TOOLKIT for Making Written Material Clear and Effective

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U.S. Department of Health & Human Services
Centers for Medicare & Medicaid Services

Overview of the Toolkit

The *Toolkit for Making Written Material Clear and Effective* was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. As shown below, it has 11 parts. It is available in PDF format at http://www.cms.gov.

Centers for Medicare & Medicaid Services (CMS)

Toolkit for making written material clear and effective

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This document is the overall Table of Contents for the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, PhD, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 1: Background

PART 1

About this Toolkit and how it can help you

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 1

About this Toolkit and how it can help you

List of figures:

This document is Part 1 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, PhD, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

What is the Toolkit?

The *Toolkit for Making Written Material Clear and Effective* is a health literacy resource from the Centers for Medicare & Medicaid Services (CMS). It was written for CMS by Jeanne McGee, PhD, McGee & Evers Consulting, Inc. As shown below, this 11-part Toolkit provides a detailed and comprehensive set of tools to help you make written material in printed formats easier for people to understand and use.

Centers for Medicare & Medicaid Services (CMS)

Toolkit for making written material clear and effective

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The Toolkit focuses on written material for CMS audiences

What are "CMS audiences"?

"CMS audiences" are primarily people who are eligible for or enrolled in health care programs *administered by the Centers for Medicare & Medicaid Services (CMS), caregivers, and partners.* These programs include Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). The guidelines and advice we offer apply to a broad range of program-related and health-related written materials for these CMS audiences. This includes:

- Written material that gives information about the CMS programs or about health-related topics. For example, this includes such things as pamphlets about covered services, patient education booklets, fact sheets that describe patient privacy protection, posters in waiting rooms, notification letters, reminder postcards, and notices about rights and responsibilities that tell people what to do if they have a concern or complaint.

- Written materials that ask the reader to supply program-related or health-related information. Examples include enrollment forms that people fill out to apply for services, health history questionnaires, and satisfaction surveys.

Though our main focus is on written material intended for use by members of the CMS audiences, the guidelines and advice we offer also apply to written material created for people who serve or assist these members. For example, you can use this Toolkit to help improve material written for family members of people with Medicare, outreach workers, agency staff, community organizations, and care providers. And even though we focus specifically on Medicare, Medicaid, and CHIP, you'll find that our guidelines and advice apply to many kinds of written material created for other populations, including the public.

What do we mean by "written material"?

This Toolkit is about written material that people read in a printed format. Written material comes in different shapes and sizes and is used for different purposes. Examples include brochures or pamphlets, booklets, flyers, fact sheets, posters, bookmarks, application forms, comparison charts, postcards, instruction sheets, and questionnaires. Typically, written material is printed on paper, but it can be printed on other surfaces, such as refrigerator magnets or billboards. There are many ways to do the printing.

Many printed pieces are professionally published by commercial print shops. Some are photocopied for distribution. Some written material is in electronic files that you can print from your computer.

Since reading something that's on a computer screen is very different from reading something in a printed format, we cover written material on a website only in a limited way (see Toolkit Part 8, *Will your written material be on a website*?)

This Toolkit is about written material, but it's important to recognize the limitations of written material. For some audiences and purposes, it is simply not appropriate. It is not suitable for people who cannot read, and must be adapted for readers who have vision loss. And even if your audience members have sufficient reading ability and other literacy skills, written material may not be the most effective way to deliver your message, since learning styles and media preferences differ among readers at all literacy levels and from different cultures.

What are "low literacy skills"?

Medicare, Medicaid, and CHIP audiences are culturally and linguistically diverse and they include many people who have low literacy skills. Throughout this Toolkit, we suggest ways of making written material easier for people with low literacy skills to understand and use. To explain what we mean by "low literacy skills," this section provides background on how literacy skills are measured.

How are literacy skills measured?

The most up-to-date statistics on literacy levels of the population come from the *National Adult Assessment of Literacy* (NAAL) done by the U.S. Department of Education in 2003. Like its predecessor, the 1992 *National Adult Literacy Study* (NALS), the 2003 NAAL assesses the functional literacy of adults in terms of people's ability to apply literacy skills to everyday situations and tasks. But the 2003 NAAL differs from the 1992 NALS in two important ways:

1. **The 2003 NAAL categorizes levels of literacy in a new way.**

   The five levels of literacy for the 2003 NAAL are *Non-Literate in English*, *Below Basic Level*, *Basic Level*, *Intermediate Level* and *Proficient Level*. The development and rationale for the new way of categorizing literacy levels is described in detail in a report by the Committee on Performance Levels for Adult Literacy (Hauser, Edley, Jr., Anderson Koenig, & Elliott, 2005).

   As in the 1992 NALS, each level of literacy has the three dimensions of *prose literacy* (skill in understanding information in a continuous text, such as a newspaper article), *document literacy* (skill in using information in graphs, figures, and tables, such as in a bus schedule), and *quantitative literacy* (skill in applying arithmetic to numbers presented in texts or documents).

Here are brief summary descriptions of the four levels adapted from a slide show in the *A Quick Guide to Health Literacy* (Office of Disease Prevention and Health Promotion [ODPHP], 2006); for full descriptions, see Hauser et al. (2005):

Below Basic:	Can perform tasks involving brief and uncomplicated texts and documents. Adults can generally locate a piece of information in a news story.
Basic:	Able to locate information in text, make low-level inferences, and integrate easily identifiable pieces of information.
Intermediate:	Able to integrate information from relatively long or dense texts, determine appropriate arithmetic operations, and identify quantities needed to perform the operation.
Proficient:	Demonstrates proficiencies associated with long and complex documents and texts.

Here are the 2003 results reported in *A First Look at the Literacy of America's Adults in the 21st Century* (National Center for Education Statistics [NCES], 2006a):

Prose literacy:	14%	Below Basic
	29%	Basic
	44%	Intermediate
	13%	Proficient
Document literacy:	12%	Below Basic
	22%	Basic
	53%	Intermediate
	13%	Proficient
Quantitative literacy:	22%	Below Basic
	33%	Basic
	33%	Intermediate
	13%	Proficient

2. **The 2003 NAAL adds a new health literacy measure**. Additional items on health were added to the NAAL in order to provide a new measure of health literacy. Results are reported in *The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy* (NCES, 2006b). Here are the overall results:

Health literacy:	14%	Below Basic
	22%	Basic
	53%	Intermediate
	12%	Proficient

This Toolkit is oriented toward the needs of readers with only Basic level literacy skills

If you are developing written material related to Medicare, Medicaid, or CHIP programs, chances are good that your intended readers will include many people whose literacy skills are only at the *Basic* level. Although others who will use the written material may have literacy skills above the *Basic* level, focusing on the needs of those with *Basic* literacy skills will allow you to reach the broadest possible audience. Therefore, this Toolkit focuses on creating written material for people with *Basic* literacy skills. Throughout the Toolkit, when we use terms such as *low literacy skills* and *less-skilled readers*, we are referring to literacy skills at the *Basic* level.

If written material is used for people with literacy skills at the *Below Basic* level of literacy skills, it must be specially adapted to be extremely simple and quite brief. We do not focus on these adaptations in this Toolkit.

People who have only *Basic* literacy skills do best when material is familiar, short, and simple. When it comes to using the information or performing operations on numbers, performing tasks that require more than just one step or involve making inferences will be difficult. To make written material clear and effective for people with *Basic* literacy skills, you need to keep distractions to a minimum, and be direct and specific in your explanations and instructions. There are many other ways, as well, to help readers whose literacy skills are at the *Basic* Level. We offer a number of suggestions in this Toolkit's guidelines for writing and design. We also emphasize the need to get feedback directly from your readers to see how well your written material is working for them.

If material works well for people with Basic level literacy skills, is it also suitable for those with skills above the Basic level?

While we emphasize ways to help make written material as suitable as you can for people with only *Basic* level literacy skills, many of the things you do to clarify and simplify the material for readers at this level of literacy skills will also be helpful to readers with stronger literacy skills. In this Toolkit, we urge you to make *all* written material as simple as you can, without sacrificing the content or compromising the meaning. We take a reader-centered approach to help you produce "low barrier" material that is written in "plain language" with special attention given to graphic design and issues of cultural appropriateness.

Making your material "low barrier" can be helpful to readers at all literacy levels. This Toolkit's guidelines will help you identify and fix barriers that can keep people from noticing, understanding, and using the material. For example, we explain how to design the material in ways that help readers understand its meaning, rather than distracting or misleading them. Although we emphasize things that are likely to be barriers to people with only *Basic* literacy skills, removing these barriers can also make the material more effective for readers who have literacy skills above the *Basic* level. For example, any reader appreciates a clear and simple layout with informative headings and subheadings that are formatted to stand out and be easy to skim. And any reader appreciates a document that repeats the same information right where they need it, instead of sending them somewhere else in the document to find it.

"Plain language" is appealing to readers at all literacy levels. This Toolkit's guidelines for writing will help you write your material in plain language (or "plain English"). "Plain language" means that the information is organized and presented in ways that make it easy for its intended readers to understand and use. It is communication that people can understand the first time they read it (*A Quick Guide to Health Literacy*, ODPHP, 2006).

- **Done well, plain language does not sound condescending or childish**. For an example, see Toolkit Part 10, *Using this Toolkit's guidelines to revise a brochure*. This chapter shows a before-and-after makeover of a tri-fold brochure that tells about a tobacco quit line. The words and sentences in the final brochure score as "easy to read" (4^{th} to 6^{th} grade level), yet the text is suitable for skilled readers. For another example, see a booklet called *Taking Time: Support for People with Cancer* by the National Cancer Institute (NCI, 2009). Written in clear and simple language with a warm, supportive tone, this booklet is suitable for readers across a broad range of literacy skill levels. This booklet also scores as "easy to read" (4^{th} to 6^{th} grade level). For concerns and recommendations about using readability formulas and interpreting reading grade level scores, see Toolkit Part 7, *Using readability formulas: a cautionary note*.

- **To check on suitability, you can test the material with readers who represent a range of literacy skills**. If you have developed written material to meet the needs of people with only *Basic* literacy skills, you may want to test it with readers who represent the full range of literacy levels within your intended audience.

The Toolkit is a health literacy resource

What is health literacy and why is it a concern?

Health literacy is about people's ability to obtain, understand, communicate about, and act upon information in health-related settings and situations. In his foreword to the Institute of Medicine (IOM) report, *Health Literacy: A Prescription to End Confusion*, Dr. Harvey Fineberg describes concerns about health literacy in the following way:

> Tens of millions of U.S. adults are unable to read complex texts, including many health related materials. Arcane language and jargon that become second nature to doctors and nurses are inscrutable to many patients. Adults who have a problem understanding written materials are often ashamed and devise methods to mask their difficulty. They may be reluctant to ask questions for fear of being perceived as ignorant. If health professionals were able to take the time to ask their patients to explain exactly what they understand about their diagnoses, instructions, and bottle labels, the caregivers would find many gaps in knowledge, difficulties in understanding, and misinterpretations. These problems are exacerbated by language and cultural variation in our multicultural society, by technological complexity in health care, and by intricate administrative documents and requirements (IOM, 2004: xi).

Here are some things to know about health literacy:

- **Health literacy includes reading skills and much more.** Besides reading skills, health literacy includes listening skills, speaking skills, writing skills, and skills in understanding and using numbers and doing calculations. Health literacy involves a range of social and individual factors and includes cultural and conceptual knowledge (IOM, 2004, Executive Summary: 5). Health literacy has been defined in many ways. One definition that is often cited comes from the National Library of Medicine. It calls health literacy "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (Ratzan & Parker, 2000). This definition is used in the U. S. public health initiative *Healthy People 2010* (HHS, 2003), in *Health Literacy: A Prescription to End Confusion* (IOM, 2004), and in the slide show that is part of the *Quick Guide to Health Literacy* (ODPHP, 2006).

- **For individuals, health literacy varies by context and situation.** How well people can obtain, understand, communicate about, and act upon health-related information varies depending on the circumstances. For example, health literacy can plummet when people get worried or upset about their health. It also goes down when information or decision making is complex or unfamiliar. As the Institute of Medicine report on health literacy points out, “even people with strong literacy skills may have trouble obtaining, understanding, and using health information: a surgeon may have trouble helping a family member with Medicare forms, a science teacher may not understand information sent by a doctor about a brain function test, and an accountant may not know when to get a mammogram” (IOM, 2004, Executive Summary: 5).

- **Health literacy affects some subgroups more than others**. Though a person’s health literacy varies depending on the context, studies suggest that the problem of limited health literacy in the United States is often greater among certain subgroups. These include older adults, people with limited education, and people with limited English proficiency (IOM, 2004, Executive Summary: 5).

- **Health literacy goes beyond the individual.** Definitions of health literacy tend to focus on the extent to which individuals have the various skills they need for effective access, understanding, communication, and decision making, but health literacy goes beyond the individual. To emphasize this point, one expert calls health literacy “a shared responsibility in which patients and providers each must communicate in ways the other can understand” (Osborne, 2004). This view that health literacy is a shared responsibility is also reflected in the U.S. public health initiative *National Action Plan to Improve Health Literacy*: “The skills of individuals are an important part of health literacy, but health literacy is not only about individuals’ skills. Health literacy in the U.S. reflects what health systems and professionals do to make health information and services understandable and actionable. Professionals, the media, and public and private sector organizations often present information in ways that make it difficult to understand and act on. Publicly available health information can also be incomplete or inaccurate…. Consequently, the skills of health professionals, the media, and government and private sector agencies to provide health information in a manner appropriate for their audiences are as equally important as an individual’s skills” (ODPHP, 2010:5).

- **Limited health literacy has serious implications.** Low literacy has been linked to poor health outcomes such as higher rates of hospitalization and less frequent use of preventive services. Both of these outcomes are associated with higher health care costs (*A Quick Guide to Health Literacy*, ODPHP, 2006)

What can be done to improve health literacy?

Many people have trouble understanding, communicating about, and acting upon health-related information, and the consequences are serious and troubling (IOM, 2004; ODPHP, 2006 & 2010; Parker, Ratzan, & Lurie, 2003; Root & Stableford, 1999; Rudd, Moeykens, & Colton, 1999; Rudd, Colton, & Schacht, 2000). There are several important ways to help (adapted from IOM, 2004):

- We need to improve the information itself. Making the information easier to understand and use reduces the literacy demands on individuals.

- We need to make those who *provide* health-related information more aware of health literacy and its implications, and strengthen their skills in communicating information more effectively to everyone, including people with lower literacy skills.

- We need to strengthen the literacy skills of individuals who *receive* the health-related information so that they will have less trouble understanding, communicating about, and acting upon this information.

- We need to identify and reduce barriers to communication and decision making that make health-related information hard for people to understand and use.

The *National Action Plan to Improve Health Literacy* (ODPHP, 2010) seeks to engage organizations, professionals, policymakers, individuals, and families in a linked, multi-sector effort to improve health literacy. It contains seven goals and suggests strategies for different sectors of the health care system (such as payers, the media, government agencies, and health care professionals) to achieve them. These strategies include, among others, the four listed in the previous paragraph. According to the plan, building health literacy skills begins early in life and must be reinforced through the educational process and life-long learning about health. Social service agencies, libraries, community-based organizations, non-profits, patient advocacy groups, and other organizations can help individuals and communities build their health literacy skills and find appropriate health information and services in the community. The plan also calls for more research on effective strategies to address health literacy as well as evaluations of interventions aimed at improving health literacy with wide dissemination of these results. For more information about the National Action Plan, visit http://www.health.gov/communication/HLActionPlan/.

What about written material and health literacy?

Health care and social service systems rely heavily on written forms of communication, and much of this written material is too difficult for its intended readers:

> Over 300 studies, conducted over three decades and assessing various health-related materials, such as informed consent forms and medication package inserts, have found that a mismatch exists between the reading levels of the materials and the reading skills of the intended audience. In fact, most of the assessed materials exceed the reading skills of the average high school graduate (Rudd, Moeykens, and Colton, 1999)....Directions, signs, and official documents, including informed consent forms, social services forms, public health information, medical instructions, and health education materials, often use jargon and technical language that makes them unnecessarily difficult to use (Rudd, Colton, and Schacht, 2000). (IOM, 2004, Executive Summary: 7).

The Toolkit is a health literacy resource for improving written material

Improving written material is only one part of a comprehensive approach to improving health literacy, but it's a crucial part. This Toolkit can help. It gives you practical tools and advice on ways to make your written material clear and effective. Figure 1-a below explains what the Toolkit means by "clear and effective."

Figure 1-a. What makes written material clear and effective?

To be **"clear and effective"** written material has to do ***all*** of the following things:

1 It must **attract readers' attention**

Members of your intended audience will make snap judgments about your written material, based on a quick glance. They may be in a hurry or distracted or uncomfortable with reading. Since you have only a few moments to convince them to read it, their first impressions are crucial: the topic and purpose should be clear; it should *look* appealing; it should *look* like it's worth reading; it should *look* like it's going to be easy to read.

2 It must **hold their attention**

To encourage people to keep reading, the material must seem worth the effort and it must be easy to follow. You don't want readers to give up because what initially caught their eye proved to be hard to read, distracting, confusing, or of no interest. To *keep* holding their attention, the material needs to seem personally relevant and be at the right level of detail for them.

3 It must **make readers feel respected and understood**

The material needs to be *culturally appropriate*, making readers feel that it was written for them. The information needs to fit with the readers' cultural knowledge, traditions, beliefs, and values. It needs to respond to their interests and experiences, and anticipate the kinds of questions or concerns they may have. It needs a friendly and supportive tone that puts readers at ease, making them receptive to the information.

4 It must **help them understand**

Comprehension is crucial. You want your readers to be able to skim and pick up the main points, without stumbling over words they don't know or being distracted by the design. It needs to be easy for them to find and understand information of personal interest.

5 It must help **move them to take action**

When you produce written material, it's for a reason – there is something you want your readers to do. Ultimately, what makes written material clear and effective is that people can read and use the information to do something that seems feasible and of value to them.

Source: Created for this Toolkit.

We take a reader-centered approach to developing and testing written material

Medicare, Medicaid, and CHIP audiences are culturally and linguistically diverse and they include many people who have low literacy skills (for the latest national statistics on literacy skills of adults, see NCES, 2006a). To help you create written material that will work well for these audiences, we take a reader-centered approach that emphasizes issues of cultural appropriateness and the needs of less-skilled readers (see Toolkit Part 2, *Using a reader-centered approach to develop and test written material*). Our reader-centered approach also stresses the need to check on how well the material is working by getting feedback directly from your readers (see Toolkit Part 6, *How to collect and use written material from readers*). The more you understand your intended readers, the more responsive you can be to their information interests and needs, and the more successful you will be in motivating them.

How can the Toolkit help you?

What tools does it offer?

This Toolkit is written in non-technical style for people with a broad range of backgrounds and skills. Whatever your role and whatever the written material you are dealing with, the Toolkit offers guidelines and practical advice to help you make it clear and effective. The Toolkit covers a number of topics in depth. It discusses many details that, taken together, can have enormous impact on the clarity and effectiveness of your written material.

- **Detailed guidelines for writing, design, and translation.** To help you develop or revise your written material, this Toolkit includes detailed guidelines for writing, graphic design, and culturally appropriate translation from English into other languages. These guidelines are not presented as requirements or as hard and fast rules that apply to every situation. Rather, they are offered as specific suggestions for making your written material clear and effective for your intended readers. The guidelines and discussion will help you look at the material from your readers' point of view, making it easier for you to identify and remove barriers to your readers' attention, comprehension, and use of the material.

- **Methods for testing material with readers**. Toolkit Part 6 is a book-length guide that explains step-by-step how to collect and use feedback from readers to improve your written material. You don't have to spend a lot of time and money to test your material with readers. Toolkit Part 6 describes some efficient and cost effective ways to get feedback from readers.

- **Special topics in writing and design**. These special topics include cautions about using readability formulas to assess material, things to know if your material is for older adults, a comparison of written material on websites versus written material in printed formats, and an extended "before" and "after" example of using the Toolkit guidelines to revise a brochure.

The table of contents for all parts of the Toolkit is available at the website where you can download the various parts. For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you.* For the full list of guidelines for writing and design and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

How can you use the Toolkit?

How you use this Toolkit depends on your background and situation, including your role and responsibilities, the written material you are working with, and what you are trying to accomplish. For example, you could use the Toolkit in any or all of the following ways:

- As a practical tool for helping to develop and refine your own written material.
- As an in-depth self-study resource to strengthen your current skills and learn new ones.
- As a reference that you read selectively for help with a particular topic.
- As a resource for assessing existing materials. For example, you could use the Toolkit guidelines for writing, design, and translation as a comprehensive checklist for determining the suitability of materials or selecting among materials. Toolkit Part 3 gives suggestions about how to do this.
- As a resource for setting standards for the written materials produced by your organization.
- As a resource for the contractors who produce your written materials.

End notes

Acknowledgments

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References

Many examples in this *Toolkit for Making Written Material Clear and Effective* are excerpts from published materials or have been adapted from published materials. While some of the source materials are in the public domain, others are copyrighted. If you wish to use any of the Toolkit's text excerpts, photos, or illustrations in your own work, be sure to contact the publisher of the original source material to get permission.

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Contact NCES at 1990 K Street NW, Washington, DC 20006-5651. Phone (202) 502-7300. For more information about the 2003 NAAL (National Assessment of Adult Literacy), see http://nces.ed.gov/naal.

NCI (National Cancer Institute, National Institutes of Health)

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ODPHP (Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services)

2006 *Quick guide to health literacy*. Launched in 2006, this website is updated periodically. The guide is a quick and easy reference filled with facts, definitions, tips, checklists, and resources. The guide's fact sheets provide a basic overview of health literacy concepts. They also offer strategies for improving the usability of health information and health services through communication, knowledge-building, and advocacy. Examples of health literacy best practices are included. The *Quick Guide* materials are user friendly and action oriented. They can be easily reproduced, either individually or as an entire unit. It can be downloaded from: http://www.health.gov/communication/literacy/quickguide/.

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CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 1: Background

PART 2

Using a reader-centered approach to develop and test written material

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 2

Using a reader-centered approach to develop and test written material

List of figures in this chapter:

This document is Part 2 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, PhD, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Preface about the Toolkit

This document, Toolkit Part 2, is part of the *Toolkit for Making Written Material Clear and Effective.* To provide context for this document, we begin with background on the Toolkit as a whole.

What is the Toolkit?

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource (see Toolkit Part 1). It's a detailed and comprehensive set of tools to help you make written material easier for people to understand and use. This Toolkit is from the Centers for Medicare & Medicaid Services (CMS) and it is oriented toward the programs administered by CMS. These programs include Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). In this Toolkit, we focus on material in printed formats that is written for people with Medicare or Medicaid and the parents or guardians of children with coverage through CHIP. These "CMS audiences" are culturally, linguistically, and demographically diverse, and they include significant numbers of people with low literacy skills. Much of the discussion in the Toolkit also applies to material that is written for those who work with or assist members of CMS audiences, such as material written for family members of people with Medicare, outreach workers, agency staff, community organizations, and care providers.

What topics are covered in the Toolkit?

To help you develop or revise your written material, this 11-part Toolkit includes detailed guidelines for writing, graphic design, and culturally appropriate translation from English into other languages. It includes a book-length guide to methods for testing material with readers, and covers special topics in writing and design. These special topics include cautions about using readability formulas to assess material, things to know if your material is for older adults, a comparison of written material on websites versus written material in printed formats, and an extended "before" and "after" example of using the Toolkit guidelines to revise a brochure. The table of contents for all parts of the Toolkit is available at the website where you can download the various parts. For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you.* For the full list of guidelines for writing and design and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

A reader-centered approach

The topic of this document, Toolkit Part 2, is using a reader-centered approach to develop and test your written material. The need to be reader centered is the main theme throughout all parts of this Toolkit. If you want your written material to be clear and effective, it's essential to be reader centered.

Toolkit's definition of "clear and effective"

For an expanded version of this definition, see Figure 1-a in Toolkit Part 1 *Source: Toolkit author, Jeanne McGee*

In this Toolkit, we use "clear and effective" to mean written material that accomplishes all of these things:

- It attracts the intended readers' attention
- It holds their attention
- It makes them feel respected and understood
- It helps them understand the messages in the material
- It helps move them to take action

These things that make material clear and effective all have one thing in common: **they focus on how your intended readers react to the material.** It's the readers who decide whether the material looks interesting, whether they feel it has been written for them, whether they care about what it says, whether they find it easy to understand, and whether it influences what they think, feel, or do.

Since readers are the ultimate judges of the written material, producing material that is clear and effective for them requires that you look at the material from *their* point of view. Figure 2-a below has tips to help you do this.

Figure 2-a. Tips for being reader centered.

Tips for being reader centered:

1. To keep from reflexively creating material that works well for you but not for your readers, stay aware of all the ways in which you differ from your readers.
2. Recognize that "educating" your readers by giving them information you think they need will not automatically move them to action.
3. Get insights into what your readers need by observing the settings and manner in which the written material will be used.
4. Create "low barrier" material by adopting the perspective of your readers and fixing anything that might keep them from noticing, understanding, and using the material.
5. Orient your writing and design toward the subset of your readers who are less attentive, less knowledgeable, and less skilled at reading.
6. Get help directly from your intended readers on what to say and how to say it.
7. To find out how well your written material is working, test it by getting reactions directly from your readers.

Source: Created for this Toolkit.

Remember that you are writing for your readers, not yourself

To keep from reflexively creating material that works well for you but not your readers, stay aware of all the ways in which you differ from your readers.

For many of us, "writing for your readers" is not as simple and self-evident as it sounds. Identifying and understanding the ways in which you differ from your readers will make it easier for you to stay focused on looking at the written material from their point of view rather than your own.

How do you differ from your intended readers?

Taking a reader-centered approach means reminding yourself that you are writing for your readers, not yourself. For many of us, "writing for your readers" is not as simple and self-evident as it sounds. Since we are the audience we know best, it's easy to slip into writing something that works well for us but may not work as well for our intended readers. It's not that we do this deliberately. It's just that our taken-for-granted assumptions about written materials are based largely on our own knowledge, attitudes, literacy skills, and experiences. Unless we make a *deliberate and sustained effort to see the material the way our intended readers will see it*, the default is to implicitly create something with ourselves in mind.

To cultivate a reader-centered mindset, it helps to start by looking at the ways in which you differ from the people you are trying to reach with your written material. Figure 2-b below provides a list of common differences between the creators and users of written material.

Figure 2-b. Common differences between those who create written material and the readers who use it.

The chart below outlines ways in which you and the other professionals who develop written material are likely to differ from the people who will be reading and using it. The size and nature of these differences between you and your intended readers will vary from one project to the next. There may be very large gaps between you and your readers in some of the areas listed below, and smaller gaps in others.

Knowing the purpose of the material

You already know. You already know what the material is about and how you want people to use it.

Your readers must figure it out. Your intended readers need to figure out what the material is about and what they are supposed to do with it. They may be seeing the material for the first time.

Familiarity with the subject matter

You have extensive knowledge. You know the subject matter well, and understand much more than has been included in the material. You may even be a subject matter expert.

Your readers have limited knowledge. It's likely that at least part of the content is unfamiliar to many or most of your readers.

Level of interest and investment

Your interest and investment is substantial. You have spent time and resources to produce the material and may have high expectations about its use and impact.

Your readers' interest and investment may be minimal. The material may or may not capture their attention and interest. To many readers, the material is just one of many things to read and do. Moreover, people vary in their willingness to spend time on written materials, regardless of the subject matter.

Figure 2-b continued.

Reading and comprehension skills

You have excellent reading skills. You are a skilled reader, able to read and understand the material with ease. Reading is so habitual for you that you may tend to take your reading skills for granted.

Your readers may have poor to average reading skills. It's likely that many or most of your intended readers have average reading skills at best. Some may have very limited literacy skills, and may struggle to read and understand material that seems simple to you.

Approach to reading the material

You hope your readers will read it carefully and thoroughly. You may be expecting that people will read all of the material, and read it in sequence from beginning to end.

Your readers will probably skim quickly and skip around. People often glance through material first, to decide if it's worth reading. They may read selectively, focusing on parts that seem personally salient.

Ability to concentrate on the material

You can easily concentrate. When you are creating, revising, or reviewing the material, you can give it your full attention. You have emotional distance from the material because its content is not directed at you.

Your readers may have trouble concentrating. Demands and problems of daily life may compete for their attention. People with health concerns may find it hard to focus on the material and absorb its meaning, even if they are skilled readers.

Figure 2-b continued.

Time spent on the material

You spend a lot of time on it. It takes time to plan, create, review, and revise written material. You have probably read some parts of the material over and over. After you have read something over and over, it's hard to remember how it seemed on first reading.

Your readers may spend very little time on it. How long people spend on the material depends on many factors, including the material itself, their interests and motivation, competing demands, and their literacy skills. Perhaps few people will read it more than once or all the way from beginning to end.

Interpretation of its meaning

You expect readers will generally interpret the material as you intend. You have made an effort to be clear, and you are probably expecting readers to have relatively few misunderstandings or alternative interpretations of what is written.

Your readers' interpretations can vary. People actively interpret what they read, based on their cultural background, knowledge, experiences, and circumstances. Your readers may take a different meaning from what you intend. If they find the material culturally inappropriate, they may even take offense.

Overall reactions to the material

You are positive about the material and see value in it. While some types of material are more urgent or consequential than others, it's likely that you see the material as being useful and valuable for its intended readers.

Your readers' reactions can vary. How people react to the material, including the value they place on it, depends on many factors that differ by person and situation. While the material may have important consequences for the reader, some health-related materials may trigger concerns or call for changes in attitudes and behavior that are hard for the reader to make.

Figure 2-b continued.

How the material is used

You hope your readers will use it in the way you intend. When you create written material, it's for a reason: generally, there is something specific you want your readers to do. You want the material to trigger this action on their part.

How – and *whether*– **your readers** will use it depends on many factors. What people actually do with written material depends on many factors that differ by person and situation. These factors include how readily and well they understand it, whether they find it personally salient, how motivated they are, and how feasible and appropriate it seems to take the action it is urging.

Source: Created for this Toolkit.

The chart above in Figure 2-b shows how risky it can be to use our own perspectives, rather than our readers' perspectives, to guide development of written material. Just because the material appeals and makes sense to us doesn't mean that it will to the people we are trying to reach.

Figure 2-c below suggests great resources for using a reader-centered approach to develop and test your written material. Very different from each other in topic and focus, together these resources can energize and inspire you to stay focused on your readers' point of view and use it to guide decisions you make in creating your material.

Figure 2-c. Resources for being reader centered.

Written by Janice (Ginny) Redish, this is the first chapter in *Techniques for Technical Communicators*, a book edited by Carol M. Barnum and Saul Carliner. The discussion and examples in this chapter paint a vivid picture of the active cognitive efforts involved in reading written material, showing how writing and document design can help or hinder readers. This chapter summarizes research evidence about how readers work with documents and discusses practical implications.

This book by William Smith is based on columns he wrote for Social Marketing Quarterly. It is available to download at the Academy for Educational Development website (see end of Toolkit Part 2 for details). Smith describes this publication as “low cost suggestions about how ‘thinking like a marketer’ can improve your program of social change.” Full of stories and ideas, this book will help you think about reader motivation and other reader-centered issues in a fresh and practical way.

This report by Elizabeth Hoy, Erin Kenney, and Ana Talavera gives an in-depth description of how reader feedback was used to develop a model guide that presented health plan information for diverse populations in California. It explains the results of reader testing sessions and shows how the model guide was modified after reviewing feedback from readers. The research was sponsored by a partnership of the California Health Care Foundation and the California Department of Health Services, and focused specifically on making consumer-friendly information available to Medi-Cal beneficiaries.

http://erc.msh.org/qualityandculture

This website is designed to assist healthcare organizations throughout the US in providing high-quality, culturally competent services to multi-ethnic populations. This website offers advice and resources to help providers better understand a range of issues including diversity, nonverbal communications, and health disparities. This website is updated frequently, and it includes numerous links to other resources.

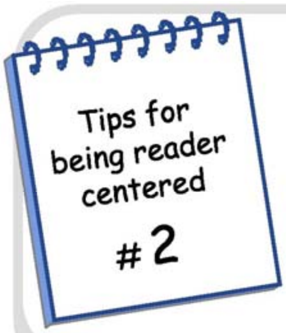
www.hsph.harvard.edu/healthliteracy

This website developed by Rima Rudd and others gives a nice overview of the various components of creating and assessing print materials. It is designed to help writers produce and test materials that are clear and easy to read. It includes an extensive list of resources available on the web and in print.

This book by Helen Osborne offers practical tips in a conversational manner. It covers a very broad range of communication situations and issues in a thoughtful and consumer-focused way. While this book does not focus on developing and testing written material, the examples and ideas it offers are a great catalyst for thinking about how you could communicate with your readers in more effective ways.

For full references, see the end of this document.

Look at motivation from your readers' point of view



Recognize that "educating" your readers by giving them information you think they need will not automatically move them to action.

Instead of asking what you want your readers *to know*, try asking what you want them *to do*. This shift in perspective will encourage you to look at things from the reader's vantage point and take account of what might motivate your readers to take the action you are seeking.

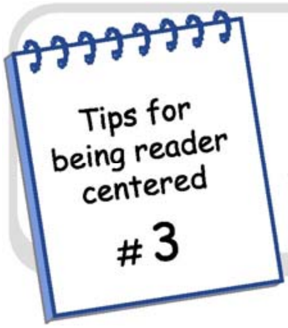
Sometimes we develop written material with the mindset that our intended readers "need to be educated" about the issues we cover in the material. But no matter how good our intentions, and how important the topic, it's possible that the people we are trying to reach will have no interest in being educated in the way that we've envisioned. And it's also possible that even if they are interested in being educated about the issues, what they learn will not lead them to change their attitudes or behavior.

Material that is created to "educate" people typically focuses on what *you* want them to know: it reflects a *producer-centered* perspective rather than a reader-centered perspective. It reflects your hope that once they *know* what you want them to know, they will *do* what you want them to do. But the simple act of giving people information—even when people understand and accept it—does not automatically move them to action.

So instead of looking at your written material from your own point of view, by seeing it as a means of educating your readers, try looking at it from the reader's point of view. Instead of focusing on what you want your readers to *know*, try focusing on what you want them *to do*. This shift in perspective will encourage you to look at things from the reader's vantage point and take account of what might motivate your readers to take the action you are seeking.

As we saw in Figure 2-b, which outlines differences between you and your readers, it's important to keep reminding yourself that you are writing for your readers, not yourself. What motivates you may not motivate your readers. Taking a reader-centered approach means recognizing and accepting that you cannot change your readers' interests and values. Taking a reader-centered approach means finding ways to make the material of interest and value to them. It means giving reasons to do what you want them to do—reasons that are compelling *to them*. For in-depth and lively discussion of looking at motivation from the reader's point of view, see *Social Marketing Lite* by William Smith (1999).

Learn by observing where and how the material will be used



Get insights into what your readers need by observing the settings and manner in which the written material may be used.

Watching your readers in action can be quite instructive.

Commercial marketing uses features of a setting to influence consumers and sell products. For example, it's no accident when stores put toys on low shelves within easy reach of children and put impulse items near the checkout counter. Or that shopping mall escalators are positioned in ways that force you to walk past a long row of stores.

How do commercial market researchers figure out these and other tactics that work so well for selling? Often, they use results from field observation studies. In pure observation studies, researchers unobtrusively observe, listen, and record in great detail exactly what consumers do in public places. Sometimes the researchers assume a more active role, such as mystery shoppers who spot-check quality of customer service in stores and hotels.

This powerful technique of field study is available to you, too. Observing audience behavior in settings where the written material may be used is an easy, low-cost way to learn more about your intended readers and gain insights into ways to improve your written material. Figure 2-d below shows an example.

Figure 2-d. **Example:** Using field observation to improve written instructions for physical therapy exercises.

Suppose that you are working on revising patient instruction sheets for physical therapy exercises. Think about the useful things you could learn by going to the setting and watching patients and physical therapists to see how the instruction sheets are actually presented and used. Direct observation would let you see how therapists work with a patient to explain an exercise, watch the patient perform it, and follow-up with additional help on technique. It would also let you observe how and when the written instruction sheet is presented to the patient. Ideally, you could also watch the patient use the instruction sheet without assistance from the therapist.

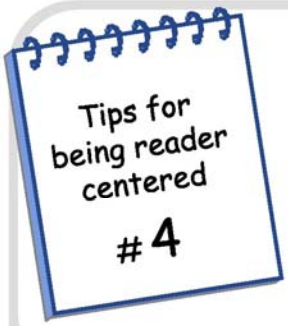
What you learn by observing the patterns of behavior on the part of therapist and patient can help you refine the written material to make it easier for the patient to understand and use. To give just two examples of how you might use what you learn through observation:

- Suppose that you observe that the instruction sheet omits many things the therapist said to help the patient learn to perform the exercise correctly and avoid further injury. You could expand the written instructions to include this extra coaching. The expanded instructions would anticipate and address problems and questions that are likely to come up later on at home when patients struggle to remember exactly how they did that exercise during their therapy session.

- Suppose that the written instructions include one illustration that uses an arrow to indicate the way patients are supposed to move their arms. When you watch patients using these written instructions as their only guide, you see that this illustration is too poorly drawn or incomplete for them to follow. To help patients do the exercise correctly, you could replace the single illustration with a series of several illustrations that show different stages of movement of the arms.

Source: Created for this Toolkit.

Focus on removing common barriers



Create "low barrier" material by adopting the perspective of your readers and fixing anything that might keep them from noticing, understanding, and using the material.

Looking at the material from your intended readers' point of view rather than your own will help you identify and remove aspects of content, organization, writing, and design that might be barriers for your readers.

When you consider all the ways in which you differ from your intended readers, as outlined in Figure 2-b above, you become aware that many things about the material that are not barriers for you might be sizeable barriers for your intended readers. This realization can change your entire approach to developing written material. You will find yourself noticing details of content, writing, and design that might keep your intended readers from noticing, understanding, and using the material. The diagram in Figure 2-e below shows some common types of barriers.

Figure 2-e. Barriers that can keep people from understanding and using written material.

To the reader, it might look like it's going to be hard to read

EXAMPLES: hard to skim; an overpowering "wall of text;" hard to read due to small print or poor contrast; the layout looks too busy or confusing or complicated

It might be too hard to follow or understand

EXAMPLES: it uses words the reader doesn't know; it's poorly organized; doesn't explain things well or lacks cohesion; the design is distracting rather than helpful

It might be culturally unsuitable

EXAMPLES: the reader can't relate to it; doesn't feel respected and understood; feels put off or is offended by it

It might not attract and hold the reader's interest

EXAMPLES: The reader doesn't notice it; the reader notices but doesn't find it interesting or appealing at first glance; the reader begins reading it and then loses interest

Its purpose or usefulness might be unclear or unappealing to the reader

EXAMPLES: the reader can't figure out what it's for or how to use it; sees no benefits from reading it; finds the action it calls for too difficult or unrealistic

Source: Created for this Toolkit. This figure summarizes many of the topics that are addressed in the Toolkit Guidelines for Writing and Design. For details, see Toolkit Parts 3, 4, and 5.

Focusing on removing possible barriers is a very powerful and effective way to make written material easier for your intended readers to understand and use. To look at the material from your reader's point of view, you will need to work hard at suspending your own reading skills and habits, your subject matter knowledge, and your taken-for-granted preferences and assumptions. Figure 2-f below gives an example.

Figure 2-f. **Example:** Taking the reader's perspective to identify possible barriers in written material.

Suppose you are a clinician who is revising a fact sheet about asthma for patients who are newly diagnosed. Many of your patients have low literacy skills and you want to make the fact sheet appealing and easy for them to understand and use. The fact sheet you are using now begins with a formal definition of asthma and then shows cutaway diagrams that compare normal and inflamed airways. This approach reflects a medical model and it makes sense to you as a clinician. **But when you take a fresh look at the fact sheet from your intended *reader's* point of view—rather than your own—you begin to see some big barriers for your readers:**

- **Words and sentences**. You notice that the formal definition of asthma uses long and complicated sentences and words such as *inflammation* and *constriction* that will be unfamiliar and too difficult for your intended readers. You realize that starting with this type of definition will confuse and discourage your intended readers rather than inform them. You think about how you could rework the beginning to tell them what they need to know about asthma using words they can understand.

- **Illustrations.** You notice that the cross-sectional diagrams of airways that are so familiar and simple to you are actually very abstract and complex. You realize that for a patient who lacks your subject matter knowledge and familiarity with conventions for medical illustration, this type of static and greatly magnified cross-sectional drawing of an airway, shown completely out of context, is likely to be baffling. You think about other ways you could explain the key points about normal and inflamed airways that would make more sense to your readers.

- **Writing style and tone**. You notice that the overall tone of the fact sheet is dry and impersonal. You know that newly diagnosed patients tend to be concerned about having asthma and what it will mean in their lives; they need emotional support as well as information. To help these patients absorb new information about asthma, you realize that the information must be delivered in a friendly and supportive way. You think about how you could rework the material to improve its tone.

For more about the medical model, including cautions about using it for your written material and comparisons to other models of writing, see Doak, Doak, & Root (1996) and Toolkit Part 4, Chapter 2 *Guidelines for organizing the content* (sequencing, grouping, labeling). Figure 4-2-b, *Six ways to organize and present information,* is in this chapter. For a wealth of ideas about ways to communicate more effectively with patients, see *Health Literacy from A to Z* (Osborne, 2004).

Source: Created for this Toolkit.

How can you create low barrier material?

There are two steps to creating “low barrier” written material that works well for your intended readers:

1. **Identifying the barriers**. As shown in the example just above, the first step in creating “low barrier” written material is to look at the material from your reader’s perspective and identify possible barriers. The more you know about your readers, and the better you get at seeing the material from their point of view, the easier it will be to identify possible barriers.

2. **Fixing the barriers**. Once you have identified possible barriers, the next step is to fix them:

    - **Removing barriers**. When you notice possible barriers in material you are revising, fixing these barriers means removing the barriers and making whatever changes in content, organization, writing, and design are needed to fix the problem.

    - **Being aware of and avoiding barriers at the outset**. As you become knowledgeable about your readers and more experienced in taking their perspective, you will find that you are able to create low barrier material in a more efficient way, right from the start. This skill takes time to develop, but getting practice in removing barriers will lead you to not writing them in the first place.

Other parts of this Toolkit can help you identify and remove barriers:

- The four chapters of Toolkit Part 4, *Understanding and using the Toolkit Guidelines for Writing,* will help you anticipate, identify, understand, and fix many aspects of content, organization, writing, and design that can make it hard for people to understand and use your written material.

- The eight chapters in Toolkit Part 5, *Understanding and using the Toolkit Guidelines for Graphic Design,* will help you anticipate, identify, understand, and fix many aspects of page layout, use of fonts and contrast, headings, text emphasis, color, and visual elements that can distract people from your messages or make the material hard to skim and comprehend.

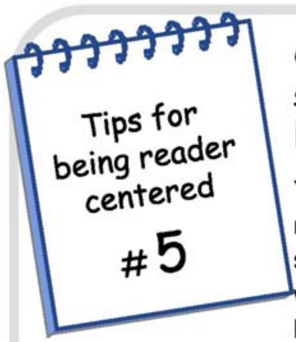
- If you are writing for a Medicare audience, you can learn about barriers that apply to this audience in Toolkit Part 9, *Things to know if your written material is for older adults.*

- If your intended readers have limited English proficiency, and you are translating the material into their language, see Toolkit Part 11, *Understanding and using the Toolkit Guidelines for*

> *Culturally Appropriate Translation.* This part of the Toolkit discusses barriers related to the challenges of cross-cultural communication.

One of the most effective ways to identify and remove barriers is to get help from your readers as you develop the material and test it by getting reactions directly from them. We discuss these topics in later sections (tip 6 on getting help from readers and tip 7 on testing your material).

Orient toward the subset of readers who are less knowledgeable, less attentive, and less skilled at reading



Orient your writing and design toward the subset of your readers who are less attentive, less knowledgeable, and less skilled at reading.

Your intended readers will differ in the attention they give to the material as well as the subject matter knowledge and literacy skills they bring to it. If you create written material that works well for those who are less attentive, less knowledgeable, and less skilled at reading, you will reach a larger proportion of your audience.

The tip shown above is a pragmatic suggestion for taking a reader-centered approach to creating low barrier written material. It urges you to **orient toward the subset of your readers *for whom the potential barriers are the greatest***, that is, the readers who are less attentive, less interested, less knowledgeable, and less skilled at reading. If you can make your material work well for these readers, it will work well for the rest of your readers, too.

In terms of reading skills, the Toolkit focuses on material that is written for people with skills at only the *Basic* level of literacy. For a discussion of how literacy skills are measured and what is meant by *Basic* literacy skills, see the section on *What are "low literacy skills"?* (Toolkit Part 1, *About this Toolkit and how it can help you,* page 3). Although others who will use the written material may have literacy skills above the *Basic* level, focusing on the needs of those with only *Basic* level literacy skills will allow you to reach the broadest possible audience with your written material.

Literacy skills are important, but they are not the only factor that influences how readers work with documents. Sometimes our hopes and expectations about reader behavior are unduly optimistic: we may assume that people will give the material their full attention, that they will read it carefully from beginning to end, that they will be able to understand it, and that they that they will immediately be interested in and care about what it says.

While these assumptions may hold for some people, there will surely be others who skim quickly and are easily distracted, who need some convincing about the salience and value of the material, and who find some words and concepts hard to understand. Given the range of interests, skills, knowledge, and life experience that your intended readers bring to the material, it is sensible to make fairly conservative assumptions about reader behavior (see Redish, 1993).

The detailed guidelines in this Toolkit are all oriented toward helping less-skilled readers who are less attentive and less knowledgeable about the topics covered in the material. To give just a few examples, these guidelines:

- Urge you to embed definitions of terms right where readers need them, rather than forcing them to go elsewhere for a definition (see Guideline 3.4 in Toolkit Part 4, Chapter 3, *Guidelines for writing style*).
- Stress the need to use plenty of informative headings that stand out clearly and make it easy for people to skim and find information of personal interest (see Guideline 2.4 in Toolkit Part 4, Chapter 2, *Guidelines for organizing the content*).
- Explain how certain design elements can distract your readers and show you how to avoid distractions by creating a clear and obvious path through the material (see Guideline 5.3 in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*).

By making special efforts to remove barriers that might be problematic for this subset of your readers who are less attentive, less knowledgeable, and have lower literacy skills, you will create material that will work well for a larger number of your intended readers.

Get help from readers on what to say and how to say it

Get help directly from your intended readers on what to say and how to say it.

Involving your intended readers is a straightforward and effective way to create material that they will understand and want to use. You can get their suggestions and reactions in different ways and at different stages of materials development. You can also get help from informants who are familiar with your intended readers.

This tip urges you to get members of your audience actively involved in helping you develop your written material. Readers can give you good advice about what to say in your written material and how to say it. Since it's your readers who decide what is culturally appropriate and easy to use, getting their input helps you stay on track to produce something they will understand and use. Getting help from readers requires some extra planning, but it is the best insurance you can get for creating material that they will find appealing, culturally appropriate, and easy to understand and use.

You may also want to get help from informants who have close contacts with members of your intended audience, and are familiar with their language, culture, and traditions. Informants might include people in your agency, as well as people from other organizations and community groups. While people in regional and national organizations can also serve as informants for certain aspects of your project, it's the people in your own community who are familiar with local cultural patterns and issues. Depending on your audience and material, your informants could include individuals and organizations such as the following: health care practitioners and health care organizations; public health agencies; social workers and social service agencies; senior centers; teen clinics; outreach workers; ABE (Adult Basic Education) programs; ESL (English as a Second Language) programs; WIC programs (Women, Infants, Children); refugee resettlement agencies; schools; advocacy groups; Legal Aid; faith-based organizations; and neighborhood groups.

What kinds of help can you get?

There are many ways that representatives from your intended audience and informants who are familiar with the audience can help you when you are developing and testing written material. For example, you can get:

- **Help with refining the content**. At an early stage in your project, input from intended readers and informants can provide helpful advice and a good reality check on your initial ideas for the material. When you are ready to begin writing the text, you probably have a notepad of ideas and topics. Perhaps you also have a list of points to be covered that was generated by subject matter experts. Before you go very far on your writing and design, take some time to share your ideas and get reactions from intended readers and informants. Find out what they already know and how they feel about what you plan to cover in the material. This discussion and advice can help you clarify your goals and identify and prioritize key messages.

- **Help in deciding how to word the messages, what sequence to use, and which points to emphasize.** Getting feedback from members of your audience will help you understand which words and concepts you need to explain. As you get their feedback, be attuned to the language and logic they use and the concerns they express. The way they talk about the topic may suggest ways of sequencing the material so that it will make sense from their point of view. Listen closely and you will hear phrases and examples you can use in the material. You can also ask directly for their suggestions about a title, headings, and words and phrases to use.

- **Help and advice with identifying and addressing culturally sensitive areas and potential misunderstandings**. Members of the audience can help you understand the nuances of their culture, and recommend ways to anticipate and address potential problems and misunderstandings. To avoid offending or confusing people, it’s important to check with members of the audience about the visual elements as well as the words you use. Members of your audience can give you helpful feedback on colors, images, and other aspects of design.

- **Help in understanding what will motivate them.** Readers themselves are the best resource you have for understanding what they will find appealing, what behaviors will seem feasible to them, and what will motivate them to action.

- **Help in identifying possible barriers**. An earlier tip urges you to take the reader’s point of view and remove barriers that might keep your readers from noticing, understanding, and using the material. Getting feedback from your intended readers is the most efficient and effective way to identify potential barriers.

- **Help in judging the adequacy of a translation.** Feedback from the intended users provides a crucial check on the adequacy of a translation See Toolkit Part 11, *Understanding and using the Toolkit Guidelines for Culturally Appropriate Translation*.

What methods can you use?

When you are seeking help from readers and informants, try for a good mix of people and use whatever method or combination of methods suits your project and is most practical. This might be consulting one-on-one with members of the audience and informants, holding two or more focus groups, or meeting periodically with the same people. For help with methods, see CDCynergy; *Making Health Communications Programs Work* (National Cancer Institute [NCI], "Pink Book", 2002); *The Focus Group Kit* (Morgan & Krueger, 1997); *Focus Groups: A Practical Guide for Applied Research* (Krueger & Casey, 2000); *Interviewing for Social Scientists: An Introductory Resource with Examples* (Arksey & Knight, 1999). See also Toolkit Part 6, *How to collect and use feedback from readers*.

If circumstances permit, it can be very helpful to get audience members actively involved in developing and refining the written material. Various terms have been used to describe this approach, including *participatory materials development*, *learned-developed materials* (Rudd & Comings, 1994), and *cooperative composing* (Zarcadoolas, Timm, & Bibeault, 2001). You can recruit panel members at the beginning of your project and meet with them periodically to get informal input and feedback throughout the project. This type of panel is quite different from an advisory group. By definition, advisory groups just give advice about what should be done—they don't actually do it. In contrast, an audience panel both gives advice and gets involved in actually implementing it. For an example of material that was created using a participatory approach, *Hair Care Tips for Sisters on the Move: Feeling Fit and Looking Fine* (Sisters Together Coalition). It's available at the Harvard School of Public Health's health literacy website at http://www.hsph.harvard.edu/healthliteracy/files/sisters.pdf.

While this approach requires a lot of coordination, cultural knowledge and sensitivity, and skill in working with a group, the benefits can be substantial. Getting audience members involved in the actual writing and design of your materials is an effective way to end up with culturally-appropriate materials at an appropriate reading level. It is empowering to the members of the audience, and you will be amazed at how much you will learn.

Besides talking with people, you can use other approaches to get them actively involved. For example, it can be very helpful to show people a group of photos or design choices and ask for their opinions and preferences. You can also use tasks such as card sorting as a tool for getting feedback. For example, you can put key messages on cards and ask people who represent your intended readers to sort the cards into the order that makes sense to them. This technique will help trigger a discussion of how your readers are interpreting the messages and why they think one topic needs to come before another. The technique may also reveal gaps in your sequence, that is, topics that your audience thinks should be added.

Whatever your approach, it takes careful planning and skillful implementation to get the most meaningful and useful information. Many factors have great impact on the depth, breadth, and validity of the feedback you collect, including whom you recruit to participate, the tone you establish during recruitment and during the discussion itself, the questions you ask, and the ways in which you ask them. For help with this, see Toolkit Part 6, *How to collect and use feedback from readers.* Chapter 6, *Should you do interviews or focus groups*? discusses which approaches work best for which purposes.

Rely on feedback from readers as the ultimate test

Tips for being reader centered #7

To find out how well your materials are working, test them by getting reactions directly from your readers.

There's no substitute for getting feedback on draft versions of the material from members of your intended audience. Individual interviews with readers provide the privacy and flexibility you need to assess comprehension and usability.

The ultimate test of your written material is, of course, the response of your readers. For the details about how to get feedback from readers, see Toolkit Part 6, *How to collect and use feedback from readers*. It focuses on how to use individual interviews to test your material with readers. Interviews offer privacy and flexibility, allowing you to get readers to engage with the material and give their candid reactions without being influenced by others in a group. You can use a variety of techniques in an interview. For example:

- Interviews allow you to watch how people read through the material, noting their "navigational" approach: where do they begin reading the document? Where do they go next? How long do they spend on each topic?
- In an interview, you can also ask people to "think aloud" as they read, sharing their thoughts and opinions as they go.
- Interviews work especially well for checking on comprehension, because you can ask people to explain in their own words what the material is about. This experience can be humbling as well as enlightening for those who developed the material, because it sometimes reveals a big gap between what they intended the material to say and what the reader interpreted it to mean.

- Interviews also work especially well for "usability testing," which checks on how well people can actually put the written material to use. For example, if the material is a decision guide for choosing a health plan, you can ask the person you are interviewing to use it to make a decision. You can watch as they read the material and make their decision, then talk with them afterwards to get their feedback on the process of applying what they have read. If the material is an application form for a program, you can ask the person to fill it out and see if any questions or problems come up as they do it.

End notes

Thanks to the following people for sharing their insights about what it takes to be reader centered and offering suggestions for topics covered in this Toolkit Part 2: Elizabeth Hoy; Ginny Redish; William Smith; Julie Carson; Helen Osborne, and Mark Evers.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 3

Summary List of the "Toolkit Guidelines for Writing and Design"

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 3

Summary List of the “Toolkit Guidelines for Writing and Design”

This document is Part 3 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit

The *Toolkit for Making Written Material Clear and Effective* is a health literacy resource from the Centers for Medicare and Medicaid Services (CMS). It has practical tools to help you improve printed material you develop for people who are enrolling in or receiving services from CMS programs such as Medicare, Medicaid, or Children’s Health Insurance (CHIP). These CMS audiences are culturally diverse and they include people with limited reading skills and older adults such as people with Medicare.

To learn more about the Toolkit, see Toolkit Part 1 (*About this Toolkit and how it can help you*) and Toolkit Part 2 (*Using a reader-centered approach to develop and test written material*).

About the Toolkit Guidelines for Writing and Design

To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. This document, Toolkit Part 3, gives you the full list. Each Toolkit Guideline focuses on a particular aspect of writing or graphic design, such as writing with a friendly tone, making headings easy to skim, and checking on cultural appropriateness of photographs and other visual elements. Some guidelines for design are unique to specific types of material, such as charts, forms, or questionnaires.

This document (Toolkit Part 3) gives the full list of *Toolkit Guidelines for Writing and Design* and offers general tips for ways to use them. For the details on how to apply each guideline, see Toolkit Part 4 (guidelines for writing) and Part 5 (guidelines for design).

The Toolkit Guidelines apply broadly across literacy levels

While the guidelines are geared to the needs of CMS audiences, most of them reflect general principles for effective communication of information to *any* audience.

- Most of the guidelines can be used to help create material that is clear and effective for people who have a broad range of literacy skills, ranging from those with low (but not marginal) literacy skills through those who are skilled readers (see Toolkit Part 1 and Toolkit Part 2).

- All readers can appreciate getting information that is written in plain language. Readers want a document to be well organized and easy to skim to pick up the main points. Material that is well written and designed will not be condescending or oversimplified (www.plainlanguage.gov).

- "Plain language" is defined from the perspective of the reader; plain language means that the intended readers find it clear and effective. When you write in plain language, you adapt the material based on the literacy skills of your intended readers. For example, one of the Toolkit Guidelines urges you to use words that are familiar to your intended readers. If your intended readers are skilled readers, you will have a wider choice of words that are familiar.

Tips on how to use the Toolkit Guidelines

The *Toolkit Guidelines for Writing and Design* are not hard and fast rules, and they are not set up to "score" documents with overall ratings of suitability. Rather, they are practical, flexible tools to help you improve your written materials. Here are some ways you can use the guidelines:

1 Use the guidelines to learn what makes materials suitable and effective for culturally diverse CMS audiences

- **Cultural suitability for diverse audiences**: you can use the guidelines to draw attention to the needs of a culturally diverse audience.

- **The needs of less-skilled readers**: you can use the guidelines and other discussion in this Toolkit to focus on the needs of less-skilled readers.

- **Attention to older readers**: you can use the guidelines to draw your attention to the needs of older adults who often experience the normal age-related declines in vision and the ability to read and process written information (see Toolkit Part 9, *Things to know if your written material is for older adults*).

2 Use the guidelines as a flexible tool to help you select, improve, or create written material

When you use the guidelines, it's up to you to decide which ones are most salient and consequential for your particular materials and intended readers, and how to apply them. Use some or all of the guidelines at any stage of developing your material. CMS offers the Toolkit and its guidelines as practical assistance for making your written material clear and effective (not as requirements).

- **Selection of materials**: you can use the guidelines as an assessment tool to help you evaluate a group of existing materials and pick the most effective ones.

- **Revision of materials**: you can use the guidelines to identify strengths and weaknesses of your own materials and help guide revisions.

- **Creation of materials**: you can use the guidelines as a tool for developing effective new materials.

3 Use the guidelines as a resource for staff training or development of standards

- **Staff training and development*:*** you can use the guidelines as a basis for training sessions to promote awareness and skill development among staff in your organization.

- **Guidance for vendors or contractors*:*** you can use the guidelines as a resource for setting specific standards for written materials produced by vendors or contractors.

Keep the focus on improvement

When you are developing written material, there's always something new to learn about what works and what doesn't. By sharing these detailed guidelines, we hope to give you a fresh perspective and some insights into things you might do to make your material more effective. The Toolkit Guidelines work best when you have a positive and constructive attitude that focuses on improvement:

- **Be tactful and constructive**. If you are using the guidelines to assess existing materials, emphasize that you're using the guidelines to judge the written material, not the people who sponsored or produced it. If you have a team of reviewers who meet as a group, a positive and constructive spirit is crucial, so that no one feels put on the spot and defensive about any shortcomings identified by the assessment.

- **Don't get discouraged.** This book has many detailed guidelines, and you may see many opportunities for improvement when you apply them. Just remember that no document is perfect, and certain trade-offs are inevitable. As you think about revisions, focus on the areas that seem most consequential and those that lend themselves most readily to improvement. Pay special attention to the factors that affect ease of reading, comprehension, and overall cultural acceptance.

Use a team approach

When you are ready to use the guidelines to guide improvements, it can be very helpful to get a group of people involved. Try for a good mix of people:

- **People who differ in their familiarity with the material**. It's wise to include people who have never seen the document before, because they will come to it with fresh eyes. It's also good to involve people who are familiar with the document or who helped create it. They know its history, including results from any testing that was done and why certain decisions were made.

- **People who reflect a broad range of knowledge, skills, and interests.** To apply the guidelines to your materials, you need subject matter experts and people who are knowledgeable about cultural and linguistic patterns among your intended readers.

- **People who tend to focus on different features of the materials.** Most people tend to be more attuned to certain features of a document and less attuned to others. For example, people who are highly visual may have stronger or different opinions about layout and formatting than those who are not. Those who have struggled to write clear and simple language may be more insightful and demanding in their evaluation of the writing style than those who have not.

Use the guidelines for a formal assessment

If you want to do a formal assessment with multiple reviewers, you can turn the guidelines into a systematic tool for assessments. Here are some suggestions:

1. **Choose which guidelines to include in your assessment**. You may want to focus your review on just a few sections or items in the guidelines:

   - For example, if you think there are problems with the way you've organized the material, you could use Guidelines 2.1 through 2.5 that tell how to sequence, group, and label the information.

   - If you have concerns about whether the material is culturally appropriate, you could focus on the guidelines that address cultural issues. There are guidelines that address different aspects of cultural suitability under many of the topics covered in the Toolkit Guidelines. For more about this, see Toolkit Part 2, *Using a reader-centered approach to develop and test written material.*

   - Since the guidelines are extensive and detailed, you may find that some of them are not applicable to your material. For example, if you are assessing a document that is printed in black and white, you would drop the entire section of guidelines on use of color.

2. **Decide how to structure the collection of feedback from reviewers**. There are several possibilities:

- You can leave blank lines for comments. The simplest way to collect feedback from reviewers is to list the guidelines you have chosen and leave a space after each one for reviewers to make comments.

- If you are doing a systematic review, you may find it helpful to create a rating form. Below, we use Guideline 3.5 as an example to show how you could convert a guideline into a rating item. The sample format shown below includes space for comments, urging reviewers to be as specific as they can. You can tally the ratings for each guideline to identify areas that need improvement. Whether you use a rating form or not, comments from reviewers are the most informative and actionable part of using this Toolkit's guidelines to assess written material.

Guideline 3.5

Create cohesion by making strong, logical connections among your sentences and paragraphs.

Develop ideas in a logical progression that makes the connections between ideas explicit. Repeat key words and phrases to reinforce learning and create continuity.

- ☐ Meets this guideline
- ☐ Needs minor improvement
- ☐ Needs major improvement
- ☐ Don't know or not sure
- ☐ Not applicable

Comments *(please be as specific as you can):*

____

____

____

____

Look at the material from the reader's point of view

Whatever process you use to apply the guidelines to your materials, do your best to adopt the mindset of a reader who is part of the intended audience. As much as you can, try to suspend your own reading habits, subject matter knowledge, and taken-for-granted assumptions.

For example, if you are assessing a document written for readers with low literacy skills, you know that these readers will approach the material differently than you would (see Toolkit Section 2, *Using a reader-centered approach to develop and test written material)*. As you apply the guidelines to the material, think about how it might seem to less skilled readers, and how they are likely to navigate through it. This will help you spot the things that will challenge poor readers, such as difficult words (even though *you* know them) and connections among concepts that need to be spelled out specifically (even though *you* could easily fill them in on your own).

Make notes on your reactions

- **Try to capture first impressions**. When you look at written material for the first time, skim quickly without reading to form a general first impression. Jot down your impressions before they fade. It is hard to recapture first impressions once you begin to read material closely and study it critically.

- **Taking notes**. It is easier to make certain types of comments by writing directly on the document, such as comments about layout, fonts, color, and other visual elements. It is also helpful to have self-stick notes handy for making longer comments directly on the document.

- **Consolidating notes and making plans for revision.** If you have a longer document, it can be helpful to make a cut-and-paste display of it for use when you are deciding on revision. Just cut the document apart and mount the pages in sequence on a long roll of paper. You can tape this to a wall for reference. This display makes it easier to analyze the overall flow of the document, and to address problems with organization and navigation. It also makes a handy spot to consolidate notes and record decisions about plans for further consumer testing or revisions.

Remember that readers' reactions are the ultimate test

While the *Toolkit Guidelines for Writing and Design* are a useful tool for developers and sponsors of written materials, they don't replace the need to get feedback directly from the intended audience. The guidelines will give you a big head start in producing effective materials, but impact on the behavior of the intended audience is the ultimate test.

To know whether your intended readers are noticing, understanding, and using the materials, you need to do testing and evaluation that include getting feedback directly from them. For help with this, see Toolkit Part 6, *How to collect and use feedback from readers*. Written for people without a research background, this Part is a book-length guide with step-by-step instructions for collecting and using feedback from readers to improve written material.

A list of the "Toolkit Guidelines for Writing"

As shown below, the Toolkit Guidelines for Writing cover four areas: (1) content; (2) organization; (3) writing style; and (4) engaging, supporting and motivating your readers.

Content

Toolkit Part 4, Chapter 1 shows how to apply these guidelines

1.1 **Make the purpose and usefulness of the material immediately obvious.**
Use the title and other upfront text to make clear to readers what the material is about, who it is for, and how to use it. Remember that readers skim and make quick judgments about what's worth reading.

1.2 **In choosing which content to include, be guided by the *readers'* interests, knowledge, and needs (which may be quite different from your own).**
Focus on what matters most to the intended readers. Address their issues and concerns, as well as areas of possible misunderstanding.

1.3 **Show awareness of and respect for diversity among intended readers.**
Choose content that is culturally appropriate for the intended readers, reflecting and responding to differences in their experiences and situations.

1.4 **Repeat new concepts and summarize the most important points.**
All readers need time to absorb new information. Repetition helps them remember it.

1.5 **Make sure that the information is accurate and up to date.**
Check the facts. Involve subject matter experts from the beginning, and have reviewers check on accuracy. Proofread carefully at the end, not relying just on a spell-check program.

1.6 **Limit the information to an amount that is reasonable for the intended readers.**

Too much text can be overwhelming, especially to less-skilled readers. If the material is too long, consider other ways to package it. If you condense it, don't oversimplify or drop the examples and explanations that readers really need.

1.7 **Identify the organization that produced the material, and include a publication date and contact information.**

Including contact information makes it easy for readers to follow up with questions or ask for permission to reprint the material. Including the date will help remind you when it's time to update the information.

Guidelines 2.1 to 2.5

Organization (sequencing, grouping, and labeling)

Toolkit Part 4, Chapter 2 shows how to apply these guidelines

2.1 **Group the information into meaningful "chunks" of reasonable size.**

Readers can handle only a limited amount of information at one time. To avoid information overload, divide the text in ways that will make sense to the readers. Keep each segment or section of text relatively short. When you use bulleted lists, limit the number of bulleted points (group the points into sections if the list is long).

2.2 **Organize the information in an order that will make sense to the intended readers.**

Topics should build in a natural way, giving readers the background and context they need to understand new information.

2.3 **Use headings, subheadings, and other devices to signal what's coming next.**

These devices are "advance organizers" that show readers how the material is grouped and sequenced, and prepare them for the next topic.

2.4 **Use specific and informative wording for sections, headings, and subheadings.**

To reinforce the main points and help readers skim, compose text for headings that is meaningful and explicit.

2.5 **Use navigational tools to help orient readers and make important information easy to find.**

For printed material, these tools include page numbers, headers and footers, table of contents, and index. Choose navigation tools that are appropriate for the intended readers and type of material.

Writing style

Toolkit Part 4, Chapter 3 shows how to apply these guidelines

3.1 **Write in a conversational style, using the active voice.**

To make your message informal and appealing, use "we" and "you." To make it direct and easy to understand, write in the active voice.

3.2 **Keep your sentences simple and relatively short.**

Don't pack too much information into a single sentence. Keep most of your sentences relatively short, and use simple conjunctions (*or*, *but, and*). To create good rhythm and natural tone, and avoid sounding choppy, vary the length of your sentences.

3.3 **Be direct, specific, and concrete.**

To help readers understand and use the information, spell out its implications, and be direct in saying what they should do.

3.4 **Give the context first, and incorporate definitions and explanations into the text.**

To help readers understand new information, give the context first. Most readers don't use a glossary, especially poor readers, so explain a new term or concept when you use it. Then continue to include some context to help readers remember what it means.

3.5 **Create cohesion by making strong, logical connections among your sentences and paragraphs.**

Develop ideas in a logical progression that makes the connections between ideas explicit. Repeat key words and phrases to reinforce learning and create continuity.

3.6 **Choose words that are familiar and culturally appropriate for the intended readers.**

Tailor your vocabulary to your readers, using simpler words whenever possible. Be cautious about using professional jargon, slang, figures of speech, and words that may differ by region.

3.7 **Use technical terms and acronyms only when readers need to know them.**

Technical terms can be difficult and intimidating; use simpler words whenever you can. It takes extra effort for readers to learn and remember a new acronym, so don't use acronyms just out of habit.

3.8 **Write as simply you can, taking into account the reading skills of your intended audience.**

As a general goal, whatever your audience, write as simply as you can without sacrificing content or distorting meaning. (Be very cautious about using readability formulas or setting goals based on reading grade levels. Readability formulas predict the difficulty of words and sentences, usually based only on their length. Despite their name, readability formulas do not measure ease of reading or comprehension, and the scores from these formulas are not good indicators of overall suitability of material. For concerns and recommendations about using formulas to score written material, See Toolkit Part 7, *Using readability formulas: a cautionary note*.)

Engaging, supporting, and motivating your readers

Toolkit Part 4, Chapter 4 shows how to apply these guidelines

4.1 **Be friendly and positive.**

When your messages have a supportive tone, readers will be more receptive, especially if you are urging them to do something difficult or unfamiliar.

4.2 **Use devices that engage and involve your readers, such as stories and quotations, questions and answers, quiz formats, and blank spaces for them to fill in.**

When you get people actively involved with the material, they become more interested and learn more easily.

4.3 **When you give suggestions or instructions, make them specific, realistic, and culturally appropriate for your intended readers.**

To keep people from feeling frustrated or discouraged, be sure that the behavior you are urging seems feasible to them. If you raise awareness of risks or problems, tell people what they can do about them.

4.4 **Base your material on information sources that your intended readers will trust.**

To check on credibility of different sources, ask members of your intended audience and informants.

4.5 **Match health statistics and similar information as closely as you can to the characteristics of your intended readers and their communities.**

A close match makes it easier for people to relate to the material.

4.6 **Tell readers how to get help or more information.**

Make it easy for people to follow up on what they've just read by telling them what additional information or assistance is available and where they can get it.

A list of the "Toolkit Guidelines for Design"

As shown below, the Toolkit Guidelines for Design cover the following seven topics: (1) overall design and page layout; (2)) fonts (typefaces), size of print, and contrast; (3) headings, bulleted lists, and text emphasis; (4) use of color; (5) use of photographs, illustrations, and clip art; (6) tables, charts, and diagrams; and (7) forms and questionnaires.

Overall design and page layout

Toolkit Part 5, Chapter 2 shows how to apply these guidelines

5.1 **Design the size, shape, and general look of the material with its purpose and users in mind.**

Consider whether there are ways to change features such as size and shape to make it more functional, more eye-catching, or more appealing to your readers. Also, consider possible ways to make it easier or more cost effective to produce and distribute.

5.2 **Make the material look appealing at first glance.**

Create uncluttered pages with generous margins and plenty of white space. Include something to catch the reader's eye but not confuse it. A clean, crisp layout encourages readers by making the material look as if it's going to be easy to read.

5.3 **Create a clear and obvious path for the eye to follow through each page.**

Design your layout to fit with a reader's natural and deeply ingrained way of progressing through a printed page (called "reading gravity"). Place the headings, text, and images in a way that guides readers smoothly through all of the material without diverting or distracting them.

5.4 **Create an overall design for the material that has a clear and consistent style and structure.**

For a clean and well-organized look, use a page grid and style sheets to guide your design. Line up your headings, blocks of text, lists, illustrations, and other design elements in a clear and consistent way. Keep the same style or "look" throughout the material.

Guidelines 6.1 to 6.12

Fonts (typefaces), size of print, and contrast

Toolkit Part 5, Chapter 3 shows how to apply these guidelines

6.1 **For the regular text in printed materials, use a "serif" font that is designed for ease of reading.**

Serif fonts are fonts that use the small lines called "serifs" to finish off the main strokes of letters. For extended amounts of text, serif fonts work better than fonts without serifs (which are called "sans serif" fonts). Since readability of fonts differs greatly, pick a serif font that is highly readable as your basic text font. This text font should show good contrast between its bold and regular versions, and should remain easy to read when italicized.

6.2 **For the headings in your printed materials, use an easy-to-read "sans serif" font, preferably one that is a "font family" with different weights (some bolder than others).**

To help readers skim and pick out the main points in your material, be sure that there is good contrast between the serif font you use for text and the sans serif font you use for headings. Choosing a font for headings that offers variations in weight is helpful because it gives you better options for creating good contrast.

6.3 **In general, use no more than two or three different typefaces in a single piece of material.**

Limiting the number of fonts will give your material a cleaner look and greater unity. For most information materials, it works well to use just one serif font for the text and one sans serif font for the titles and headings. Experiment a bit to be sure the fonts you have chosen work well together. You may want to add an additional font or two for a particular purpose, such as using a special font to accent the title.

6.4 **Make the type size large enough for easy reading by your intended audience.**

The best way to know whether your type is large enough is to get feedback from your intended readers. Older readers will need somewhat larger type than younger ones. You can use point size (such as "12 point font") as a rough guide, but keep in mind that fonts in the same point size can vary a lot in actual physical size due to differences in style of the letters. These differences in lettering style can affect ease of reading as much or more than point size.

6.5 **For all of your text, including titles and headings, use upper and lower case letters in combination --nothing written in "all caps."**

Text in all capital letters is hard to read, so use capital letters only at the beginning of sentences and other places where they are required. For ease of reading, try capitalizing only the first word in titles and headings (rather than capitalizing all of the important words).

6.6 **To emphasize words and short phrases that are part of your regular text, use italics or boldface type.**

Do not use underlining or put the text into all capital letters, because these make text hard to read. Be restrained in using italics, boldface, and other devices such as contrast in size or color accents on text. If you use these devices too often, they lose impact. If you use them on longer blocks of text, they make it hard to read.

6.7 **For ease of reading, use dark colored text on a very light non-glossy background.**

Make sure there is enough contrast between the printed text and the paper to be able to read everything easily. Black text on a white or cream-colored non-glossy background is best. Don't use light-colored text on a dark background (this is called "reversed out" text), because it is too hard to read.

6.8 **For ease of reading, do not print text sideways, on patterned or shaded backgrounds, or on top of photos or other images.**

Printing a title or heading that runs vertically rather than horizontally puts a burden on readers to tilt their heads or twist the page in order to read it (and most won't). When you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The words are harder to read because of reduced contrast and distraction in the background, and the impact of the image is undermined by the words on top of it. Even a plain shaded background makes words harder to read, because it reduces the contrast between the text and background.

6.9 **For ease of reading and a cleaner look, adjust the line spacing in your material.**

To make blocks of text easier to read, add a little extra space between the lines. To help readers connect a heading with the text that follows it, leave a little less line space after the heading than you leave before it. To make bullet points stand out more clearly, put a little extra space between them. Keep these line spacing adjustments consistent throughout the document.

6.10 **For ease of reading, use left justification throughout the material, for both text and headings.**

Left-justify the basic text, leaving the right margin uneven ("ragged right"). Don't use "full justification" because forcing even margins on both sides of a block of text inserts uneven spaces between the words, making them harder to read. Don't center blocks of text, because centering makes it harder to read. To make headings prominent and easy to skim, left justify them (rather than centering them).

6.11 **Keep your lines of text to an appropriate length for easy reading – neither too short nor too long.**

For many materials, a line length of about five inches long works well. If the paper is wide, set the text in columns to maintain a readable line length. Avoid "wrapping" your text in awkward ways that make it hard to read.

6.12 **For ease of reading, watch where the lines break (avoid hyphenation; split long headings carefully to reflect natural phrasing).**

Do not hyphenate words at the end of a line, because splitting a word over two lines makes it harder to read, especially for less-skilled readers. When headings are long, split them over two lines in a way that reflects natural phrasing and avoids the awkwardness of leaving a single word by itself on the second line.

Guidelines 7.1 to 7.4

Headings, bulleted lists, and emphasizing blocks of text

Toolkit Part 5, Chapter 4 shows how to apply these guidelines

7.1 **To make the material easy to skim and show how it is organized, create a clear hierarchy of prominent headings and subheadings.**

Left-justify the headings and subheadings, because readers sometimes miss headings that are centered. To emphasize how the material is structured, use contrast in fonts and maintain clear and consistent alignments, indentations, and spacing between headings and the text that follows.

7.2 Us**e contrast and other devices to make the main points stand out on each page.**

Remember that your readers are skimming and looking for information of personal interest. Help them by using devices such as bulleted and numbered lists, captions for illustrations, emphasis on key words and phrases, and summaries of main points. Use design elements or images to accent important information, such as putting a picture of a phone next to the helpline number.

7.3 **For ease of reading, use care in formatting bulleted lists.**

To set off a list of bulleted points and connect it more closely with the sentence that introduces it, indent the entire list slightly. To make the bulleted points stand out clearly, add extra line space between them and use hanging indents. To set off each point without distracting readers, use bullets that are simple solid shapes. Bullets should be large enough to notice but not so large that they are distracting. Place bullets close to the text that follows them.

7.4 **Choose effective ways to emphasize important blocks of text.**

Outline boxes are often used to emphasize text, but they clutter your layout and readers sometimes ignore text that's enclosed by a box. Shaded backgrounds tend to attract the eye, but they also reduce the contrast, making text less legible and therefore less likely to be read. Instead of using outline boxes or shaded backgrounds, try other methods that tend to work better for emphasizing blocks of text.

Guidelines 8.1 to 8.4

Use of color

Toolkit Part 5, Chapter 5 shows how to apply these guidelines

8.1 **Choose colors that are appealing to the intended readers and free from unwanted connotations or problematic cultural significance.**

Depending on your audience, there can be much variation in the appeal and cultural connotations of various colors and color combinations. To avoid possible problems, get audience reactions to your color choices.

8.2 **Use color sparingly, in a consistent and deliberate way that reinforces the meaning of your messages and enhances their impact.**

Resist the impulse to use color in decorative ways that may distract people from the text. For greatest impact, use color with restraint, since using too much color creates “color overload” that can overwhelm and distract your readers. Be cautious about using color coding as a device. If you use color coding, do it in a consistent way and make the meaning clear to readers. Get feedback from readers to verify that they understand the color coding and find it helpful.

8.3 **Verify that the color scheme and shades of color work well from a design standpoint (including when the material is photocopied or printed in black and white).**

While color selection is partly a matter of taste, certain colors are less effective than others for text, shaded areas, and other design purposes. Check to be sure that the colors reproduce well when photocopied. If material with color is downloadable from a website, it may work best to produce a separate version for users who will print it in black and white. If you are using two colors in your material, it works best to make one of them black and use it for the text.

8.4 **Take into account that some readers are likely to have diminished or limited color perception.**

Check to be sure that your color scheme works well for people who do not perceive the full range of colors, and for older adults who may perceive color less vividly. Be cautious about using color coding in your materials.

Guidelines 9.1 to 9.8

Photographs, illustrations, clip art, and symbols

Toolkit Part 5, Chapter 6 shows how to apply these guidelines

9.1 **Use photos, illustrations, symbols, and other visuals that relate directly to the information in the material and reinforce your key messages.**

Images have great impact, so select them carefully and use them to highlight key points. Instead of using images to decorate the pages, choose images that reflect the subject matter of your materials. Try to show only the behaviors you want to encourage. Avoid using images that are too abstract or hard for readers to understand, such as parts of the body shown in isolation, cross-sections, and highly magnified images.

9.2 **Use images that are clear, uncluttered, and consistent in style.**

For greatest appeal and impact on your readers, keep the images clear and simple, with good contrast that emphasizes the main subject. Avoid using photographs or illustrations with cluttered backgrounds or distracting detail (or edit them to remove the clutter). For a unified look, choose images that are compatible in style and color.

9.3 **Use photos, illustrations, symbols, and other visuals that are culturally appropriate for your intended readers.**

Choose images of people and activities that are contemporary and representative of the intended audience in their demographics, physical appearance, behavior, and cultural elements. Check to be sure that the images you use are free from unwanted connotations or problematic cultural significance.

9.4 **When images include people, make sure that their poses, facial expressions, and body language are appropriate to the situation and appealing to the intended audience.**

Poses that show people engaged in doing something may be more effective than stock photography shots of people smiling directly at the camera. If there is more than one person in the image, poses that show the people relating to each other tend to have more impact.

9.5 **Be very cautious about using symbols or icons to represent concepts or to serve as markers to guide readers through the material.**

Symbols and icons can be ambiguous or confusing to your readers. Using symbols as shortcuts can hinder more than help by giving less-skilled readers something additional to notice, learn, and remember. If you use symbols or other visual means of marking or representing topics, check to be sure that your readers understand the meaning you intend and find the use of symbols helpful.

9.6 **Avoid using cartoons, "cute" or humorous images, and caricature, because these kinds of images may bewilder, confuse, or offend some of your readers.**

Since humor does not translate well across cultures, attempts at humor may puzzle or confuse some readers. Humor based on irony is especially problematic, because readers who take it literally will completely misinterpret what you mean. In addition, individuals differ in what they may find amusing. When you are choosing images, avoid those with strange camera angles, exaggerated features, or a "cute" look. Distorted or coy images distract readers by drawing too much attention, and people find them unappealing or culturally offensive.

9.7 **Pay careful attention to the total number, quality, size, placement, and labeling of the images you use.**

For best impact, limit the number of images you use. Use images of high quality that will reproduce well, and make each one large enough for good impact. Place images in positions that fit with the natural progression of reading so that they do not cause your readers to overlook parts of the text. Keep images close to the text they reinforce.

9.8 **Check for accuracy, if applicable, and pretest the images with your intended readers.**

If your images include technical or medical subject matter, check to be sure that the details are correct. Check on the appeal, cultural appropriateness, and comprehension of the images by getting feedback directly from members of the intended audience.

Guidelines 10.1 to 10.5

Tables, charts, and diagrams

Toolkit Part 5, Chapter 7 shows how to apply these guidelines

10.1 **Take a reader-centered approach to the use of tables, charts and diagrams.**

In deciding whether and how to use these formats, take into account the literacy skills and needs of your intended readers.

10.2 **Make titles, headings, and other labeling specific and complete enough for easy understanding.**

To help readers understand and interpret the meaning of charts and diagrams, use informative text in all labeling. To reduce cognitive burden and the possibility of misinterpretations, avoid using abbreviations, acronyms, footnotes, and cross-references.

10.3 **Create a clean, uncluttered layout with strong visual and written cues to guide readers and help them interpret the information correctly.**

Keep the layout tidy and uncluttered, with ample margins and white space. Help readers understand and absorb the information in a chart or diagram by using devices such as taglines, examples, captions, and step-by-step instructions. If you use symbols in a comparison chart, make them as self-explanatory as possible, tell what they mean, and design them with good contrast.

10.4 **If there are any numbers or calculations, explain them carefully and give examples.**

Since math is hard for many people, and can be especially hard for people with low literacy skills, take special care with explanations that involve numbers. With calculations, use examples that show each step and explain it clearly. Simplify numeric examples by using rounded whole numbers as much as you can. To help people understand weights and measurements, make comparisons to familiar objects.

10.5 **Test your tables, charts, and diagrams to be sure that your intended readers can understand and use them.**

Direct feedback from readers is the best way to check on comprehension, cultural appropriateness, and usability of the information you present in a table, chart, diagram, or graph.

Guidelines 11.1 to 11.9

Forms and questionnaires

Toolkit Part 5, Chapter 8 shows how to apply these guidelines

11.1 **Begin a form or questionnaire with an informative title and brief explanation of its purpose.**

At the beginning of the form or questionnaire, tell what the document is for and what people should do with it, using words they will understand. Explain any program titles or agency names that may be unfamiliar to them. Explain how the information will be used and, if applicable, how privacy will be protected.

11.2 **Ask only for information you really need and will definitely use.**

Filling out a form or questionnaire can be burdensome and time consuming, so keep it as short as you can. Don't collect information that is unnecessary or readily available elsewhere. Ask for each piece of information only one time.

11.3 **Make the layout clear, uncrowded, and appealing.**

Do not crowd a form or questionnaire into space that is too small for easy reading and writing. Spreading it out into the amount of space required for easy completion will work better than forcing it to fit into some predetermined length (such as "no longer than one page").

11.4 **Integrate instructions and explanations into the form or questionnaire, placing them right where they are needed by the reader.**

Integrating the instructions into your form is a powerful way to show consideration for your readers and improve ease and accuracy of response. Do not use footnotes or asterisks, because many less-skilled readers do not understand their function, and using them adds an extra burden for any reader. At the end, tell readers what to do with the completed form or questionnaire

11.5 **Limit the number of formats for collecting answers and use them in a consistent way.**

Make the task of supplying information as simple and intuitive for your readers as you can, so that they don't have to stop and think about what you are asking or how to answer. To encourage full and accurate completion, provide clear, complete labels on the fields to be filled in.

11.6 **In a form for people with low literacy skills, avoid using a grid or matrix format to collect information.**

A grid or matrix format has rows and columns. When you use a grid to collect information, readers have to keep looking up at the headings at the top of the columns to understand what you are asking for. To make it easier for people to give accurate answers, consider breaking each part of the grid into a fully labeled separate item.

11.7 **Create a clear and obvious path through the form that minimizes cross-references and skip patterns.**

Arrange the items in an order that makes sense to readers and eliminates (or greatly minimizes) the need to skip around among the sections.

11.8 **Conduct usability testing.**

To find out whether a form or questionnaire is working well, conduct usability testing with intended users. Have them fill it out, then debrief to get their reactions and suggestions.

11.9 **Take into account how the form or questionnaire will be produced, distributed, and processed.**

Work with others to produce a form that is both easy to fill out and easy to process.

How were the Toolkit guidelines developed?

The Toolkit and its guidelines were written for CMS by Jeanne McGee, PhD, McGee & Evers Consulting, Inc., Vancouver, Washington. CMS offers the Toolkit as practical assistance to help you make your written material clear and effective, not as a requirement from CMS.

The set of *Toolkit Guidelines for Writing and Design* is an expanded version of the *Checklist for Assessing Print Materials.* This *Checklist* was part of a manual of technical assistance written for the Health Care Financing Administration (HCFA) (now known as CMS) by Jeanne McGee and titled *Writing and Designing Print Materials for Beneficiaries: A Guide for State Medicaid Agencies* (HCFA, 1999). The Toolkit is more inclusive than its precursor. The scope of the Toolkit has been expanded to include Medicare and the Children's Health Insurance Program (CHIP) as well as Medicaid.

To create the Checklist for Assessing Print Materials, the writer identified and synthesized themes and findings from research, field experience, and existing checklists. She also drew on the expertise and advice of numerous colleagues and subject matter experts across the nation. To help develop and refine the items for the Checklist, she reviewed a number of checklists in resources that were available in 1999. These included Doak, Doak, & Root (1996); Root & Stableford (1998); Guidry & Larke (1996); Guidry, Kern-Foxworth, & Larke (1996); Ramirez, Stamm, Williams, Stevenson, & Espinoza (1996); the National Cancer Institute (NCI) (1994); and the Center for Substance Abuse Prevention (CSAP) Communications Team (1994).

Some of the checklists that the writer reviewed focus on specific types of materials or specific populations. For example, the Suitability Assessment of Materials (SAM) in *Teaching Patients with Low Literacy Skills* (Doak, Doak, & Root, 1996) was created for use with patient education materials. The cultural competency tools associated with the Texas Cancer Council (Guidry & Larke, 1996; Guidry, Kern-Foxworth, & Larke, 1996; Ramirez, et al., 1996) are focused on specific racial/ethnic groups and a specific type of disease. Some of the checklists she reviewed are scored to yield a numerical score or rating. For example both the SAM and the Cultural Sensitivity Assessment Tool yield a numerical score.

The *Checklist for Assessing Print Materials* published in *Writing and Designing Print Materials for Beneficiaries: A Guide for State Medicaid Agencies* (HCFA, 1999) is broad in scope and is not scored numerically. The Checklist has a descriptive section ("Part A") with 12 items. The assessment section ("Part B") has 22 items on writing, 34 items on graphic design, and 4 items on translation.

Using the existing *Checklist for Assessing Print Materials* as the starting point, the writer created the *Toolkit Guidelines for Writing and Design by* reviewing recent literature, seeking suggestions for improvement from colleagues, and responding to feedback from users of the original guide. The resulting Toolkit Guidelines preserve the same general content and reader-centered approach of the original Checklist. The format has changed: the items have been converted from a checklist (with each item posed as a question) into guidelines (with each item describing a desirable feature that helps make written material clear and effective). As before, the topic of cultural appropriateness is integrated throughout the guidelines, topic by topic. The biggest change is that the guidelines for graphic design have been expanded substantially (from 34 items to 46 items). Responding to feedback from users of the original Checklist, the new guidelines for graphic design are more detailed and more comprehensive, and so is the discussion that explains how to apply them (Toolkit Part 5).

The original Checklist included 4 items for language translation. Responding to feedback from users, these have been expanded for the Toolkit. There are now 10 guidelines for translation: see Toolkit Part 11, *Understanding and using the "Toolkit Guidelines for Culturally Appropriate Translation"*.

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 4

Understanding and using the “Toolkit Guidelines for Writing”

Chapter 1

Guidelines for content of your written material

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 4, Chapter 1

Guidelines for content of your written material

List of figures in this chapter:

This document is the first of four chapters in Part 4 of the *Toolkit for Making Written Material Clear and Effective.* The Toolkit has 11 parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare and Medicaid Services (CMS). It has practical tools to help you improve printed material you develop for people who are enrolling in or receiving services from CMS programs such as Medicare, Medicaid, or Children's Health Insurance (CHIP). These CMS audiences are culturally diverse and they include people with limited reading skills and older adults such as people with Medicare.

To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing in Toolkit Part 4 and 46 guidelines for graphic design in Toolkit Part 5. While these Toolkit guidelines emphasize ways to make written material clear and effective for CMS audiences, most of them reflect general principles for effective communication of information to *any* audience. They are offered as practical assistance to help you make your written material easier for people to understand and use (not as requirements from CMS).

For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material*. For the full list of guidelines for writing and design, and a discussion about how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 4 of the Toolkit focuses on the guidelines for writing. These guidelines apply to writing various types of material intended for use in printed formats by culturally diverse audiences that include people with low literacy skills (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the first of four chapters on writing in Toolkit Part 4. It discusses how to apply the guidelines for content of written material shown below in Figure 4-1-a. (Other chapters in Part 4 cover guidelines for organization (Chapter 2); guidelines for writing style (Chapter 3); and guidelines for engaging, motivating, and supporting your readers (Chapter 4).)

Figure 4-1-a. Toolkit guidelines for content of written material.

Make the purpose and usefulness of the material immediately obvious. Use the title and other upfront text to make clear to readers what the material is about, who it is for, and how to use it. Remember that readers skim and make quick judgments about what’s worth reading.

In choosing which content to include, be guided by the *readers’* interests, knowledge, and needs (which may be quite different from your own). Focus on what matters most to the intended readers. Address their issues and concerns, as well as areas of possible misunderstanding.

Show awareness of and respect for diversity among intended readers. Choose content that is culturally appropriate for the intended readers, reflecting and responding to differences in their experiences and situations.

Repeat new concepts and summarize the most important points. All readers need time to absorb new information. Repetition helps them remember it.

Make sure that the information is accurate and up to date. Check the facts. Involve subject matter experts from the beginning, and have reviewers check on accuracy. Proofread carefully at the end, not relying just on a spell-check program.

Limit the information to an amount that is reasonable for the intended readers. Too much text can be overwhelming, especially to less-skilled readers. If the material is too long, consider other ways to package it. If you condense it, don’t oversimplify or drop the examples and explanations that readers really need.

Identify the organization that produced the material, and include a publication date and contact information. Including contact information makes it easy for readers to follow up with questions or ask for permission to reprint the material. Including the date will help remind you when it’s time to update the information.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the “Toolkit Guidelines for Writing and Design”.*

Can readers tell at a glance what the material is for?

Make the purpose and usefulness of the material immediately obvious.

Use the title and other upfront text to make clear to readers what the material is about, who it is for, and how to use it. Remember that readers skim and make quick judgments about what’s worth reading.

Make it easy for your intended readers to figure out both what is covered in your written material and what they are supposed to do with it. Just like you, they make snap judgments about written materials based on a quick glance: *What’s this about? Should I bother to read it?*

If the content and purpose are not evident from the title and other prominent text, many people you’re trying to reach won’t give the material a second glance. And if the title is ambiguous or misleading, you may attract the wrong audience. So pay careful attention to how the title and other prominent text will shape a reader’s first impressions. Keep in mind that you already know the purpose and content of the material, but the reader does not. The title, subtitle, and other upfront text are your first and best chance to attract the reader’s attention, so make them informative and appealing.

When you start to write your material, giving it a working title helps you focus and reminds you of the purpose of your work. Later, when the first draft is complete, take a critical look at your working title. If this title were all you could see, would you have a good sense of what to expect? Does it give enough clues about the subject matter and the intended audience?

Suggestions for creating an effective title and upfront text

- **Make it specific and informative.** If the title is vague or misleading, you may lose your prospective readers at the outset. Try to build in a clear and compelling message about what the material is about and what people will gain from reading it. It helps to be specific. Together with the other upfront text, the title and subtitle should answer the reader’s questions: *What’s this about? How can I use it?*

- **Choose your words and phrases carefully to capture the interest of the intended readers**. You want to draw readers in, not push them away. A poster created by a Medicaid program to publicize its resources for pregnant teenagers provides a good example. The title draws attention: “Pregnant? Now what?” Then the subtitle gives a pregnant teen reason to keep reading: “Give your baby a healthy start. One call gets you connected to care.”

- **Use enough words to be meaningful (but not too many).** When titles are very short, it can be hard to know what they actually mean. For example, if a title were “Choosing Quality,” would you know what the material was about? Long titles are a problem too, because they can't be read at a glance. They may also discourage readers by suggesting that the material itself will be long and complicated. You can keep the title fairly short, and then use a subtitle and other upfront text to expand on its meaning. See the example below in Figure 4-1-b.

Figure 4-1-b. Examples of titles.

Suppose that your organization is sponsoring a free workshop to help people with Medicare reduce medication errors. What would be a good title for the workshop? Some options are shown below.

This title is not very informative, and it could be misleading:

This title doesn’t identify the subject matter or audience very well. Is it an anti-drug workshop for high school seniors, or is it something about prescription drugs for older adults?

This one is more specific, but how will people react to it?

“Medication error” is health care jargon – will people with Medicare understand what this term means? The phrase “... errors and you” may sound a little frightening – will this attract their attention or scare them away?

The title shown below is more specific and more inviting.

This title gives a clear message about the purpose, content, and intended audience. The wording of the title makes the event sound practical and helpful.

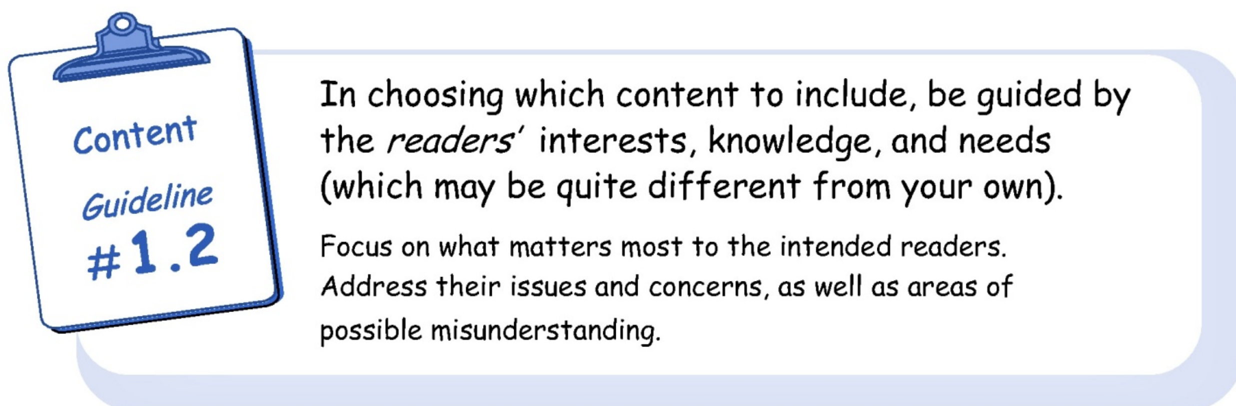
“**Program**” may be a better word choice than “workshop” because it is more familiar and sounds more neutral (to a Medicare audience, “workshop” may suggest that there’s going to be a lot of work to do).

Notice that the subtitle adds the word “**free**.” It also identifies the sponsor – a community agency that the intended audience members will trust.

Source: Created as a fictional example for this Toolkit.

- **Rely on feedback from members of your intended audience as the ultimate test of how well your title and upfront text are working.** A title that seems informative and motivating to you and others who create the written material may not make sense or appeal to the people you are trying to influence. The best way to know whether a title is working well is to get reactions from people who represent your intended readers (see Toolkit Part 6, *How to collect and use feedback from readers*).

What do the readers want and need to know?



This guideline goes to the heart of what it takes to produce effective written materials. The content you include must capture the attention and interest of your intended readers and give them something they find useful. If it doesn't, nothing else you do will matter very much.

This guideline helps you focus on the content that matters most from the reader's point of view. While this may sound simple, the implications are profound. When you are working on written materials, the gaps between you and the intended readers can make it hard for you to look at the materials from their perspective. Here are some possible gaps:

- **A gap in understanding the purpose**. You have a head start because you know why you are writing the material and what you want readers to do with it. Readers have to figure this out.

- **A gap in literacy skills**. You are a highly skilled reader and may take your skills for granted. Many of the intended readers may be much more limited in their reading skills.

- **A gap in knowledge and expertise**. For you, the content is already familiar and very easy to understand. For the intended readers, it is less familiar and possibly hard to understand.

- **A gap in time spent with the material**. You have spent a great deal of time creating the material, and have probably read it from beginning to end a number of times. Readers may spend only a few moments skimming through it, or they may skip around and never read the whole thing.

- **A gap in the benefits you see**. You are strongly positive about the content and think it is valuable for the readers to know. Readers need to be convinced about what they'll gain from it.

- **A gap in how invested you are and how much you care**. Your expectations for the material may be high. For readers, it is just one of many possible things to read (and they may not like to read).

Given these gaps, it can take some extra effort to understand the reader's perspective. It's worth this effort, though, because understanding the reader's perspective is the key to producing materials that people will notice, understand, and use.

To help learn ways to take the reader's perspective as you develop and test written materials, see Toolkit Part 2, *Using a reader-centered approach to writing and design*, and Toolkit Part 6, *How to collect and use feedback from readers*.

Is the content culturally appropriate?

Content Guideline #1.3

Show awareness of and respect for diversity among the intended readers.

Choose content that is culturally appropriate for the intended readers, reflecting and responding to differences in their experiences and situations.

Consider the following examples:

- An Asian American woman who has diabetes is reading a nutrition and recipe guide for people with diabetes. She skims through it and then throws it away. The photos and recipes feature meat and dairy products – foods she seldom eats. The guide doesn't include any of her favorite Asian foods. It emphasizes recipes to fix from scratch – something she seldom does.

- A nursing home activity director is reading a booklet on ways to use music to encourage nursing home residents to get more exercise. He notices that all of the examples focus on residents who use canes and walkers. He wonders how to apply the booklet's suggestions to the residents who use wheel chairs or have to stay in bed most of the day.

In both of these examples, the material is not working well because it doesn't include the specific information these readers needed. Most likely, the people who produced the material didn't exclude this information on purpose—they just didn't pay enough attention to the diversity among their intended readers and the situations they face. The content they omitted kept them from connecting with some of their intended readers.

Showing respect for diversity can be subtle and complex. The people who read your material will relate to it when they can see themselves in it. Yet at the same time, they will read your material as individuals and want to be regarded personally, not as members of a group. Here are suggestions for ways to show awareness of cultural differences and respect for individuals in the content of your materials:

- **Do research about the intended readers and get their reactions to the materials**. Knowing your readers well makes it easier to choose content that responds to their interests and needs. It can help you avoid conspicuous omissions that keep you from connecting with some of your intended readers (as shown in the examples above about exercise for nursing home residents and diabetes nutrition). Getting reactions directly from readers is the best way to make sure that the materials are attuned to their cultural and linguistic practices, using portrayals and examples they find acceptable. For example, Figure 4-1-c below shows how paying attention to readers' reactions led to a change in phrasing of a survey question.

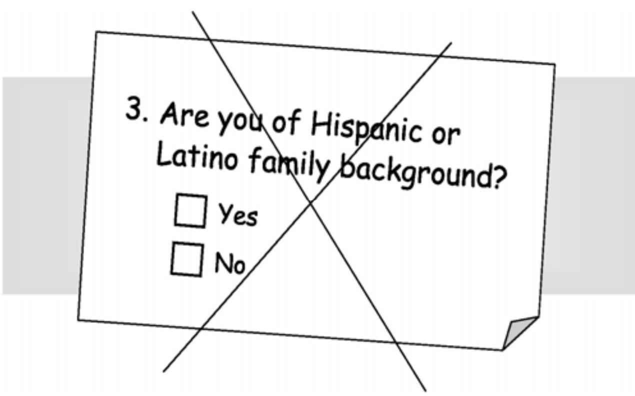
- **To make it easy for readers to relate to what you say, choose content that fits with their logic, language, and experience**. For example, for members of cultures that tend to be highly family centered in their decision making, your messages should take account of the family context.

- **Obviously, it's vital to avoid any portrayals that could be construed as stereotyped, caricatured, or otherwise offensive.** One important principle is to avoid singling out a feature (such as teenage pregnancy or HIV infection) as a dominant characteristic of a person or subgroup. For example, Toolkit Part 4, Chapter 3, *Guidelines for writing style*, has an example with detailed advice about how to write about disabilities in a respectful way (see Figure 4-3-i). *Practical Guidelines for the Development of Audiovisual Cancer Education Materials for African Americans* (Guidry & Larke, 1996:21) calls for eliminating stereotyped portrayals of African Americans. Examples of offensive portrayals include showing African American women in subservient roles, showing African American youths as gang members or lovers of hip-hop and rap, and emphasizing athletic prowess to the exclusion of other traits, such as being intellectual. For discussion of stereotyping, see the website called *The Provider's Guide to Quality & Culture* at http://erc.msh.org/qualityandculture.

- **Use words, phrases, and examples that are part of the culture**—the language that is familiar to people. Figure 4-1-c below gives an example.

Figure 4-1-c. Asking about ethnicity in a culturally appropriate way.

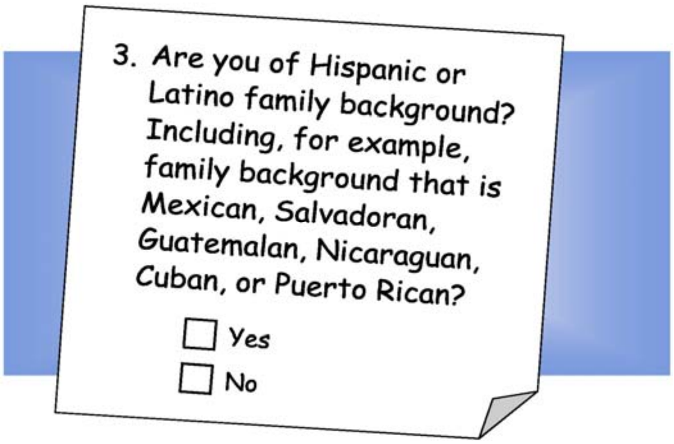
During a series of interviews done to get readers' reactions to written materials, participants were asked to complete a one-page questionnaire that asked for demographic information. As shown below, the survey question that asked about ethnicity had to be revised.



This first version of the question about ethnicity did not work very well.

Interviewers noticed that several people who were known to be Hispanic/Latino marked "no" or skipped the question, even though they answered all the other questions, including one about race.

Interviewers learned that people were not offended by the question. They marked "no" or skipped the question simply because the words "Hispanic" and "Latino" were not the words that they use to describe themselves.



This revised wording worked much better, because people could relate to it personally.

The new wording reflects the diversity among the respondents. Adding the names of the countries shows awareness of and respect for the ways in which they describe themselves.

Source: Created for this Toolkit from the writer's personal experience.

Repeat new concepts and summarize the most important points

Repeat new concepts and summarize the most important points.

All readers need time to absorb new information. Repetition helps them remember it.

To keep the text as brief as possible, writers sometimes remove text that seems to be redundant. Often this is not a good idea. Remember that readers need some time and repetition to absorb new information. You can't expect them to learn and retain something you've mentioned only once, especially if they are poor readers (Doak, Doak, & Root, 1996).

Here are some suggestions to help readers master new information and build confidence in their ability to apply it:

- **Explain important new terms and concepts in more than one way, using different words and phrases**. Don't be stingy with explanations and examples. If you don't give readers enough help to understand the new concepts, they won't be able to follow the rest of what you say.

- **Give readers time to absorb the information**. Even after you have explained a new idea, continue to include some context to help readers remember what it means.

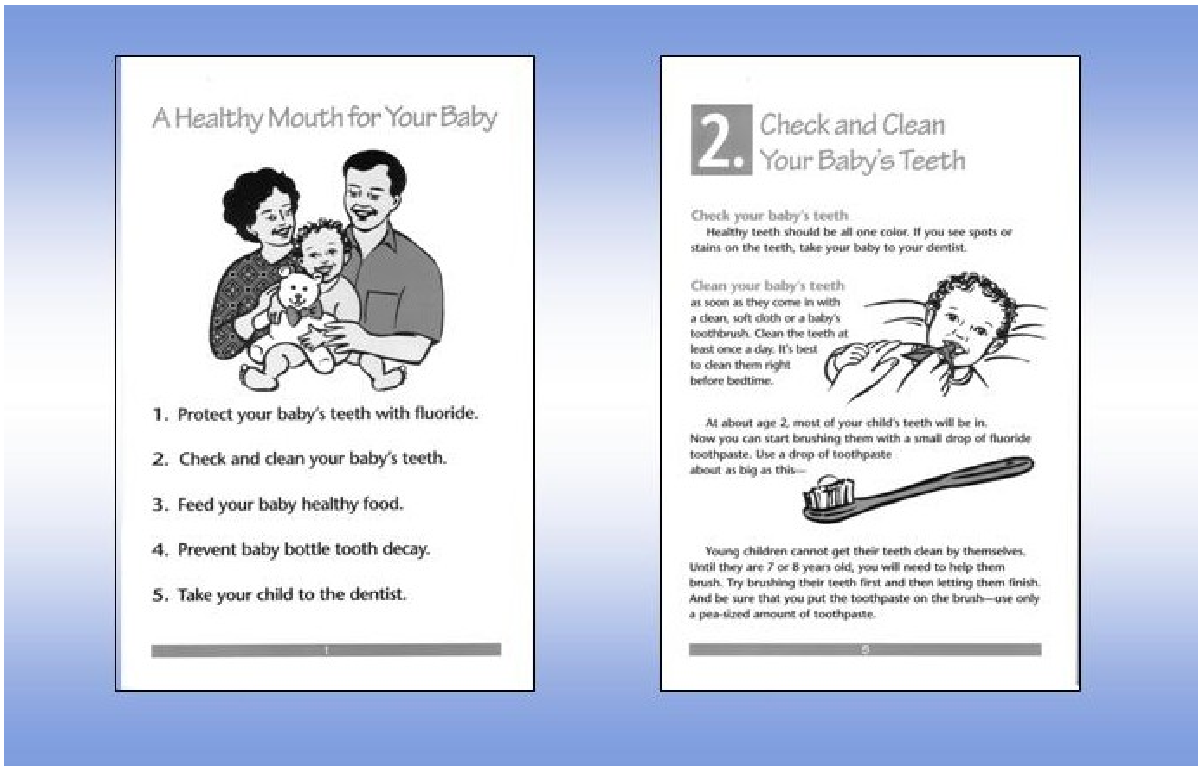
- **Take a "just in time" approach" by repeating the explanations of new terms and concepts whenever they appear.** It's not realistic to expect people to read the material carefully from beginning to end. Many people skim and read selectively, and others skip around. So don't rely on explaining something only at the beginning. Instead, incorporate explanations and context in different parts of the material, wherever the reader may need them.

- **Summarize to reinforce the main points**. How and where you summarize depends on your purpose, your readers, and the material. For example, a summary might be very brief or more detailed. In short material it may come at the end. In longer material, there might be a summary at the beginning or end of each section. Figure 4-1-d below gives an example of a short summary on page 1 of a low literacy booklet on children's dental health. It introduces the five main points that are covered in the rest of the booklet.

- **You can use special formatting to draw attention to the main points and summary**. For example, the list of guidelines in Figure 4-1-a at the beginning of this chapter serves as a summary. The little clipboards help draw your attention to the summary list and to each guideline in the chapter. The booklet in Figure 4-1-d below uses oversize numbers to emphasize five points and the link between the summary list and the page that explains each point. Toolkit Part 5, *Understanding and using the "Toolkit Guidelines for Graphic Design"*, includes many tips on ways to highlight key points and summaries in your materials.

Figure 4-1-d. Using a summary list in an easy-to-read booklet.

The example below is two pages from different parts of a booklet written for people who have limited literacy skills.

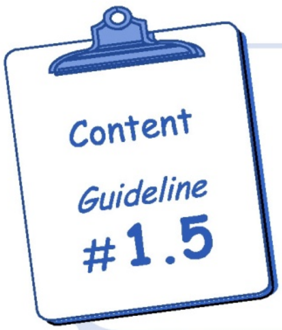


This summary list of five main points appears on page 1. Then the next five pages explain each point.

For illustration, here is the separate page that explains point # 2.

Source: *A Healthy Mouth for Your Baby.* National Institute of Dental and Craniofacial Research, National Institutes of Health, U.S. Department of Health and Human Services, Bethesda, MD. NIH Publication No. 08-2884, reprinted July 2008. For more information, contact nohic@nidcr.nih.gov, visit http://www.nidcr.nih.gov, telephone (301) 402-7364, or visit the following website: http://www.nidcr.nih.gov/OralHealth/Topics/ToothDecay/AHealthyMouthforYourBaby.htm.

Is the content accurate and up to date?



Make sure that the information is accurate and up to date.

Check the facts. Involve subject matter experts from the beginning, and have reviewers check on accuracy. Proofread carefully at the end, not relying just on a spell-check program.

Here are some suggestions for ensuring accuracy of the information in your materials:

- **Before you start writing, be sure of your facts**. This applies to medical, scientific, and technical facts. It also applies to telephone numbers, names of organizations, street addresses, and website addresses, and similar information. If you use other studies’ facts or statistics, make sure you’re interpreting them accurately.

- **Involve subject matter experts at an early stage**. For example, if you are developing patient education materials, you could ask clinicians and patient educators for advice about what topics to cover and what resource materials to use. When the first draft is ready, have them review it for clinical accuracy before it goes out for broader review or testing with patients.

- **Address legal concerns**. If the material is about legal matters, or the legal department raises any concerns about the text you have written, work together with people from the legal department to resolve their concerns without sacrificing clear and simple language. For examples of ways to simplify legal language, see Figure 4-3-h in Toolkit Part 4, Chapter 3, *Guidelines for writing style*. For a detailed discussion of ways to explain patient privacy regulations in plain language, see Pritts (2005).

- **Anticipate topics that may need frequent updating, and set up procedures to handle this**. Some types of information change frequently. To keep this information accurate and useful, you need to update it periodically. With careful planning, you may be able to format the information in a way that makes updating much easier and more cost effective. For example, if you group it all in one place, you can focus your updates on a single page or two.

- **If the material includes a map or directions for getting to your location, check these carefully to make sure they are accurate and easy to follow**. It helps to ask someone who is less familiar with the area to check on maps and directions. For an example on how to format a map in the most effective ways, see *Before and After Page Design* (McWade, 2003:81).

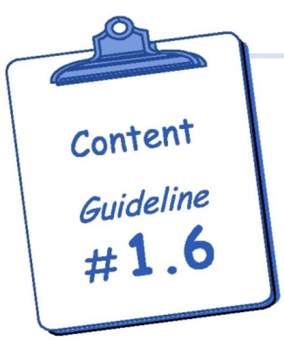
- **Proofreading is the final step in ensuring accuracy**. Do this carefully. Spell-check programs catch certain types of errors, but they are no substitute for thorough manual proofreading:

  - Spell checkers will catch many *misspelled* words but they do not catch *misused* words. For example, a spell-checker will not flag a misuse of the word *its* that should have been *it's* because *its* and *it's* are both legitimate words.

  - The dictionary built into a spell checker is limited. Some words you use may be unknown to the spell checker. Spell checkers cannot spot typos in such things as people's names, phone numbers, or websites. Nor will they catch typing errors that produce legitimate words, such as typing "no" instead of "on."

  - Often, you will just catch a few minor errors when you proofread. Occasionally, you will catch a huge mistake that could have caused major problems – such as a typo in the toll-free help line number or an error in describing a deadline or program benefit.

How much information should you include?



Limit the information to an amount that is reasonable for the intended readers.

Too much text can be overwhelming, especially to less-skilled readers. If the material is too long, consider other ways to package it. If you condense it, don't oversimplify or drop the examples and explanations that readers really need.

The combination of sheer amount of text and the way it is formatted makes an immediate impression on your readers. Material that is densely designed with solid blocks of text can look overwhelming, regardless of its content. Toolkit Part 5, *Understanding and using the "Toolkit Guidelines for Graphic Design"*, will help you break your content into sections, add informative headings, and use other devices to guide readers smoothly through the text. But no matter how well text is visually displayed, readers may get discouraged or reject the material if they think it includes too much information.

Here are suggestions to help you keep the total amount of text to a reasonable amount for your intended readers:

1. **Identify what readers really "need to know," and consider eliminating what is merely "nice to know."** With help from key informants and people who represent your intended readers, sift through all that might be said and figure out just (and only just) what readers really need to know.

   - **Look at each part of the text closely**: Could this part stand by itself and still make sense? Could you eliminate it altogether and still have the reader take the action you urge or understand the key points of your message?

   - **Take care not to distort the meaning by oversimplifying or omitting crucial content as you pare away.** A "reasonable amount" of information means including *enough* information, but not too much. Be careful not to be too brief or terse. For example, in your quest to reduce the total amount of information, don't cut all of your examples and explanations. You will probably find that condensing your text requires rewriting as much as cutting.

2. **Consider different options for packaging and distributing the information.** If you have many topics to cover, ask yourself if it's wise to put them all in one comprehensive publication. The total amount of text may seem overwhelming and discourage people from finding the specific information they need.

   - **As you work on condensing the content, take into account other ways you are sharing the same or related information.** Which content must be covered in written materials and what could be covered in other ways? Often it is best to use written material in combination with other approaches, such as personal assistance from toll-free help lines or workshops, audio or video recordings, radio, and television. Can you rely on some of these other sources of information to supply the details to readers who need them?

   - **In some situations, a group of shorter, complementary pieces may be better than a single long one**. For example, you can help readers by packaging information about enrolling in a program for health services separately from information about how to use the services once enrolled. The purpose and timing are different for each type of information. Enrollment materials are for one-time use, while the information about what services are available and how to use them is for ongoing reference. Instead of putting everything into a single document, you might devote one piece to getting signed up, and produce a follow-up piece that explains about how to get care.

3. **Rely on readers’ reactions to tell you what amount of information is “reasonable.”** The ultimate test of whether you’ve kept the content to a reasonable amount is, of course, the results from testing your draft with members of the intended audience. For guidance on how to test your draft materials, see Toolkit Part 6, *How to collect and use feedback from readers*.

    - **Does the material include what the readers feel they need?** Results from feedback sessions with readers will help reveal any content that is missing from the reader’s point of view.

    - **Should further cuts be made?** Readers’ reactions may also suggest content that could be eliminated. For example, you might consider condensing, cutting (or maybe reformatting) parts that people tend to skip over during feedback sessions.

Does the material tell who produced it and give a publication date?

Content Guideline #1.7

Identify the organization that produced the material, and include a publication date and contact information.

Including contact information makes it easy for readers to follow up with questions or ask for permission to reprint the material. Including the date will help remind you when it’s time to update the information.

It is good practice as well as a courtesy to readers to put the name of your organization somewhere on the written material. Where you place this identifying information, and how prominent it should be, can vary. Sometimes it’s important to feature the name of your organization up front. Other times you may want to put it at the end in smaller print, just for reference.

It's helpful to put a publication date on all print materials, not only for reference but also to remind you about when it's time to do revisions. You can put this date in small size print, in an unobtrusive place.

If the material has been translated from English into other languages, be sure to label the document in English. Include information about organization and date, together with the name of the language – *all written in English.* Labeling the material in English is crucial to help staff members identify and distribute the material. They may not be able to recognize the language of translation, let alone read what it says. (See guideline 12.4 in Toolkit Part 11, *Understanding and using the "Toolkit Guidelines for Translation*".)

End notes

Thanks to Julie Carson and Mark Evers for their contributions to this chapter. For resources on health literacy and plain language, see Toolkit Part 1.

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The provider's guide to quality & culture

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476
September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 4

Understanding and using the "Toolkit Guidelines for Writing"

Chapter 2

Guidelines for organization (grouping, sequencing, and labeling the content)

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 4, Chapter 2

Guidelines for organization (grouping, sequencing, and labeling the content)

List of figures in this chapter:

This document is the second of four chapters in Part 4 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing in Toolkit Part 4 and 46 guidelines for graphic design in Toolkit Part 5.

For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material*. For the full list of guidelines for writing and design, and a discussion about how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 4 of the Toolkit focuses on the guidelines for writing. These guidelines apply to writing various types of material intended for use in printed formats by culturally diverse audiences that include people with low literacy skills (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the second of four chapters on writing in Toolkit Part 4. It discusses how to apply the guidelines for organizing the content of your written material. These guidelines are shown below in Figure 4-2-a. (Other chapters in Part 4 cover guidelines for content of your written material (Chapter 1); guidelines for writing style (Chapter 3); and guidelines for engaging, motivating, and supporting your readers (Chapter 4).)

Figure 4-2-a. Toolkit guidelines for organizing written material.

Group the information into meaningful "chunks" of reasonable size. Readers can handle only a limited amount of information at one time. To avoid information overload, divide the text in ways that will make sense to the readers. Keep each segment or section of text relatively short. When you use bulleted lists, limit the number of bulleted points (group the points into sections if the list is long).

Organize the information in an order that makes sense to the intended readers. Topics should build in a natural way, giving readers the background and context they need to understand new information.

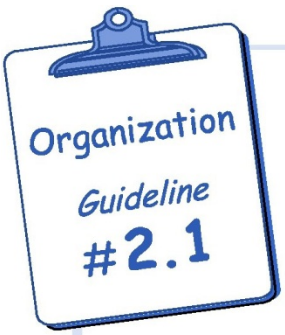
Use headings, subheadings, and other devices to signal what's coming next. These devices are "advance organizers" that show readers how the material is grouped and sequenced, and prepare them for the next topic.

Use specific and informative wording for sections, headings, and subheadings. To reinforce the main points and help readers skim, compose text for headings that is meaningful and explicit.

Use navigational tools to help orient readers and make important information easy to find. For printed material, these tools include page numbers, headers and footers, table of contents, and index. Choose navigation tools that are appropriate for the intended readers and type of material.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Pace readers through the material by grouping it into meaningful “chunks”



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Readers can handle only a limited amount of information at one time. To avoid information overload, divide the text in ways that will make sense to the readers. Keep each segment or section of text relatively short. When you use bulleted lists, limit the number of bulleted points (group the points into sections if the list is long).

The amount of information we can hold in our minds at any one time is limited for all of us, regardless of literacy skills, and it declines with age (see Toolkit Part 9, *Things to know if your written material is for older adults*). How many items of information we can hold in memory depends on factors related to the person and the information. Studies suggest that adults with good literacy skills can rarely store more than seven independent items at any one time in their short-term memory (see discussion in Doak, Doak, & Root, 1996:64–66). Many people, including people with low literacy skills, may have trouble handling more than four or five items at once.

Given the limitations of short-term memory, here are ways to guide readers through the material and help them understand it:

- **Try to cover no more than four or five points in any one piece** (or in a single section of a longer document).

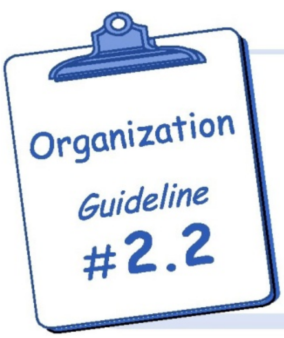
- **Divide the material into relatively short segments or “chunks.”** Though “chunk” is not an elegant word, it’s a convenient and flexible label for any relatively small grouping or clustering of closely-related text. For example, a chunk might be a couple of short paragraphs under a subheading, a brief list of bullet points, or a vignette. A section or chapter would consist of multiple chunks.

- **Use plenty of chunks.** The way you divide the material shows readers how you have organized it. Using plenty of chunks helps readers follow the flow of information in the material and increases the visual appeal. If a chunk of information seems too large, try to divide it further. For example, later in this chapter, Figure 4-2-d shows how grouping a long list of 12 bullet points into three parts can make it easier for readers to absorb the information.

- **Try covering just one topic on each page or panel of a brochure**. This strategy works especially well for low-literacy materials. There's nothing wrong with ending the text at different places on each page or panel of a brochure, as long as your pages have a consistent layout and unified design.

- **Use feedback from readers to fine tune the number and size of the chunks of text in your written materials**. For ways to do this, see Toolkit Part 6, *How to collect and use feedback from readers.*

Put the information in an order that works well for readers



Organize the information in an order that will make sense to the intended readers.

Topics should build in a natural way, giving readers the background and context they need to understand new information.

Two general principles

Here are two general principles for organizing material in an effective way:

1. **Put the main messages or most important ideas at the beginning of sections and lists**, because readers tend to pay more attention to items mentioned first.

2. **Before you present new information, give readers the background and definitions they need to understand it.** By placing ideas or words in a deliberate order, you create a context that helps readers understand your messages. For example, you should explain new terms before you start using them, and you should cover the rules themselves before you mention any exceptions.

Providing ample context is especially important when you present new material that is complex or requires significant changes in well-established patterns of behavior. For more discussion of this point, see Doak, Doak, & Root (1996).

- **Be cautious in the assumptions you make about the knowledge a reader brings to your material.** For example, starting your material with a question like *Do you perform breast self-examinations?* presumes that readers already know about the purpose of breast self-exams and how to perform them (Ramirez, Stamm, Williams, Stevenson, & Espinoza, 1996). To avoid putting readers on the spot and losing teachable moments, incorporate the definitions and explanations that people need to understand your message.

- **Remember that the need to supply context applies throughout the written material**. Building a context for understanding applies at the level of paragraphs and sentences as well as to the progression of topics as a whole. Your goal is to create a logical and continuous flow that avoids, as much as possible, forcing the reader to skip around on the page or go back and forth between pages or sections.

What order makes sense to readers?

Putting the most important information first and giving context to prepare readers for new information can help you develop a smooth and meaningful progression of topics. When you apply these two general principles, build on what you know about your readers and the issues:

- **Which topics are the most important, interesting, and useful to your readers?** You'll want to feature these topics, together with the key messages, at the beginning of sections and lists.

- **What do your readers already know? What terms and concepts will be new to them? What areas of possible concern can you anticipate?** Answers to these questions will help you decide which definitions, explanations, and reassurances you need to include, and how to arrange these in an order that makes sense to your readers.

As you work on developing the sequence of topics, you'll want to review what you have learned about your intended readers and the issues. It also helps to get reactions directly from people who represent your intended readers or from informants who know them well. For example, if your materials encourage Spanish speaking parents to enroll their children in a Children's Health Insurance Program (CHIP), you could choose informants who interact with Spanish speaking parents in various ways. Organizations that serve the local Spanish-speaking community can tell you what parents are concerned about and they can advise you on issues of cultural and linguistic appropriateness. Outreach workers and help line staff can tell you what questions parents typically ask about CHIP.

Here are tips on ways to seek input from readers and informants during the development of written materials:

- **Focus groups.** When you are developing your ideas and text for the materials, you can get feedback and suggestions by holding focus group discussions with readers or informants. These discussions may give you insights into ways to organize the materials.

- **Interviews to get reactions to a draft**. When a draft is ready for review, show it to readers to see if the sequence of topics seems logical to them. There may be some surprises, since the sequence that seems logical to you may not be compelling to them. While you could use focus groups to get readers’ feedback, talking with them one at a time in interviews will be much more informative. Individual interviews give you more privacy and flexibility to explore how readers are interpreting the material and to watch what they do with it. For a step-by-step guide to testing material with readers, see Toolkit Part 6, *How to collect and use feedback from readers*.

- **A card-sorting task.** You can use a card sorting task to find out what sequence of topics makes sense to readers. First, write each of the key messages for the material on a separate card. Then ask readers or informants to arrange the cards in order and share their comments. The patterns they create and the reasons they give can be very enlightening. You will learn what seems logical from their point of view, including what they are assuming and why they think one topic needs to come before another. This task will also help identify anything that’s missing (or unnecessary) from their point of view.

Models for organizing and presenting information

Figure 4-2-b describes six models that are different ways to organize and present information. You may want to use one or more of these models in your written materials. How you apply the models depends on your purpose and on what sequence of topics works best for your intended readers.

Figure 4-2-b. Six ways to organize and present information.

NEWSPAPER MODEL

How does it work?

You give the key points or most important part first, then arrange the rest in order of descending importance.

Why use this model?

This approach helps people in a hurry and readers with low literacy skills because first impressions tend to stick. It lends clarity by forcing you to identify and emphasize the most important information. You can apply this model at various levels of the material.

LIST MODEL

How does it work?

You insert a list of separate items into your material.To set these items apart, you use bullets, numbers (such as a numbered list that gives "Five tips for healthy snacks"), or other devices (such as a list of Q & A items or true-false items).

Why use this model?

Lists are easy to skim (if they are reasonably short). Visually, they attract attention and make it easier to compare and absorb the information in each item. Some lists get readers to interact with the material, which helps them learn and remember the information in the list.

STORY MODEL

How does it work?

You insert a story, vignette, dialogue, or quotation at an appropriate place within the material. Or, use the story model for the entire material, such as using a comic book format or a photo-novel format (photographs of people with cartoon-like callouts that tell what they are saying).

Why use this model?

Stories are a natural and powerful way of sharing information. They can also convey information that is hard to present in other ways. Stories attract people's attention, raise their empathy and interest, and may help them accept and act upon the information you present. Moreover, they are the preferred approach in some cultures. (For more on this topic, see Guideline 4.2 in Chapter 4*, Engaging, motivating, and supporting your readers.)*

STEP-BY-STEP MODEL

How does it work?

You present a series of tasks or procedures to be done in a specified order. Often, each step is numbered.

Why use this model?

This model works well for patient education materials, forms, and other material with a natural sequence of tasks. Going step by step makes the tasks easier for people to understand and follow.

HEALTH BELIEF MODEL

How does it work?

The information and sequence is:

1 – you are at risk
2 – but there's something you can do about it
3 – and you will get personal benefits if you do

Why use this model?

This is a popular approach in materials that seek to change the reader's attitudes and behaviors. How well it works depends on how well it fits with the reader's needs and interests, and how well it is implemented. If you use this model, be sure to pre-test it carefully with your intended readers.

MEDICAL MODEL

How does it work?

Typically, you give the information in this order:

1 – describe the disease itself
2 – give statistics on its frequency, cure rate, etc.
3 – discuss how it is treated
4 – discuss the efficacy of treatments and medications
5 – tell about side effects
6 – give other information

Why use this model?

This approach gives health practitioners the medical details in a format that is logical and familiar to them. It's a specialized model for a specific audience and purpose. **Don't use it for the general reader!**

Source: The list model was created for this Toolkit. The descriptions of all other models (not the formatting) are adapted from Table 6-2 in *Teaching Patients With Low Literacy Skills,* Second Edition, by Cecilia Doak, Leonard Doak, and Jane Root (1996:82–83). Used with permission. For more discussion of models for writing, see Doak, Doak, & Root (1996), Chapter 23.

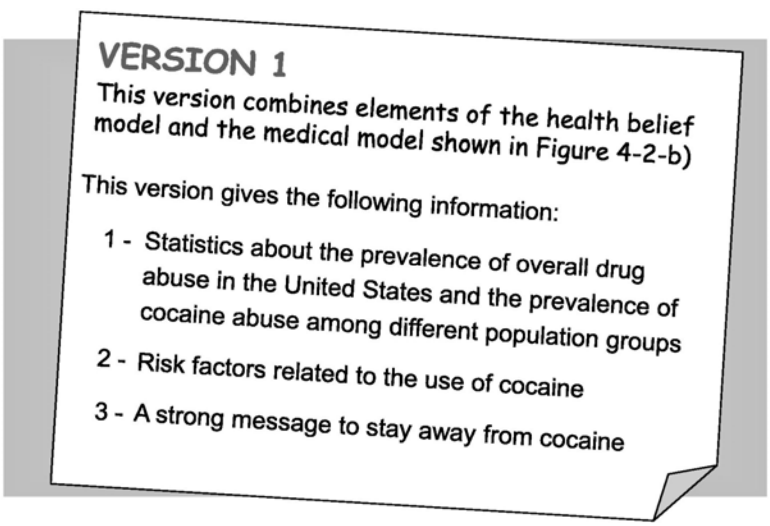
The first three models in Figure 4-2-b – the newspaper model, list model, and story model -- are the most versatile. All three are suitable for any audience, and they work especially well for less-skilled readers. The newspaper model follows the basic principle of placing the main messages or most important ideas at the beginning; you probably use it often. Try the story model, too, if you are not already using it in your materials. It adds a human touch and voice to information that can be quite powerful. If you happen to have information with a defined sequence of tasks, the step-by-step model works very well.

As noted in Figure 4-2-b, unless your audience is health professionals, you will want to avoid using the medical model.

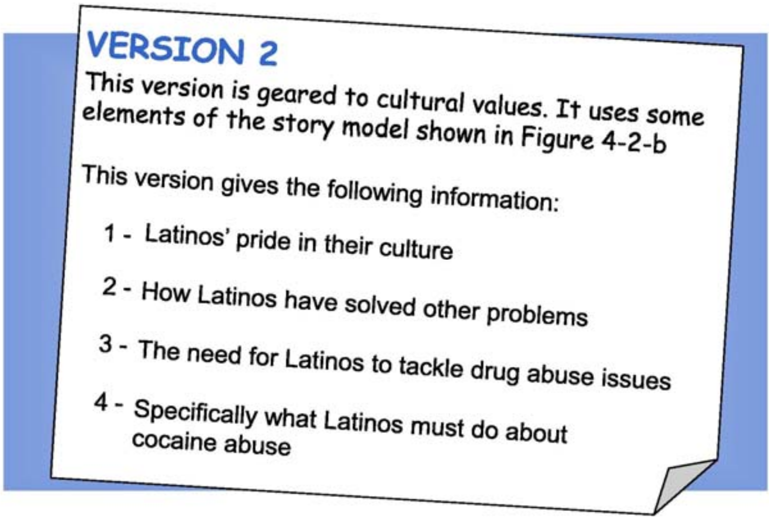
The example in Figure 4-2-c below illustrates how several of the models might be applied. It contrasts two ways of presenting information to Latinos about cocaine abuse, emphasizing the importance of taking the culture of the intended readers into account when you frame your messages.

Figure 4-2-c. Comparing two ways to present information.

This example comes from *You Can Prepare Easy-to-Read Materials* (Center for Substance Abuse Prevention [CSAP], 1994). It emphasizes the need to tailor the content and sequencing of messages to the intended audience.



This content and sequence may seem like a logical and compelling way to educate people about the dangers of cocaine abuse. But will giving statistics and risk factors, then warning against cocaine use, be persuasive to the intended readers? Notice that **this approach appeals solely to their intellect**, and not to their emotions or cultural values.



You Can Prepare Easy-to-Read Materials suggests that this version which is geared to cultural values would be more effective with a Latino audience.

Source: The basic outlines in each version are adapted from an example in *You Can Prepare Easy-to-Read Materials,* Center for Substance Abuse Prevention (CSAP), *Technical Assistance Bulletin*, September 1994:3. Distributed by the National Clearinghouse for Alcohol and Drug Information, http://ncadi.samhsa.gov/govpubs/MS499/. See reference at end of this chapter.

Use plenty of headings and subheadings

Use headings, subheadings, and other devices to signal what's coming next.

These devices are "advance organizers" that show readers how the material is grouped and sequenced, and prepare them for the next topic.

Once the material has been grouped into chunks and sequenced in an order that will make sense to readers, the next step is to add labels to guide readers through the material. Formatted to stand out from the regular text, these labels serve as "advance organizers" that prepare readers for the next topic and help them locate information of personal interest.

Usually, the labels are headings or subheadings, but there are other options. For example, if you have written a short piece with a strong lead sentence at the beginning of each paragraph, using boldface type for the lead sentences turns them into advance organizers. With appropriate formatting, a lead-in sentence, brief paragraph, or a summary set of bullet points can also serve as an advance organizer.

Whatever form they take, the labels that serve as advance organizers are crucial. They make it easy for readers to recognize and follow your carefully crafted sequence of topics. They also break up the "wall of text" that is intimidating to poor readers.

Figure 4-2-d provides an example of advance organizers. It shows two versions of the same list of 12 bullet points: the first is a long list, and the second has been broken up by adding three subheadings.

Figure 4-2-d. Subheadings make a long list of bulleted points easier to read.

No subheadings

What children of all ages need to know:

- Nothing your child did, thought, or said caused you to get cancer.
- You can't catch cancer from another person. Just because you have cancer does not mean that others in your family will get it, too.
- Just because you have cancer does not mean you will die from it. In fact, many people live with cancer for a long time.
- Scientists are finding many new ways to treat cancer.
- Your child is not alone. Other children have parents who have cancer.
- It is okay to be upset, angry, or scared about your illness.
- Your child can't do anything to change the fact that you have cancer.
- Family members may act differently because they are worried about you.
- You will make sure that your children are taken care of, no matter what happens to you.
- They can help you by doing nice things like washing the dishes or drawing you a picture.
- They should still go to school and take part in sports and other fun activities.
- They can talk to other adults such as teachers, family members, or religious leaders.

With subheadings

What children of all ages need to know:

About cancer:

- Nothing your child did, thought, or said caused you to get cancer.
- You can't catch cancer from another person. Just because you have cancer does not mean that others in your family will get it, too.
- Just because you have cancer does not mean you will die from it. In fact, many people live with cancer for a long time.
- Scientists are finding many new ways to treat cancer.

About living with cancer in the family:

- Your child is not alone. Other children have parents who have cancer.
- It is okay to be upset, angry, or scared about your illness.
- Your child can't do anything to change the fact that you have cancer.
- Family members may act differently because they are worried about you.
- You will make sure that your children are taken care of, no matter what happens to you.

About what they can do:

- They can help you by doing nice things like washing the dishes or drawing you a picture.
- They should still go to school and take part in spports and other fun activities.
- They can talk to other adults such as teachers, family members, or religious leaders.

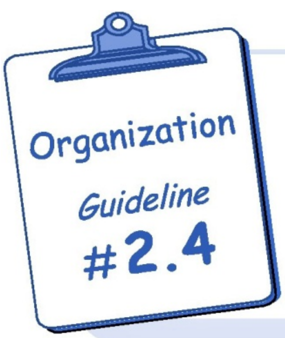
Source: The bulleted list on the right (the one with the subheadings) is from page 19 of *Taking Time: Support for People with Cancer*, a booklet produced by the National Cancer Institute, National Institutes of Health, U.S. Department of Health and Human Services, NIH Publication No. 09-2059, Revised July 2009, Reprinted September 2009, Bethesda, MD. http://www.nci.nih.gov/cancertopics/takingtime. The example on the left (the one without the subheadings) was created for this Toolkit to show the improvement it makes to use subheadings when your list of bullet points is long.

Adding the subheadings is an improvement in two ways:

- **The subheadings reduce cognitive burden and guide the reader through the material.** Instead of giving readers a long list of 12 points to work through on their own, the version with subheadings makes the underlying organization explicit. The subheadings point the way by showing readers three categories of things to talk about with a child. This makes the content more manageable and gives readers a head start in applying the information to their own situation.

- **Dividing the material into manageable chunks adds visual appeal as well.** Identifying three coherent groups of advice contributes to this appeal. The formatting follows Toolkit Guideline 7.3 for formatting of bulleted text, which calls for using bullets in a simple shape and appropriate size, indenting the columns of bulleted text under each subheading to make the subheadings easier to notice and read, and adding a little extra space between bulleted points to make them easier to read. (This guideline is in Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text).*

Make headings specific and informative



Use specific and informative wording for sections, headings, and subheadings.

To reinforce the main points and help readers skim, compose text for headings that is meaningful and explicit.

Section titles, headings, subheadings, and captions for illustrations are powerful tools to increase comprehension because they catch the reader’s eye. Compose them carefully so that readers who are skimming through your material will grasp its overall organization and pick up all of the main points. When your labels are effective, it’s easy for people to locate the information they are looking for.

Make headings, subheadings, and other labels in your written material as short as you can while still being explicit and informative. Very short headings of just a word or two can be ambiguous or even misleading, and they seldom give readers a good sense of what’s coming next.

Figure 4-2-e compares two versions of headings for a booklet. Most of the headings in Version 2 are posed as questions. This works well for many readers, though it tends to make the headings a bit longer. The brief headings in fictional Version 1 give only a general sense of what the booklet covers.

Figure 4-2-e. Comparing two versions of headings for a 12-page booklet.

The headings in Version 2 are from a real booklet written for people with limited reading skills. There's a heading at the top of each page (a few of the pages have more than one heading). Most headings are framed as questions. The booklet includes two pages that invite the reader to make notes in preparation for a visit to the doctor.

VERSION 1:

Arthritis and You

- Symptoms of arthritis
- Treatment
- Arthritis pain
- Exercise and arthritis
- Resources

VERSION 2:

It Hurts When I Move . . . Help!

- If it hurts when you move, you may have arthritis (ar – thry – tiss). What is arthritis?
- How do I know if I have it?
- Why should I see a doctor?
- What should I tell my doctor?
- What do I take with me when I go to the doctor?
- I want to tell the doctor about these aches and pains and when they hurt me: *(the rest of this page has space for the reader to make a list)*
- Questions I want to ask the doctor: *(with space for the reader to make a list)*
- Medications I am taking: *(with space for the reader to make a list)*
- What can the doctor do for me?
- How can I live with arthritis?
- What can I do to ease the pain?
- Does exercise help?
- Where can I turn to for help?
- I'm living on a small income. How can I pay for the help I need?

Source: The headings in Version 2 are from *“It Hurts When I Move . . . Help!”* a brochure produced by the Arthritis Foundation, Maryland Chapter, Inc./Judy White, PhD. Adapted and used with permission. To reach the Arthritis Foundation, Maryland Chapter, Inc., call 1-800-365-3811 or visit http://www.arthritis.org/chapters/maryland/. Version 1 is a fictional example of headings created for this Toolkit to show contrast with headings in the real booklet.

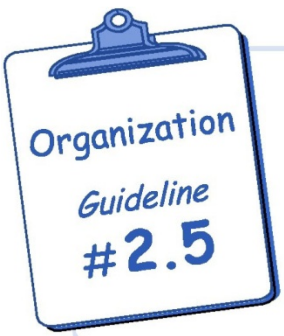
It’s easier to write an informative heading when the material is divided into a number of relatively short chunks of text. If the chunks of text are long, it may be impossible to write good headings because each chunk has too many topics. The solution is to create more chunks.

You can use feedback from sessions with intended readers to test whether your labels are sending the message you intend. Start by putting each title, heading, and subheading on a separate card. Show the cards one at a time, and ask people to tell you what they think a section with that heading would be about. This may be very revealing.

A good example of how people interpret headings comes from a study of consumers’ reactions to a comparison chart showing results from a Consumer Assessment of Healthcare Providers and Systems survey (AHRQ/CAHPS). Consumers interpreted the short heading, *choice of doctors*, in many different ways. Some thought it meant having a large number of doctors, some thought it meant you could either choose or you couldn’t, and still others thought it suggested something about quality. Consumers made more consistent (and accurate) interpretations of a longer heading that was more specific: *easy to find a doctor you are happy with* (McGee et al., 1999:MS37).

The words you choose for your labels are important, but so is the way you format them. For tips on how to use type styles, contrast, and other graphic elements to enhance the impact of headings, subheadings, and other labels, see Toolkit Part 5, *Understanding and using the “Toolkit Guidelines for Graphic Design*”.

Use reference devices to help readers navigate through the material



Use navigational tools to help orient readers and make important information easy to find.

For printed material, these tools include page numbers, headers and footers, table of contents, and index. Choose navigation tools that are appropriate for the intended readers and type of material.

We’ve already mentioned that headings, subheadings, and captions for illustrations serve as navigation tools that can help readers skim and find information of interest. Reference devices such as page numbers and table of contents are also navigation tools. Depending on the material and your intended readers, these and other reference devices can be quite helpful.

Page numbers

If the material has pages, it usually makes sense to number them. Even if a booklet is short, the page numbers can be a useful point of reference as a navigation tool.

Table of contents

This basic reference device is familiar to most readers, and easy for them to use. If your written material is lengthy, covering more than about five main points, add a table of contents to provide the road map a reader needs. You should definitely add a table of contents to any document that is intended for ongoing reference. Shorter pieces with well-labeled sections ought to be able to stand on their own.

Headers and footers

When documents are long, adding a header or footer can help orient readers. Headers and footers are printed outside of the main text area of the page, either at the very top (a header) or at the very bottom (a footer). Typically, headers and footers are used to give the name of the section or chapter, to help readers know at a glance which part of the material they are in. (Headers or footers that show only the title are the same on every page, which makes them useless as a navigation device.) Often, headers or footers include the page number, though you can number pages without using a header or footer.

- **You can use either a header or footer, or you can use both.** Usually, it works better to choose one or the other, for a less cluttered look.

- **Headers tend to work better than footers as a navigation aid,** because their position at the top of the page makes them more prominent. This Toolkit uses headers.

- **Headers and footers tend to work best for skilled readers**. Do not rely on them as a major navigation device in material designed for less-skilled readers. In many feedback sessions done by the author, less-skilled readers have frequently overlooked or ignored headers and footers. Instead, they tend to search for particular information by flipping through the pages and skimming the text.

Index

In reference materials, an index can be of tremendous help. However, an index is effective only when your readers know what it is, how to use it, and it includes the words and terms they are searching for. Here are suggestions to make an index reader friendly:

- **Consider calling the index by a more descriptive name**. Many less-skilled readers have never heard of an index, but they may be able to use it if you give them some help. For example, you could expand the title to say *Index (a list of topics and the page numbers where they are covered)*.

- **Where applicable, index the same topic in different ways to reflect differences in how readers might look it up**. For example, suppose that you want to include the topic of benefits and services in your index. Some readers might look this up by searching for the word benefits, while others would start by looking for services, or coverage, or medical care. To help your readers find the information quickly and easily, you could include four entries (benefits, services, medical care, and coverage) instead of just one (benefits and services).

- **When acronyms are used, include them in the index as separate listings, and spell out what they stand for**. For example, include one entry for PCP (Primary Care Provider) and another entry for Primary Care Provider (PCP).

- **Show the page number for every entry in your index**. Don't send your readers to a different entry to get a page number, such as saying *PCP—see Primary Care Provider.* Instead, say *PCP (Primary Care Provider)* and then give the page number. Forcing people to look in two places just to get the page number will discourage poor readers and annoy the rest.

- **When there are multiple page numbers for a given word or phrase, list them in a *meaningful* order rather than automatically listing them in *numerical* order**. When there are several page numbers for an entry, put the page number for the *main discussion* first, so that readers who turn there will find the most extensive treatment of the topic they are interested in. Also, if there is a definition on one of the pages in the entry, identify it (such as: *Deductible ....35 (gives a definition), 20, 47*).

These tips about adding detail and deliberate redundancy to your index will make it a bit longer, but it will make it far easier for readers to understand and use. In particular, it will help teach less-skilled readers about how to find particular topics, and help keep them from getting so discouraged that they quit using the Index after an unsuccessful try.

If you are creating an index for your material, check to see if your word processing software includes tools for building an index.

Glossary

Most people don’t use glossaries. It’s a burden on any reader to look up a word, and it’s especially hard on less-skilled readers. They are the ones most likely to need the definitions, but they may lose their train of thought when they interrupt their reading. They may also have more trouble applying a formal definition to something they’ve just read.

When a word or term is likely to be unfamiliar or difficult, the best solution is to **incorporate a definition into the text** (for more about this, see guideline 3.4 in Toolkit Part 4, Chapter 3, *Guidelines for writing style*).

But even when you include definitions as part of the regular text, there may be reasons to include a separate section of definitions as well. For example, adding a glossary gives you an opportunity to expand on the meaning of the word or add legal or regulatory language that must be included in the material. If you add a glossary for reference, don’t rely on it as a substitute for incorporating definitions in the text for reader comprehension, and don’t label it *glossary,* because this word is unfamiliar to many readers. Use a more familiar word instead, such as *dictionary*, or a descriptive phrase, such as *List of definitions.*

Appendix

In a large document, writers sometimes put less important information or reference material into an appendix. Be cautious about using an appendix in your materials. In sessions with Medicare beneficiaries to get their reactions to a large reference document, the author found that many of them were unfamiliar with both the word and concept, and were unaware that the appendix is always at the end of a document. As a result, they were confused when they encountered a reference to the appendix.

References to other sections

In a large document that covers numerous topics, writers often insert references to other sections. Unless you are writing for an audience of skilled readers, try to minimize references of this sort. They can be distracting and frustrating to readers who are not accustomed to seeing them, and may make the material harder for them to use. Unless you include a page number, readers who flip through the pages rather than turn to the table of contents or use the headers will find it burdensome to locate the other section. They may also react negatively if they see no reason for the reference or have little sense of what information they would find if they turned to the other part of the document.

Usability testing to check on ease of navigation

If the material is long and complex, “usability testing” with your intended readers will show how well your navigation devices are working. For example, you can interview readers and ask them to find particular items of information in the material, and then watch how easy it is for them to do. For tips on how to do this, see Toolkit Part 6, *How to collect and use feedback from readers.*

End notes

Thanks to Julie Carson and Mark Evers for their contributions to this chapter.

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The CAHPS program is a public-private initiative to develop standardized surveys of patients’ experiences with health care. CAHPS results are used by health care organizations, public and private purchasers, consumers, and researchers. For more information, see https://www.cahps.ahrq.gov/ (accessed September 8, 2006).

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September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 4

Understanding and using the “Toolkit Guidelines for Writing”

Chapter 3

Guidelines for writing style

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 4, Chapter 3

Guidelines for writing style

List of figures in this chapter:

This document is the third of four chapters in Part 4 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing in Toolkit Part 4 and 46 guidelines for graphic design in Toolkit Part 5.

For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material*. For the full list of guidelines for writing and design, and a discussion about how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

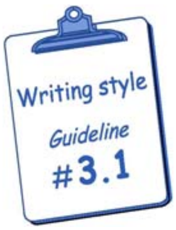
Part 4 of the Toolkit focuses on the guidelines for writing. There are four chapters in Part 4, each of which covers the guidelines for a different aspect of writing. These guidelines apply to writing various types of material intended for use in printed formats by culturally diverse audiences that include people with low literacy skills (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

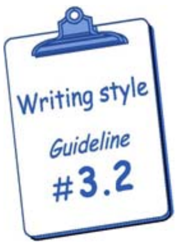
This is the third of four chapters on writing in Toolkit Part 4. It discusses how to apply the guidelines for writing style. These guidelines are listed in Figure 4-3-a below.

[Other chapters in Part 4 cover guidelines for content of your written material (Chapter 1); guidelines for organizing the content (Chapter 2); and guidelines for engaging, motivating, and supporting your readers (Chapter 4).]

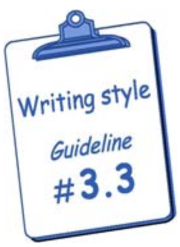
Figure 4-3-a. Toolkit guidelines for writing.



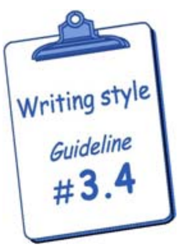
Write in a conversational style, using the active voice. To make your message informal and appealing, use "we" and "you." To make it direct and easy to understand, write in the active voice.



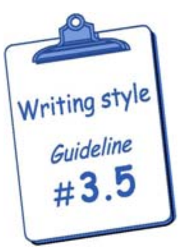
Keep your sentences simple and relatively short. Don’t pack too much information into a single sentence. Keep most of your sentences relatively short, and use simple conjunctions (*or*, *but, and*). To create good rhythm and natural tone, and avoid sounding choppy, vary the length of your sentences.



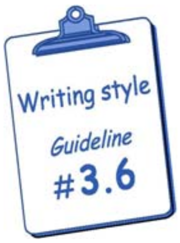
Be direct, specific, and concrete. To help readers understand and use the information, spell out its implications, and be direct in saying what they should do.



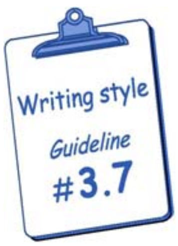
Give the context first, and incorporate definitions and explanations into the text. To help readers understand new information, give the context first. Most readers don’t use a glossary, especially poor readers, so explain a new term or concept when you use it. Then continue to include some context to help readers remember what it means.



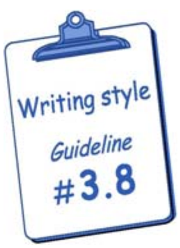
Create cohesion by making strong, logical connections among your sentences and paragraphs. Develop ideas in a logical progression that makes the connections between ideas explicit. Repeat key words and phrases to reinforce learning and create continuity.



Choose words that are familiar and culturally appropriate for the intended readers. Tailor your vocabulary to your readers, using simpler words whenever possible. Be cautious about using professional jargon, slang, figures of speech, and words that may differ by region.



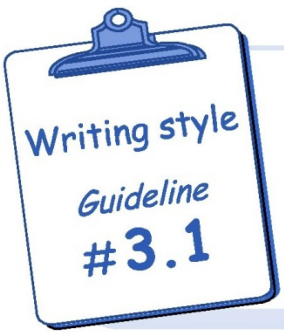
Use technical terms and acronyms only when readers need to know them. Technical terms can be difficult and intimidating; use simpler words whenever you can. It takes extra effort for readers to learn and remember a new acronym, so don't use acronyms just out of habit.



Write as simply as you can, taking into account the reading skills of your intended audience. As a general goal, whatever your audience, write as simply as you can without sacrificing content or distorting meaning. (Be very cautious about using readability formulas or setting goals based on reading grade levels. Readability formulas predict the difficulty of words and sentences, usually based only on their length. Despite their name, readability formulas do not measure ease of reading or comprehension, and the scores from these formulas are not good indicators of overall suitability of material. For concerns and recommendations about using formulas to score written material, See Toolkit Part 7, *Using readability formulas: a cautionary note*.)

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

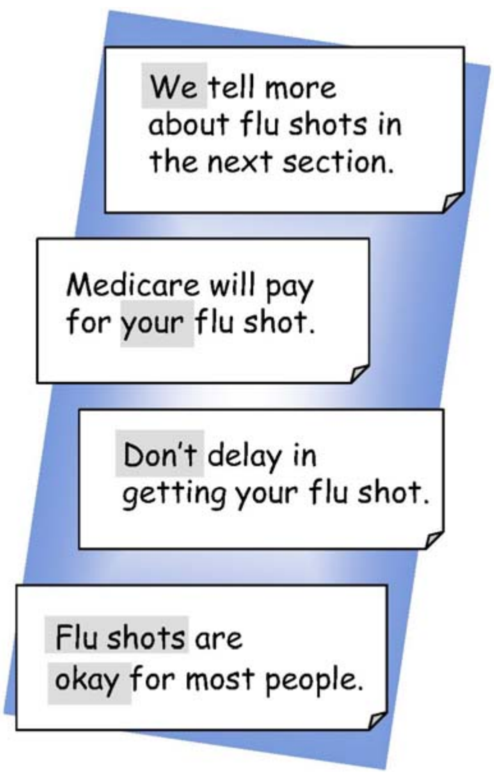
Write in a conversational style, using the active voice



Write in a conversational style, using the active voice.

To make your message informal and appealing, use "we" and "you."
To make it direct and easy to understand, write in the active voice.

What is a conversational style?



Conversational style uses "I" or "we" as the "voice" of the material.

It uses "you," "your," and "yours" to address the reader directly.

It uses conversational forms, such as contractions.

Vocabulary is simple and informal.

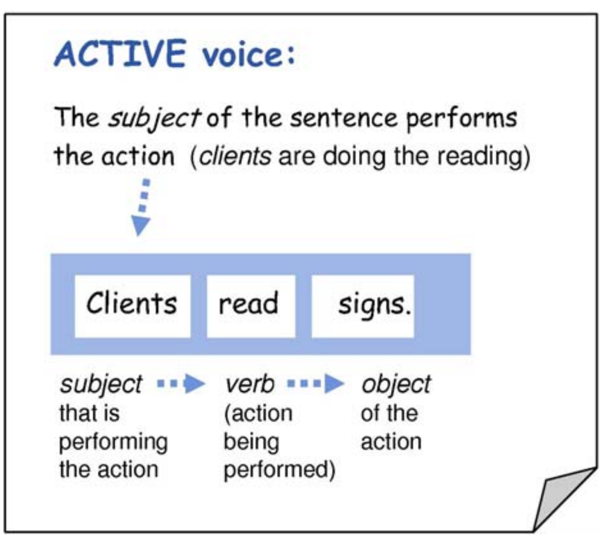
The example below shows how a conversational style has simpler vocabulary and a more natural tone than formal writing. To produce this natural tone, try writing as if you were talking to a friend. Then *read it aloud* to hear how it sounds.

Source: *Simply Put* (CDC, 1999:6).

Addressing your readers directly as "you" lets people know the information applies directly to them. Near the beginning of the written material, you can define your intended audience by telling them explicitly what "you" means. For example: "As a new enrollee in the State Children's Health Insurance Program, you....."

Active voice

Active voice is the most common sentence structure in English. It is the one we use the most often in conversation because it is clear and direct. It can take several forms, but the basic one has the subject of the sentence performing the verb: *authors write*; *children play*; *clients read*. It can take an "object:" *authors write books*; *children play games*; *clients read signs*.



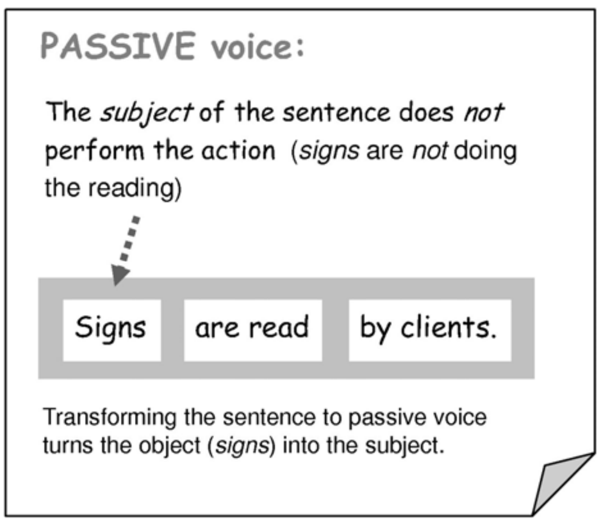
Active voice has more punch than passive voice:

- Active voice has a simple, direct, and logical flow from a subject that is performing the action to the object of that action. This direct flow makes active voice sentences easier to understand. For example, in the sentence on the left, you know immediately who is reading the signs.
- Sentences in active voice are slightly shorter than the same sentence in passive voice.

As shown above, the active voice makes material easier to understand because there is a direct and logical progression from *subject* performing the action to *verb* to *object*. Sentences with this direct flow are easy to read, and they encourage people to keep reading. For more about the benefits of a conversational style that uses the active voice, see Guideline 4.1 about writing in a friendly, positive tone (in Toolkit Part 4, Chapter 4, *Guidelines for engaging, motivating, and supporting your readers).*

Passive voice

Passive voice is just the opposite of active voice. What would be the subject in active voice -- the person or entity "doing" the verb -- is relegated to a marginal position, and sometimes omitted entirely. For example: *children play games* is in active voice; *games are played by children* (or *games are played)* is in passive voice.



Passive voice has less punch than active voice:

- Transforming the sentence to passive voice reduces the active emphasis on *clients*. Now you have to wait until the end of the sentence to find out who is reading the signs.
- Sentences in passive voice are less direct and slightly longer. For example, the sentence to the left is two words longer: passive voice adds the word “are” in *are read*, and the word “by” in *by clients*.

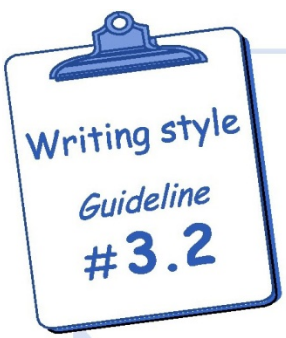
To check whether your sentence is in active or passive voice:

- **Look for who or what is actively doing something**. For example, in the active voice sentence, *children play games*, it’s “children” who are actively doing something. In the passive voice version of this same sentence, *games are played by children*, “games” are not doing something active.
- **Look for the word “by” as a clue that a sentence might be in passive voice**. For example, *games are played by children*. Typically, you will find the performer of the action immediately after the word “by” (in this example, *children* is the performer of the action).

Passive voice is not wrong; it's just less effective than active voice in most situations. In a few situations, passive voice is more appropriate than active voice. For example, you may want to use passive voice to be tactful (such as, *a mistake was made*), or when the subject of the sentence is not important or is unknown (such as, *applications are processed*).

When you find yourself needing to use the passive voice, use it. But try to rewrite your sentence in the active voice first. You'll be surprised how easy that conversion is and how much more direct your writing becomes.

Make the sentences simple and relatively short

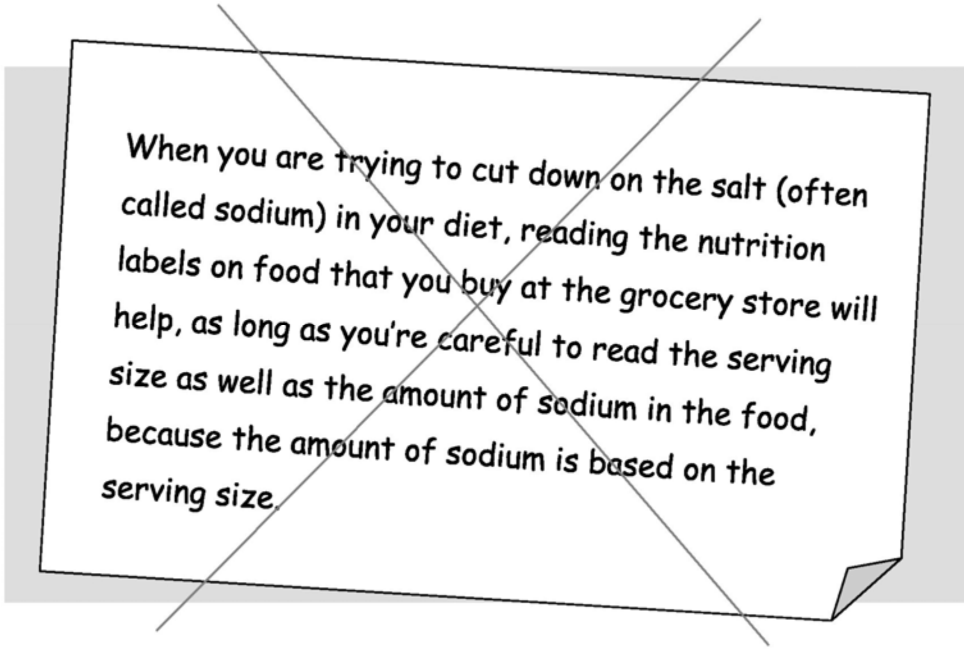


Keep your sentences simple and relatively short.

Don't pack too much information into a single sentence. Keep most of your sentences relatively short, and use simple conjunctions (*or*, *but*, *and*). To create good rhythm and natural tone, and avoid sounding choppy, vary the length of your sentences.

Use simple sentence structure

Packing too much information into a single sentence makes it hard to follow. As shown in the example below, complex sentences are hard to read because clauses with secondary messages interrupt the main message:



This wordy sentence is complex and extremely long (62 words!). It packs a paragraph or more of information into a single sentence. There are so many secondary messages that it’s hard to identify the main message.

When sentences get this long and complex, simple editing won’t help. You need to start over. Think about what your readers want and need to know, and then rewrite using shorter, simpler sentences. Here are tips to help you untangle and simplify your text:

1 Start by analyzing the text and developing a strategy

- **Reconsider how much you need to include**. Examine each part of the content and ask yourself, *Is this something readers need to know? How will they use this information?* Then eliminate unnecessary content.

- **Separate the main and secondary messages**. Try outlining the main and secondary messages, focusing on what you want readers to know and do. This will help you remove secondary information that is interrupting your statement of the main message. Here’s an example:

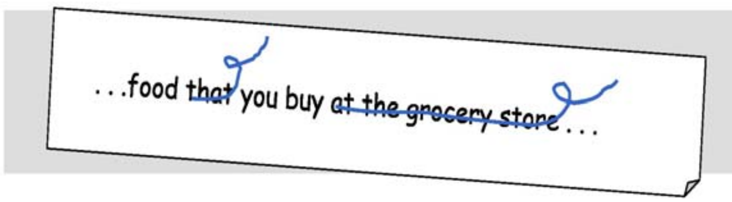
- **Identify which terms and concepts you need to explain upfront.** Examine the text and ask yourself, *What do readers need to know first in order to understand what follows?* For help in developing a good sequence, see Guideline 2.2, "Organize the information in an order that will make sense to the intended readers," (Toolkit Part 4, Chapter 2) and Guideline 3.4, "Give the context first, and incorporate definitions and explanations into the text" (we discuss it later in this chapter).

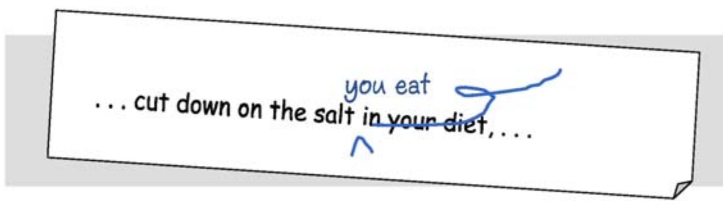
2 Rewrite using sentences with simple structure

- Keep most of your sentences relatively short.
- Use simple conjunctions (*or*, *but*, *and*).
- Limit the number of explanatory or qualifying clauses in your sentences.
- Consider using lists instead of sentences to make a large amount of information more readable.
- Consider adding examples or illustrations to explain complicated information more clearly.

3 When you finish, edit what you've written

Look again for words you can delete and phrases you can simplify. Here are two examples:





Use a variety of reasonably short sentences

When sentences are long, the main point gets lost in all the words. Keep your sentences simple and direct. Most should be reasonably short. For less-skilled readers, a range of about eight to fifteen words per sentence typically works well. For good rhythm and natural tone, vary the length of your sentences.

The example in Figure 4-3-b below has three sets of sentences, each of which covers the same content using simple language. What differs is the sentence length. As shown in the third set of sentences, adding a somewhat longer, natural-sounding sentence of about 12 to 15 words can break up the choppy effect created by using many short sentences (Center for Substance Abuse Prevention [CSAP], 1994).

Figure 4-3-b. Variations in sentence length.

VERSION 1 is hard to follow. There is too much packed into each wordy sentence:

Word counts per sentence:
26, 23

Average sentence length:
24 words

We want you and your family to get the medical care you need, but it’s always possible that you might have a problem getting that care.

If you have a problem, we want you to call us at 553-4444 because we are here to help you stay healthy.

VERSION 2 is choppy. There are too many short sentences of similar length:

Word counts per sentence:
8, 6, 6, 6, 6, 6

Average sentence length:
6 words

You will usually get the care you need. But you might have some problems.

Call us if you have problems. Our phone number is 553-4444.

We are here to help you. We want you to be healthy.

VERSION 3 is much better. All of the sentences are relatively short, but they are varied enough to be interesting and sound natural:

Word counts per sentence:
14, 8, 2, 6, 10

Average sentence length:
8 words

Most of the time you won’t have problems getting the medical care you need.

But if you do, we want to help. Call us. Our phone number is 553-4444.

We’re here to help you and your family be healthy.

Source: Created for this Toolkit.

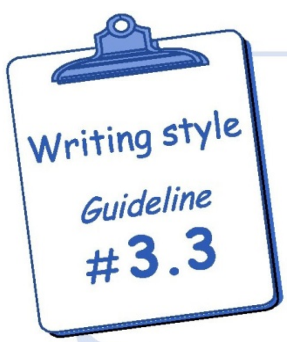
Keep the paragraphs reasonably short

Just like the words and the sentences, paragraphs should be relatively short. Short paragraphs are more inviting to your reader and give the visual appearance of being easier to read. Keep in mind that if you divide your text into columns, your paragraphs will look longer.

For less-skilled readers, a range of about two to four sentences per paragraph often works well. It's okay to make a single sentence into a paragraph, too.

The first sentence of a paragraph or section is the topic sentence. It should carry a very clear message to help keep readers on track. When you keep your paragraphs short, you will have more topic sentences to guide the reader (CSAP, 1994:4).

Be direct, specific, and concrete



Be direct, specific, and concrete.

To help readers understand and use the information, spell out its implications, and be direct in saying what they should do.

When people read your written material, they want to know, *what does this mean to me, personally*? Give them a clear, direct answer. Making the information in your materials concrete and action oriented has two important benefits:

- **It helps you hold the reader's attention.** If the information is general and impersonal, rather than concrete and action-oriented, you force your readers to figure out how to apply what they read to their own situation. This adds a cognitive burden that may discourage them from using the material. Less-skilled readers, in particular, find it hard to apply abstract principles or a general discussion to themselves.

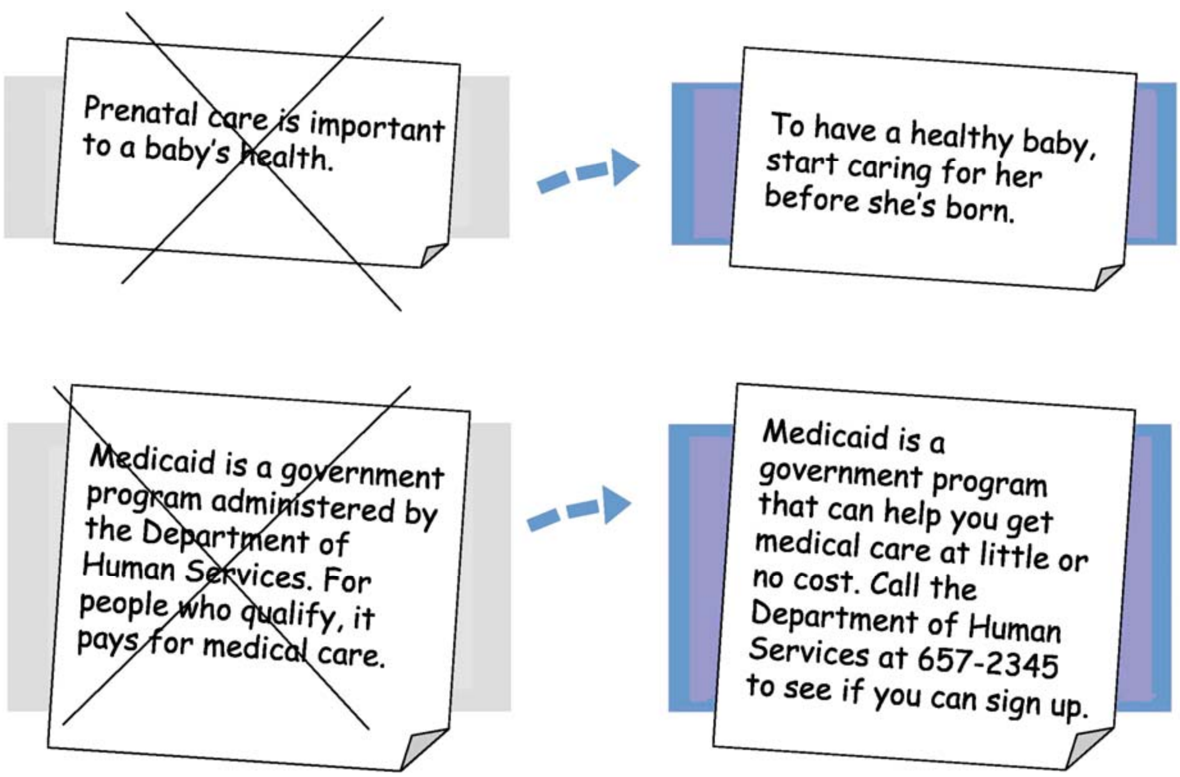
- **It helps ensure that readers notice the main messages and interpret them correctly.** If you make your readers do the work of identifying and interpreting the personal implications of the material, they may miss or misinterpret an important message.

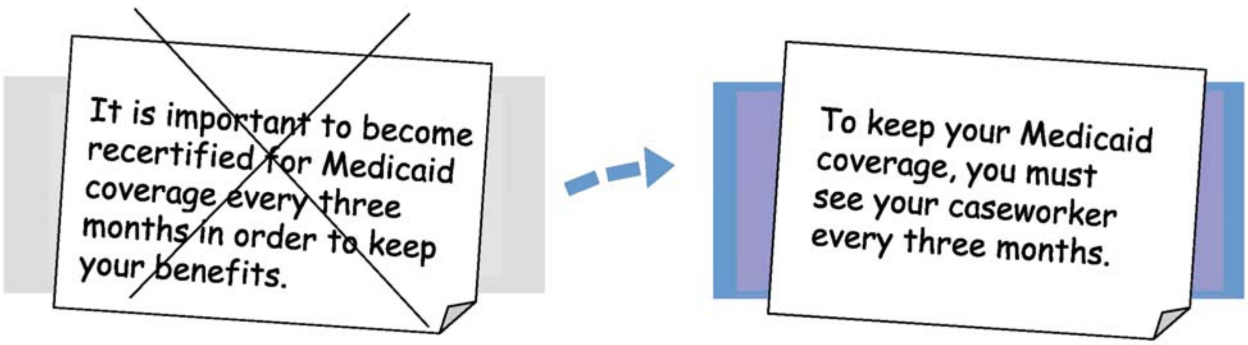
So instead of putting extra burden on your readers, help them out. Make your writing direct, specific, and concrete. Figure 4-3-c has “before” and “after” examples that show how.

Figure 4-3-c. Making your text direct, specific, and concrete.

The wording of statements on this side is general and impersonal. Readers have to figure out how the information applies to them.

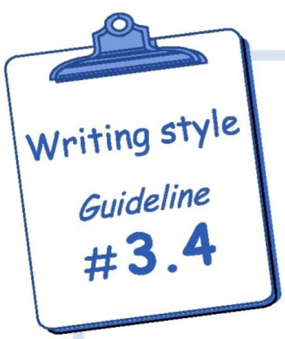
The statements on this side give specific advice in a caring voice. Each one addresses the reader directly, and focuses on what the reader should do.





Source: These examples are from *Write It Easy-to-Read* (Root & Stableford, 1998). Used with permission of Sue Stableford.

Give the context first, and incorporate definitions into the text



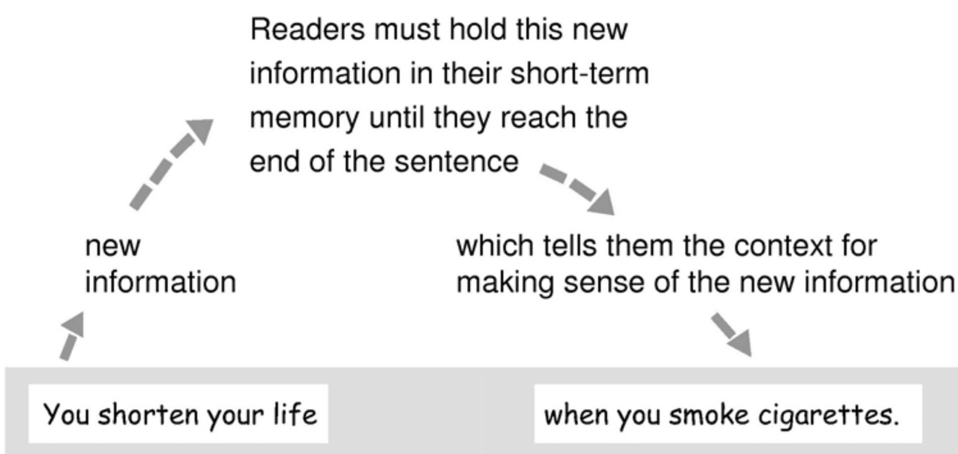
Give the context first, and incorporate definitions and explanations into the text.

To help readers understand new information, give the context first. Most readers don't use a glossary, especially poor readers, so explain a new term or concept when you use it. Then continue to include some context to help readers remember what it means.

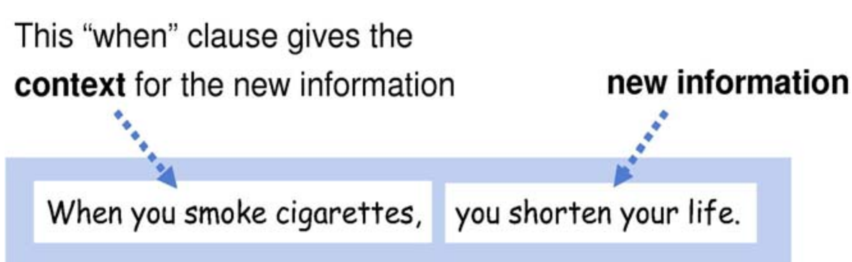
To help readers understand new information, give the context first. Figure 4-3-d shows how giving the context first prepares readers to receive the new information.

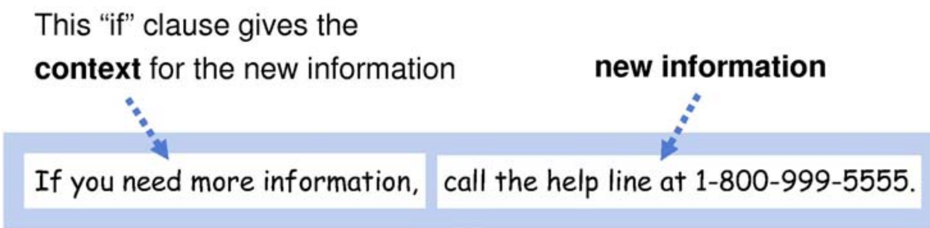
Figure 4-3-d. Putting the context at the beginning of a sentence prepares readers to understand the rest of the sentence.

As shown in the example below, presenting new information before you give the context for it puts a burden on your readers:



Instead, help your readers by giving them the context at the beginning of the sentence. **Giving the context first prepares your readers to receive the new information.** Here are two examples:





Source: Based on text in the book *Teaching Patients with Low Literacy Skills,* Second Edition (Doak, Doak, & Root, 1996:83) and put into diagram format for use as an example in this chapter. Adapted and used with permission. For more about preparing readers to receive new information, see *Teaching Patients with Low Literacy Skills*, Second Edition.

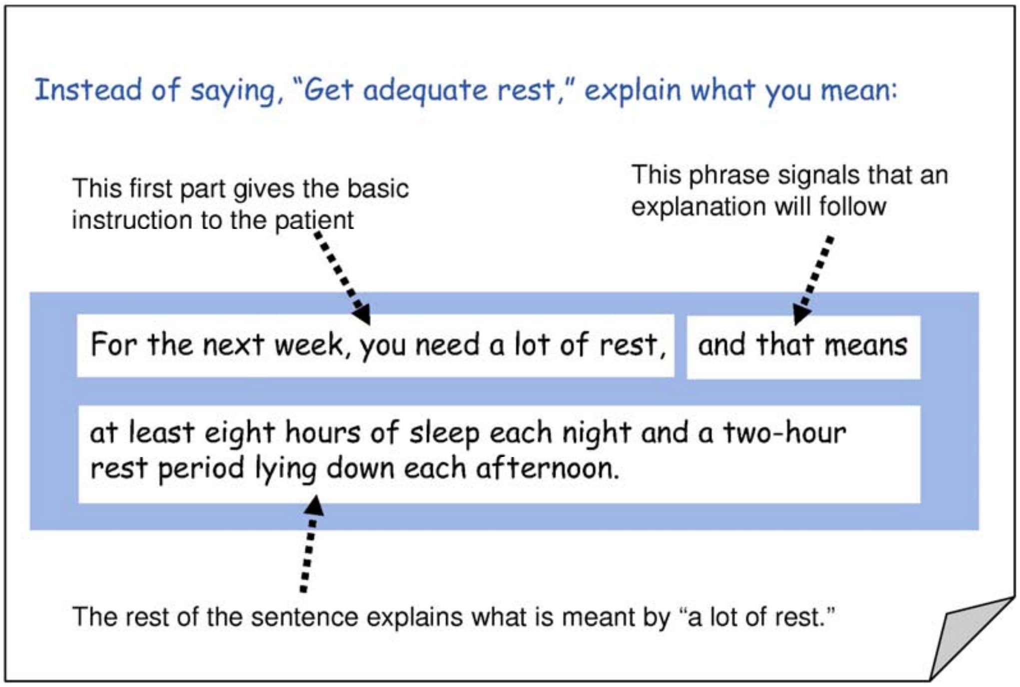
Incorporate definitions and explanations into the text

It's hard for less-skilled readers to look up words and apply definitions to something they've just read – and so they seldom do. Watch for words that are likely to be unfamiliar to your readers. Also, watch for words that are abstract or vague, or that may mean different things to different people. To help make sure that readers understand your message, incorporate definitions within the text, right where they are needed. Figure 4-3-e gives an example.

Figure 4-3-e. Incorporating specific explanations into your text.

The book, *Teaching Patients with Low Literacy Skills* (Doak, Doak, & Root, 1996), warns that **abstract, general words tend to cause problems because they often mean different things to different people**. For example, a post-operative patient might be told to call the doctor "if there is excessive bleeding." But how much bleeding is *excessive*? The nurse and doctor know, but chances are the patient does not. And what is meant by instructions such as "eat a variety of foods," or "get regular exercise"?

As shown below, to help your readers understand the material, incorporate definitions and explanations into the text.



Here are additional tips:

- Even after you have explained a new idea, continue to include some context to help readers remember what it means. Remember that readers need time and repetition to absorb new material.
- In addition, if the material is long, repeat the explanations to reinforce readers’ understanding. When they read something they feel they have already learned, their confidence grows.
- Finally, make it easy on those who skim by repeating the explanations in each new section.

Source: Adapted with permission from discussion and examples in *Teaching Patients with Low Literacy Skills,* Second Edition (Doak, Doak, & Root, 1996:79–80) and put into diagram format for use as an example in this chapter. For more about incorporating definitions into the text, see *Teaching Patients with Low Literacy Skills*, Second Edition.

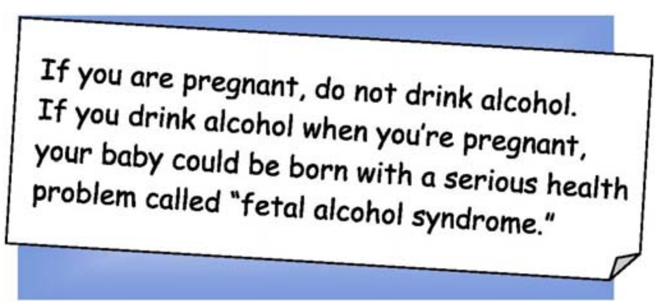
Be cautious about using symbols in your explanations

When you introduce a complex concept, take the time to give a careful explanation. If you use symbols or pictures to represent a concept, be sure to explain what they mean in a caption or the text. Also, check on how members of your intended audience are interpreting them. It is surprisingly hard to create clear and effective picture symbols (see Toolkit Part 5, Chapter 6, *Guidelines for photographs, illustrations, and clip art*).

As shown below in Figure 4-3-f, a short cut summary puts too much burden on readers.

Figure 4-3-f. Be cautious about using symbols to explain concepts.

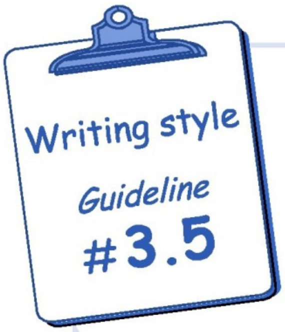
Putting the message in the form of a word equation makes it abstract, impersonal, and hard to understand. It’s up to the reader to extract the meaning and figure out the personal implications. In addition, “fetal alcohol syndrome” is very difficult vocabulary that requires explanation.



This version builds in the beginning of an explanation of fetal alcohol syndrome (“a serious health problem”). It explains the risk of drinking alcohol while pregnant and tells the reader directly not to do it.

Source: Adapted from *Simply Put* (CDC, 1999:7).

Create cohesion



Create cohesion by making strong, logical connections among your sentences and paragraphs.

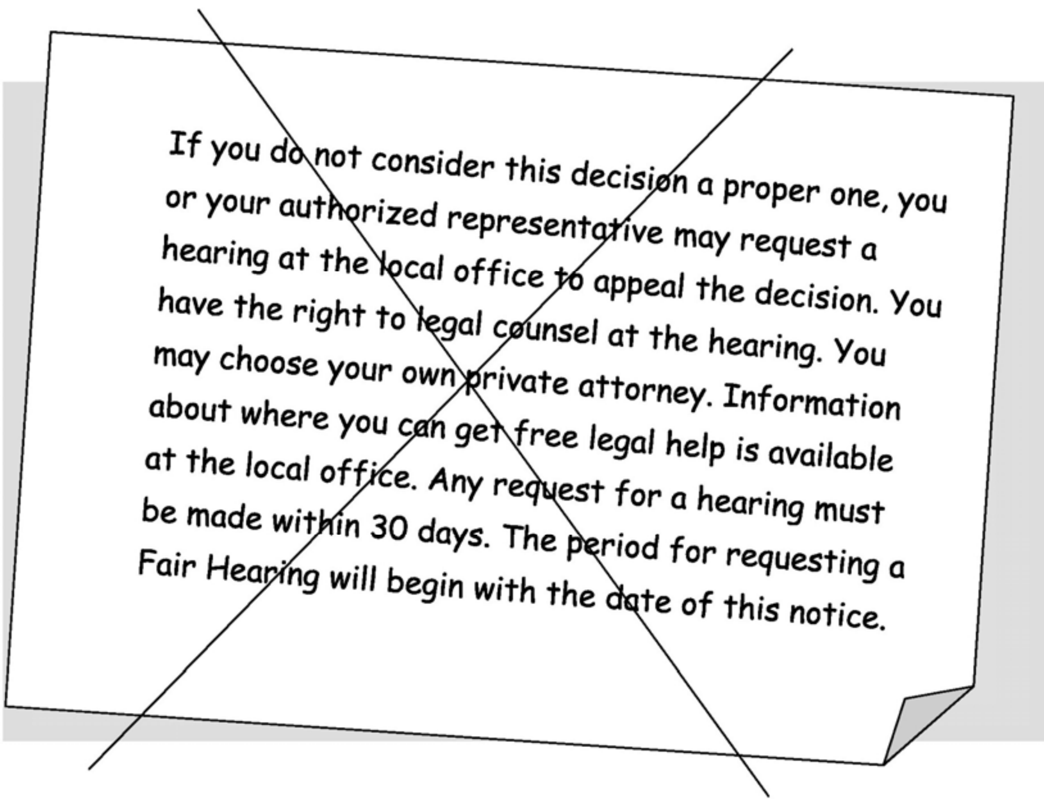
Develop ideas in a logical progression that makes the connections between ideas explicit. Repeat key words and phrases to reinforce learning and create continuity.

Cohesion occurs when the information in sentences or paragraphs holds together easily in our minds. Cohesive writing creates a smooth flow of information that is easy to understand. It guides readers from one point to the next, helping them anticipate what is coming next and refer back to what has already been mentioned.

Create cohesion by making strong, logical connections among your sentences and paragraphs. This includes developing ideas in a logical progression that makes connections explicit, and repeating key words and phrases to reinforce learning and create continuity. Figure 4-3-g illustrates the importance of creating cohesion.

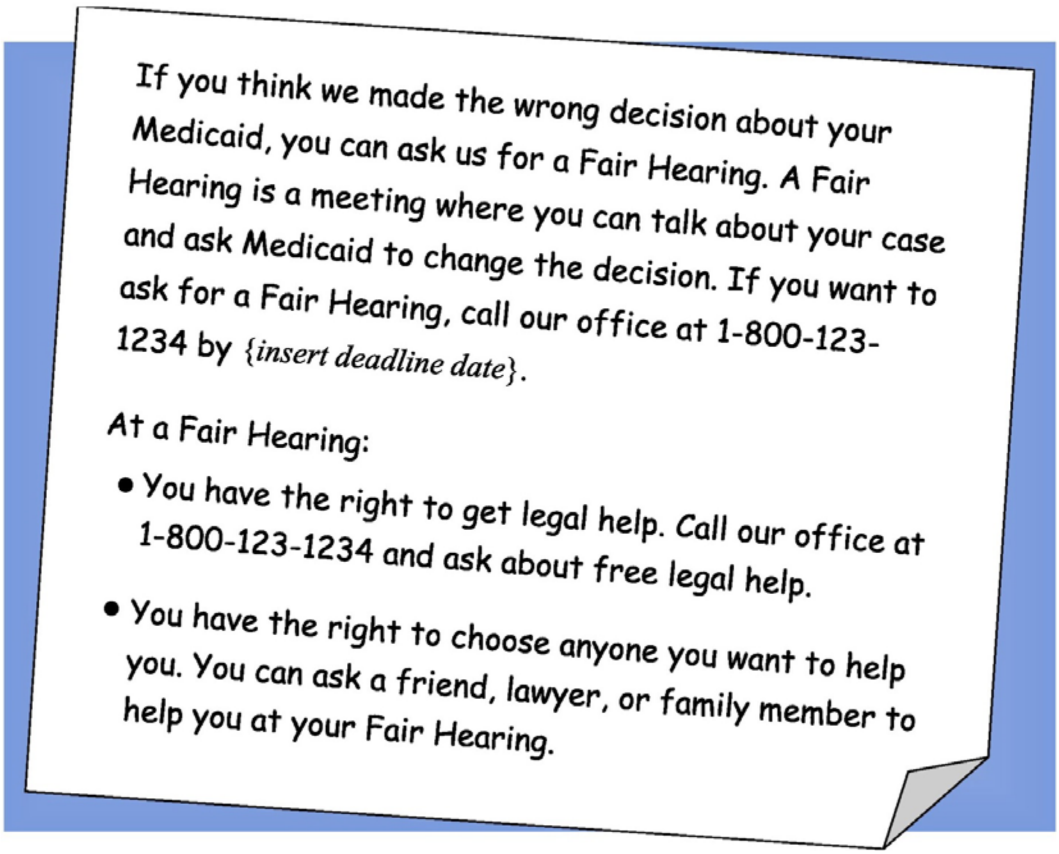
Figure 4-3-g. Create cohesive text.

In the example below, the text lacks cohesion because every sentence contains only new information. When every sentence is about something new, it's up to the reader to supply all of the connections. The cognitive burden of figuring out how all of the new information is connected can be overwhelming to readers, especially those with low literacy skills.



If you do not consider this decision a proper one, you or your authorized representative may request a hearing at the local office to appeal the decision. You have the right to legal counsel at the hearing. You may choose your own private attorney. Information about where you can get free legal help is available at the local office. Any request for a hearing must be made within 30 days. The period for requesting a Fair Hearing will begin with the date of this notice.

Link your words and concepts from sentence to sentence and paragraph to paragraph so that new information becomes familiar as readers move through the text:



If you think we made the wrong decision about your Medicaid, you can ask us for a Fair Hearing. A Fair Hearing is a meeting where you can talk about your case and ask Medicaid to change the decision. If you want to ask for a Fair Hearing, call our office at 1-800-123-1234 by *{insert deadline date}*.

At a Fair Hearing:

- You have the right to get legal help. Call our office at 1-800-123-1234 and ask about free legal help.
- You have the right to choose anyone you want to help you. You can ask a friend, lawyer, or family member to help you at your Fair Hearing.

Source: The text about creating cohesion and the introduction and examples in this figure are adapted from work done by Christina Zarcadoolas, Penny Lane, Holly Smith Mirenda, and Mercedes Blanco as part of a project for the Centers for Medicare & Medicaid Services by the MAXIMUS Center for Health Literacy. For information about the MAXIMUS Center for Health Literacy, visit http://www.maximus.com/services/health/health-literacy.

Use words that are familiar and culturally appropriate

Writing style Guideline #3.6

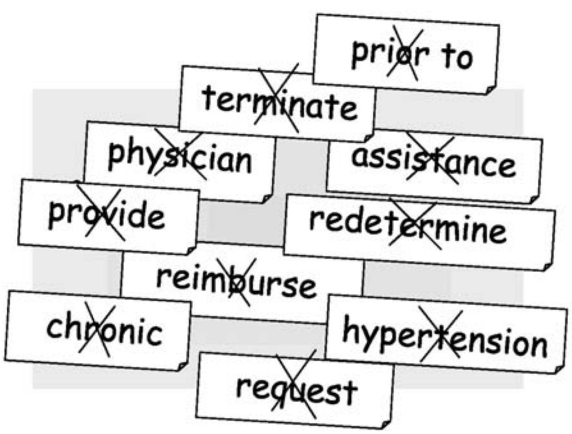
Choose words that are familiar and culturally appropriate for the intended readers.

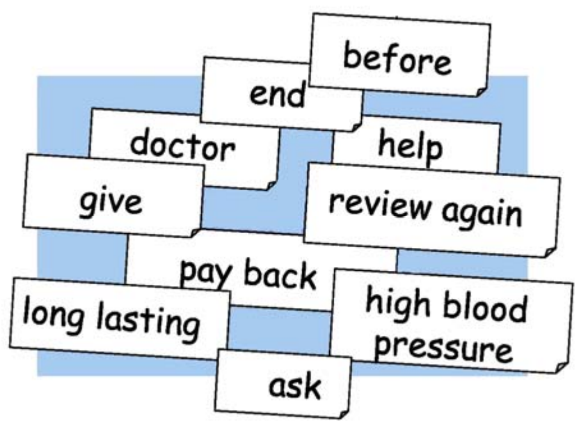
Tailor your vocabulary to your readers, using simpler words whenever possible. Be cautious about using professional jargon, slang, figures of speech, and words that may differ by region.

Use the shorter, simpler words that your readers know and use

Use words that are familiar to your intended audience. Shorter words tend to be common in conversations and so your readers will find them easier to understand. There are exceptions, of course. For example, *access* has only two syllables, but to many readers, it is unfamiliar health care jargon (or computer jargon). The word *organization* has five syllables, but most readers probably know it.

Here are just a few examples of word substitutions you might make:





It’s easy for agency staff, health care professionals, and others who produce materials to forget which terms are new or difficult for the public. To simplify the vocabulary in your materials, try suspending your taken-for-granted knowledge of specialized vocabulary. Go through your materials and circle all of the words that you think a reader who lacks your subject matter knowledge and experience may not recognize. Ask people who represent your intended readers to review it as well. You will probably find many opportunities for simplification. Later in this chapter, there are guidelines that urge you to use technical terms only when you need to, and to explain them carefully when you do.

Simplify legal language

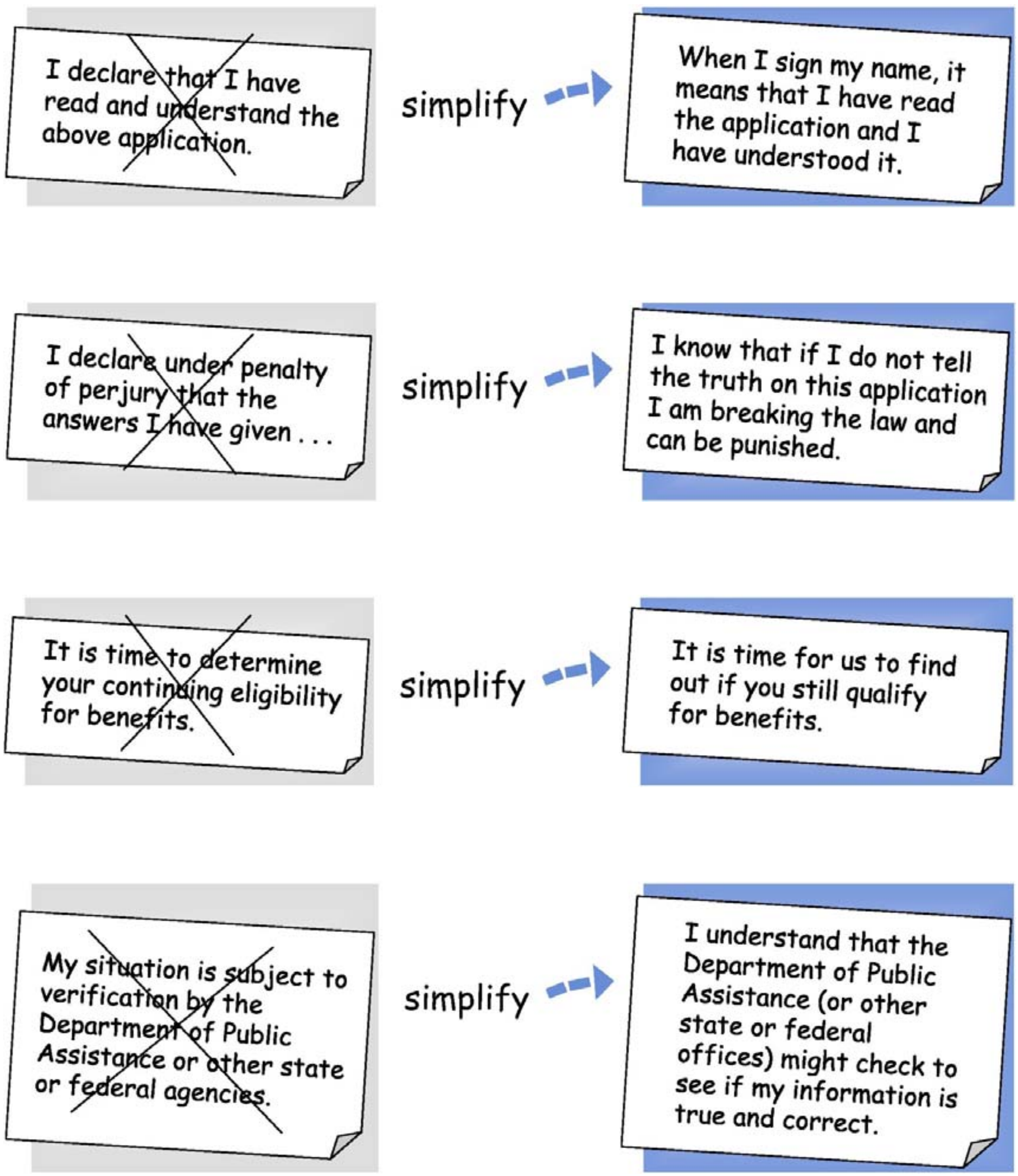
As *The Health Literacy Style Manual* explains, legal language is “generally written at a high reading level, in a stilted style, and in an authoritarian tone. Much of the vocabulary is not familiar to readers with low literacy skills and not easy for them to read. Sometimes even common words may have different meanings for bureaucrats than they do for the public. For example, to the staff the word ‘family’ may mean parents and children—or the ones in the budget. But to the general public, “family” may mean everyone living in the home, including Uncle Joe and Grandma.” (MAXIMUS, 2005:22).

If there is complex legal language in your materials, work with the attorneys in your organization to produce a simpler version that satisfies their legal requirements. It is usually possible to rephrase legal terminology and other formal language, keeping the integrity of the message but using easy-to-read vocabulary. If it is not possible to substitute a simpler version, another option is to write the prescribed legal text and then paraphrase it in plain language immediately afterward (*The Health Literacy Style Manual*, MAXIMUS, 2005:23).

For a helpful resource on simplification of legal language, see *An Introduction to the HIPAA Privacy Rule* (Pritts, 2005). Written by an attorney, Joy Pritts, this document was prepared for the *Covering Kids & Families* National Program Office, Southern Institute on Children and Families. Appendix G has plain language principles and a thesaurus for making HIPAA privacy notices more readable, and it includes examples of notices from several states.

To simplify the legal language in your written material, use the strategies covered in the guidelines of this chapter. These include substituting easier words, defining words and using examples, providing context cues, writing cohesively, and repeating words that you want the reader to learn. Figure 4-3-h below has examples that show how dramatic the improvement can be.

Figure 4-3-h. Examples of ways to simplify legal language.



Source: The first two examples in this figure are adapted from work done by Christina Zarcadoolas, Penny Lane, Holly Smith Mirenda, and Mercedes Blanco as part of a project for the Centers for Medicare & Medicaid Services by the MAXIMUS Center for Health Literacy. The last two examples and the discussion of legal language that precedes this figure are reproduced with permission from *The Health Literacy Style Manual* (MAXIMUS, 2005:22). For information about the MAXIMUS Center for Health Literacy, visit http://www.maximus.com/services/health/health-literacy.

Use words that are culturally appropriate and respectful

To help readers relate to your material, use words, phrases, and examples that reflect their habits and cultural customs. Here are tips for choosing language that is respectful and culturally appropriate:

- To choose the most effective and culturally appropriate ways to get your messages across, rely on advice and feedback from members of your audience and key informants. They will help you identify and avoid any stereotyped portrayals. It’s especially helpful to ask people who represent your intended readers to review your drafts.

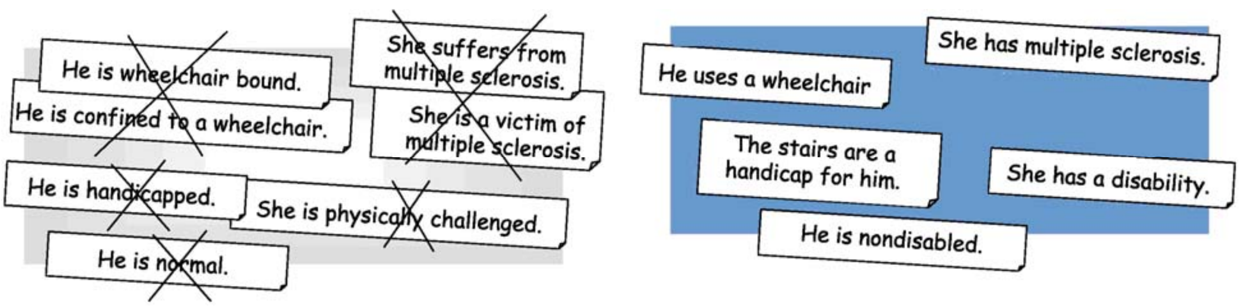
- **Sometimes you may need to use more than one word to reflect the diversity or preferences of your intended readers.** For example, if you know that some of your readers use community clinics rather than private doctor’s offices, say “doctor’s office or clinic” in your materials. Getting feedback from your intended readers is crucial when you are unsure about which words to use. For example, should you say “Black” or “African American” or both? “Hispanic” or “Latino” or perhaps a name that is more specific, such as “Mexican” or “Puerto Rican”? One term or the other may be preferred for certain audiences or certain parts of the country, and even then, some people may disagree. Toolkit Part 11, *Understanding and using the Toolkit Guidelines for Translation*, discusses regional variations in terminology and gives examples.

- Be cautious about using slang expressions or figures of speech because they are likely to be culturally inappropriate for at least some of your readers. Slang expressions may undermine the tone of your material by sounding excessively familiar or even condescending. It is best to avoid them. When figures of speech are unfamiliar, they will frustrate or confuse readers who take them literally. For example, what if someone is unfamiliar with the expression “you’ll feel better down the road,” and tries to interpret it literally?

- **Use resources to learn more about culturally appropriate communication**. For suggested resources, see the end of Toolkit Part 2, *Using a reader-centered approach to writing and design*.

Figure 4-3-i below is adapted from a resource that gives detailed advice about how to write about disabilities in a respectful way.

Figure 4-3-i. Guidelines for writing about people with disabilities.



To help people use words and images that create a straightforward, positive view of people with disabilities, the Research and Training Center on Independent Learning (University of Kansas) produced *Guidelines for Reporting and Writing about People with Disabilities.* Developed in collaboration with over 100 national disability organizations, these guidelines have been reviewed and endorsed by media and disability experts. Portions have been adopted into the Associated Press stylebook.

Here are some highlights from the Guidelines:

- **Put people first, not their disability**. Say *woman with arthritis*, *children who are deaf*, *people with disabilities*. This puts the focus on the individual, not the particular functional limitation.

- **Do not use generic labels for disability groups**, such as *the deaf*. Emphasize people, not labels, by saying *people who are deaf.*

- **Emphasize abilities, not limitations**. For example, say *uses a wheelchair* rather than *confined to a wheelchair*, or *wheelchair-bound*. Say *uses braces* or *walks with crutches*, rather than *crippled.* Do not use emotional descriptors such as *unfortunate* or *pitiful.*

- **Do not sensationalize a disability** by saying *afflicted with*, *crippled with*, *suffers from*, *victim of,* and so on. Instead, say *person who has multiple sclerosis* or *man who had polio.*

- **Do not use euphemisms to describe disabilities.** Disability groups strongly object to using euphemisms to describe disabilities. Terms such as *handicapable*, *mentally different*, *physically inconvenienced*, and *physically challenged* are considered condescending.

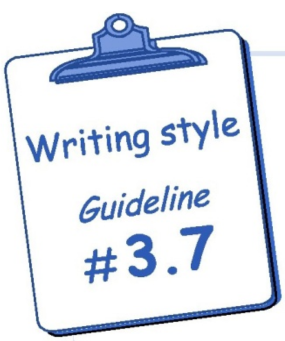
- **Show people with disabilities as active participants of society**. Portraying persons with disabilities interacting with nondisabled people in social and work environments helps break down barriers and open lines of communication.

- **Do not portray successful people with disabilities as superhuman**. Even though the public may admire super achievers, portraying people with disabilities as superstars raises false expectations that all people with disabilities should achieve this level.

- **Be aware that the word *handicap* is not a synonym for *disability***. Handicap describes a condition or barrier imposed by society, the environment, or by one's own self. Some individuals prefer *inaccessible* or *not accessible* to describe social and environmental barriers. Handicap can be used when citing laws and situations but should not be used to describe a disability. Do not refer to people with disabilities as *the handicapped* or *handicapped people*. Say *the building is not accessible for a wheelchair-user* or *the stairs are a handicap for her*.

Source: Adapted from an early edition of *Guidelines for Reporting and Writing about People with Disabilities* developed by the Research and Training Center on Independent Living, University of Kansas, Suite 4089 Dole Center, 1000 Sunnyside Avenue, Lawrence, KS 66045-7555. (785) 864-4095, RTCIL@ku.edu. For the latest edition of the guidelines, visit http://www.rtcil.org. Adapted and used with permission.

Use technical terms only when readers need to know them



Use technical terms and acronyms only when readers need to know them.

Technical terms can be difficult and intimidating; use simpler words whenever you can. It takes extra effort for readers to learn and remember a new acronym, so don't use acronyms just out of habit.

Technical terms, acronyms, and other abbreviations can be intimidating, and it takes extra effort for readers to learn them. As you write your materials, be alert for the terminology you take for granted. You may be so used to using it that you forget how hard it can be for others to understand.

Do readers need to learn the term?

When you notice technical terms, acronyms, and abbreviations, consider whether readers truly need to learn them:

- Sometimes it's important to use a technical term, because people in your audience will encounter the term and need to know what it means. Words like *mammogram*, or *cholesterol* are good examples.

- Sometimes an acronym is more familiar than the words it stands for, such as *HMO*. In this case, using the acronym will be easier for readers.

- If it's not necessary for readers to learn a term, replace it with everyday words whenever you can without losing the content or distorting the meaning.

- Don't put an extra and unnecessary burden on your readers by abbreviating words that you use only a few times.

Teach the meaning of technical terms

Explain crucial technical concepts and terms in non-technical ways. Here are suggestions:

- **Explain the meaning using words that are familiar to your readers.** For example, a mammogram can be explained as an x-ray of the breast to check for signs of possible cancer. You can be relatively certain your readers will know the words *x-ray* and *cancer*.

- **When you are explaining something new, drawing a comparison to something more familiar may be helpful.** To develop an effective analogy, think about the interests and experiences of your intended readers. Suppose, for example, that you need to explain blood tests to people with diabetes. Specifically, you want readers to understand the difference between the daily blood testing they do on their own and a special laboratory blood test called the hemoglobin A 1 C that their doctor orders several times a year. It might work to use a weather analogy, comparing the daily blood testing to daily temperature, and the A1C blood test to an average monthly temperature. But you would need to test such an explanation with readers to be sure.

- **Use resources**. Seek inspiration from easy-to-read materials and from resources that provide definitions or substitute language for health care terms. For example, the following resources have word lists: http://www.plainlanguage.gov/howto/wordsuggestions/simplewords.cfm and MAXIMUS (2005:20):

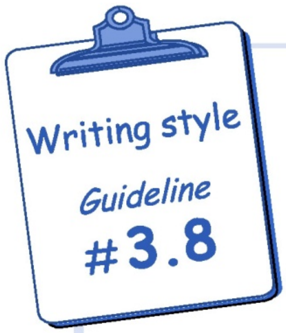
- **Use readers' reactions to guide what you say and check whether your explanations are clear.** To be sure that your analogies are culturally appropriate and effective, listen closely to members of your audience for the words and examples they use to get points across.

Explain acronyms and abbreviations

In typical practice, you introduce an acronym by putting it in parentheses immediately after the words it stands for. Then, having identified it, you are free to use the acronym in place of the words it stands for. However, if you are writing for less-skilled readers, it will work better to introduce the acronym in the following way:

Notice how this approach places the emphasis on the acronym and uses boldface type to teach the reader the source of the letters in the acronym. If the material is long, make it easy on those who skim by repeating your explanation of the acronym in each new section.

Write as simply as you can



Write as simply you can, taking into account the reading skills of your intended audience.

As a general goal, whatever your audience, write as simply as you can without sacrificing content or distorting meaning.

(Be very cautious about using readability formulas or setting goals based on reading grade levels. Readability formulas predict the difficulty of words and sentences, usually based only on their length. Despite their name, readability formulas do not measure ease of reading or comprehension, and the scores from these formulas are not good indicators of overall suitability of material. For concerns and recommendations about using formulas to score written material, See Toolkit Part 7, *Using readability formulas: a cautionary note.*)

What about using readability formulas?

Low health literacy is a widespread problem with serious consequences (see Toolkit Part 1). Since so many health-related written materials are too difficult for their intended readers, it’s crucial to make your material as clear and simple as you can (Institute of Medicine of the National Academies [IOM], 2004; Rudd, Kaphingst, Colton, Gregoire, & Hyde, 2004; Schwartzberg, VanGeest, & Wang, 2005; Root & Stableford, 1999; Office of Disease Prevention and Health Promotion [ODPHP], 2006).

Sometimes people set goals for written material based on a targeted reading grade level, such as “this needs to be at the 6th grade level.” To find out whether they have reached this goal, they use a readability formula to score the text. There are several dozen readability formulas, including the Fry formula, SMOG, and Flesch tests (Flesch-Kincaid and Flesch Reading Ease). Though the formulas vary, they estimate difficulty based on what is easy to count at the level of individual words and sentences, such as the length of words and sentences. Results from these formulas are often given as a grade level, such as “fourth grade” or “12th grade.”

It's easy to infer from the name, "readability formula," that the formulas measure comprehension or reading ease, but they do not. Readability formulas measure things that are easy to count, like number of syllables and number of words in a sentence. The formulas do not measure attributes beyond the sentence level, such as how well sentences are connected, let alone the active role of the reader in interpreting the text.

Since many people are unaware of the narrow and mechanical focus of these formulas, the grade level scores from these formulas are often interpreted and used in ways that go well beyond what they measure. If you are developing written material, it's important to know about the formulas and be cautious in how you use them. The Toolkit covers this topic in Toolkit Part 7, *Using readability formulas: a cautionary note*. Figure 4-3-j below summarizes the concerns and recommendations that are discussed in detail in Toolkit Part 7.

Figure 4-3-j. Using readability formulas: A summary of concerns and recommendations.

Reasons for being cautious about using readability formulas

- **Readability formulas completely ignore most factors that contribute to ease of reading and comprehension, including the active role of the reader**. A grade level score is based on the average length of the words and sentences. This tells you nothing about whether the words are familiar to your readers and nothing about whether the sentences are clear and cohesive. A grade level score can't tell you whether the material will attract and hold people's attention or whether they will be able to understand and use it. This means that relying on a grade level score can mislead you into thinking that your materials are clear and effective when they are not. (For more about what readability formulas do and do not measure, see *Figure 7-c, Readability formulas ignore the active role of the reader* and Figure 7-d, *Readability formulas alone can't tell you whether written material is clear and effective*. Both are in Toolkit Part 7.)

- **Grade level scores for the same text can differ considerably depending on the formula you choose and how you use it.** In addition, there are problems of unreliable measurement if you score text by computer.

- **Grade level scores are less precise than they sound and it is tempting to over-interpret what they mean.** For more on this topic, see Toolkit Part 7, Figure 7-e, *What does a readability score actually mean?*

- **The need to meet a grade level standard based on a readability formula can lead writers to produce text that is actually *less* readable**. Edits that are done to make text score at a lower grade level can produce choppy text that lacks cohesion.

Toolkit recommendations for using readability formulas

- **Use readability formulas only as tools for occasional limited use -- not as ways to measure overall suitability of documents.**
  - Use scores from readability formulas as a check on difficulty of words and sentences – not as indicators of comprehension, not as summary assessments of reading ease or usability, and not as a guide to writing. If material is too difficult for the intended readers, a readability score might help you convince others that revisions are essential.
  - In general, make writing clearly and cohesively in "plain language" your general goal for any written material for any audience.
  - Rely on feedback from your intended readers as the ultimate test of whether materials are clear and effective (see Toolkit Part 6, *How to collect and use feedback from readers*).

- **Pick your readability formula and method carefully**. This Toolkit recommends scoring written material by hand using the Fry method or the SMOG (instructions are provided in Toolkit Part 7). Scoring by hand tends to be more reliable than computer scoring. Also, working directly with the text makes you more aware of your writing habits and helps you spot ways to improve. If you use a computerized readability formula, prepare the text first to avoid misleading results. This includes removing embedded punctuation and text that is not in full sentences.

- **Interpret a score from a readability formula as indicating a general range of difficulty rather than a specific grade level**. For suggestions, see Toolkit Part 7, Figure 7-h, *Interpreting scores from readability formulas as ranges of difficulty.*

- **Report scores from readability formulas in ways that acknowledge the narrow scope and limitations of readability formulas**. When reporting a readability score, tell which formula and method you used, what it measures, and include other information to help people make a meaningful interpretation of the score. Tell whether the material has been tested with the intended readers. Consider listing the words that were counted as "difficult" by the formula (those with 3+ syllables) to help others judge whether they are likely to be familiar to the intended readers. For an example, see Figure 7-i in Toolkit Part 7.

Source: Adapted from *Toolkit for Making Written Material Clear and Effective*, Part 7: *Using readability formulas: A cautionary note*.

Make writing in "plain language" a general goal

Figure 4-3-j above urges you to make writing clearly and cohesively in "plain language" your general goal for *any* written material for *any* audience. The *Toolkit Guidelines for Writing and Design* will help you get the reading grade level of your materials as low as you can without losing important content or distorting the meaning, and without sounding condescending to the reader. Testing the material with readers will verify whether the material is clear and effective.

Plain language is essential for readers with low literacy skills, but it works well for others, too.

> "We're writing information, not literature, and most of us like to get our basic information as quickly and easily as possible."

As Jane Root and Sue Stableford have said, the bottom line is that we're writing information, not literature, and most of us like to get our basic information as quickly and easily as possible. We skim the text looking for answers to our questions, and if we can't find them easily or feel overwhelmed by the amount of information, we may just give up (Root & Stableford, 1998).

End notes

Acknowledgments

Thanks to Julie Carson, Mark Evers, and Penny Lane for their contributions to this chapter and assistance with examples. Thanks also to Sue Stableford, Len Doak, Ceci Doak, and Christina Zarcadoolas, for their insights into what it takes to make writing clear and effective, and for supplying some of our examples and letting us adapt them for use in this chapter.

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PlainLanguage.gov

This is a resource from the federal government which contains guidelines and examples on how the federal government can improve its communications with the public.

Also on this website, references on health literacy: http://www.plainlanguage.gov/populartopics/health_literacy/ (accessed September 8, 2006).

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DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

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CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 4

Understanding and using the "Toolkit Guidelines for Writing"

Chapter 4

Guidelines for engaging, motivating, and supporting your readers

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 4, Chapter 4

Guidelines for engaging, motivating, and supporting your readers

List of figures in this chapter:

This document is the last of four chapters in Part 4 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing in Toolkit Part 4 and 46 guidelines for graphic design in Toolkit Part 5.

For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material*. For the full list of guidelines for writing and design, and a discussion about how to use them, see Toolkit Part 3, *Summary List t of the "Toolkit Guidelines for Writing and Design".*

About this part of the Toolkit

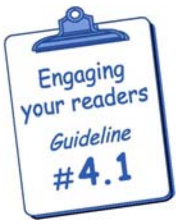
Part 4 of the Toolkit focuses on the guidelines for writing. There are four chapters in Part 4, each of which covers the guidelines for a different aspect of writing. These guidelines apply to writing various types of material intended for use in printed formats by culturally diverse audiences that include people with low literacy skills (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

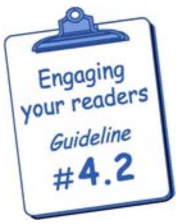
This is the last of four chapters on writing in Toolkit Part 4. It discusses how to apply the guidelines for engaging, motivating, and supporting your readers. These guidelines are shown below in Figure 4-4-a.

[The other chapters in Toolkit Part 4 cover guidelines for content of your written material (Chapter 1); guidelines for organizing the content (Chapter 2); and guidelines for writing style (Chapter 3).]

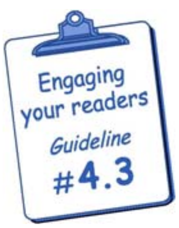
Figure 4-4-a. Toolkit guidelines for engaging, motivating, and supporting your readers.



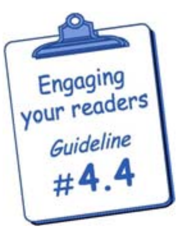
Be friendly and positive. When your messages have a supportive tone, readers will be more receptive, especially if you are urging them to do something difficult or unfamiliar.



Use devices that engage and involve your readers, such as stories and quotations, questions and answers, quiz formats, and blank spaces for them to fill in. When you get people actively involved with the material, they become more interested and learn more easily.



When you give suggestions or instructions, make them specific, realistic, and culturally appropriate for your intended readers. To keep people from feeling frustrated or discouraged, be sure that the behavior you are urging seems feasible to them. If you raise awareness of risks or problems, tell people what they can do about them.



Base your material on information sources that your intended readers will trust. To check on credibility of different sources, ask members of your intended audience and informants.

Match health statistics and similar information as closely as you can to the characteristics of your intended readers and their communities. A close match makes it easier for people to relate to the material.

Engaging your readers Guideline #4.6

Tell your readers how and where to get help or more information. Make it easy for people to follow up on what they've just read by telling them what additional information or assistance is available and where they can get it.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Does the material have a friendly and positive tone?

Engaging your readers Guideline #4.1

Be friendly and positive.

When your messages have a supportive tone, readers will be more receptive, especially if you are urging them to do something difficult or unfamiliar.

Often, you can deliver the same message in either a positive or a negative way. If you fill your material with negative wording, such as "don't...." or "you shouldn't..." or "you can't ..." you will dishearten your readers. Instead, foster a more positive and upbeat tone by emphasizing what they *can* or *should* do. Here's an example:

Source: Adapted from *Simply Put* (CDC, 1999:6).

In addition to emphasizing the positive, maintaining a friendly tone is crucial. You will likely lose some readers if the material sounds bossy or seems to talk down to them. To make readers more receptive, write in a friendly and supportive tone. To illustrate the importance of tone, Figure 4-4-b shows two ways to deliver the same message.

Figure 4-4-b. How would these messages make you feel?

POSTCARD A: How do you think you would react if you got this postcard from your clinic?

> Dear Ms. Jones:
>
> Our records indicate that you did not show up the last two times you made an appointment to bring your baby in for a checkup. Your child could be sick and you might not be able to tell. If you have no way to get to the clinic, let us know. Call for an appointment today.

POSTCARD B What if the clinic sent you this postcard instead?

> Dear Ms. Jones:
>
> We hope you'll bring your baby into the clinic soon. She needs a checkup, and she's due for shots to keep her healthy. The baby and the clinic staff are counting on you! We can help you get a ride if you need one. Please call us for an appointment today.
>
> Thank you.

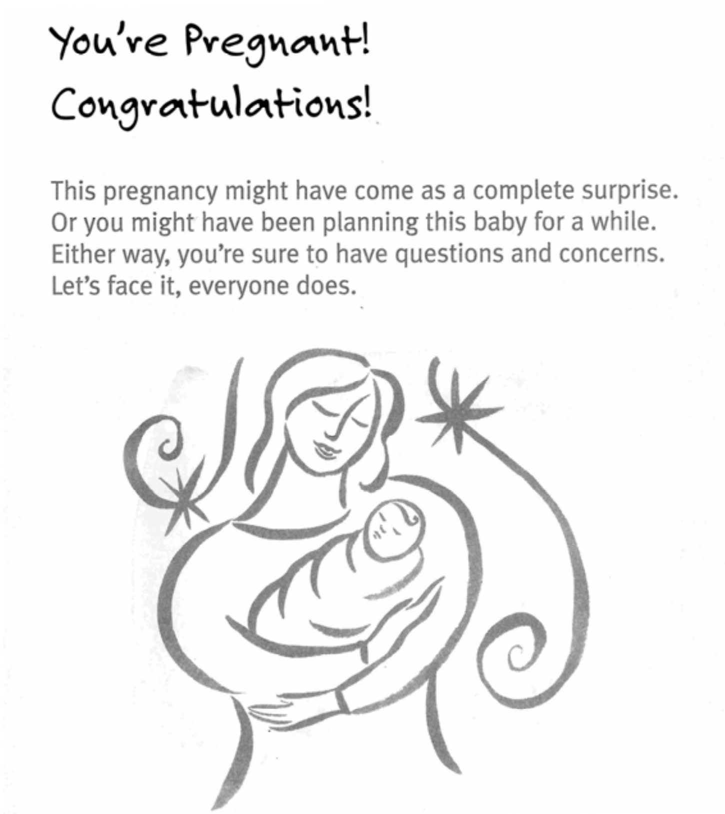
Source: The situation and Postcard B are from Exercise 8 in *Write It Easy-to-Read* (Root & Stableford, 1998) and are used with permission of Sue Stableford. Postcard A was written by Julie Carson as an example for this Toolkit to make a point about tone.

As shown in the examples above, the tone of your writing is influenced by the words you choose and the way you develop your messages. Here are suggestions for creating a friendly and positive tone:

- **Be polite and invitational**. When you are explicitly urging someone to act in a certain way, make your tone invitational—inviting help and cooperation. Use phrases such as "We need your help" "Please" "Here's what we'll do" "We want you to get the best possible care; here's how" (Root & Stableford, 1998).

- **Use a conversational style**. This means writing the way you might talk with a friend. For more about using a conversational style, see the discussion of Guideline 3.1 in Toolkit Part 4, Chapter 3, *Guidelines for writing style*.

- **Show respect, support, and acceptance of differences**. To make your writing friendly and supportive, be nonjudgmental about your readers' thoughts, feelings, and behaviors. As shown in the example below, you can put readers at ease by conveying that it's okay to react to the same situation in different ways:



This shows the first page of the introduction in *Baby Basics: Your Month by Month Guide to a Healthy Pregnancy,* a publication of The What to Expect Foundation (see references at the end of this chapter). It sets the friendly, non-judgmental tone that is maintained throughout the book. (Used here with permission.)

- **Personalize the messages if you can**. Ideally, the material should make readers feel that it's been written just for them. Even if you can't personalize the writing very much, it shouldn't have the tone of a form letter or one-size-fit-all.

Use devices to get your readers actively involved with the material

Engaging your readers

Guideline #4.2

Use devices that engage and involve your readers, such as stories and quotations, questions and answers, quiz formats, and blank spaces to fill in.

When you get people actively involved with the material, they become more interested and learn more easily.

Reading tends to be a passive activity, and readers' minds can wander. To keep your readers' attention and help them learn, use devices that get them actively involved with the material. You can add stories and vignettes to make the material come alive. Dialogues and quotations help personalize the content by using someone's words. Question and answer formats, and quiz formats such as true-or-false, get readers involved in learning the answers. Devices that invite readers to fill in information or take notes get them actively involved with using the material.

Whatever the device, the purpose is the same: to engage your readers so effectively they assimilate the material and apply it to their lives. When you pique their curiosity and get them more personally invested in what you are telling them, your material becomes persuasive and compelling.

Questions and answers

Question and answer formats (Q & A) can be very effective, because readers come to your materials looking for answers to their questions. The trick is to **pose your questions carefully**, so that they match your readers' personal interests, and to **provide the answers right away** so that readers don't have to search for them.

You can adapt the Q & A approach to suit your needs. For example:

- **The simplest application of Q & A is to write a heading in the form of a question.** It's okay to mix headings that are posed as questions and headings that are not. Instead of forcing all headings into the form of questions, fit your headings to the content.

- **You can also use Q & A to give the details about a topic, answering specific questions that typically arise.** For example, suppose that your material is about Medicare coverage of skilled nursing care. Since it can be hard for readers to understand and apply general discussions of coverage, it may help to use a series of questions and answers about real-life situations as an explanatory device. When you write the scenarios, you can incorporate issues or circumstances that you know are confusing to your readers, and then use the answer to clear up misunderstandings.

    - For example, you could write a scenario that begins: *Mr. Talbot had hip replacement surgery, and was discharged from the hospital to a skilled nursing facility*. Then you would add details, such as how long he stayed in the skilled nursing facility and the type of care he got during that stay.

    - Then you would end the scenario with a question: *How many days of skilled nursing care will Medicare cover for Mr. Talbot*? The answer that follows can go into the details about how the rules about coverage apply to this situation.

Here are tips for using Q & A in your materials:

- **Expect your readers to be selective about which parts they read**: Q & A makes it easy for readers to skim quickly through the material to find information they care about – *and skip over parts they don't*.

- **Be cautious about using Q & A for core content that you want everyone to read.** If a question doesn't appear salient, people may skip over the answer and miss some of your most important points.

- **Use informative headings for your questions and answers.** If you are writing for the public, avoid popular abbreviations such as "Q & A" or "Frequently Asked Questions" or "FAQ." While you are familiar with these abbreviations, many of your readers may not be. FAQ is computer jargon, and many people who lack computer access – especially older people – would find it quite bewildering. Even when readers know the meaning of Q & A or FAQ, a heading such as "Answers to Questions about Coverage for Skilled Nursing Care" is more informative.

Quiz formats such as true-or-false

Quiz formats expand on the basic Q & A approach by giving answer choices and asking readers to say which is correct. Much like Q & A, quiz formats can work well as a device for discussing widely-held beliefs, clearing up common misunderstandings, and providing answers to typical questions a reader may have. There are many ways to use them in your materials. The next two figures give examples:

Figure 4-4-c. Example of a true-or-false form.

The example below is the answer key to a brief quiz about exercise. To get readers involved, you would show the questions first, so that readers could mark them, and then give the answer key. The answer key in this example shows how you can expand on the answers to get your main points across.

True or false?

For most adults, doctors recommend 30 minutes of physical activity at least five days a week. But what does this mean?

1. It has to be vigorous exercise, such as playing tennis, or working out in a gym. ☐ True ☒ False

   The truth is that "physical activity" can be vigorous, such as jogging or swimming laps, but it doesn't *have* to be. **Just about anything that gets you moving can count as physical activity.** This includes taking a brisk walk around your neighborhood, working in your garden, or playing actively with your grandchildren.

2. You have to exercise 30 minutes without stopping. ☐ True ☒ False

   The truth is that **you can break up your 30 minutes of physical activity** into pieces that work for you. For example, you could take a 20-minute walk in the morning and a 10-minute walk later in the day.

Source: This example is based on text from *Creating Communities for Active Aging: A Guide to Developing a Strategic Plan to Increase Walking and Biking by Older Adults in Your Community* (2001:6), U.S. Department of Transportation, National Highway Traffic Safety Administration Partnership for Prevention. Adapted and reformatted for this Toolkit.

Figure 4-4-d. A variation on true-false that says, "You may have heard."

You May Have Heard

"Your labor will be just like your mom's. Too bad hers lasted for 2 days."

Every pregnancy, and every labor, and every delivery is different. Your labor will be as long or short, as easy or hard, as it is. There's no way to predict. And no way to blame your mother for this one.

"Get your hair styled before you go into labor, so the baby comes out with hair."

Well, if it will make you feel better—get a nice shampoo or a cut. But don't expect a full head of hair on delivery day. Some come out bald, others are hairy, but either way, you'll probably think your baby has just the right style."

"My mother said it was important to pick a baby's name that came from my family."

Will you name her after a favorite relative? What about naming him after a famous president? Or using a traditional name from your culture or religion? You may already have a name picked out. Or you may want to wait until you meet the baby to pick a name.

"If you can't breastfeed, the baby won't know you're his or her mother."

Of course your baby will know you – from your smell, your voice, and your touch. So if you can't breastfeed, don't worry. But do bond with your baby. Hold the baby close to your skin about the distance from your breast to your face. For a while the baby can only focus from about 18 inches away.

Source: *Baby Basics: Your Month by Month Guide to a Healthy Pregnancy,* a publication of The What to Expect Foundation. Courtesy of Lisa Bernstein, Executive Director, The What to Expect Foundation, 144 W. 80th Street, New York, NY 10024, (212) 712-9764. To learn more about this book and about the Baby Basics Prenatal Health Literacy program visit http://www.whattoexpect.org.

Stories and vignettes

Stories are powerful ways to explain the consequences of behaviors and make the action you want people to take very clear and logical. These devices can be very effective because they personalize your material with other people's words and experiences. They can be adapted from real life or invented to illustrate your points. They also lend themselves to interesting graphic treatments.

If you decide to write a story, keep it short. Make the characters believable, similar to the readers themselves. The setting should also be familiar and directly relevant to the point you want to make. Keep the storyline moving. For more about the power of stories, how to use them, and examples, see the following resources: *Health Literacy from A to Z* by Helen Osborne (2004); *Storytelling as Best Practice* by Andy Goodman (2003); "The power of conversation: All social change begins with a conversation" from the book *Turning to One Another* by Margaret Wheatley (2002); and *Caring for Patients from Different Cultures: Case Studies from American Hospitals* by Geri Galanti (1997).

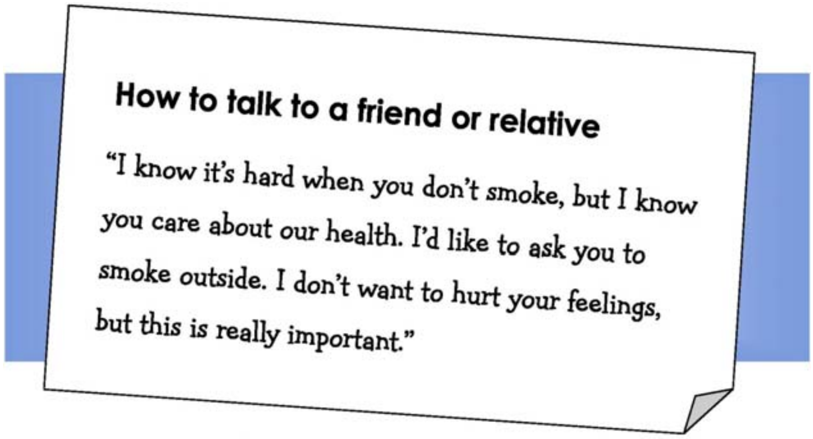
A vignette is like a story, but without a plot. You can use vignettes as examples; they are like a verbal snapshot. For example, a substance abuse prevention brochure for pregnant women is using a vignette when it begins with a young woman describing her drug use and the disastrous effects it had on her unborn child. She directly confronts the myth that it can't happen to me and urges other pregnant women to avoid her mistake. This story helps get readers interested and engaged in the subject matter and is likely to be much more effective than listing the risks of alcohol, tobacco, and other drug abuse to the developing baby (*You Can Prepare Easy-to-Read Materials*, Center for Substance Abuse Prevention [CSAP], 1994:3-4).

Dialogues and brief quotations

You can incorporate dialogue into your written materials in different ways for different reasons:

- **You can use dialogue or quotations to help tell a story**. When you include dialogue in a story, keep it simple and use words that are familiar to your audience. The words should sound like ordinary speech, and reveal personality or move the story line along—nothing else (no small talk). To write convincing dialogue, listen to the words your intended readers use. You can get inspiration by paying attention to the words and examples they use in focus group discussions or feedback sessions (see Toolkit Part 6, *Methods for testing written material with readers*). You can also get readers actively involved in creating materials (see, for example, Rudd & Comings, 1994).

- **You can use dialogues or quotations as scripts to coach readers on what to say.** When you tell readers to do something, especially if it's something hard, try suggesting some words they might use. Here's an example that uses a quotation to coach readers on what to say:



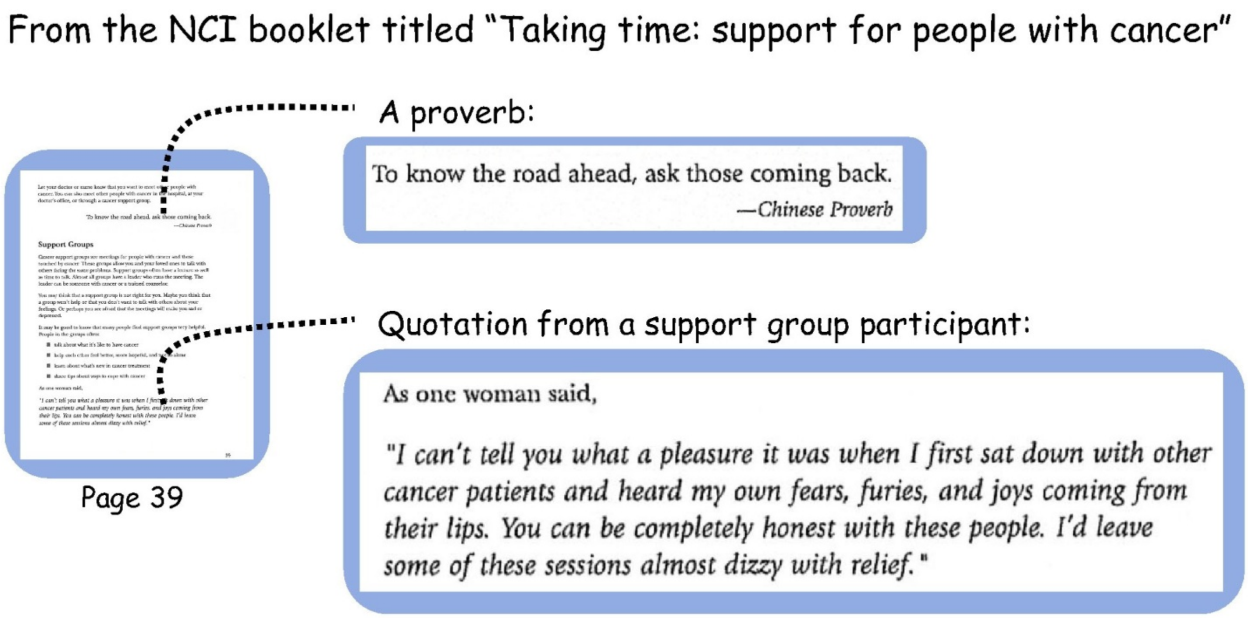
Source: This text is from *One Of The Best Things You Can Do For Your Kids*, a brochure developed by the State of Washington Department of Health. Used with permission.

You can also use dialogues or quotations as expanded explanations. Here is an example from a booklet on dental care that shows a dialogue between two mothers:

Source: Excerpt from page 3 of *A Healthy Mouth for Your Baby*, by the National Institute of Dental and Cranofacial Research. See end of this chapter for more information.

- **You can use dialogues or quotations to engage your readers and reinforce a friendly and supportive tone**. Figure 4-4-e shows two examples that appear on a single page of a booklet by the National Cancer Institute (NCI) called *Taking Time: Support for People with Cancer.* Near the top of the page is a proverb, and near the bottom of the page is a quotation.

Figure 4-4-e. Using proverbs and quotations.



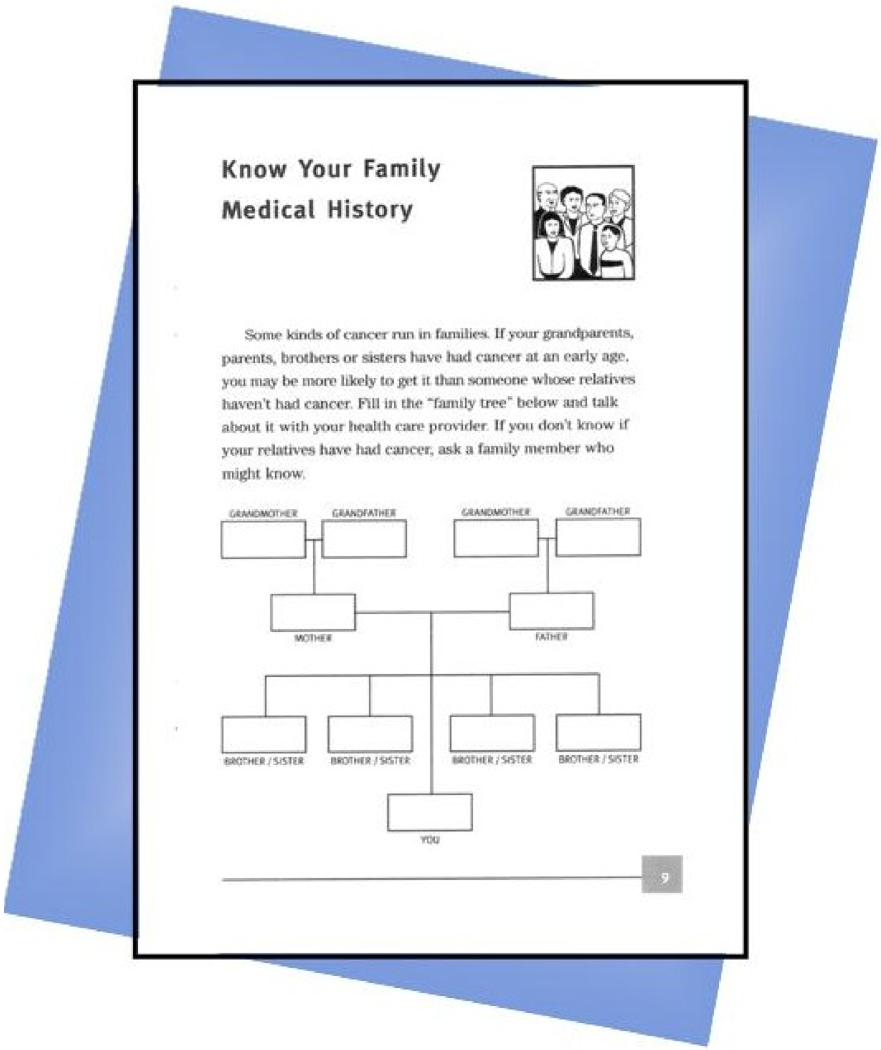
Source: National Cancer Institute, National Institutes of Health, *Taking Time: Support for People with Cancer.* NIH Publication No. 09-2059, Revised July 2009, Reprinted September 2009, Bethesda, MD. http://www.nci.nih.gov/cancertopics/takingtime.

Giving readers blanks to fill in

Giving readers places to fill in gets them actively involved with learning and applying the information in your material. One way is to put some blank lines in the material and invite readers to take notes. While you could write a general heading for these blank lines, such as “Notes,” a more specific heading will probably work better to get people to write something down.

Some materials consist mostly or entirely of forms for people to fill in. Examples are application forms and wallet cards with spaces for people to list the medicines they take and other personal medical information (see Toolkit Part 5, Chapter 8, *Guidelines for forms and questionnaires*). There are other ways to get readers involved with the material by giving them places to fill in their own personal notes or information. Figure 4-4-f gives an interesting example.

Figure 4-4-f. Giving readers a family tree diagram to record their medical history.


Know Your Family Medical History

Some kinds of cancer run in families. If your grandparents, parents, brothers or sisters have had cancer at an early age, you may be more likely to get it than someone whose relatives haven't had cancer. Fill in the "family tree" below and talk about it with your health care provider. If you don't know if your relatives have had cancer, ask a family member who might know.

Source: *Passport to Health: A Guide to Staying Well* (2000). Developed by World Education, Inc., with funding from the Centers for Disease Control and Prevention. World Education Inc., 44 Farnsworth St., Boston, MA 02210. http://healthliteracy.worlded.org/heal/passport/. Used with permission.

Are instructions specific and culturally appropriate?

Engaging your readers
Guideline #4.3

When you give suggestions or instructions, make them specific, realistic, and culturally appropriate for your intended readers.

To keep people from feeling frustrated or discouraged, be sure that the behavior you are urging seems feasible to them. If you raise awareness of risks or problems, tell people what they can do about them.

Be specific

If your materials give vague instructions or advice, you put the burden on your readers to figure out what you mean and how they should apply what you have said. To encourage and guide your readers, be specific.

The book, *Teaching Patients with Low Literacy Skills* (Doak, Doak, & Root, 1996), provides examples and helpful advice on how to be specific in patient education materials. Their advice applies to administrative procedures as well. For example, suppose you are explaining Medicaid enrollment procedures to beneficiaries. Instead of saying, “bring proof of your income,” tell them exactly what kind of documents they need to bring, and give examples (such as an illustration of a pay stub). The “Ask Me 3™” campaign is another example. It coaches patients on questions to ask when they go to the doctor.

Be realistic

To empower your readers, be *realistic* as well as specific in what you suggest or tell them they should do. Any behavior change or action you urge needs to be something that your readers may believe they can do. Asking them to do something they can’t envision doing will discourage them and could even cause them to reject everything else you say.

Here are some tips about gearing your suggestions and advice to people’s capabilities:

- **When something is hard to do, say so, and offer support**. You can acknowledge and reinforce people's good intentions. For example, you can tell smokers who are trying to quit to keep trying, and then offer reassurance about how most people need to make repeated attempts before they quit for good.

- **Offer options for transition to a new behavior.** For example, suppose your materials tell people how to reduce the amount of salt they eat. Readers will find the advice more palatable if you explain how to phase in their new eating habits rather than telling them to make all of the changes immediately. Materials that encourage physical activity might give guidelines for gradual increasing the amount of activity over a period of time.

- **Suggest compromises for behaviors that are highly resistant to change**. For example, suppose that your material explains how to reduce children's asthma attacks by controlling their exposure to pet dander. Even though their health would benefit, it's unrealistic, not to mention cold-hearted, to tell children they must give up a beloved pet. Instead, the material could suggest ways of reducing exposure such as keeping the pet out of the child's bedroom, and shampooing it regularly. It could also warn against getting new pets with dander.

Be cautious about messages based on fear

Health promotion materials often discuss health risks, hoping to make people feel vulnerable and therefore more receptive to changing their behavior. But this approach can backfire if the threat part of the message comes across more strongly than the healthy behavior solution (NCI, 2002). For example, readers might conclude that there's nothing they can do to prevent heart disease, cancer, or high blood pressure, and fatalistically continue their bad habits.

Here are two suggestions:

- **If you raise awareness of risks or problems, give people a way to follow-up**. For example, in material that warns about breast cancer, it's logical to include explicit instructions about self-examinations, as well as advising regular checkups and mammograms.

- **If you include messages based on fear, be sure to test them thoroughly** with members of your intended audience.

Be culturally appropriate

When you are urging particular behaviors, take into account the cultural and linguistic practices of your intended readers. When you give culturally appropriate suggestions, you make it easier for readers to relate to the material and understand what it means, and easier for them to act on what you have advised.

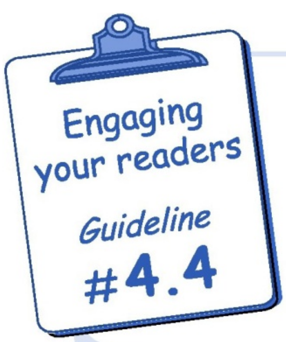
For example, materials that deal with nutrition should reflect the usual eating habits of the intended readers. Be aware of the diversity among your intended readers and make adaptations as needed so that they can easily relate to the material:

- **Food choices**. The food pyramid diagram typically includes a few examples of foods in each food group. Often, these pictures reflect a narrow definition of a western diet. To make a food pyramid culturally appropriate, you may need to expand the examples of foods that are pictured.

- **Cooking practices**. Material with dietary instructions for Hispanics/Latinos who have diabetes provides another example. Instead of telling them to eliminate cooking oil, which would run counter to typical cultural practices and might be unrealistic in any case, the materials advise cutting back on the amount of oil that is used to prepare foods (Health Promotion Council).

Besides making people more receptive, giving culturally appropriate instructions can help prevent medical error. To give just one example, instructions for taking a “teaspoon of medicine” need to take into account the possibility that Asian or Asian American households may have spoons that are much larger than a measuring teaspoon.

Do readers trust the information sources?



Base your material on information sources that your intended readers will trust.

To check on credibility of different sources, ask members of your intended audience and informants.

People tend to reject information that comes from a source they do not trust. Some information sources may have little credibility with your audience, while others will be viewed as quite trustworthy. For example, consumers tend to be skeptical when a health care organization describes its own quality of care. Studies suggest that consumers typically prefer to get information about health care quality from a neutral third party (McGee, Sofaer, & Kreling, 1996; Lubalin & Harris-Kojetin, 1999). For example, they are more likely to trust quality information if it comes from the Medicare Program rather than from an individual hospital, nursing home, or health plan.

A report on Medicaid outreach to communities in Washington State provides another example about credibility of information sources. This report made recommendations about ways to improve outreach to African Americans, Asians and Pacific Islanders, Hispanics /Latinos, Native Americans and Alaskan natives, and Russian-speaking communities. Here are a few of their suggestions (Washington State Health Care Authority, 1996:26): (1) Request an endorsement from the Korean consulate for advertisements targeted to the Korean community; (2) secure some type of tribal endorsement for materials distributed to Native American/Alaskan native tribe members; (3) work through churches and temples in some communities, because they are centers for cultural, social, and economic activity, especially for Koreans, Hispanics/Latinos, and African Americans.

For the best guidance on readers' likely reactions to information sources you are considering, consult members of your intended audience and key informants.

Can readers relate to the health statistics you give?

Engaging your readers
Guideline
#4.5

Match health statistics and similar information as closely as you can to the characteristics of your intended readers and their communities.

A close match makes it easier for people to relate to the material.

Whenever you can, use statistics that are the most meaningful to your intended audience—ones that match their sex, age, ethnicity, locale, and other characteristics. If your audience can relate personally to your facts, your piece will be more persuasive. For example, if you are writing for teenagers who are pregnant, statistics about low birth weight babies will be more meaningful it they are based on babies born to teenagers rather than on birth rates in general.

It can be a challenge to find information that describes your audience, because national and regional data may not have the level of detail you need to match the groups you are trying to reach. But for some audiences and some health conditions, there are sources of detailed information. For example, there are websites with health statistics, some of which have interactive features that let you define the subgroups you need. Below are four websites to check. To find others, try doing a key word search on the Internet, including key words to describe the type of data you need and the audience you are trying to reach.

http://www.healthfinder.gov

See the home page on this government website. You can make selections based on demographic categories (men-women, age groups, race-ethnic groups) and other categories such as people with disabilities and groups based on roles (examples are parents, caregivers, community leaders, health professionals).

http://apps.nccd.cdc.gov/gisbrfss/

You can create, save, and print maps for states and metropolitan areas for a variety of health-related risk factors using "BRFSS Maps" at the Behavioral Risk Factor Surveillance System (BRFSS) website. Using mapping technology and results from the periodic national BRFSS surveys, this website lets you compare prevalence data for states, territories, and local areas.

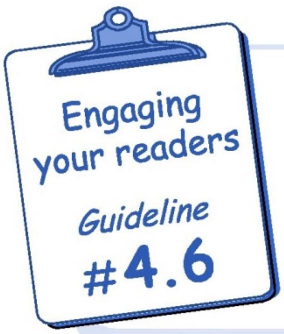
http://www.health.gov/communication

The federal office of Disease Prevention and Health Promotion (ODHDP) Prevention Communication Research Database (PCRD) gives you access to federally sponsored audience research reports on key prevention topics. PCRD topic areas include asthma, arthritis, cancer, diabetes, healthy eating and nutrition, heart disease and stroke, obesity, physical activity, substance abuse, tobacco use, youth risk-taking behaviors, and preventive measures to address these issues.

http://www.nwlc.org

The National Women’s Law Center and Oregon Health Sciences University produces reports called *Making the Grade on Women’s Health: A National and State-by-State Report Card.* These reports assess the overall health of women at the state and national level by examining indicators of women’s health status and state policies that can contribute to improving women’s health. You can download or order this report at the website, which also has fact sheets.

Does the material say how to get help or more information?



Tell readers how to get help or more information.

Make it easy for people to follow up on what they've just read by telling them what additional information or assistance is available and where they can get it.

When they finish reading your written material, some people may have questions or want to learn more. Make it easy for them to follow up by including contact information in your materials. Also, tell about other versions of the material that are available, and about any additional help you can offer. Here are some suggestions:

- **Be specific about what's available.** Help readers know what additional help or information is available by describing the specific types of help they can get. For example, can they call a helpline? Order publications? Go in to an office and talk in person?

- **If appropriate, offer multiple ways for people to get help or more information**, such as phone, mail, website, and in-person options. Instead of just giving an address and asking people to write, give them a ready-made card to drop in the mail.

- **Make the information about where to get help or more information easy for people to find**. For example, repeat the help line information in different parts of the material, especially if people are going to use it for reference. Remember that some people read material randomly—opening the middle, reading from the back, skimming, etc., so make it easy for them to find information they need to follow up.

- **If the material is available in alternate formats or other languages, tell your readers how to get it**. Put this notice in a prominent place, preferably on the cover: people who need an alternate format (such as large print or audio) or different language need to know at first glance that the version they need is available. If you put it inside or on the back, they will probably not see it. For more on this topic, see Toolkit Part 11, *Understanding and using the Toolkit Guidelines for culturally appropriate translation.*

End notes

Thanks to Julie Carson and Mark Evers for their contributions to this chapter.

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Ask Me 3™

Ask Me 3™ is a trademark licensed to the Partnership for Clear Health Communication, 1615 L Street, NW, Suite 1000, Washington, DC 20036, http://www.npsf.org/askme3/. Affiliated with the National Patient Safety Foundation (NPSF).

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260 South Broad Street, Philadelphia, PA 19102. Telephone (215) 731-6150. Visit online at http://hpcpa.org/.

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CMS Product No. 11476

September 2010

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material
Clear and Effective

SECTION 2: Detailed guidelines for
writing and design

PART 5

Understanding and using the "Toolkit Guidelines for Graphic Design"

Chapter 1

Tips for learning about design and working with design professionals

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 1

Tips for learning about design and working with design professionals

List of figures in this chapter:

This document is the first of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?)*

This is the first of the eight chapters on design in Part 5:

- This introductory chapter gives you background on design and tips for working with professional graphic designers.

- The rest of the chapters in Toolkit Part 5 explain how to apply the guidelines for the following aspects of design: overall design and page layout (Chapter 2); fonts (typefaces), size of print, and contrast (Chapter 3); headings, bulleted lists, and text emphasis (Chapter 4); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

Toolkit chapters on design are written for non-designers

The design chapters in Part 5 of the Toolkit assume that you have little if any background in graphic design. You may have an interest in design, or be responsible for coordinating the design part of your materials. Perhaps you have developed design skills on the job, by producing some of your own written materials. Though you may work on planning, developing, testing, or otherwise producing written materials, we assume that you have not had formal training in graphic design. We further assume that you probably get some help with your written materials from graphic design professionals. You may contract with firms for design services, or use your own in-house resources.

Just as in any field, graphic design has its own set of specialized skills and terminology. If you don't have training or experience in the field, it can be intimidating to deal with design issues and work with professional designers. Whatever your situation and responsibilities, the Toolkit chapters on design will help you become a better-informed and more discriminating judge of graphic design, and show you ways to improve the design of your written materials:

- **You'll get suggestions about good resources to use.** To help you get up to speed on the basics of design and of getting your materials printed, this chapter suggests some excellent books and websites to consult.

- **You'll get practical advice about using design services.** This chapter has tips on choosing and working with design professionals.

- **You'll get specific guidance on design to apply to your own materials.** As you read the rest of the chapters in this Part 5 section on design, you'll learn how to recognize and avoid many common problems in design. The detailed guidelines and examples in these chapters will help you improve the look of your materials and their impact on readers.

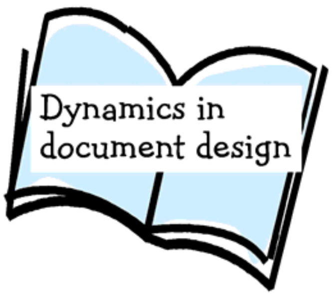
- **You'll learn why certain features of design are so crucial to materials for more vulnerable audiences**. In particular, we address the needs of less-skilled readers and of older adults who are experiencing the normal age-related declines in vision and ability to read and process written information (see Toolkit Part 2, *Using a reader-centered approach to writing and design*). For example, less-skilled readers and older readers need highly readable print, prominent and informative headings, and a clean, uncluttered layout with a clear path for the eye to follow. These and other design features that are crucial for less-skilled readers and older readers will work well for the rest of your intended readers, too. (If you happen to be a design professional, this emphasis on making information materials more reader-friendly for vulnerable audiences may be a new topic for you, since it is seldom covered in professional training for design.)

Resources for learning about graphic design

Learning the basics of good design will help you feel more confident about the design aspects of your written materials and about working with graphic design professionals. Figure 5-1-a below describes some great resources to help you learn more about design.

Figure 5-1-a. Resources for learning about basics of graphic design.

If graphic design is a new topic for you, this book by Robin Williams (2004) is a good place to begin. It gives clear explanations of basic design principles (contrast, repetition, alignment, and proximity), and uses many examples to show their impact on written materials of various types.

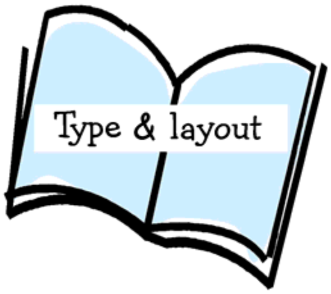


This book by Karen Schriver (1997) is a very detailed resource on research related to design and its impact. Emphasizing practical applications of research findings, this book gives examples from testing that show how crucial it is to take the readers’ needs seriously. It also discusses subtleties of cross-cultural aspects of document design.

These two books are written by John McWade (2004, 2005). They are based mainly on compilations of articles from his periodical called *Before & After: How to Design Cool Stuff* (http://www.bamagazine.com/).

Although McWade writes for professional designers, much of the material in both books is accessible to non-professionals as well. The books have outstanding examples and clear commentary that make them useful and inspiring resources for anyone with an interest in design.

If you find something you want to adapt from these books, they include the technical instructions that you could give to a graphic designer.



The full title of this book is *Type & Layout: Are You Communicating or Just Making Pretty Shapes* (2005) .The author Colin Wheildon has studied how people react to variations in type and layout of materials. Based on this research about what helps and hinders readers, he describes design practices that you can use to attract and hold your readers’ attention and improve their comprehension.

This book by Robin Williams and John Tollett (2007) has hundreds of examples that show how to apply design principles to a wide variety of projects. The commentary is helpful, and the examples are detailed.

Websites that sell fonts can be an excellent resource for learning more about typography. Some include examples that show typeface design in use and explain the development and features of fonts designed for different purposes. Generally, you can do keyword searches to find fonts for a particular purpose (such as *legible*, *friendly*, *sans serif, handwriting*). Some let you type in your own text and then show you how it looks in various fonts. Two good sites to check are: http://www.myfonts.com and http://www.fonts.com.

This book by Eric Kenly and Mark Beach can help you understand issues related to the actual production of your printed materials. The full title is *Getting It Printed: How to Work with Printers & Graphic Imaging Services to Assure Quality, Stay on Schedule & Control Costs* (2004). This book has a wealth of practical information and advice, including many cost-saving tips.

Full references are listed at the end of this chapter.

Choosing a graphic designer

Just as in any field, graphic design professionals differ in talent, training, and skills -- not to mention personality, fees, and efficiency. Ideally, you will find a designer or design firm with the expertise and attitude it takes to produce designs that work well for less-skilled readers. Since designers have great impact on the effectiveness of your materials, keep looking until you find a good fit. When you find a good fit, it's wise to cultivate a long-term relationship.

Here are some suggestions for choosing a designer:

- **If possible, find a designer who has expertise in working with low literacy materials.** Unfortunately, technical skill in itself does not guarantee that a graphic designer will be oriented toward making your materials easier for readers to understand and use. Relatively few professional designers are trained to be aware of the needs of less-skilled readers and how these needs affect graphic design. Designers who lack training and experience in designing low literacy materials are less likely to know about and focus on ways to reinforce reader comprehension through design. At worst, they may resist following your instructions if you ask them to do something other than their usual practice. Finding a designer with expertise in low literacy materials will help you create the most effective materials in the most efficient way.

- **Look for designers who can create low literacy materials in various styles.** Designers tend to be somewhat specialized, even in a full-service design firm. They also have their own distinctive styles and preferences, which can sometimes influence how they approach a project. Try to find a designer who genuinely likes to create low literacy materials, and who is versatile enough to create them in different styles. Clarity of layout and simplicity of design are hallmarks of low literacy materials. Creating such materials may hold little appeal to designers who naturally gravitate toward producing complex layouts or incorporating the latest trends in design.

- **Look for designers who are non-defensive about feedback on their work.** Many designers are willing to work cooperatively with you. They are responsive to your feedback and eager to meet the needs of your readers. For example, if results from testing show that a layout they designed confused your readers, they are receptive and view it as an opportunity to learn and improve. However, not all designers are so flexible and responsive. Keep searching until you find one who is.

- **If you find yourself feeling intimidated, be wary.** Good design results from give and take. When the client-designer relationship is working well, you should be learning from your designer and vice versa, rather than feeling intimidated. Look for a designer who makes you feel comfortable enough to voice your opinions, explain your reasons, and ask for yet another round of changes when you need them. Look for someone who will explain design issues and options in a way you can understand, instead of overwhelming you with technical terms you have never heard. Pick a designer who will discuss your needs and options in a collegial way, rather than telling you what to do.

- **Ask for samples of work, references, and information about fees.** Share the samples of work with others to get their reactions. Call the references and ask questions.

Working effectively with design professionals

Make it easy for the designer to produce what you need within your budget

Producing print materials is a complex process that involves many decisions. Some decisions are made by you, some by the designer, and some are made jointly or dictated by others. Ideally, design decisions reflect careful consideration and solid design principles. But realistically, there's not always enough time to produce the design you might like, and design decisions are sometimes compromised or over-ridden by non-design considerations, such as budget or specific requirements or standards that have been imposed.

Good design requires good teamwork; you and the designer both have responsibilities. Here are things that you can do to make it easier for your designer to produce what you need within your budget:

- **Communicate openly and honestly**. Be clear about your expectations, and encourage the designer to speak freely as well. Don't be afraid to ask questions. Show your appreciation. Don't say you like something if you really don't. Holding back your honest opinions gives your designer misleading cues, which can cause problems later on.
- **Use a mockup as a tool for working with your designer.** In this Toolkit, we suggest that you create a mockup (full size replica) of your print piece to serve as a draft of both the text and preliminary design features (see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*). Using a mockup makes it easier for you to communicate effectively with your designer and get the benefit of his or her comments and advice at an early stage. Using a mockup as a tool will help you and your designer visualize a similar final product from the beginning, which can cut down on the number of revisions you will need. Another tip in Toolkit Part 5, Chapter 2 suggests that you create a resource file by collecting examples of materials to use as visual aids for communicating what you like and don't like in design. Showing pictures from your resource kit to your designer can work better than struggling to describe a particular "look" in words.

- **Be timely and responsive**. Give the designer your feedback in a timely manner, and follow through on the promises you make. Don’t delay the progress of your project by being slow to respond.

- **Tell the designer about your budget constraints and ask for advice on possible ways to save money**. Sometimes you can save money by making relatively minor changes in the design. When designers know you are cost conscious, they can explain factors that affect costs and help you consider the financial implications of decisions that come up. (As we explain in the next section, you will also want to work with printers the same way to get their advice on ways to cut the cost of printing.)

- **Be sure you understand how fees for design services are applied and what is covered by a contract.** Be sure that you are clear about the meaning of terms and conditions included in a bid. For example, your idea of what constitutes “one round of revisions” might differ from what the designer has in mind. To avoid misunderstandings and possible budget problems, talk these things over in advance.

- **Monitor the design costs while the project is underway**. If you are not a designer, it can be hard to know how long it may take to do particular tasks for your project. If you are paying by the hour, rather than a fixed price, keeping close track of the design charges for your project will help you stay on budget. If the costs run higher than expected, you’ll want to know right away, so that you can make adjustments in the scope or nature of the work (or in the budget, if that is an option). Many design firms automatically provide a detailed breakdown of time spent on specific tasks on their invoices. Ask for it if they don’t, because reviewing the details will help you understand the cost of different parts of the work. You can use this information to guide your planning and to budget with greater accuracy in your future projects.

End notes

Acknowledgements

Thanks to Bruce Wilson and Karen Laksamana at Formations Design Group in Vancouver, Washington, for their helpful contributions to this chapter. Formations Design Group has also helped with parts of the Toolkit design. For more information about this firm, visit http://www.formationsdesign.com.

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September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the "Toolkit Guidelines for Graphic Design"

Chapter 2

Guidelines for overall design and page layout

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 2

Guidelines for overall design and page layout

List of figures in this chapter:

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About this part of the Toolkit

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What is this chapter about?

This is the second of the eight chapters on design in Part 5. It explains how to apply the Toolkit Guidelines for overall design and page layout. As with all of the Toolkit chapters on design, this chapter assumes that you have not had formal training in design.

What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); fonts (typefaces), size of print, and contrast (Chapter 3); headings, bulleted lists, and text emphasis (Chapter 4); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

Goals of document design

Toolkit Part 4 gives guidelines for clear and effective writing, explaining how to write text that is clear, simple, and culturally appropriate for your readers. But making written materials easy for people to understand and use requires good design as well as good text. How you design your materials can reinforce or detract from the messages you are trying to get across. **Good design can enhance poorly written text, to a degree, but poor design can ruin the best of text.**

To work well, design needs to accomplish three things:

- **Attract your reader's attention**. The people you are trying to reach will make a snap judgment about the written material based on a quick glance. They may be in a hurry, distracted, or worried about their health. Since you have only a few seconds to convince them to read the material, first impressions are crucial, and design has huge impact on first impressions.

- **Hold their attention so they will read the material**. Catching people's eye is the first step, but it's what they do immediately afterward that counts. Do they keep reading? Or do they give up because what initially caught their eye was hard to read, confusing, or culturally inappropriate for them?

- **Help them understand and use the messages in the material.** While document design needs to be appealing to attract and hold your readers' interest, the bottom line is whether the readers can understand and use the material. Document design that reinforces key messages is especially important for readers with low literacy skills (see Toolkit Part 2, *Using a reader-centered approach to writing and design*).

Written for non-designers, this group of chapters on design will help you become a better-informed and more discriminating judge of graphic design. You'll learn how to recognize and avoid many common problems in design. The specific guidelines will help you improve the look of your materials and their impact on readers.

Things to know about the "Toolkit Guidelines for Design"

As you read Chapters 2 through 8 with guidelines for design, here are some things to keep in mind:

- **To be clear and effective, written materials need both good text and good design.** In these chapters on design, *we assume that the text is already good* so that we can focus on how to package it in an effective design.

- **Design guidelines in this Toolkit are oriented toward the needs of less-skilled readers and the needs of older adults such as people with Medicare.** For example, our guidelines stress the need for highly readable fonts, print that is large enough for easy reading, and a clean, uncluttered layout with a clear path for the eye to follow. These and other design features that are crucial for less-skilled readers and older readers will work well for the rest of your intended readers, too.

- **Design is an art, not a science, with lots of room for subjective judgment and differences in taste**. Despite consensus on many fundamentals, there are areas of controversy within the field of design (see discussion in Schriver, 1997). In these chapters on design, we present basic principles and use examples to illustrate them. Our guidelines emphasize things you can do to make your materials easier for less-skilled readers to understand and use. They also try to steer you away from some common practices that tend to cause problems for readers. But the guidelines are not hard and fast rules. There is no one "right" way to implement them, and our examples show only a few of the possibilities. Applying the guidelines in combination to your own materials is both an art and an adventure.

- **Design guidelines in this Toolkit are oriented toward materials written in English and may require cultural and linguistic adaptation for materials in other languages.** The discussions of overall layout and navigation, in particular, assume that text is read from left to right. This is not true for all languages. If you are translating materials into languages that read from right to left, such as Arabic or Hebrew, the entire layout must change. *Dynamics in Document Design: Creating Texts for Readers* (Schriver, 1997) discusses some of the cross-cultural challenges of design, and strongly advocates testing materials with the intended audience.

- **Using a professional designer does not *in itself* ensure that your materials will be designed in a way that is clear and effective for your intended readers**. In part, it's an issue of training. Most designers are never taught how to make information materials reader-friendly, so they may be unaware that some common practices in design can distract or discourage less-skilled readers and make it harder for them to understand and use written materials. Besides this widespread lack of training and awareness, there are differences among designers. For more about this, see Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals.*

- **Remember that you are designing for your readers, not yourself.** Your readers’ responses are the ultimate test of effective design. As we emphasize throughout this Toolkit, to know how well your material is working, you need to get feedback directly from your readers (see Toolkit Part 6 *How to collect and use feedback from readers*).

List of guidelines covered in this chapter

This chapter discusses the guidelines for overall design and page layout shown below in Figure 5-2-a. (For the full list of guidelines for design, see Toolkit Part 3, *Summary List of the “Toolkit Guidelines for Writing and Design”*).

Figure 5-2-a. Toolkit guidelines for overall design and page layout.

Design the size, shape, and general look of the material with its purpose and users in mind. Consider whether there are ways to change features such as size and shape to make it more functional, more eye-catching, or more appealing to your readers. Also, consider possible ways to make it easy to produce and distribute.

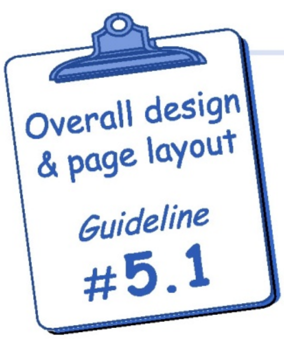
Make the material look appealing at first glance. Create uncluttered pages with generous margins and plenty of white space. Include something to catch the reader’s eye but not confuse it. A clean, crisp layout encourages readers by making the material look as if it’s going to be easy to read.

Create a clear and obvious path for the eye to follow through each page. Design your layout to fit with a reader's natural and deeply ingrained way of progressing through a printed page (called "reading gravity"). Place the headings, text, and images in a way that guides readers smoothly through the material without diverting or distracting them.

Create an overall design for the material that has a clear and consistent style and structure. For a clean and well-organized look, use a page grid and style sheets to guide your design. Line up your headings, blocks of text, lists, illustrations, and other design elements in a clear and consistent way. Keep the same style or "look" throughout the material.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Consider how the material will be used



Design the size, shape, and general look of the material with its purpose and users in mind.

Consider whether there are ways to change features such as size and shape to make it more functional, more eye-catching, or more appealing to your readers. Also, consider possible ways to make the material easier or more cost effective to produce and distribute.

To help decide on a size, shape, and general look for written material, think about its purpose and users. How will people get the material, and what will they do with it?

Here are some things to consider:

1. **Is there anything you can do about the size and shape that might make it more functional?**

   - **Making the size convenient for users**. If you are creating a brochure, is it small enough to fit conveniently into a purse or pocket (especially if it is about a sensitive subject)? If you are producing a folder of materials about Medicare for agency staff or community organizations, does it fit easily into a file drawer?

   - **Adding to its usefulness.** If you are producing a refrigerator magnet that gives the nurse help line number, does it make sense to enlarge it a bit and add some tips about getting urgent and emergency care?

   - **Removing possible barriers.** Is there anything that might deter people from using the material? For example, is your poster so large that people may feel it takes up too much of the available space on a bulletin board?

2. **Is there anything you can do about size and shape that might make it easier or more economical to produce or distribute?**

   - **If you are planning to mail the material, it's wise to check on postage costs at an early stage, while there is still time to make adjustments**. Get samples of the paper you will use, and create an actual-size mockup. Put it in the envelope you plan to use, and weigh it for postage. Usually a standard size envelope is most economical. If you use a non-standard envelope, be sure to check on postal surcharges that may apply. By checking on mailing costs at an early stage, you may discover that you can save substantially by making slight adjustments in the paper, shape, or size. This could be important if you plan to mail large quantities.

   - **Using websites to distribute written materials can be convenient and economical.** If you are distributing the material by posting it to a website, you will need to design the material with this distribution method in mind. For example, the size should be 8 ½ by 11 inches, to match the paper that people will be using to print the downloaded document. Also, for convenience to users, you may want to provide two versions of PDFs, one in color and one in black and white that is optimized for photocopying see Toolkit Part 8, *Will your written material be on a website?*).

3. **Is there anything you can do about size and shape Is there anything you can do about size and shape to improve the appeal and ease of use?**

   - **Try to avoid using formats that are tall and narrow, especially for longer documents such as booklets.** A narrow column format can be hard to read, especially if the type is reasonably large and the line length is short (see Guideline 6.11 in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast*). If you are designing a folded brochure, try to make the panels wide enough for an attractive look. You may need to use a tall, narrow shape for some purposes, such as for material that needs to fit on a literature rack. For more about tri-folds, see Figure 5-2-f later in this chapter. It discusses the challenges of formatting a tri-fold brochure.

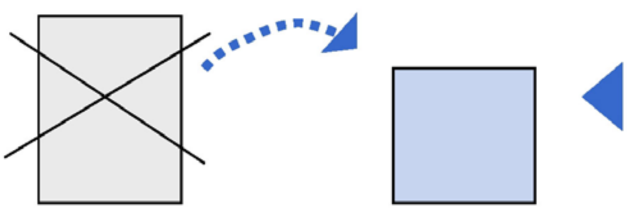
- **In general, try to use a "portrait" orientation to your pages** (pages are taller than they are wide) **rather than a "landscape" orientation** (pages are wider than they are tall). Portrait orientation is more familiar to your readers, less awkward when fully opened, and typically easier to design as an effective layout. If you do use a landscape orientation, you will likely need to use two columns to keep the lines of text to an appropriate length for easy reading (see Toolkit Guideline 6.11 in Toolkit Part 5, Chapter 3, *Guidelines for font (typefaces), size of print, and contrast*).

- **Consider a size or shape that's a little different from what you would ordinarily use**. Departing from the usual size and shape can help draw attention to your material. It may also be more pleasing to your readers. Figure 5-2-b below offers a few ideas.

Figure 5-2-b. Ideas for size and shape of written materials.

Try a square shape for a booklet

If your booklet is long, try making it 8 inches square instead of the common 8 ½ by 11 standard page size.



The square shape is less common, so it may draw more attention. It looks less imposing, so your readers may find it friendlier and more inviting.

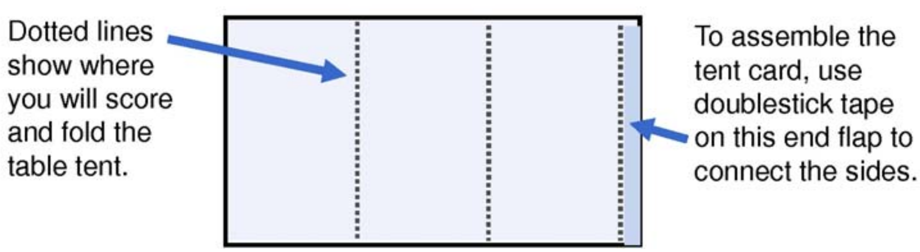
Figure 5-2-b, continued.

Make a three-sided table tent

This triangular piece stands on top of a table or counter. You could use this easy and eye-catching format to draw attention to your messages in settings such as information counters, waiting rooms, and cafeterias.

Start with a large and long rectangle of heavyweight paper or cardstock (such as 80 lb. cover stock).

Design and print **three panels of equal size**, leaving room for a flap at the end to overlap and connect the sides.



Tips for using the table tent format:

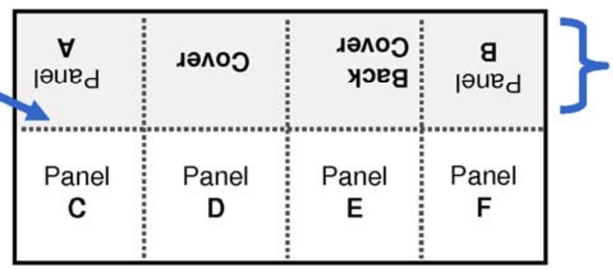
- **Include high-impact visuals** to make the table tent look intriguing from across the room.
- **Limit the amount of text, and make it larger than usual**, for ease of reading from a short distance.
- **Design the panels to make sense in any order,** since people might start reading it from any of the three sides.
- **Wider panels are easier for people to read** and easier to design. If you use an 8 ½ by 11 sheet, your panels will be 3 ½ inches wide with a half inch flap at the end. A longer sheet of paper, such as legal size, will give you wider panels.

Figure 5-2-b, continued.

Try folding a legal size sheet into a small square flyer

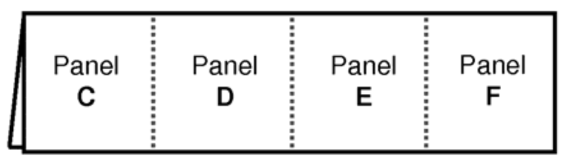
Start by designing an eight-panel format on your legal size sheet (8 ½ by 14 inches). As shown below, you will print these panels on one side of the sheet only, then fold it over.

Dotted lines show where you will fold the brochure.

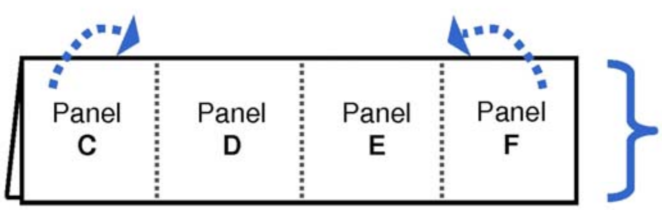


The top row of panels is printed upside down on purpose. When you fold the paper in half lengthwise, these panels will be right side up.

Next, fold the paper in half lengthwise. Turn so that panels C through F are facing you:

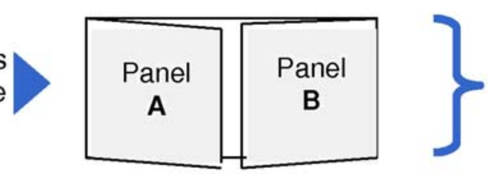


Next, make a “gate fold” by folding in the side panels C and F so that they meet in the middle. As shown below, this folding will cover up panels C through F, and expose panels A and B.



When the brochure is ***fully*** opened, people will see these four panels.

This is called a “gate fold” because the sides meet in the middle, like gate doors that swing open from the center.



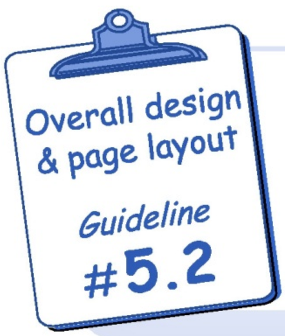
When the brochure is ***first*** opened, people will see these two panels.

Finally, fold panel A over onto panel B, and you will expose the cover of the brochure:

For more ideas about formats to try, see *Before & After Page Design* by John McWade (2004). This beautiful and helpful book includes ideas similar to the ones in this figure, and a number of others, including an eye-catching zigzag brochure (page 72), a brochure with a simple triangular pocket to hold inserts (page 64), and an accordion-folded brochure with peek-a-boo panels (page 54).

Source: Created for this Toolkit.

Make it appealing at first glance



Make the material look appealing at first glance.

Create uncluttered pages with generous margins and plenty of white space. Include something to catch the reader's eye but not confuse it. A clean, crisp layout encourages readers by making the material look as if it's going to be easy to read.

Your potential readers make snap judgments about your written material based on their first impressions. A clean, crisp look helps attract and hold your reader's attention:

- **To create a good first impression, resist the temptation to crowd a lot of text into limited space**. A "wall of text" unbroken by headings or bullet points is unappealing at best, and will discourage or intimidate less-skilled readers. Testing with readers shows that people would rather read a slightly longer document that is well-formatted than a shorter document that looks cramped and crowded (Canadian Public Health Association, 1998).
    - **Revise it.** If you are crowding too much text into one page, either condense the text or spread it out onto more pages. For example, if you have verified through testing that your intended audience won't read more than a single page, and your one-page layout is crammed with text, then you will need to cut some of it to make the page appealing.
    - **Use a mockup to help**. A mockup is an actual size replica of the finished product in draft form. If you start working with a mockup when you begin designing the written material, it will be easier to write an appropriate amount of text for the space you have available.

When you use a mockup to display your draft text, you will know immediately whether you are writing too much. This will help you be realistic about how many messages you can include.

- **Be sure there's enough "white space" to give your readers' eyes a resting place.** White space is the empty space in written material that has no text or graphic elements. This empty space is white when your paper is white.
    - **"Breathing room."** Ample white space contributes to a good first impression by making your materials appear easy to read, which is especially important to vulnerable groups such as less-skilled readers and older adults with some vision loss. Generous margins and other white space give your material some "breathing room" so that it doesn't look crowded and overwhelming at first glance.
    - **Keeping white space consistent**. Later in this chapter, we discuss using a page grid and style sheets to establish consistent margins, alignments, and spacing throughout the document. Taking this approach will help you maintain consistent and generous margins and other white space.

Analyze and de-clutter your design

Take a fresh look at your material. What could you remove or change to streamline the appearance of the text and design? Sometimes you can make a big change or two to streamline your layout and foster a better first impression. Other times, making a number of relatively small changes can add up to a big improvement in the overall appearance of your material. Here are some suggestions:

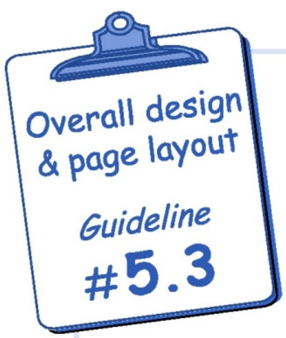
- **Use the design guidelines and examples in this Toolkit to help you spot ways to de-clutter your design.**
    - For example, this Toolkit recommends strongly against the common practice of boxing in the text you want to emphasize. Outline boxes add clutter to a layout, and putting lines around text may even deter some people from reading it. For an example, see *Why Bad Ads Happen to Good Causes* (Goodman, 2002). For tips on better ways to emphasize a block of text, see Figure 5-4-d in Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text*.
    - There are many other examples of "de-cluttering" in the Toolkit. For examples that show de-cluttering of images, see Toolkit Part 5, Chapter 6, *Guidelines for use of photographs, illustrations, and clip art.*

- **To get a fresh perspective on your design, it may help to create a miniature photocopied version of your pages in black and white**. The reduction in size and removal of color (if any) lets you focus on the overall impact of the layout. It lets you analyze the bare bones of your design without being distracted by the words and other details on the page.

- **Look through design books and examples for inspiration and insights into what makes a good layout**. For example, you can leaf through the good and bad examples of materials you have collected. Also, check the resources listed in Figure 5-1-a in Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals*.

- **Use results from testing to guide revisions to your layout**. Testing can show which parts of the layout tend to confuse or overwhelm your readers. For step-by-step instructions, see Toolkit Part 6, *How to collect and use feedback from readers*.

Create a clear and obvious path for the eye to follow



Create a clear and obvious path for the eye to follow through each page.

Design your layout to fit with a reader's natural and deeply ingrained way of progressing through a printed page (called "reading gravity"). Place the headings, text, and images in a way that guides readers smoothly through all of the material without diverting or distracting them.

How readers typically work their way through a printed page

As a skilled and experienced reader, you probably approach a printed page on "autopilot," unaware that force of habit and features of the page affect where you start reading and how you move from one part of the page to another. But next time you glance at a piece of written material, try to be aware of what your eyes and mind are actually doing as you react to the material:

- What do you look at first? Where do your eyes go next?

- Do you move automatically in a smooth progression from one area of the page to the next? Or do you find yourself flitting from one part of the page to the next, trying to figure out what the page is about and where you should look next?

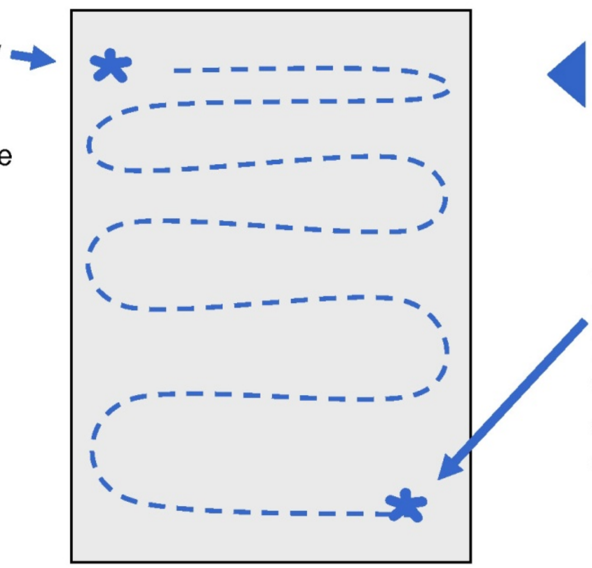
- When you’re finished, look back at the page very closely: was there anything you missed when you first glanced through it?

Now compare your reactions to the basic pattern of how readers usually work their way through a printed page. Wheildon describes this pattern of “reading gravity” in his book called *Type & Layout: Are You Communicating or Just Making Pretty Shapes* (2005). Unless something throws them off track, people typically enter a page at the upper left corner, work their way back and forth down the page, and exit at the lower right corner.

The diagram in Figure 5-2-c below explains this concept of “reading gravity.” Keep in mind that this diagram and the other ones on reading gravity in this section describe a pattern that applies to materials written in a language such as English that reads from left to right. This pattern doesn’t apply to languages that read from right to left.

Figure 5-2-c. "Reading gravity" and its implications for effective page design.

"Reading gravity" refers to a reader's typical progression through a printed page. Conditioned by years of habit, readers typically start at the top left corner. Then they go back and forth across the page, and are "pulled down" to the bottom right by "reading gravity."



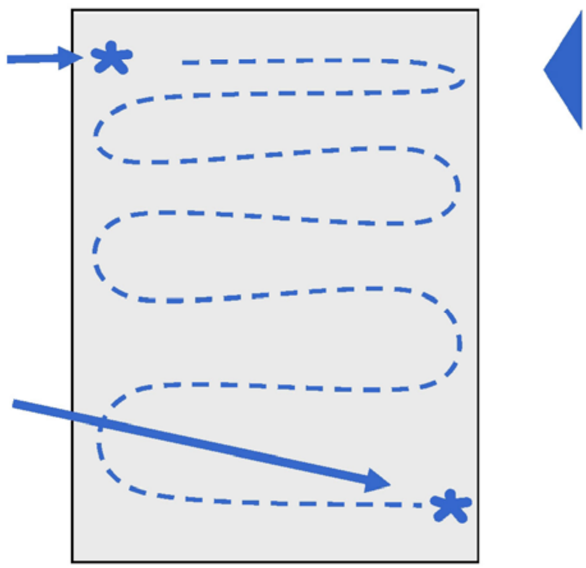
Since a reader's typical path through a printed page is so deeply ingrained, it makes sense to design your pages in ways that anticipate and accommodate it. The diagram below shows how you can use knowledge of reading gravity to design an effective page layout.

(continued on next page.)

To help readers to notice everything on the page, make your layouts consistent with "reading gravity"

Create a strong point of entry here with a main heading or strong visual.

Don't give readers a reason to jump down here first, or they may move on, overlooking other parts of the page.



Create a clear and obvious path through the page.

- Place the text and visuals in a way that fits with a reader's typical pattern of moving back and forth and down the page.
- Since strong visual elements draw readers' attention, creating a clear path helps readers notice the text as well as the visuals.

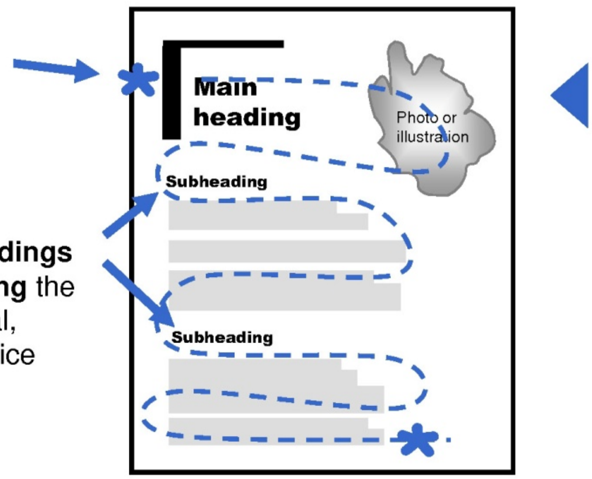
To show how this works, the next two diagrams give you illustrations of page layouts that are compatible with reading gravity. The first is a simple one-column layout, and the second has two columns.

(continued on the next page.)

The two sample page layouts that follow are **consistent** with "reading gravity":

Prominent main heading invites readers to start here and fits with their usual habit of starting at the top left.

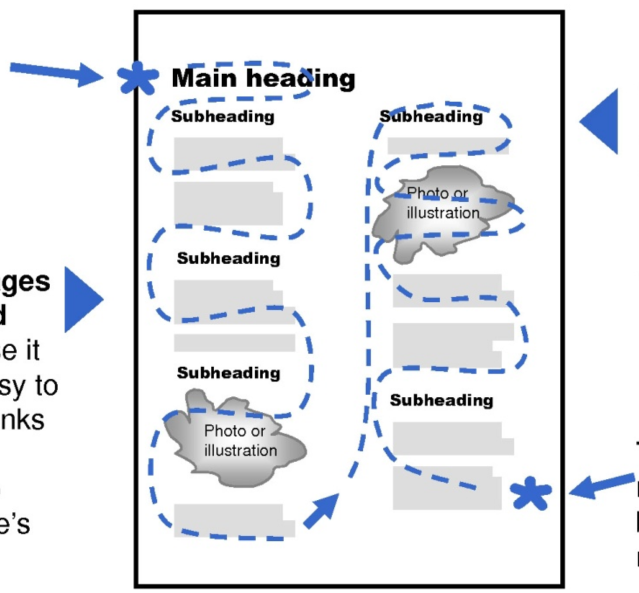
The prominent subheadings help move readers along the path through the material, encouraging them to notice the text.



This layout has a clear and simple path that's easy to follow. There are no distractions to keep readers from moving steadily *back and forth* and *down* the page.

This main heading is a strong point of entry that fits with reading gravity.

This layout encourages people to pause and read the text because it *looks* like it will be easy to read. It has short chunks of text broken up by subheadings and two illustrations, and there's lots of "white space."



The two column format and prominent subheadings create a clear path through the page that fits with reading gravity.

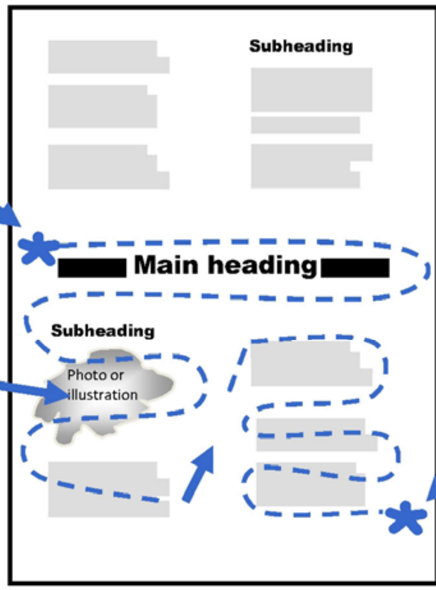
There's nothing to make readers jump down here before they look at the rest of the page

Finally, the last two diagrams give examples of layouts that do *not* follow reading gravity. As shown in these examples, if your page layout is incompatible with reading gravity, your readers are very likely to miss some of the information on the page, or get confused.

The two sample page layouts that follow are **not** consistent with "reading gravity":

Readers will probably start by looking at the middle of the page, then move directly down to the subheading and photo below.

This photo also pulls readers down into the bottom half of the page, especially since it's the only one on the page.

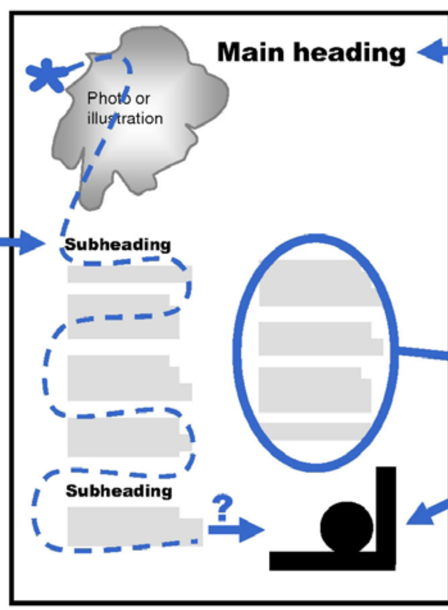


Many readers will miss this top half because it is text heavy and the strong point of entry is halfway down the page. When readers start in the middle of the page, they tend to move down from there (following reading gravity).

When readers reach the bottom right corner, they tend to feel that they have finished with the page. They may never glance back up to notice the top half.

This photo is a strong point of entry.

Many readers will probably look here next, because people tend to look down immediately after they look at a photo, and because the subheading will draw their eye.



Some readers will miss this main heading because of its placement, even though the text is large and bold.

Will readers skip over the text-heavy second column because the strong visual in the bottom right corner catches their eye?

Source: Created for this Toolkit based in part on concepts discussed in Wheildon 2005 (second edition) and 1996 (first edition), and on the Toolkit writer's experiences testing materials with readers.

Designing materials to be compatible with natural patterns of reading

As these examples in Figure 5-2-c illustrate, it's important to design your page layouts to work *with* the natural tendencies of the reader, rather than *against* them. You want the design to help your readers, not hinder or distract them.

This same principle of making a clear and obvious path through each page also applies to navigation from page to page. Creating this smooth progression through your written material requires well-organized text formatted in a manner that emphasizes the underlying organization. The text and the design both contribute to ease of navigation:

- In Toolkit Part 4, Chapter 2, *Guidelines for organizing the content (sequencing, grouping, and labeling),* we discuss how to work on the *text* part of creating this smooth progression. The guidelines in this chapter tell how to develop a sequence of topics that makes sense to your readers and how to label it with headings and subheadings that are meaningful and informative to them.

- In this chapter you are reading now, and in the other chapters in Toolkit Part 5 on guidelines for design, we suggest many specific ways to use visual elements to help guide your readers smoothly through this well-organized text without diverting or distracting them.

Figure 5-2-c above used generic diagrams to present the concept of reading gravity. To help illustrate this concept, Figure 5-2-d below shows an example using actual text and photographs.

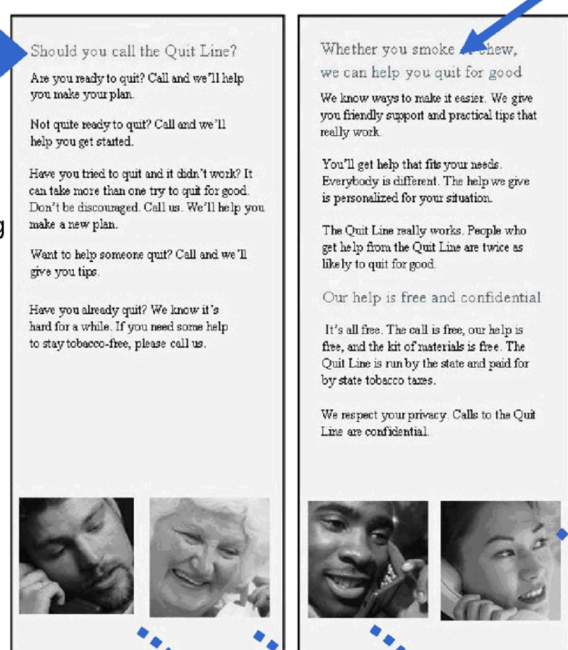
Figure 5-2-d. Two layouts - one is compatible with “reading gravity” and the other is not.

example A The layout shown below **distracts your readers** from the main points. It is not compatible with “reading gravity.”

Where will readers look first?

Readers see these two facing panels when they open the tri-fold brochure. Do you think they will read the top part first, or look immediately at the photos?

There’s no strong point of entry here. Also, the blue background discourages readers from starting here because it makes all of the text harder to read.



Should you call the Quit Line?

Are you ready to quit? Call and we’ll help you make your plan.

Not quite ready to quit? Call and we’ll help you get started.

Have you tried to quit and it didn’t work? It can take more than one try to quit for good. Don’t be discouraged. Call us. We’ll help you make a new plan.

Want to help someone quit? Call and we’ll give you tips.

Have you already quit? We know it’s hard for a while. If you need some help to stay tobacco-free, please call us.

Whether you smoke chew,
we can help you quit for good

We know ways to make it easier. We give you friendly support and practical tips that really work.

You’ll get help that fits your needs. Everybody is different. The help we give is personalized for your situation.

The Quit Line really works. People who get help from the Quit Line are twice as likely to quit for good.

Our help is free and confidential

It’s all free. The call is free, our help is free, and the kit of materials is free. The Quit Line is run by the state and paid for by state tobacco taxes.

We respect your privacy. Calls to the Quit Line are confidential.

The headings are not working well. They are four points larger than the text, but they don’t stand out:

- No contrast in style of font – it’s the same serif font for both headings and text.
- Headings are not bolded.
- Heading text is blue and so is the background (colored text reduces contrast, and having a shaded background makes it worse).

Following her gaze leads readers off of the page.

Following their gaze leads readers to look down.

example B

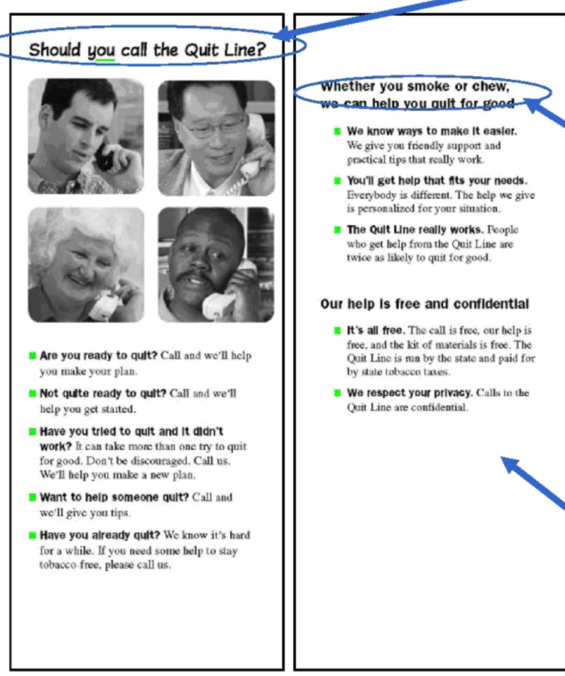
The layout below emphasizes the main points and guides readers smoothly through the page. It is compatible with "reading gravity."

Improved layout. To make the brochure compatible with reading gravity and easy to skim, we changed the placement of the photos and added contrast throughout.

Main heading and photos are a strong point of entry

- The photos are grouped together for impact.
- Poses are oriented to draw readers downward toward the text that's underneath.

Easy to skim for main points
Bulleted points with bolded text at the beginning make the brochure easy to skim.



This main heading stands out clearly – it has strong contrast, it's larger than the subheadings, and it has a special font to add a friendly tone.

This subheading stands out clearly and helps draw readers to the top of the second column. Aligning this subheading with the top of the photos (rather than opposite the main heading) helps make the main heading pop out clearly as a title for both panels.

White background makes all of the text easy to read.

Source: The materials in these examples were created for this Toolkit. Example B is a two-page spread from the tri-fold brochure featured in Toolkit Part 10, *"Before and after" example: Using this Toolkit's guidelines to revise a brochure.* Example A shows the same text as Example B but has been formatted specifically to illustrate poor contrast and violation of "reading gravity". It is based on a brochure produced by the State of Oregon and is adapted with permission for use in this Toolkit. For more information, see Toolkit Part 10.

Tips for making navigation easier for less-skilled readers

In the figures above, we've seen examples that show how details of layout influence ease of navigation through written materials. Here are some general tips on ways to make it easier for less-skilled readers to notice everything that's on the page.

- **Establish a clear hierarchy of importance on each page, without too many elements fighting for attention all at once.** Don't put too much on any one page—either text or graphic elements. Simplicity and white space make it easier for your readers to concentrate on the meaning of the information in the document. As emphasized in the examples above, be sure that each page has a clear point of entry in the top left corner and a logical progression from section to section within the page that is consistent with readers' natural progression through a page. If your layout violates "page gravity," you may cause some readers to miss some parts of the page.

- **Use prominent headings, bullet points, text emphasis, and other devices to help readers skim and find information of personal interest**. For detailed discussion of these important navigational devices, see Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text*.

- **Maintain general consistency of layout and design elements from page to page** to help keep your readers on track. Keep in mind that many readers will flip from page to page to see if the material interests them. They may start reading at any point. This means that the organization and topics covered need to be clear at a glance on every page, and from page to page. (The next guideline in this chapter covers consistency and unity of design).

- **Try to avoid cross-references to other parts of the document**, because these may confuse your readers, or you may lose them (they may skip to the cross reference and never come back). In general, put information that's needed right where it's needed, rather than sending the reader somewhere else in the document to get it. For example, it is better to repeat the nurse help line number in several places than to keep sending the reader to the end of the document to find it. It is better to define words right where they are used, rather than sending readers to a glossary.

- **If testing shows that your readers are confused about navigation, assess the content of your print piece.** Are you trying to cover too much in one document? Do you need to tighten the organization of the document? Especially if your topic is complex, consider whether it might be best to use another method, such as videotape or personal assistance by telephone, either as a supplement to or replacement of your print materials.

- **Be alert to formats and features that make navigation more difficult for less skilled readers**. If your materials are for less-skilled readers, it's important to be aware of formats and features that can cause navigation problems for less-skilled readers, *even if they cause no problems for people with good reading skills*. The next two sections show how two popular formats -- side text and tri-folds -- tend to make navigation more difficult for less-skilled readers.

Text off to the side can cause problems for less-skilled readers

People with limited reading skills, in particular, need documents that have a smooth and unbroken progression from one topic to the next through the entire document, with a minimum of cross-references. Figure 5-2-e shows how putting short blocks of text off to the side, apart from the main flow of text, makes navigation and comprehension hard for less-skilled readers.

Figure 5-2-e. Why putting short blocks of text off to the side makes written material more difficult for less-skilled readers.

The format shown below is a popular one for written materials. This format is appealing and effective for skilled and motivated readers. But, as we explain below, it does not work well for less-skilled readers. The text that is off to the side competes with the main text, diverting the reader and making comprehension more difficult.

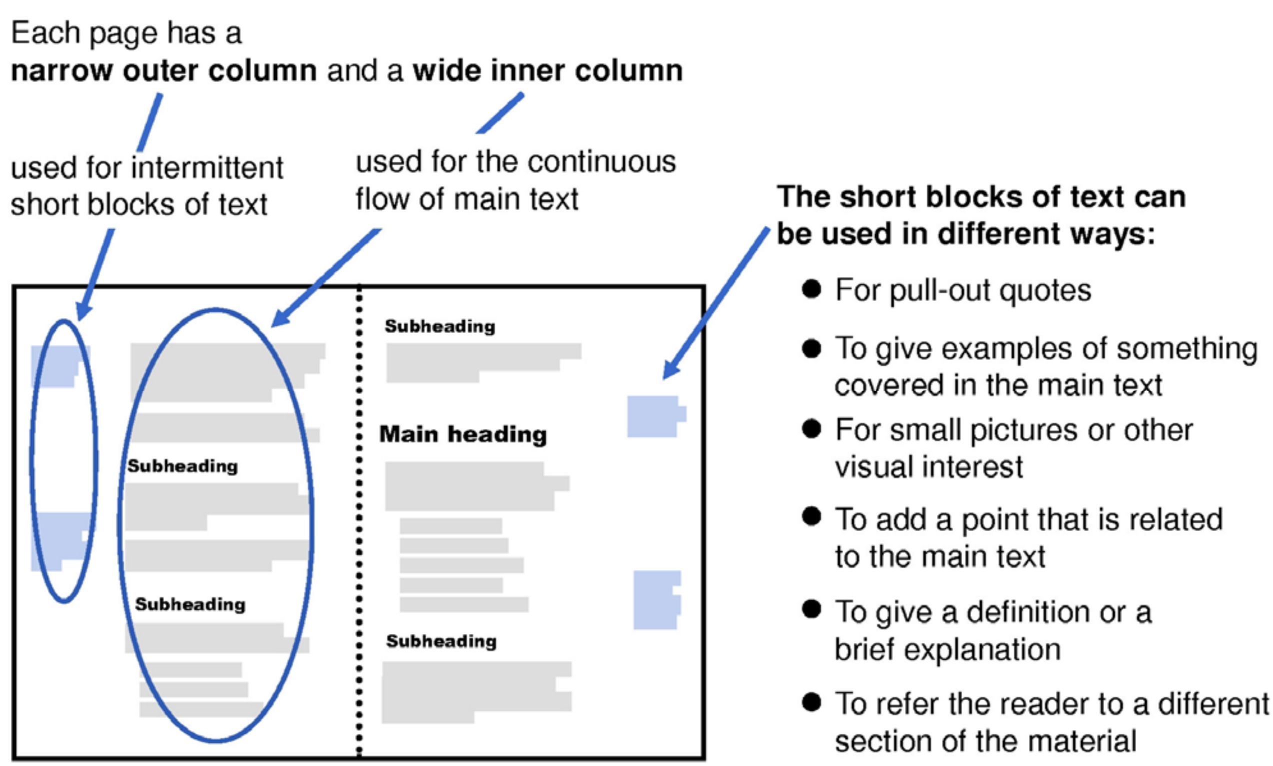


Figure 5-2-e, continued.

Extra cognitive burden – connections are not spelled out

Since the main text and short blocks of side text are presented in separate columns, it's up to the reader to figure out how (if at all) they are connected. This adds an extra burden of complexity that is very hard for less-skilled readers.

Navigational challenge – no clear and obvious path to follow

The side text and main text compete for attention, which is hard on less-skilled readers. If they skip around the page, there is too much to remember and try to integrate. They are likely to get discouraged or overlook some of the text on the page.

Here are a few of the possible paths that readers might take:

Focus on the side text, ignoring much or all of the main text

- Often, side text is formatted in ways that make it look more interesting than the main text.
- Side text is short, so it may appear to be easier.
- If headings and subheadings for the main text stand out, they may also draw the reader's attention.

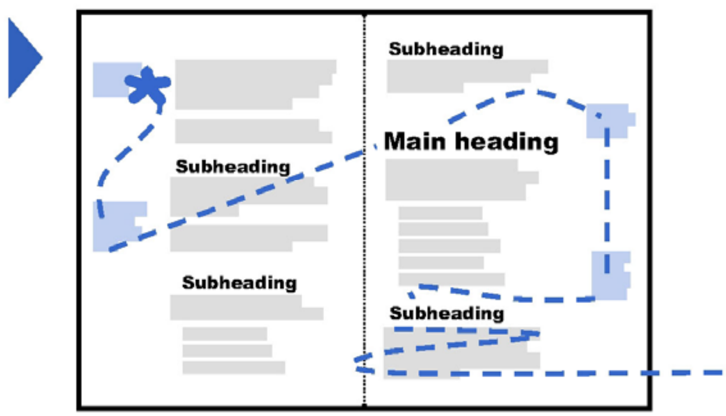
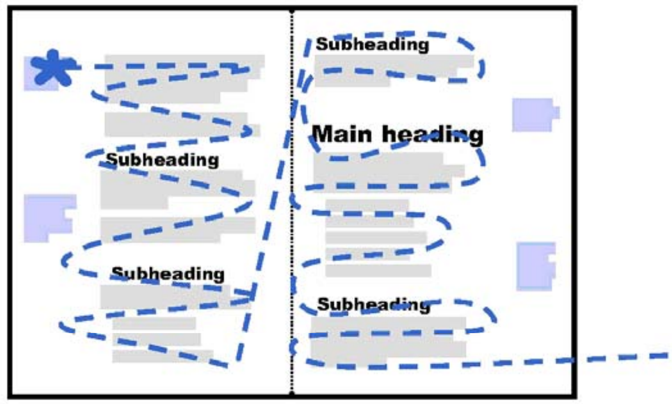


Figure 5-2-e, continued.

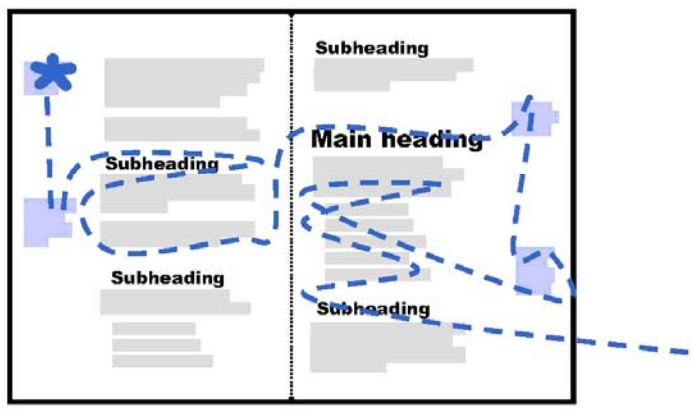
Focus on the main text, ignoring much or all of the side text.

- Often, side text is formatted in ways that prove hard to read, such as small print in a condensed font, or very short line lengths.
- Prominent headings and bullet points may draw more attention.



Skip around, looking at some of the main text and some of the side text.

- When there's no clear path through the material, readers may be more likely to jump around, looking at whatever catches their eye next.
- Skipping around from topic to topic makes it hard for less-skilled readers to learn and absorb new information.



Source: Created as an example for this Toolkit.

What to do instead of putting short blocks of text in the margin

As shown above in Figure 5-2-e, setting some parts of the text apart from the rest reduces cues about its relative importance and how and where it fits with other information on the page. This leaves it up to the reader to *notice* the text that is set apart, *read* it, and *try to figure out* if it fits-- and how it fits-- with the rest of what they were reading on the page. While this added burden may not pose problems for a skilled, knowledgeable, and attentive reader, it can be distracting or even discouraging for many readers. Given the burden that this formatting places on the reader, it seems best to avoid it (unless you are writing for an audience of skilled readers).

Let's suppose that your material that has pullout-quotes, definitions, or other short blocks of text in an outer margin of the page. What could you do to make it easier for your readers? It depends on the content and purpose of the short blocks of text:

- **Whenever feasible, integrate it into an appropriate spot within the main body of text.** Often, the text that has been pulled out and set apart could just as easily be part of the main body of text. For example, if you are putting definitions into the margin, make it easier on your readers by moving them right to the place where the reader needs them (see Guideline 3.4 in Toolkit Part 4, Chapter 3, *Guidelines for writing style*).

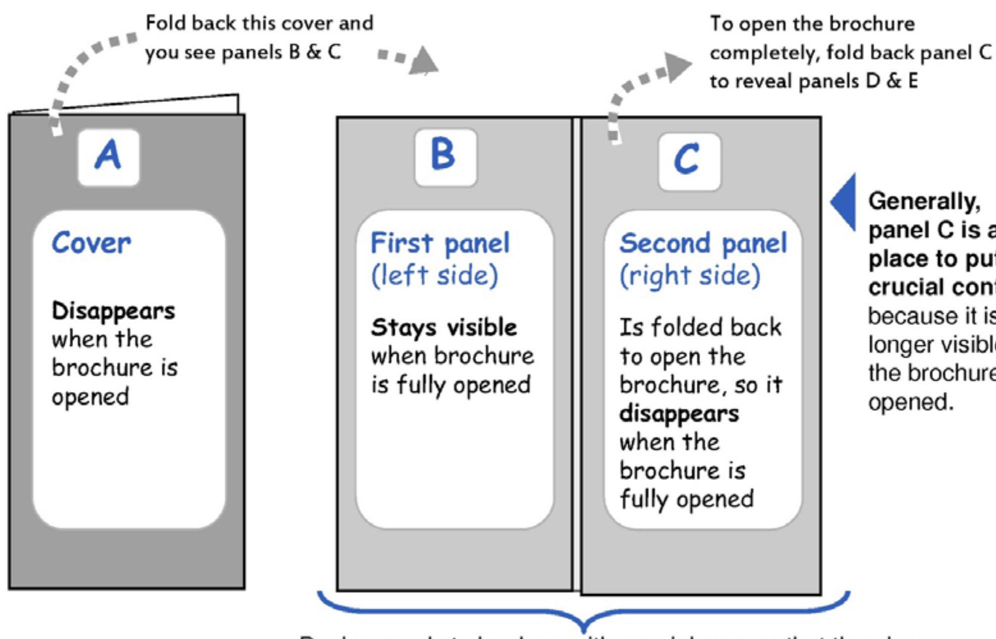
- **Use effective ways to emphasize the main points.** Sometimes, text is pulled out to the margin to emphasize an important point. To ensure that your readers notice this point, put it where it belongs within the main flow of text and use another more effective way to add emphasis. For examples of ways to emphasize a block of text, see Figure 5-4-d in Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text.*

- **If there is no obvious place to integrate the text, consider dropping it. Perhaps the point is too minor to include**. Remember, the less you distract your readers, the easier it is for them to focus on the main points.

Tri-fold brochures pose special challenges for navigation

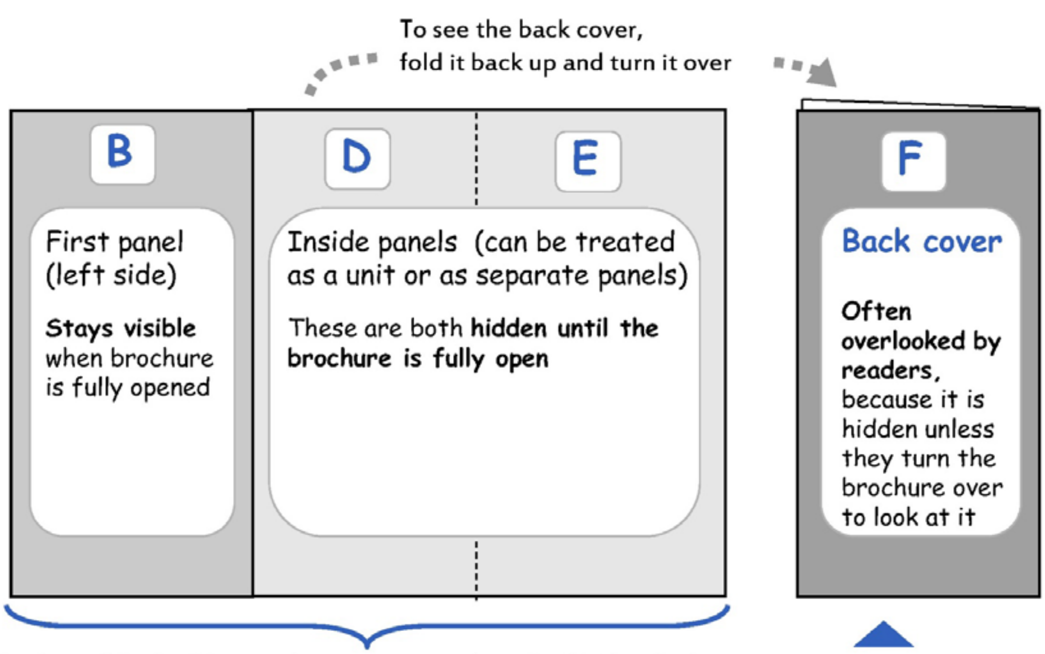
Figure 5-2-f. Why it is tricky to design a tri-fold brochure for ease of navigation.

Tri-fold brochures are very widely used, in part because they fit into literature racks. The diagrams below show why tri-folds that are folded in the conventional way tend to put extra burden on readers.



Generally, panel C is a poor place to put crucial content, because it is no longer visible when the brochure is fully opened.

Design needs to be done with special care so that there's a **clear and obvious path through both panels.** Otherwise, they may compete for attention, and readers may miss part of the text.



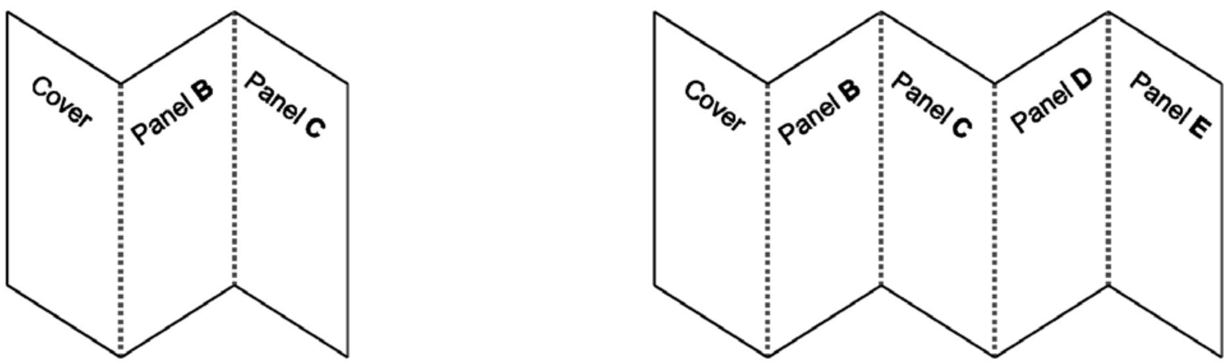
Design of the inside panels needs to work well with the design of the first panel B, so that they make sense together when the brochure is fully open and all three are visible.

The back cover is a poor place to put crucial content, because readers may miss it.

Consider an accordion fold instead

Depending on the material, you may be able to simplify navigation for your readers by designing a brochure that folds in a different way, such as using an accordion fold.

If you print on only one side of the paper, all panels stay visible when it’s unfolded.



An accordion fold can work well for three or four panels.

If you use a large number of panels, the brochure will be quite wide when it’s fully unfolded.

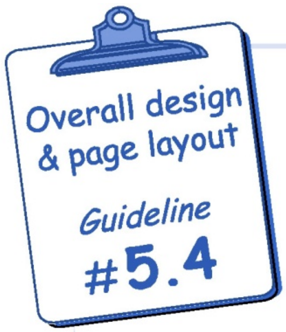
Source: Created as an example for this Toolkit.

Given the design and navigational challenges of the conventional tri-fold brochure, as shown above, think carefully about your readers before you use them:

- **Instead of automatically designing your material as a tri-fold brochure, consider other options**. There may be some better ways to package your material. Consider other shapes and sizes, especially those that offer a wider column width for improved ease of reading. For example, could you make the paper wider (or reduce the content) and fold it only once? The examples in Figure 5-2-b earlier in this chapter may give you some ideas.

- **If you must use a tri-fold, design it carefully**: Make sure that there is a clear and obvious path through the entire brochure. Don’t put crucial content on the back cover or on the panel that is folded back when the brochure is fully opened. For a detailed example of addressing the navigational problems in a tri-fold brochure, see Toolkit Part 10, “*Before and after” example: Using this Toolkit’s guidelines to revise a brochure.*

Maintain a consistent style and structure



Create an overall design for the material that has a clear and consistent style and structure.

For a clean and well-organized look, use a page grid and style sheets to guide your design. Line up your headings, blocks of text, lists, illustrations, and other design elements in a clear and consistent way. Keep the same style or "look" throughout the material.

When a layout is working well, readers find their way through it without conscious awareness or effort. They can focus on the content and main messages because there are no navigational barriers to distract them. To make your layouts work well, you need to work with your graphic designer to create an overall design that has a clear and consistent style and structure:

- **Clear and consistent structure.** Creating a neat and tidy arrangement of text and other elements on the page makes the material look well organized. Keeping the layout and look of the document consistent from page to page lends unity and makes the material easier to navigate.

  - **Makes it look well organized.** When headings, blocks of text, lists, illustrations, and other elements are lined up in a clear, strong, consistent way, the material looks "clean" and orderly and is easy to skim.

  - **Makes it more predictable.** Keeping the arrangement consistent from page to page makes the material much easier for readers to understand and use. Going through it becomes more predictable for readers, making them feel more comfortable and confident. Below, we explain how page grids are used to establish and maintain a consistent structure for your material.

- **Clear and consistent style**. Keeping the same design style or "look" throughout the material lends unity and avoids distracting readers from the key messages in your material. Many design features contribute to the overall look.

- **For example, it's important to choose your fonts carefully and limit the number of fonts that you use** (see Guidelines 6.1, 6.2, and 6.3 in Toolkit Part 5, Chapter 3, *Guidelines for fonts, size of print, and contrast*).

- **Maintaining a consistent style of artwork and repeating key visual elements** also foster unity of design. For example, if you are using photographs or illustrations in your document, try to maintain a similar style throughout the document. For more about this, see Guideline 9.2 in Toolkit Part 5, Chapter 6, *Guidelines for using photographs, illustrations, and clip art.*

A page grid is a flexible tool for creating effective layouts

A **page grid** is like an invisible skeleton that forms the underlying structure of each page.

It's a powerful, flexible tool for creating a tidy sense of order in your document.

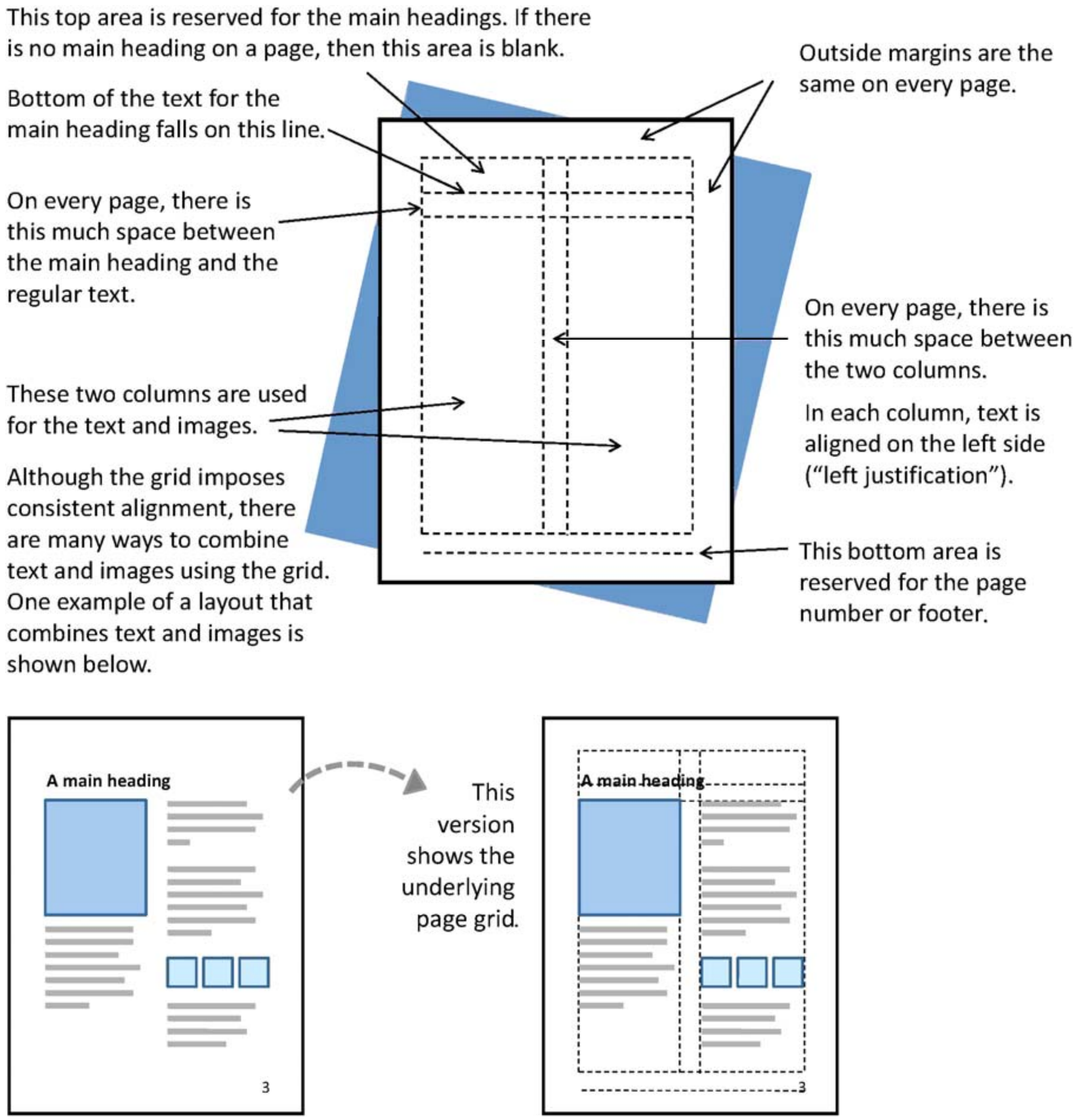
Graphic designers use a page grid to establish and maintain consistent placement and strong alignment of text and graphic elements. A page grid marks the margins and columns of your document, imposing the same structure for every page. Typically, text and graphic elements are aligned to the edges of the grid, giving the pages a strong sense of structure and unity. Here is how it works:

- **Create a fixed number of columns.** You set up your page grid to have a fixed number of columns, such as three, four, five or more columns. The number of columns you use differs depending on the size and nature of the material and the amount of flexibility you need for the design you want to create.

- **To lend variety to your layout without sacrificing the underlying unity and tidy structure, you can combine the columns in different ways**. As shown in the examples in Figure 5-2-g below, the position of each column in your page grid remains the same throughout the document, but you can combine the columns in different ways from page to page.

- **The page grid controls alignment.** On each page, you use the columns (or combined columns) as the guide for aligning text and graphic elements. This gives a tidy sense of order to your document.

Figure 5-2-g. A page grid establishes consistent placement of text and design elements.



Source: Created as an example for this Toolkit.

How you can use page grids

Although you may not have the training and software capabilities of a professional designer, you can still make good use of page grids as a design tool. For example, you can:

- **Sketch a crude page grid to guide the initial design of a mockup of your materials.** When you are doing your mockup that shows the preliminary design for your print piece, sketch in a page grid to guide development of the layout. You can also ask your graphic designer to show you the page grid for your material and explain to you how it works.

- **Use a page grid as a tool to analyze effective layouts and improve your awareness of design.** When you see a layout that is attractive and effective, make a copy of it. Then, draw lines on the copy to reveal the underlying page grid. To do this, you will need to study how text and design elements are aligned on each page. Recreating page grids on published documents can help sharpen your sense of design and give you ideas about how to use page grids in your own materials.

- **Use a page grid as a tool to help identify and correct layout problems**. For example, suppose that you are not happy with the look of a page layout. Or perhaps you have learned that readers are having trouble navigating through the material. Draw the page grid on it, and study how the text and design elements are arranged on the grid:

    - **Is everything aligned** to the grid the way it is supposed to be? If not, fix it.

    - **Is there a way to rearrange the text and image**s on the same grid that might make the layout more appealing and effective? Would it help to combine some of the columns on the page grid and use it in a different way?

    - **Does the page grid need revision** to give you more flexibility?

End notes

For excellent resources on overall design and page layout, see Figure 5-1-a in Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals.*

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2005 *Type & layout: Are you communicating or just making pretty shapes*. With additional material by Geoffrey Heard. Hastings, Victoria, Australia: The Worsley Press. (Note: This is the second edition of this book. The first edition was published in 1996 and titled *Type & layout: How typography and design can get your message across—or get in the way.*)

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476

September 2010

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the “Toolkit Guidelines for Graphic Design”

Chapter 3

Guidelines for fonts (typefaces), size of print, and contrast

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 3

Guidelines for fonts (typefaces), size of print, and contrast

List of figures in this chapter:

This document is the third of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the third of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for fonts (typefaces), size of print, and contrast. As with all of the Toolkit chapters on design, this chapter assumes that you have not had formal training in design. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); headings, bulleted lists, and text emphasis (Chapter 4); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

List of guidelines covered in this chapter

This chapter discusses the 12 guidelines for fonts, size of print, and contrast that are shown below in Figure 5-3-a. (For the full list of guidelines for design, see Toolkit Part 3, *Summary List of the Toolkit Guidelines for Writing and Design*).

Figure 5-3-a. Toolkit guidelines for fonts, size of print, and contrast.

For the regular text in printed materials, use a "serif" font that is designed for ease of reading. Serif fonts are fonts that use the small lines called "serifs" to finish off the main strokes of letters. For extended amounts of text, serif fonts work better than fonts without serifs (which are called "sans serif" fonts). Since readability of fonts differs greatly, pick a serif font that is highly readable as your basic text font. This text font should show good contrast between its bold and regular versions, and should remain easy to read when italicized.

For the headings in your printed materials, use an easy-to-read "sans serif" font, preferably one that is a "font family" with different weights (some bolder than others). To help readers skim and pick out the main points in your material, be sure that there is good contrast between the serif font you use for text and the sans serif font you use for headings. Choosing a font for headings that offers variations in weight is helpful because it gives you better options for creating good contrast.

In general, use no more than two or three different typefaces in a single piece of material. Limiting the number of fonts will give your material a cleaner look and greater unity. For most information materials, it works well to use just one serif font for the text and one sans serif font for the titles and headings. Experiment a bit to be sure the fonts you have chosen work well together. You may want to add an additional font or two for a particular purpose, such as using a special font to accent the title.

Make the type size large enough for easy reading by your intended audience. The best way to know whether your type is large enough is to get feedback from your intended readers. Older readers will need somewhat larger type than younger ones. You can use point size (such as “12 point font”) as a rough guide, but keep in mind that fonts in the same point size can vary a lot in actual physical size due to differences in style of the letters. These differences in lettering style can affect ease of reading as much or more than point size.

For all of your text, including titles and headings, use upper and lower case letters in combination – nothing written in “all caps.” Text in all capital letters is hard to read, so use capital letters only at the beginning of sentences and other places where they are required. For ease of reading, try capitalizing only the first word in titles and headings (rather than capitalizing all of the important words).

To emphasize words and short phrases that are part of your regular text, use italics or boldface type. Do not use underlining or put the text into all capital letters, because these make text hard to read. Be restrained in using italics, boldface, and other devices such as contrast in size or color accents on text. If you use these devices too often, they lose impact. If you use them on longer blocks of text, they make it hard to read.

For ease of reading, use dark colored text on a very light non-glossy background. Make sure there is enough contrast between the printed text and the paper to be able to read everything easily. Black text on a white or cream-colored non-glossy background is best. Don’t use light-colored text on a dark background (this is called “reversed out” text), because it is too hard to read.

For ease of reading, do not print text sideways, on patterned or shaded backgrounds, or on top of photos or other images. Printing a title or heading that runs vertically rather than horizontally puts a burden on readers to tilt their heads or twist the page in order to read it (and most won’t). When you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The words are harder to read because of reduced contrast and distraction in the background, and the impact of the image is undermined by the words on top of it. Even a plain shaded background makes words harder to read, because it reduces the contrast between the text and background.

For ease of reading and a cleaner look, adjust the line spacing in your material. To make blocks of text easier to read, add a little extra space between the lines. To help readers connect a heading with the text that follows it, leave a little less line space after the heading than you leave before it. To make bullet points stand out more clearly, put a little extra space between them. Keep these line spacing adjustments consistent throughout the document.

For ease of reading, use left justification throughout the material, for both the text and the headings. Left-justify the basic text, leaving the right margin uneven ("ragged right"). Don't use "full justification" because forcing even margins on both sides of a block of text inserts uneven spaces between the words, making them harder to read. Don't center blocks of text, because centering makes it harder to read. To make headings prominent and easy to skim, left justify them (rather than centering them).

Keep your lines of text to an appropriate length for easy reading – neither too short nor too long. For many materials, a line length of about five inches long works well. If the paper is wide, set the text in columns to maintain a readable line length. Avoid "wrapping" your text in awkward ways that make it hard to read.

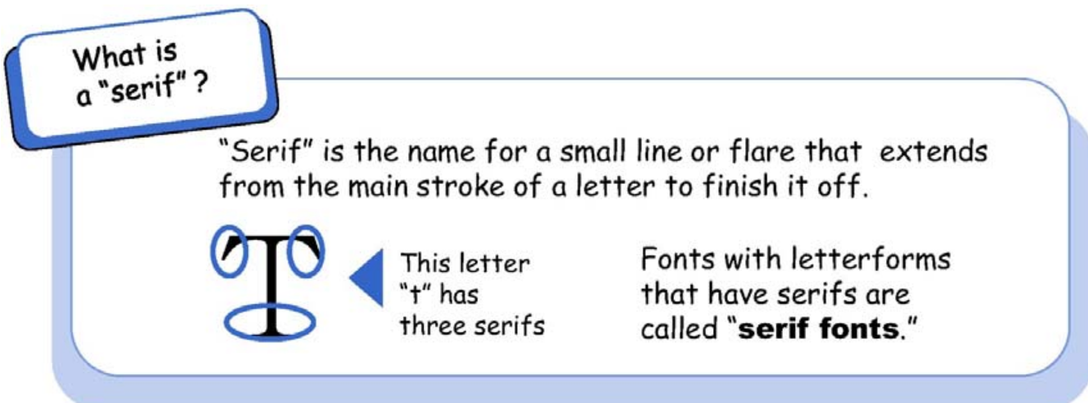
For ease of reading, watch where the lines break (avoid hyphenation; split long headings carefully to reflect natural phrasing). Do not hyphenate words at the end of a line, because splitting a word over two lines makes it harder to read, especially for less-skilled readers. When headings are long, split them over two lines in a way that reflects natural phrasing and avoids the awkwardness of leaving a single word by itself on the second line.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Background on terms we use to describe fonts

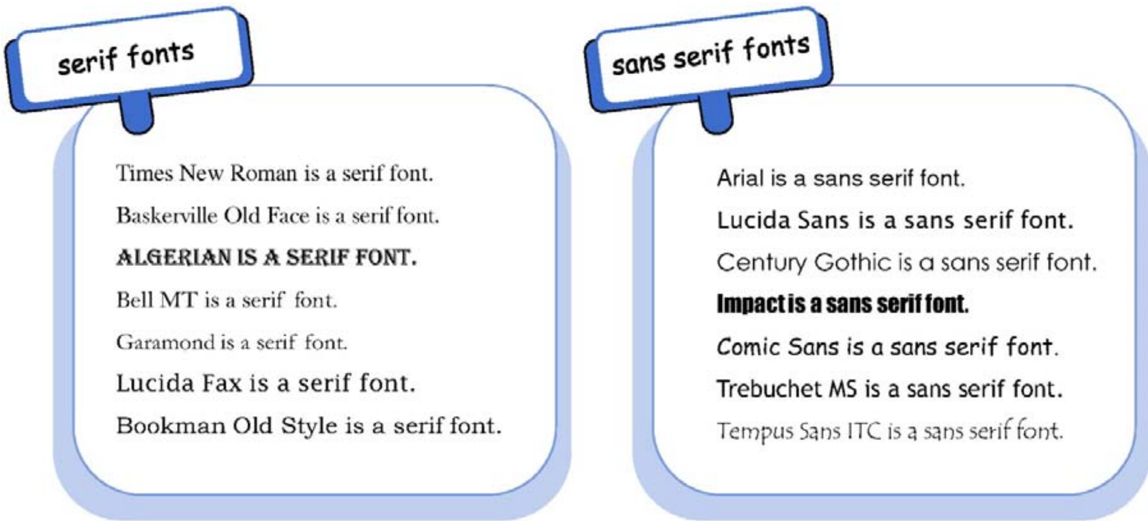
The fonts you choose can have great impact on your written materials (fonts are also called “typestyles” or “typefaces.”) To give you background for our discussion about choosing fonts, this section explains some terminology for describing fonts (*serif; sans serif; highly readable*; and *font family).* Then, in the section that follows, we give detailed guidelines for choosing your fonts.

What are serif and sans serif fonts?



Although the distinction between serif and sans serif fonts is the important one for this Toolkit, there are other types of fonts as well, including handwriting fonts, picture fonts, and symbols fonts.

There are thousands of different serif and sans serif fonts. Here are just a few examples:



As you can tell from the examples of serif and sans serif fonts above, each font has its own distinctive look or personality. Notice the differences in mood they convey. **All are the same point size, but they differ in physical size because of the differences in style of the letterforms**.

What is a "highly readable" font?

Look again at the examples of fonts shown above, and notice the differences in ease of reading. Some of the fonts are so unusual or ornate that the typographical features of the letterforms are the main thing you notice. Some (like Garamond) are so readable that you barely notice the forms of the letters.

When you are reading more than just a few words, you want a font that is easy to read. And when you are reading an *extended amount of text* that has been printed on paper, you want a font that is "highly readable."

> "**Highly readable**" fonts are fonts that are easy to read when they are used for an *extended amount of text.*

For our purposes in this book, a "highly readable font" is a serif font that has been designed specifically for ease of reading blocks of text. When a font is highly readable, it doesn't call attention to itself. It has letters and styling that are quite legible and relatively plain. When fonts are highly readable, it is almost as if they were invisible. This is good because it lets you focus entirely on the meaning of what you are reading, rather than noticing the letterforms of the font.

In contrast, fonts that have distinctive design characteristics are less readable. Because they are distinctive, they call attention to themselves, which can distract readers and make them work a little harder. **The basic rule: if it *looks* hard to read, it *is* hard to read**.

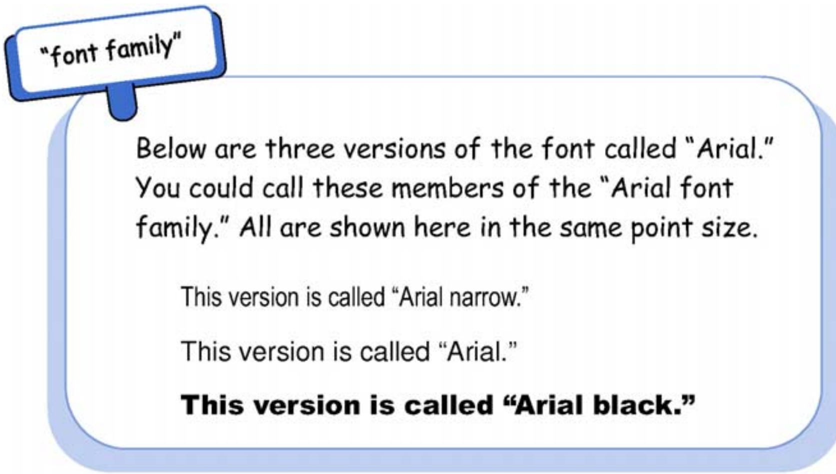
Using a distinctive font that's a little less readable can be okay for special purposes, if the font is carefully chosen and the amount of text is limited. For example, you might want to use a distinctive font for the title of your material, to give it a friendly tone (see Guideline 6.3 later in this chapter). But if you use anything other than a highly readable font for your regular text, you are creating a needless barrier that may discourage your readers. (*A note on terminology*: Graphic designers and printers use the term *body copy* instead of *regular text. Copy* is the general term for text, so *body copy* means the text that forms the main body of the document.)

For discussion of typefaces and recommendations about which ones are best to use for different purposes, including large amounts of text, see *Before & After Graphics for Business* (McWade, 2005), *The Complete Manual of Typography: A Guide to Setting Perfect Type* (Felici, 2003), and *Stop Stealing Sheep & Find Out How Type Works* (Spiekermann & Ginger, 2003). It can also be helpful to check some of the major websites that sell fonts (see the list of resources at the end of this chapter).

What is a font family?

"**Font family**" refers to a set of separate fonts with the same name (such as Helvetica) that may differ in **weight** (such as "light" or "bold"), **style** (such as "roman" or "italic"), and **width** (such as "condensed" or "expanded").

Many fonts are available as a *font family.* As shown in the examples below, a font family has different versions of the same font. The kind and number of variations in style and weight differs by font family. So do the names for the variations. For example, the most delicate version might be called "light" or "thin." The standard version you would use for regular text might be called "Roman" or "book." The stretched out version might be called "expanded" or "wide."



Font families range in size from just two members (such as a font that comes in book weight and italic) to extremely large, with literally dozens of variations. The larger font families include combinations of styles, weights, and widths, such as such as bold condensed, or expanded italic. If a font has no variations, we call it a "single version" font to distinguish it from a font family. Many decorative or highly distinctive fonts come in only one version. Picture fonts and symbol fonts are often single version fonts.

Font families offer the variations in typeface that are needed for professional printing of written material. When graphic designers prepare documents for printing, they use a separate font for each variation such as boldface or italics (at least they do whenever they can). They do not simply turn on a "bold" or "italics" option for the font, because using a separate font that has been optimized for bold or italics will make the text look better. For example, when you turn on a bolding option for a regular font in your word processing, the letterforms might be printed double or they might be thickened a bit in a uniform way. A boldface font, in contrast, is created letter by letter in a customized way, to make each letter look good in boldface. Using a separate font for each text effect also helps ensure that the final printed text will look the way you expect.

The guidelines for font use that we discuss in the next section urge you to choose a font family for your regular text and a contrasting font family for your headings. As we explain later on, choosing a font family with a good range of variations will help you create the contrast you need in your materials. You may need certain variations for a particular purpose. For example, a condensed version or lighter version of your font may work well for some of the text in an application form or chart.

Here are some things to know about single version fonts and font families:

- **Fonts that come in one weight and style only have limited use.** Generally, a font that comes in only one version is for special applications. It might be useful as an accent font for some purposes, but it does not offer the range of contrast you need for the text and headings in your materials.

- **Graphic design firms typically have a huge array of fonts from which to choose.** If there's a particular font you'd like to use, ask if they have it, or something similar to it.

- **Often, you can purchase each variation (each member of the font family) individually**. Prices for fonts and font families vary greatly, from as little as $10 or less on up. There is typically a discount if you buy the entire family as a package. If you use desktop publishing to produce materials and your font choices are limited or unsuitable, you may want to consider adding a few affordable fonts to your collection. Check the font websites listed at the end of this chapter.

- **Since font variations are often sold separately, a single font you have on your computer may be part of a font family.** To find out what other variations might be available, you can check the font websites listed at the end of this chapter.

Guidelines for choosing fonts

When you are choosing fonts for your materials, ease of reading and good contrast are essential. Here's a simple and highly effective approach:

> For printed materials, choose two easy-to-read fonts that contrast well with each other:
>
> - A **serif font** for the regular text
> - A **sans serif** font for the headings

As shown below, this approach is reflected in this book's three guidelines about choosing fonts. (These three guidelines on font use apply to materials that are printed on paper. For text that people read on a computer screen, special considerations apply. For website guidelines, visit http://www.usability.gov.)

For the regular text in your printed materials, use a "serif" font that is designed for ease of reading.

Serif fonts are fonts that use the small lines called "serifs" to finish off the main strokes of letters. For extended amounts of text, serif fonts work better than fonts without serifs (which are called "sans serif" fonts). Since readability of fonts differs greatly, pick a serif font that is highly readable as your basic text font. This text font should show good contrast between its bold and regular versions, and should remain easy to read when italicized.

For the headings in your printed materials, use an easy-to-read "sans serif" font, preferably one that is a "font family" with different weights (some bolder than others).

To help readers skim and pick out the main points in your material, be sure that there is good contrast between the serif font you use for text and the sans serif font you use for headings. Choosing a font for headings that offers variations in weight is helpful because it gives you better options for creating good contrast.

In general, use no more than two or three different typefaces in a single piece of material.

Limiting the number of fonts will give your material a cleaner look and greater unity. For most information materials, it works well to use just one serif font for the text and one sans serif font for the titles and headings. Experiment a bit to be sure the fonts you have chosen work well together. You may want to add an additional font or two for a particular purpose, such as using a special font to accent the title.

Two main fonts - one for text and one for headings

Mixing too many different fonts can distract or confuse your readers and make the material look cluttered and disorganized. As discussed above, it works best to use just two main fonts for your materials -- a serif font for basic text and a sans serif font for headings and subheadings:

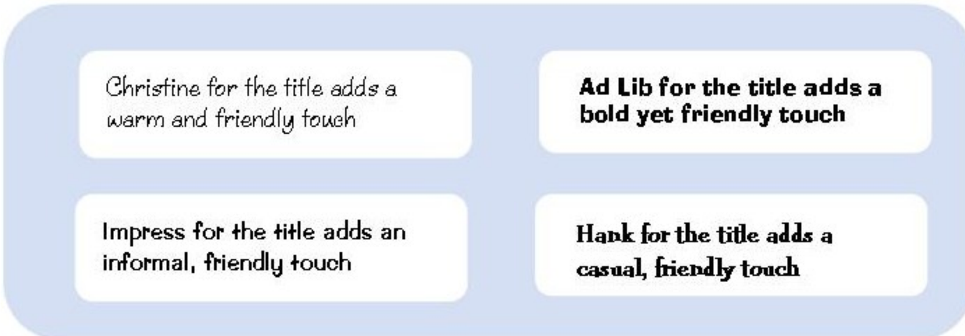
- **Serif fonts work better than sans serif fonts for ease of reading extended amounts of text**. For the basic text, Guideline 6.1 above recommends that you use a *serif* font rather than a *sans serif* font. Studies of readers’ reactions to different typestyles suggest that serif fonts work better than sans serif fonts for basic reading. Readers tend to find blocks of text easier to read and understand when they are printed in a serif font (Wheildon, 2005). Guideline 6.1 also urges you to choose one of the highly readable serif fonts that is designed for ease of reading extended amounts of text (for more about this, see the previous section with background on font terminology).

- **A sans serif font for headings offers good contrast with the text**. If you use the same font for the headings as for the text, the headings will not stand out and the material will be harder to skim. Guideline 6.2 above recommends using a different font for the headings. Specifically, it recommends using a sans serif font that offers good contrast with your text font. Good contrast between headings and the basic text makes it easier for readers to skim the material and pick out the main points.

There are many highly readable serif and sans serif fonts to consider. To learn more about what makes type readable and investigate your choices, see the resource section at the end of this chapter and talk with your graphic designer. If fonts intrigue you, you’ll enjoy visiting the websites listed at the end of the chapter. You can also get inspiration by studying real-life examples. Collect samples of printed materials in an “idea file” and study the fonts that are used.

Adding a third font for a special purpose

As suggested in Guideline 6.3 above, for some materials, you may want to add another font or two to use in a limited way for a special purpose. For example, using a distinctive font for the title of your material can lend warmth to your material, increasing its appeal and making it seem more approachable to less-skilled readers. Here are some examples of special purpose fonts:



If you use a special font as an accent, it's wise to get feedback from readers to verify that it adds appeal and is reasonably easy to read.

Choosing particular fonts that work well together

When you are ready to choose specific fonts for materials to be printed, you will have many choices of suitable fonts. There are many other possible fonts, including a large selection that is readily available through your graphic designer. To help pick an effective combination of serif and sans serif fonts for your material, here are things to consider:

- **Is each font easy to read**? Check to be sure that it remains easy to read when you change to the boldface or italics variation of the font.

- **Is each font a font family that has the variations you need for your material?** To provide good contrast in your text and headings, you need a font family with some variations in style and weight, and possibly variations in width as well. A font that comes in only one version may work as an accent font for a very limited amount of text, but it won't work well for the regular text or headings.

- **Does each font family offer good contrast among its variations?** Check on the degree of contrast between the regular and bold versions of your serif text font. Choose one with higher contrast, so that any word you print in boldface type will really stand out. When you are choosing a sans serif font, look for font families that include a demi-bold or semi-bold variation (or a regular boldface that is not as heavy as most). These variations are often more readable than regular boldface, and more versatile for adding contrast to your documents.

- **Does your sans serif font for headings contrast well with your serif font for the text?** Experiment a bit with different combinations. You may be surprised at the differences in contrast. For a discussion with examples, see "Typeface combinations (What typefaces go together? Here's how to mix and match)" in *Before & After Graphics for Business* (McWade, 2005:34-35) typeface. There are other good resources with examples, too, including Felici (2003) and Williams (2006).

Getting reactions from readers

When you have a final group of fonts you are considering, it's helpful to create test pages printed in different combinations of fonts. Show these samples to your intended readers and others to get their reactions. If you get others' reactions to sample pages, ask for first impressions, but also ask them to do a little reading to see if their opinions change. Sometimes what looks great at first glance can prove less appealing after you start reading it.

Using your fonts effectively

Once you have chosen your fonts, be sure to use them in a consistent way throughout the document. For example, don't switch the font style or size for your headings from one page to the next. Graphic designers use "style sheets" to establish and maintain consistency in font use.

Make the print large enough for easy reading by your intended readers

Make the type size large enough for easy reading by your intended audience.

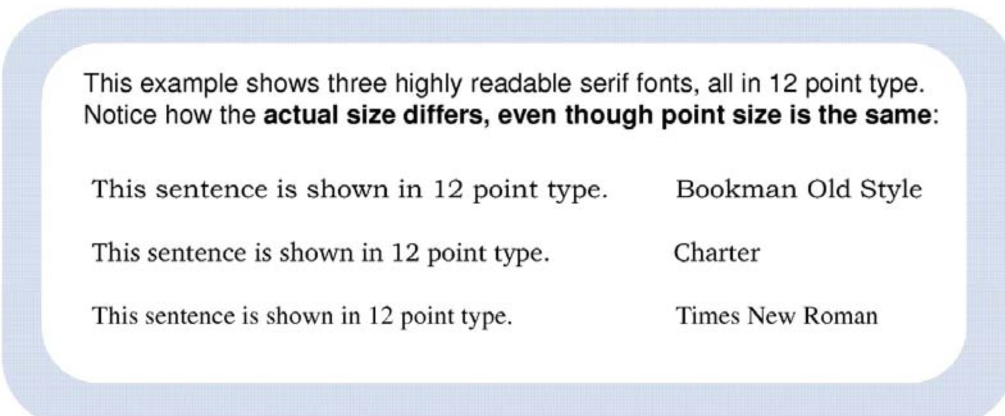
The best way to know whether your type is large enough is to get feedback from your intended readers. Older readers will need somewhat larger type than younger ones. You can use point size (such as "12 point font") as a rough guide, but keep in mind that fonts in the same point size can vary a lot in actual physical size due to differences in style of the letters. These differences in lettering style can affect ease of reading as much or more than point size.

How large should you make the type in your materials? Obviously, the type in a document needs to be big enough for easy reading, or people may get annoyed or discouraged and give up. Keeping the type large enough is especially crucial for older readers who are experiencing the normal age-related declines in vision (see Toolkit Part 9, *Things to know if your written material is for older readers*).

Problems with relying on point size as a standard

How big is big enough for type size? Sometimes, organizations set a minimum standard for point size of type to make sure that the type in materials is not too small. If you use specific point size as a guide for size of type (such as 12 point font), here are two important things to keep in mind:

- **Point size is only a rough guide to the actual physical size of the type, because fonts in the same point size can vary a lot in actual size due to differences in their style.** The example below shows the same text in the *same point size* (12 point) for three different fonts. All of these text samples would meet a standard for 12 point type. But notice how they differ in actual physical size.



- **Point size is important, but it captures only one part of what makes type easy for people to read**. As shown in the preceding section, since typographical features differ greatly from one font to the next, the particular fonts you choose have great impact on ease of reading. And, as shown in the rest of the guidelines in this chapter, so does the way you use them. For example, factors such as line length and line spacing can have a big impact on ease of reading.

As with so many other topics covered in this book, feedback from your readers is the ultimate test. So instead of a standard based on point size, Guideline 6.4 shown above offers this advice for determining an appropriate size of type:

> Instead of specifying a point size, use this pragmatic rule:
>
> **Make the type large enough for easy reading by your intended audience**

Here are some tips:

- **Use point size as a rough guide, but stay flexible**. As you develop your materials, be attentive to size of print and its impact on ease of reading, making adjustments if needed. You don't want to make the type too small, but you also need to be careful not to make it too large, since oversize type is actually harder to read if you don't have vision limitations that require large print.

- **To find an appropriate size of type, it helps to use a mockup as a tool.** For a discussion about the merits of using mockups, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*. Rely on feedback from testing draft materials with members of your audience as the measure of success.

- **If you are producing print materials for an older audience, you will need to make the type just a bit larger.** This need for slightly larger print applies to all materials for people with Medicare. More generally, any audience with people 40 and older will appreciate materials with type that is slightly larger than it needs to be for a younger audience. By "slightly larger," we mean type that is from ½ to 1 ½ points larger, depending on the font and your audience. For example, if a point size of 12 works well for a younger audience, you may want to make it 13 for an older audience. The goal is to compensate for the normal age-related decline in vision, not to create a "large print" document. Other guidelines later in this chapter cover additional ways to make whatever size font you choose easier for older eyes to read, such as by adding a little extra space between the lines.

- **If you are producing written materials for people with vision loss that is more extensive than the normal age-related decline in vision, you will need to use a *significantly* larger type size.** Just above, we recommended enlarging type size *slightly* for any audience of older readers. But a slight enlargement of type size will not meet the needs of readers with significant vision loss. Depending on the font, they may need a point size as large as 16 or 18 points. If the material is intended for an audience of people with vision loss, then producing one version in oversize type will work well. But if your audience includes people with normal vision as well people with significant vision loss, it may work better to produce two versions of the material.

- **When you need to develop alternate formats, consult with your intended readers to learn about their circumstances and preferences.** There are many options to consider. For example:
    - **Enlarge (or reduce) it on a photocopier**. If your main version of the material is in regular size print, consider producing a large print version by enlarging the document on a photocopier that can make oversize copies. Alternatively, if your main version is in very large print, you could reduce it on the photocopier, making a regular-size version that's easier for people to read if they don't have vision loss. Using the photocopier to create the alternate version is quick and easy, and it preserves all formatting and visual elements. It can also be cost effective, especially if you need only a limited number of copies.
    - **Print the text in extra-large type**. Another option is to put the text portion of the document into a word processing file, increase the size of the font (16 to 18 points), and print it out. This method sacrifices the formatting but works well for some documents.
    - **Other options**. There are other ways to accommodate people with vision loss, including braille and computer-assisted devices (when this specialized equipment is readily available).

Avoid using "all caps"

For all of your text, including titles and headings, use upper and lower case letters in combination -- nothing written in "all caps."

Text in all capital letters is hard to read, so use capital letters only at the beginning of sentences and other places where they are required. For ease of reading, try capitalizing only the first word in titles and headings (rather than capitalizing all of the important words).

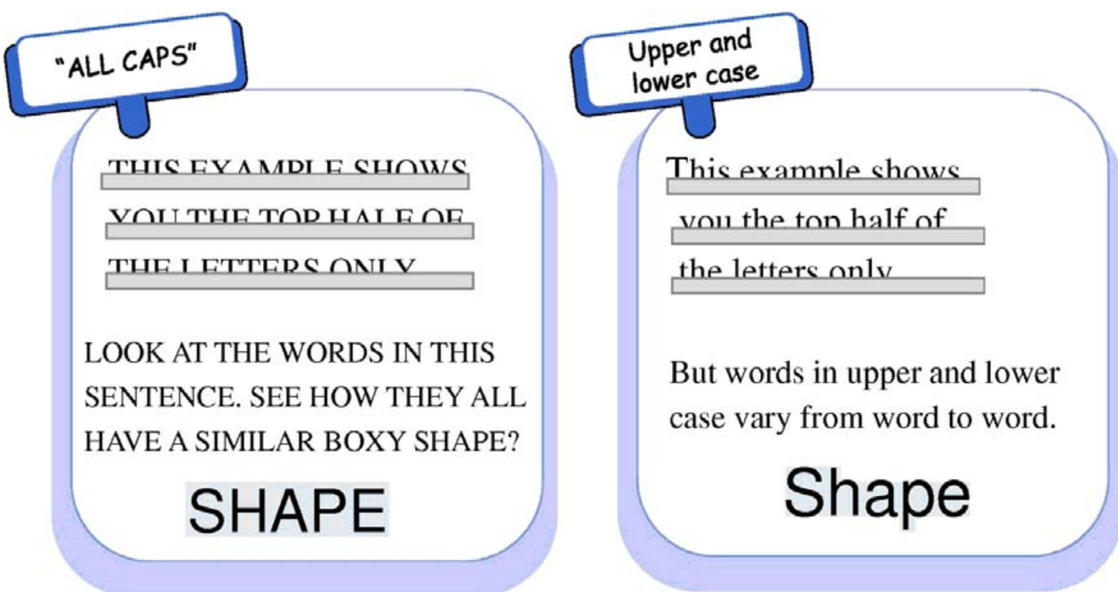
Sometimes materials use all capital letters (“all caps”) on a title or on a whole block of text, usually as a way to give it special emphasis. Using capital letters for emphasis is a habit that carries over from the typewriter days. Typewriters have only two options for emphasizing particular words or sentences: you can type them in all caps or you can underline them. Neither of these is an attractive option, because both make text harder to read. Moreover, the meaning of all caps has acquired some new connotations in the computer age: if you use all caps in an online discussion, it’s considered the equivalent of shouting.

Readers have to slow down to read text in all caps

For ease of reading, Guideline 6.5 urges you to avoid all caps text altogether:

- **We read in phrases, not letter by letter, so variation in the shape of the words leads to faster recognition.** Lower-case letters are easier to read than upper case letters because they have much more variation in shape (Wheildon, 2005).

- **When you put text into all caps, you force your readers to pay more attention than usual to the forms of the individual letters**, because it’s harder to distinguish among the letter shapes of capitals. As shown below, capital letters are all relatively boxy, and words in all caps have a similar shape. As a result, when you are reading text in all caps, you have to slow down a bit to tell one capital letter from another. This is true even for short blocks of text.



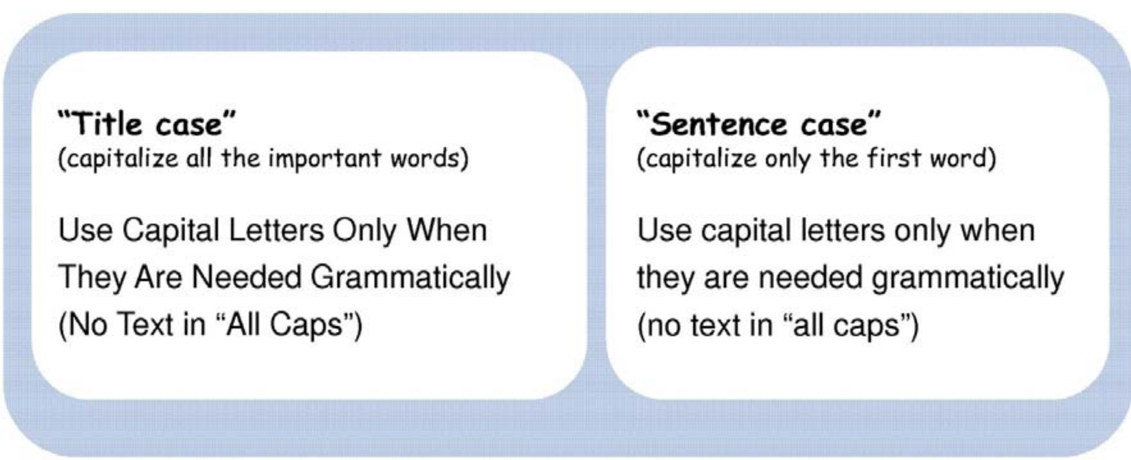
And just to emphasize this point further, here's an all-caps version of the same paragraph you just read. Which is easier and more appealing to read?

- **WHEN YOU PUT TEXT INTO ALL CAPS, YOU FORCE YOUR READERS TO PAY MORE ATTENTION THAN USUAL TO THE FORMS OF THE INDIVIDUAL LETTERS**, BECAUSE IT'S HARDER TO DISTINGUISH AMONG THE LETTER SHAPES OF CAPITALS. AS SHOWN BELOW, CAPITAL LETTERS ARE ALL RELATIVELY BOXY, AND WORDS IN ALL CAPS HAVE A SIMILAR SHAPE. AS A RESULT, WHEN YOU ARE READING TEXT IN ALL CAPS, YOU HAVE TO SLOW DOWN A BIT TO TELL ONE CAPITAL LETTER FROM ANOTHER. THIS IS TRUE EVEN FOR SHORT BLOCKS OF TEXT.

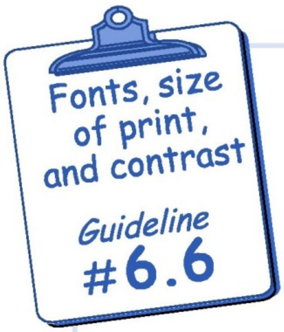
So why make your readers work harder? There's no need to use all caps text in your materials, so just avoid it altogether. As shown in the next Guideline (6.6), the switch from typewriters to word processing has given all of us much better ways to emphasize text, such as using boldface or italics.

Try using "sentence case" for your titles and headings

You can make your titles and headings easier to read by capitalizing *the first word only* (plus any words that require capitalization for proper grammar). Compare the two versions below. Notice how jumping from lowercase to uppercase so often makes text on the left harder to read:



For text emphasis, use boldface or italics (with restraint)



To emphasize words and short phrases that are part of your regular text, use italics or boldface type.

Do not use underlining or put the text into all capital letters, because these make text hard to read. Be restrained in using italics, boldface, and other devices such as contrast in size or color accents on text. If you use these devices too often, they lose impact. If you use them on longer blocks of text, they make it hard to read.

Using boldface or italics to highlight certain text draws attention and makes it easier for people to understand and use your materials. By making the key words and main points pop out from the rest of the text, you show your readers what’s most important and help them skim to find information of personal interest.

For greatest impact, be selective about which words and phrases you emphasize, and choose the most effective ways to do it. Below are some tips for ways to emphasize words or phrases that are part of your regular text. (For ways to emphasize larger blocks of text, see Guideline 7.4 in Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text.*)

- **In general, use boldface or italics to emphasize key words or short phrases.** Either of these works well for emphasizing a brief portion of the regular text, as long as you have chosen a font that remains highly readable when you use the bold or italic version (see the discussion of Guidelines 6.1, 6.2, and 6.3 earlier in this chapter).

- **Italics can work well as a substitute for setting text in quotation marks.** Some fonts have an italic version that is readable enough to use for passages that are a little longer, such as a quote with several sentences.

- **Be sparing in your use of bolding and italics, or you will diminish the effect.** When you use boldface and italics in a selective and limited way, you send a strong signal to your reader about what is most important. Overdoing the emphasis weakens this signal. For example, if you put a full paragraph in boldface, rather than just a key phrase or sentence, you weaken the signal about what is most important. You also make the whole paragraph harder to read. For example, here's this same paragraph again in boldface:

> **Be sparing in your use of bolding and italics, or you will diminish the effect. When you use boldface and italics in a selective and limited way, you send a strong signal to your reader about what is most important. Overdoing the emphasis weakens this signal. For example, if you put a full paragraph in boldface, rather than just a key phrase or sentence, you weaken the signal about what is most important. You also make the whole paragraph harder to read.**

- **Avoid using bolding and italics in combination (except for a word or two).** Using both methods of emphasis at the same time can make text significantly harder to read. If you need to emphasize one word in a sentence that is bolded, then italicizing that word will work. Similarly, you could use boldface to emphasize a word or two in a phrase that is in italics. But don't set entire sentences or longer blocks of text in bold italics. This example shows why:

> ***Avoid using bolding and italics in combination (except for a word or two). Using both methods of emphasis at the same time can make text significantly harder to read. If you need to emphasize one word in a sentence that is bolded, then italicizing that word will work. Similarly, you could use boldface to emphasize a word or two in a phrase that is in italics. But don't set entire sentences or longer blocks of text in bold italics.***

- **Avoid using underlining and all-caps text**. The previous section showed how putting text in all capital letters makes it harder for people to read. The underscore option that you can use to underline a word makes words harder to read. As you can see from the example below, underlining adds clutter and cuts through parts of letters that descend below, such as the letters *p, j,* and *y*. Graphic designers are taught that underlining words for emphasis is unprofessional.

Avoid using underlining and all-caps text. The previous section showed how putting text in all capital letters makes it harder for people to read. The underscore option that you can use to underline a word makes words harder to read. As you can see from the example below, underlining adds clutter and cuts through parts of letters that descend below, such as the letters p, j, and y. Graphic designers are taught that underlining words for emphasis is unprofessional.

Use very dark colored text on a very light non-glossy background

Fonts, size of print, and contrast
Guideline #6.7

For ease of reading, use dark colored text on a very light non-glossy background.

Make sure there is enough contrast between the printed text and the paper to be able to read everything easily. Black text on a white or cream-colored non-glossy background is best. Don’t use light-colored text on a dark background (this is called “reversed out” text), because it is too hard to read.

The ink and type of paper you choose for printed materials can have great impact on ease of reading. Research shows that highly contrasting colors for paper and ink, together with non-gloss paper, improve reader’s attention and comprehension (Wheildon, 2005).

Use non-glossy paper to avoid glare

Designers and printers refer to paper as *stock*, so they would call non-gloss paper *uncoated stock.* They use the term *matte* for *low gloss* paper, and *coated* for *higher gloss.* To learn more about choosing appropriate paper for your materials, and the cost implications of paper choices, see *Getting it Printed:*

How to Work with Printers & Graphic Imaging Services to Assure Quality, Stay on Schedule & Control Costs, 4th Edition (Kenly & Beach, 2004).

- **For ease of reading, coated stock is a poor choice.** When text is printed on coated stock, the glare from the slightly shiny surface of the paper makes it harder to read. Many magazines are printed on thin sheets of coated stock. You may have noticed how they can be hard to read; sometimes you have to keep tilting the page slightly to reduce the glare. Why add such an extra burden to materials that you want readers to use?

- **In special situations, there may be reason to use coated stock.** For example, suppose you are producing a booklet that will be used for repeated reference. For longer wear, you could print the cover (only) on coated stock, or have the printer add varnish to the cover. The glossy finish is protective in this case, and doesn't interfere much with reading ease because the amount of text on a cover is usually fairly limited. Although coated stock would work well in this situation, it's not really necessary: choosing a heavy weight uncoated stock would probably work just as well.

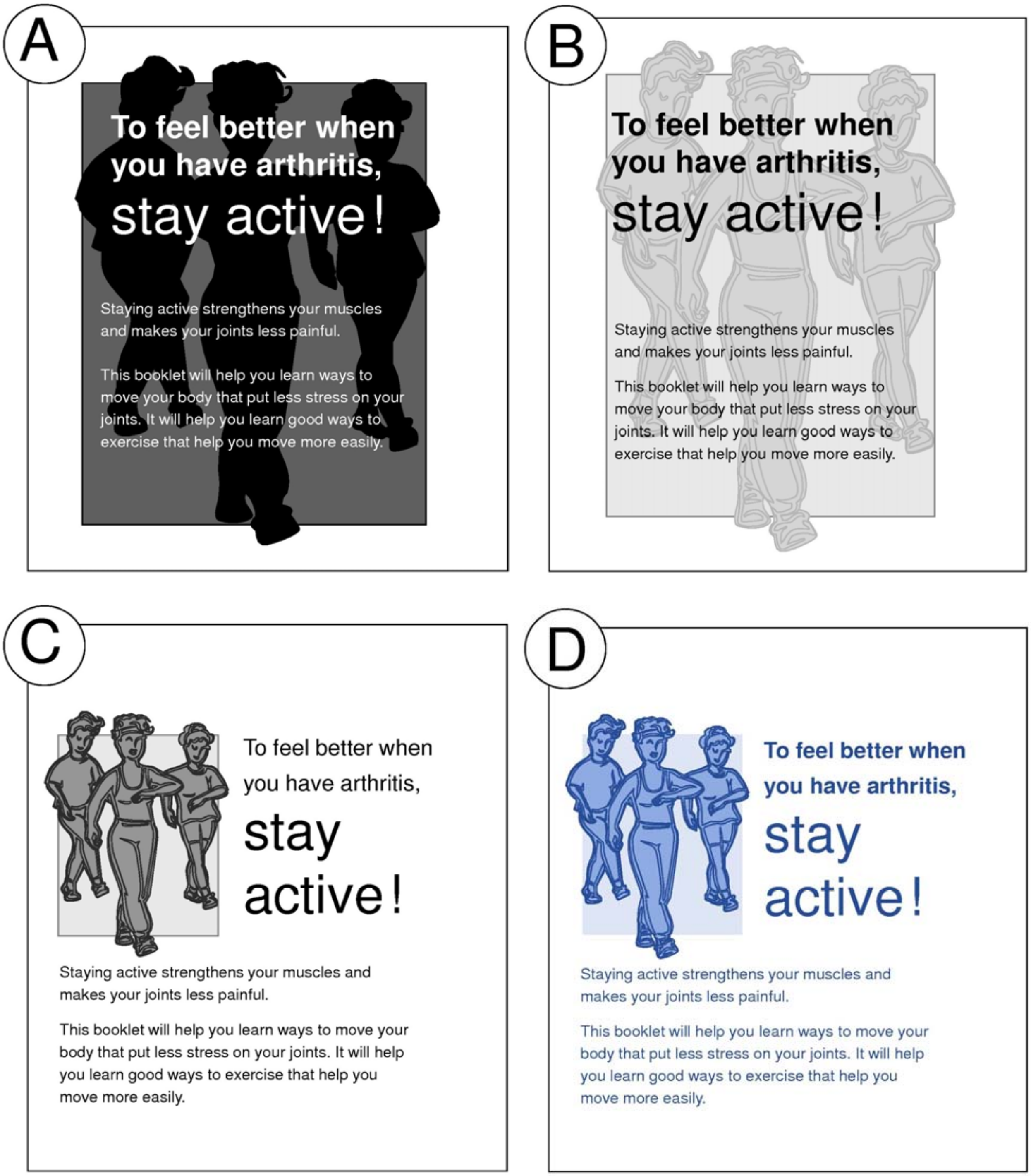
Contrast between text and paper

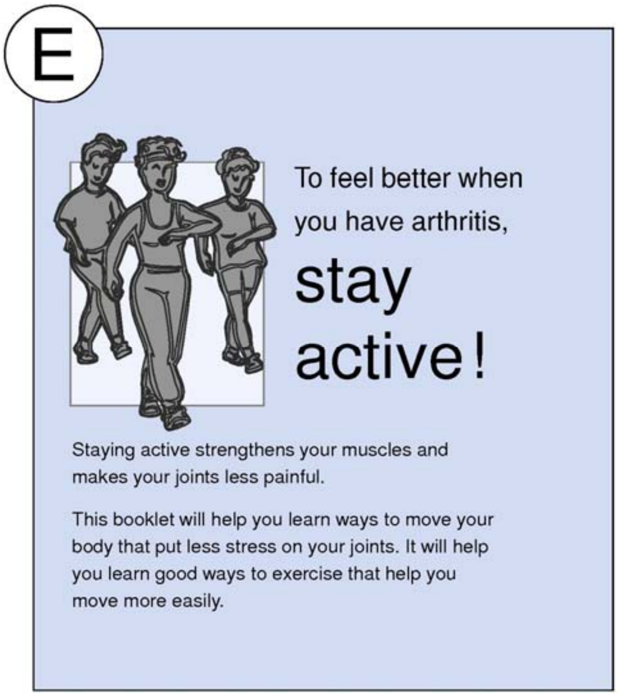
Maintaining a high degree of contrast between printed text and the paper is crucial for ease of reading, especially for older readers. Figure 5-3-b below gives an example.

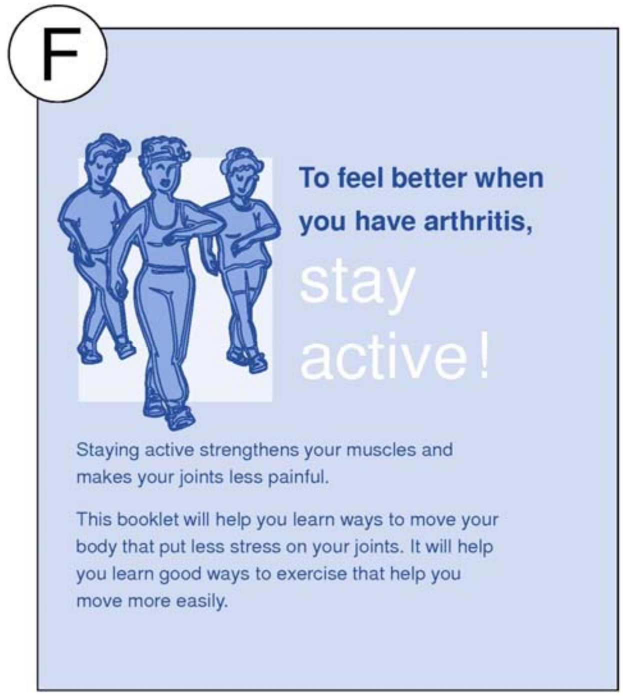
Figure 5-3-b. How contrast between text and background affects ease of reading.

Consider the different versions of a booklet cover shown below. In each version, the words are the same. There are more words than you would generally put on a cover; we added extra text to help make points about contrast between text and background.

Which of the six versions is easiest to read?


A
To feel better when you have arthritis,
stay active!
Staying active strengthens your muscles and makes your joints less painful.
This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.
B
To feel better when you have arthritis,
stay active!
Staying active strengthens your muscles and makes your joints less painful.
This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.
C
To feel better when you have arthritis,
stay active!
Staying active strengthens your muscles and makes your joints less painful.
This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.
D
To feel better when you have arthritis,
stay active!
Staying active strengthens your muscles and makes your joints less painful.
This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.





Source: Created as an example for this Toolkit.

Black text on white paper is easiest to read

Did you choose version C as the easiest to read? Of all the versions, C has the strongest contrast between text and background. Contrast is crucial to ease of reading:

- **You can't go wrong with black text on white non-gloss paper; it's the best overall choice**. Black text on very light colored paper, such as pale cream or ivory colored paper, is okay, too.

- **For best contrast, keep the black ink at "full strength" (100% black) for regular text**. Sometimes, materials "screen back" the black ink used for text so that it prints in shades of dark gray instead (such as 80% black). This might be done for an aesthetic effect, or for variety, but it reduces ease of reading. It's best to keep text at 100% black. You can add visual interest by using shades of gray in your design elements instead.

Avoid using light text on a dark background

Guideline 6.7 shown above warns against using light-colored text on a dark colored background. Graphics designers and printers refer to light text on a dark background as "reversed out" text. As you can see in version A of Figure 5-3-b above, **reversed out text is generally quite hard to read**. It can work if you use it for just a couple of words that are large and bold: the huge ultra- bold words "stay active" are the only readable parts of version A. Usually, it's best to avoid reversed out text altogether.

Compare version F, where these same words are shown in white text against a blue background. Comparing the reversed out text for "stay active" on A and F shows the impact of different contrast between text and paper. The words show up better on A because it has white against black, the maximum in contrast. The words are harder to read when the background is changed to blue, which offers much less contrast with the white letters.

Any color of ink other than black reduces readability of the text

Compare versions C and D in Figure 5-3-b above. Notice how the blue text in D is harder to read, especially in the blocks of smaller text at the bottom of the page.

In general, be cautious about using colored ink for text:

- **Light colors such as yellow and orange and light shades of any color are unsuitable for text.**

- **Use darker colors for occasional text accents in titles or headings.** It can work well to use a dark-colored ink other than black for limited amounts of larger text, such as titles or headings.

- **Use black as the ink color for regular text**. Figure 5-3-b above gives an example: notice how it is easier to read the smaller text that is printed in black (version C) than the same text printed in blue (version D). Similarly, even when contrast is reduced by adding a blue background, it is easier to read the black text in version E than the blue text in version F.

Avoid colored backgrounds

Sometimes, people choose colored paper as the background for their written material. They may pick a bright color on purpose, to draw attention: "I'm making this flyer neon orange so they can't miss it!" Unless the paper is extremely light (such as cream or ivory), using colored paper for your materials is not a good idea:

- **If you print your material on a brightly colored paper, people may notice it, but they are far less likely to read it**. The bright color that catches their eye becomes problematic as soon as they start reading, because the colored background greatly reduces the contrast between type and paper. It's self-defeating to use neon colored paper, in particular; readers tend to find it harsh and may just give up.

- **Bright paper may signal "junk mail" to some readers**.

- **The reduced contrast may tempt you to use too much bolded text.** A large amount of bolded text makes the material less appealing and even harder to read.

As we note in discussing the next guideline, these same concerns about using colored paper apply if you print text on colored backgrounds. Whenever you print text on a colored background, you reduce the contrast and make it harder to read. As an example, compare versions C and D (both on white background) to versions E and F (both on blue background). Notice how much easier it is to read the text against the white background.

If you shouldn't use colored paper or colored backgrounds for text, what can you use instead to attract reader's attention?

- If the materials are in black and white, add visual interest by using photos, illustrations, and other design elements in black and shades of gray. Silhouettes and ethnic patterns are other possibilities. If the materials have an accent color, or full color, see the suggestions in Toolkit Part 5, Chapter 5*, Guidelines for use of color*.

Consider the impact of font choice as well

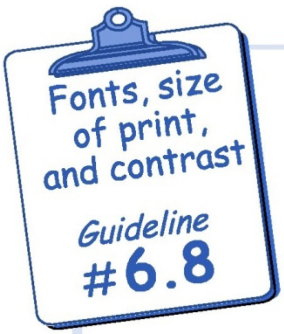
Earlier in this chapter we discussed variations in the weight of fonts and showed examples of "font families." When you use font variations, take into account their impact on ease of reading:

- **Be cautious about using light face fonts**. Light face fonts print significantly lighter than regular book weight, thereby reducing the contrast between printed text and paper. You may want to use light face fonts for special purposes, such as labels for areas to be filled in on a form, but don't use them for blocks of text.

- **Be cautious about using a "heavy" or "ultra" version of bold**. Often, these are much too dark for readability in written materials. They are typically used in applications that require very large print, such as in large display ads or on a billboard. Occasionally, you can use it to your advantage for certain purposes, such as using them in color to emphasize the numbers in a numbered list.

- **In general, you may find that a semi-bold font is more readable than regular bold**, especially for subheadings. When you are looking for a font with bolded versions that are easy to read, keep in mind that font families use different names for the degrees of bolding in their versions. You can't go by name alone: the "bold" or "medium" version in one font may be just as readable as the "demi-bold" version in another.

Do not print text sideways or on top of shaded backgrounds, photos, or patterns



For ease of reading, do not print text sideways, on patterned or shaded backgrounds, or on top of photos or other images.

Printing a title or heading that runs vertically rather than horizontally puts a burden on readers to tilt their heads or twist the page in order to read it (and most won't). When you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The words are harder to read because of reduced contrast and distraction in the background, and the impact of the image is undermined by the words on top of it. Even a plain shaded background makes words harder to read, because it reduces the contrast between the text and background.

Readers usually ignore text that's printed sideways

Occasionally, you may see text that is printed sideways in written materials. For example, this formatting is sometimes used to mark a new section or for the labels of a table or graph.

In the example to the right, we have taken version C from Figure 5-3-b above and made just one change: we printed the main part of the title sideways.

Whatever the purpose of this unconventional formatting, printing text sideways puts a burden on readers. To read sideways text comfortably, you either have to tilt your head or tilt the paper. Why do this to your readers? It's a barrier that's easy to avoid.

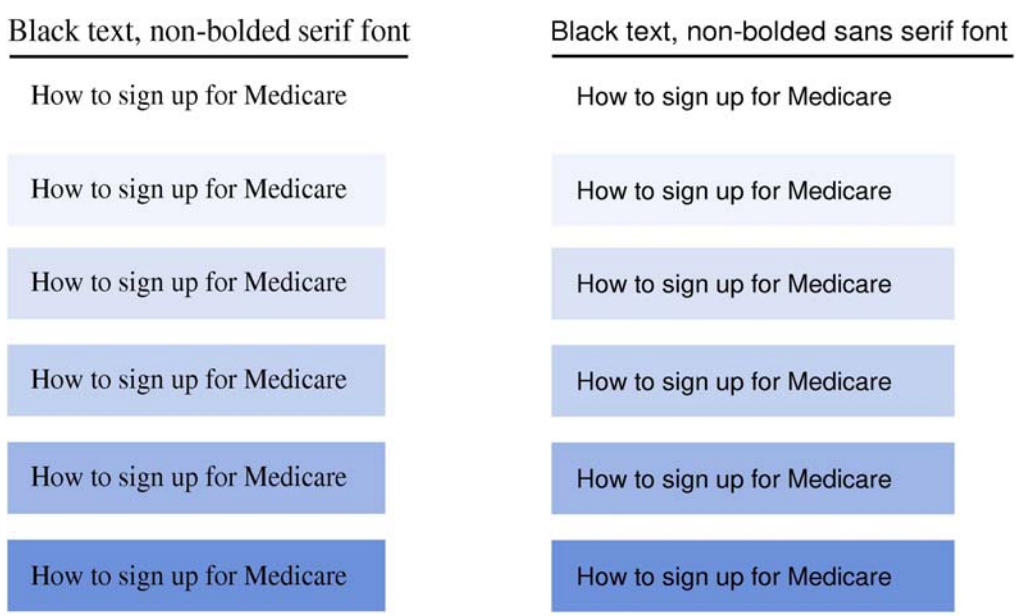
Shaded ("screened") backgrounds make text harder to read

To be effective, your written materials need to attract and *hold* the attention of your intended readers. It's not enough for people to notice the text -- you want them to linger long enough to *read* it. Putting anything other than a plain background behind the text reduces contrast and makes the text harder to read. This includes plain shaded backgrounds as well as photos or other images.

A note on terminology: what we call a *shaded background* is also called a *screen*. ***Screen*** **is the term that graphic designers and printers use to refer to an even-toned tint of a given color**. The degree of shading is identified as a percentage of the full strength (100%) color. For example, a 20% screen of black would be a light shade of gray. Graphic designers and printers have reference books that show the full range of screens for various colors of ink.

The examples in Figure 5-3-c below show how printing text on a shaded background makes the text harder to read. As shown in these examples, the degree of shading makes a difference, but so does the style and color of the font.

Figure 5-3-c. Printing text on a shaded background reduces contrast and makes it harder to read.



Black text, **boldface** serif font

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

Black text, **boldface** sans serif font

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

Blue text, non-bolded serif font

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

Blue text, non-bolded sans serif font

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

How to sign up for Medicare

Source: Created as an example for this Toolkit.

As you can see from the examples in Figure 5-3-c above:

- The darker the background, the harder it is to read the text.
- Against a shaded background, the serif font is harder to read than the sans serif font, the non-bolded fonts are harder to read than the boldface fonts, and the blue text is harder to read than the black text.

To make your materials easy for people to understand and use, avoid printing text on a shaded background. If you do use a shaded background, keep the background itself as light as possible. A very pale yellow background seems to offer the best contrast. Use the shaded background for very limited amounts of text. But before you use a shaded background to highlight important text, consider other options that may be more effective. In the next chapter, Figure 5-4-d gives some suggestions (*Replacing the shaded background and boxed-in text: Ideas for better ways of emphasizing important blocks of text*).

Printing text on photos or patterned backgrounds makes it hard to read

As it says in guideline 6.8 shown earlier in this chapter, when you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The photo to the right is an example.

The words are hard to read because of reduced contrast and distraction in the background, and the impact of the image (quite attractive in color) is undermined by the words on top of it.

Sometimes graphic designers add a semi-opaque screen between the text and the photo, to increase the contrast and make the words easier to read. As shown to the right, this helps a lot with contrast, though the screen itself is a new distraction. Although you can read the text more easily, the text and image are still fighting for attention.

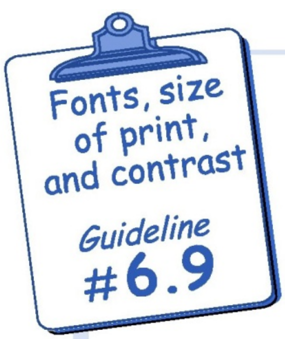
Another way to increase the contrast is to lighten the entire image, so that the text stands out more clearly. As shown to the right, the contrast is improved, but the image has lost impact (this loss is even more apparent for the image shown in color).

The photo to the right shows the simplest and most effective solution: print the text on a plain light colored background. In the example shown here, we curved the text slightly to echo the curve of the lettuce and add visual interest.

Separating the text and image provides the greatest contrast for both. This separation makes the material easier for less-skilled readers: there are no longer two things fighting for attention in the same spot, so they can concentrate more readily on the meaning of the words.

For other examples of how printing text on patterned backgrounds interferes with ease of reading, see versions A and B of the booklet in Figure 5-3-b earlier in this chapter.

Adjust the spacing between lines



For ease of reading and a cleaner look, adjust the line spacing in your material.

To make blocks of text easier to read, add a little extra space between the lines. To help readers connect a heading with the text that follows it, leave a little less line space after the heading than you leave before it. To make bullet points stand out more clearly, put a little extra space between them. Keep these line spacing adjustments consistent throughout the document.

Together with choice of font and size of print, line spacing has a big impact on ease of reading. To help your readers understand and use the material, here are two types of line spacing adjustments to make:

- **Add a little extra space between the lines of the regular text.**

- **Throughout the material, use spacing adjustments to emphasize connections** and help readers understand what parts of the material belong together.

The rest of this section gives you tips and examples on how to make both types of line space adjustments.

Adding extra line space to the regular text

If you use the default setting on word processing, the lines of text you type will be single spaced. To see the impact of line spacing, try this experiment with your own test page of text. First, print it out single spaced. Then, add just a little extra space between the lines. You can do this by changing line spacing to a multiple of 1.1 on the line spacing or paragraph menu. Now print the page again and compare. Don’t you agree that adding a little more space between the lines makes the page easier to read?

Graphic designers routinely add extra line space to the regular text to make it more readable. They call the space between lines of text “leading” (pronounced as “ledd-ing”), and refer to degrees of leading as being “looser” and “tighter.” (If you want details on this topic, including how line space is measured by designers, see the books by Felici (2003) and Williams (2006) listed at the end of this chapter.)

You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print. Here are some examples:

This line space is too tight. It is set to be a little less than single spacing. This text is crowded and hard to read. Notice how it is hard to find which line to read next when you return to the left margin.

You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

This line space is single spaced. It’s a little tight for easy reading.

You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

This line spacing is about right. It's just a little more than single spacing.

You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

This line spacing is too loose. Putting too much extra space between the lines makes the material harder to read and weakens the connection of text within a paragraph.

You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

Using line space adjustments to emphasize connections in the material

Below, the same text has been formatted in two different ways:

Differences in line spacing.

- In example A, there is equal space (and quite a lot of space) between each line.
- **In B, the line space has been adjusted to group together the information about each doctor who is listed.** There is a small amount of extra space after the doctor's name, to help set it off, but the main spaces you see are those between the entries.

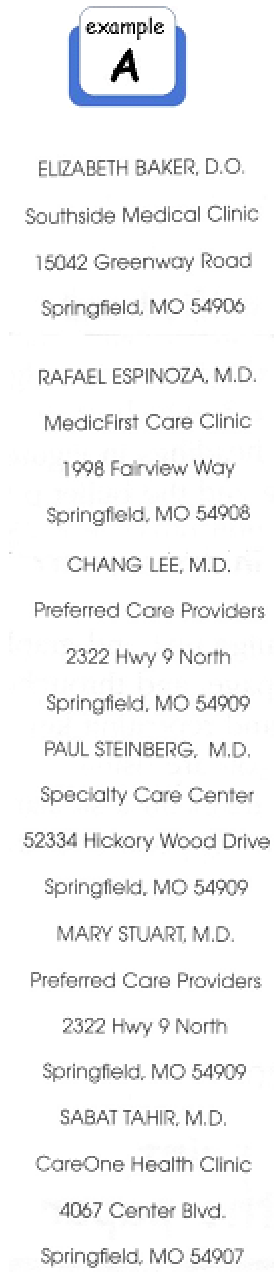
These other differences also help make B easier to read and use:

Differences in justification.

- The centered text in A is hard to skim.
- Switching from centered text to left-justified text in B makes the material much easier to skim (for more on left-justification, see the discussion of guideline 6.10 below).

Differences in contrast.

- In version A, you need to read the list carefully to pick out a doctor's name.
- Notice how easy it is to skim version B. The bold text for the doctor's name makes all the difference.


example A

ELIZABETH BAKER, D.O.
Southside Medical Clinic
15042 Greenway Road
Springfield, MO 54906
RAFAEL ESPINOZA, M.D.
MedicFirst Care Clinic
1998 Fairview Way
Springfield, MO 54908
CHANG LEE, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909
PAUL STEINBERG, M.D.
Specialty Care Center
52334 Hickory Wood Drive
Springfield, MO 54909
MARY STUART, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909
SABAT TAHIR, M.D.
CareOne Health Clinic
4067 Center Blvd.
Springfield, MO 54907


example B

Elizabeth Baker, D.O.
Southside Medical Clinic
15042 Greenway Road
Springfield, MO 54906

Rafael Espinoza, M.D.
MedicFirst Care Clinic
1998 Fairview Way
Springfield, MO 54908

Chang Lee, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909

Paul Steinberg, M.D.
Specialty Care Center
52334 Hickory Wood Drive
Springfield, MO 54909

Mary Stuart, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909

Sabat Tahir, M.D.
CareOne Health Clinic
4067 Center Blvd.
Springfield, MO 54907

Source: Created as an example for this Toolkit; all names and addresses are fictional.

- The next chapter has an example of guidelines for formatting bulleted points. It shows how putting a little extra space between the bulleted points makes each one stand out more clearly (Figure 5-4-c).

Left justify the text and headings

For ease of reading, use left justification throughout the material, for both the text and the headings.

Left-justify the regular text, leaving the right margin uneven ("ragged right"). Don't use "full justification" because forcing even margins on both sides of a block of text inserts uneven spaces between the words, making them harder to read. Don't center blocks of text, because centering makes it harder to read. To make headings prominent and easy to skim, left justify them (rather than centering them).

Left-justify the regular text, leaving the right margin uneven

There are two usual choices for justification of regular text: left justification and full justification:

- **Left-justification makes text easier to read.** This book advises you to use left justification because it maintains even spacing between words, making the text easier to read. Left justification leaves the right margin uneven ("ragged right"), adding a little visual interest to the page. This book uses left justification for its regular text.

- **Full justification makes text harder to read**. Full justification forces the text into straight margins on both the left and right by inserting uneven amounts of space between the words. If the lines of text are long and the print is small, this uneven spacing is not noticeable. But in materials with lines of text that are five inches or so, with print large enough for easy reading, full justification can make text harder to read. If the text is in narrower columns, such as in a tri-fold brochure, using full justification can produce large gaps between words. As you can see in the example below, large gaps between words make the material harder to read.

Full justification:

But in materials with lines of text that are five inches or so, with print large enough for easy reading, full justification can make text harder to read. If the text is in narrower columns, such as in a tri-fold brochure, using full justification can produce large gaps between words.

Left justification:

But in materials with lines of text that are five inches or so, with print large enough for easy reading, full justification can make text harder to read. If the text is in narrower columns, such as in a tri-fold brochure, using full justification can produce large gaps between words.

Left-justify headings

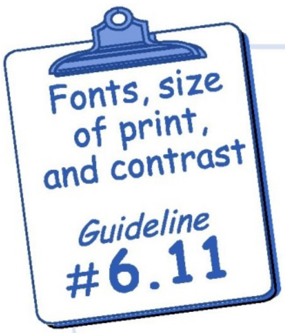
There are three choices for justification of titles and headings: left, right, and centered. This Toolkit advises using left justification for headings (and for titles, too). There are three reasons:

- **Left-justified headings are easier to read, especially when they continue to more than one line**. When text is left justified, it's easy to pick out the beginning of the next line of text, because your eyes return to the left margin by force of habit. In contrast, when text is centered or right justified, the next line of text can start in a different place, so your eyes have to hunt for it. It can get tedious to start at a different place for each new line of text. If you center or right justify the headings, you create a barrier for readers because you make them work harder.

- **Left-justified headings are more prominent, so readers are less likely to miss them.** Left justified headings are consistent with "reading gravity", which means that they fit with the reader's natural and habitual progression through a printed page. Testing materials with readers show that they can sometimes overlook a heading that is centered, because their eyes are oriented toward the left margin. (For more on reading gravity, see Guideline 5.3 in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.)

- **Left-justified headings reinforce strong alignments, making the page layout look clean and orderly**. When headings, blocks of text, lists, illustrations, and other elements are lined up in a clear, strong, consistent way, the material looks "clean" and orderly and is easy to skim. (See the discussion of page grids under Guideline 5.4 in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.)

Make lines an appropriate length for easy reading



Keep your lines of text to an appropriate length for easy reading – neither too short nor too long.

For many materials, a line length of about five inches long works well. If the paper is wide, set the text in columns to maintain a readable line length. Avoid "wrapping" your text in awkward ways that make it hard to read.

Line length affects the ease of reading

Sometimes, the problem is that lines of text are much *too long*. This happens, for example, when a document uses landscape orientation and the paper is wide. Other times, the problem is that lines of text are *too short:*

- **Some written materials have very narrow columns of text**. For example, pull-out quotes and short blocks of text in the outer margin of a page sometimes have very short line lengths. There may be as few as two or three words on a line in these blocks of text. Sometimes, columns of text are squished into a small place to accommodate a photo or other image.

- **Printing text with a short line length is a big barrier to readers.** When lines of text are too short in a document, it's harder to read. Your eyes take in smaller bundles of words, and you have to keep going back and forth, back and forth, back and forth, just to read a sentence or two.

Here are some tips for length of lines:

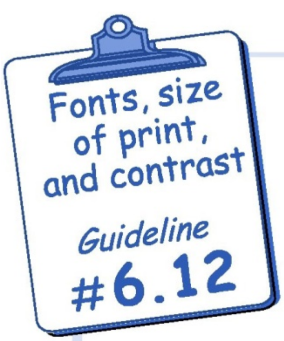
- **Avoid narrow columns and lines that are longer than five inches or so**. The line length you should use depends in part on the size and shape of the material and the size of the print.
  - For regular text in materials written for less-skilled readers, it often works well to create lines of text that are, on average, about five or five and a half inches long.

- It generally works well if lines are no less than about 25 characters wide, and no more than about 50 to 60 characters wide. Use wide margins to take up the rest of the space on the page; it gives the reader a place to pause and rest.
- If you are formatting a *short* passage of text, such as a caption for a photo, try for a minimum length of at least two inches.

- **Use columns if the paper is wide.** Earlier in this chapter, we noted that it's generally better to use a portrait orientation to your paper (taller than it is wide) rather than a landscape orientation. Unless your paper size is small, if you do use a landscape orientation, you will likely need two columns of text to keep the line length easy to read.

- **Avoid wrapping text in awkward ways**. A slight contouring of the right margin of a block of text that makes it follow the shape of a photo or other graphic element can add a nice effect. Just do it carefully, to preserve ease of reading.

Watch where lines of text break



For ease of reading, watch where the lines break (avoid hyphenation; split long headings carefully to reflect natural phrasing).

Do not hyphenate words at the end of a line, because splitting a word over two lines makes it harder to read, especially for less-skilled readers. When headings are long, split them over two lines in a way that reflects natural phrasing and avoids the awkwardness of leaving a single word by itself on the second line.

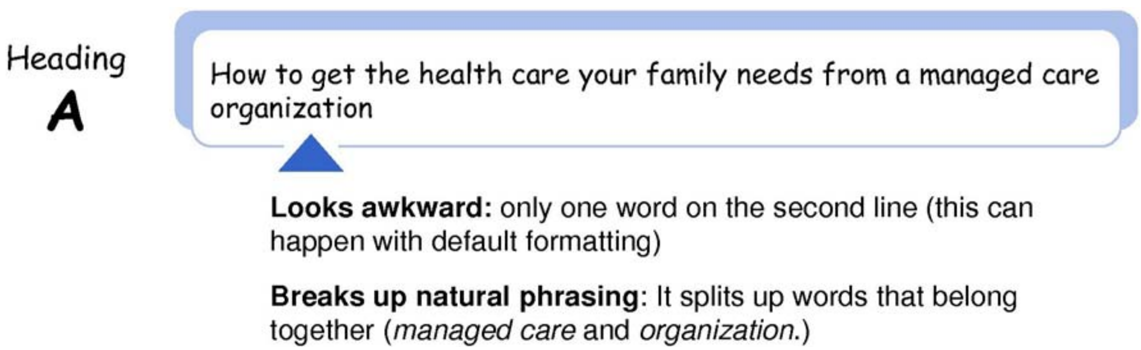
Split long titles and headings carefully

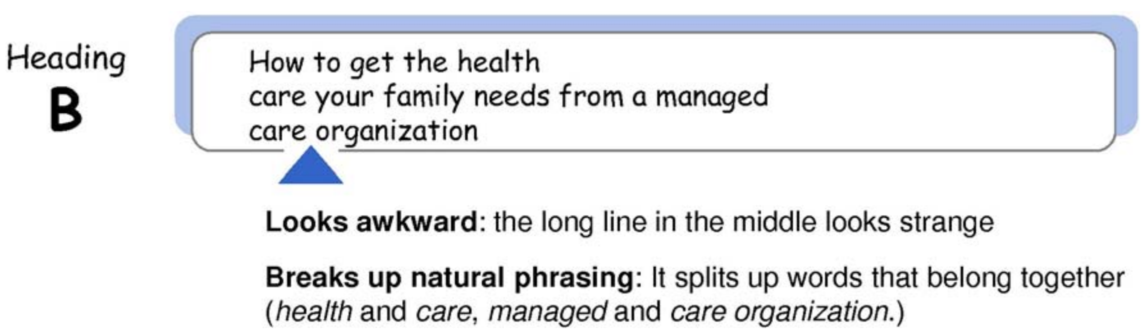
When titles and headings need to be split over two lines, pay attention to where you break the lines:

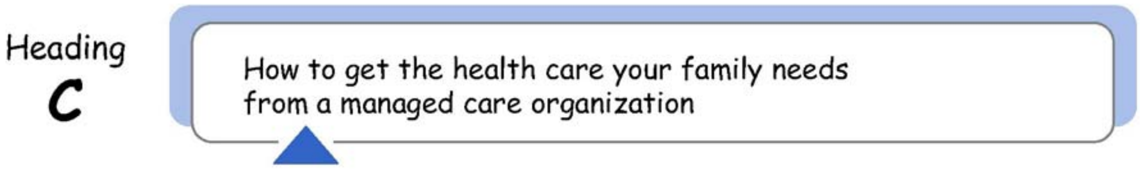
- **Break the lines at a place that keeps words together that belong together as a unit**. Maintaining natural phrasing for each line of the title or heading makes it easier to understand. Think of it as breaking the title or heading into separate "sound bites" for the reader.

- **Break the lines at a place that creates good visual balance**. Don't leave one word all by itself on the second line. It looks awkward and it's harder to read.

- **If a title or heading fills up nearly all of a line, break it into two lines**. Breaking a long title or heading makes it easier to read and easier to skim. When a title or heading stretches across a whole line, it makes the material harder to skim.







Looks fine: the two lines have good balance

Reflects natural phrasing: The first line breaks at an appropriate place – each line of the heading has natural phrasing

Avoid hyphenating words at the end of a line

In written materials for less-skilled readers, it's best to avoid hyphenating words at the end of a line because hyphenation makes reading and comprehension more difficult. Splitting words over two lines with a hyphen forces the reader to make a visual and mental link between the two parts of the word that have been split. This puts an unnecessary burden on your readers. Don't use hyphens to carry over the words in headings or titles, either.

End notes

You can use font websites to take a closer look at font choices. These websites have great features that let you try out samples of your own text using different fonts and let you do key-word searches for fonts with particular attributes (such as "friendly" or "readable"). These sites also have newsletters that are interesting and informative. Often they include examples of how the fonts have been used in different applications.

Try these: http://www.myfonts.com and http://www.fonts.com.

References cited in this chapter

All of the references listed below are also excellent resources for learning more about the topics covered in this chapter. Some are described in Figure 5-1-a in Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals*.

Felici, James
2003 *The complete manual of typography: A guide to setting perfect type*. Berkeley, CA: Peachpit Press.

Kenly, Eric and Mark Beach
2004 *Getting it printed: How to work with printers & graphic imaging services to assure quality, stay on schedule & control costs.* Fourth edition. Revised by Eric Kenly. Cincinnati, OH: How Design Books.

McWade, John
2005 *Before & after graphics for business*. Berkeley, CA: Peachpit Press.

Spiekermann, Erik and E.M. Ginger
2003 *Stop stealing sheep & find out how type works.* Second edition. Berkeley, Ca: Adobe Press.

Wheildon, Colin
2005 *Type & layout: Are you communicating or just making pretty shapes*. With additional material by Geoffrey Heard. Victoria, Victoria, Australia: The Worsley Press. (*Note:* This is the second edition of this book. The first edition was published in 1996 and titled *Type & layout: How typography and design can get your message across—or get in the way*.)

Williams, Robin
2006 *The non-designer's type book: Insights and techniques for creating professional-level type*. Second Edition. Berkeley, CA: Peachpit Press.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476
September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the “Toolkit Guidelines for Graphic Design”

Chapter 4

Guidelines for headings, bulleted lists, and emphasizing blocks of text

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 4

Guidelines for headings, bulleted lists, and emphasizing blocks of text

List of figures in this chapter:

This document is the fourth of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the fourth of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for headings, bulleted lists, and emphasizing blocks of text. As with all of the Toolkit chapters on design, this chapter assumes that you have not had formal training in design. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

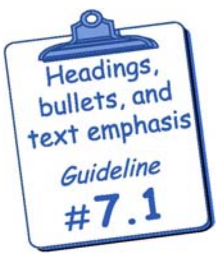
What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); fonts (typefaces), size of print, and contrast (Chapter 3); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

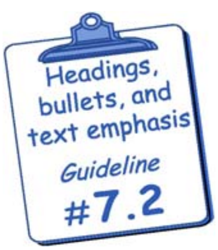
List of guidelines covered in this chapter

This chapter discusses the four guidelines shown below in Figure 5-4-a. Following these guidelines will help make your written material easy for readers to skim and pick up the main points. (For the full list of guidelines for design, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.)

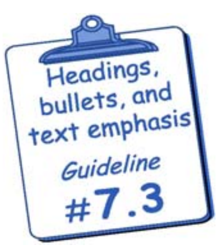
Figure 5-4-a. Guidelines for headings, bulleted lists, and emphasizing blocks of text.



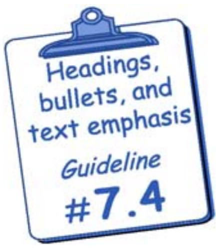
To make the material easy to skim and show how it is organized, create a clear hierarchy of prominent headings and subheadings. Left-justify the headings and subheadings, because readers sometimes miss headings that are centered. To emphasize how the material is structured, use contrast in fonts and maintain clear and consistent alignments, indentations, and spacing between headings and the text that follows.



Use contrast and other devices to make the main points stand out on each page. Remember that your readers are skimming and looking for information of personal interest. Help them by using devices such as bulleted and numbered lists, captions for illustrations, emphasis on key words and phrases, and summaries of main points. Use design elements or images to accent important information, such as putting a picture of a phone next to the helpline number.



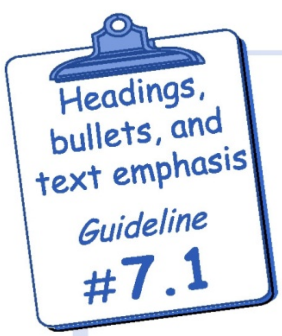
For ease of reading, use care in formatting bulleted lists. To set off a list of bulleted points and connect it more closely with the sentence that introduces it, indent the entire list slightly. To make the bulleted points stand out clearly, add extra line space between them and use hanging indents. To set off each point without distracting readers, use bullets that are simple solid shapes. Bullets should be large enough to notice but not so large that they are distracting. Place bullets close to the text that follows them.



Choose effective ways to emphasize important blocks of text. Outline boxes are often used to emphasize text, but they clutter your layout and readers sometimes ignore text that's enclosed by a box. Shaded backgrounds tend to attract the eye, but they also reduce the contrast, making text less legible and therefore less likely to be read. Instead of using outline boxes or shaded backgrounds, try other methods that tend to work better for emphasizing blocks of text (Figure 5-4-d in this chapter gives suggestions).

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Create a clear and prominent hierarchy of headings and subheadings



To make the material easy to skim and show how it is organized, create a clear hierarchy of prominent headings and subheadings.

Left-justify the headings and subheadings, because readers sometimes miss headings that are centered. To emphasize how the material is structured, use contrast in fonts and maintain clear and consistent alignments, indentations, and spacing between headings and the text that follows.

Heading are a powerful tool for helping readers understand and use your written material. When headings (and subheadings) are working well, readers can see at a glance what topics are covered and how the material is structured. Effective headings help readers navigate through the material, finding information of personal interest. They are "advance organizers" that help prepare readers for the topics that come next, making it easier for them to understand and absorb new information.

Guidelines discussed in previous chapters cover several factors that have great impact on the effectiveness of your headings and subheadings. These include:

- **The importance of using plenty of headings and making them as informative as you can.** When headings are specific and numerous, readers can skim through quickly and pick up the main points. For more on this, see the discussion and examples for Guideline 2.3 in Toolkit Part 4, Chapter 2, *Guidelines for organizing the content (sequencing, grouping, and labeling)*.

- **The importance of choosing an effective font for headings.** In Toolkit Part 5, Chapter 3, *Guidelines for fonts (typeface), size of print, and contrast*, Guidelines 6.1, 6.2, and 6.3 cover recommendations for font choice. These guidelines advise using a combination of easy-to-read fonts with good contrast: a serif font for the regular text and a **sans serif font for the headings**. These guidelines recommend using a "font family" that offers variations in style, weight, and width that can be used to create good contrast.

- **The role of headings in guiding readers through the material.** In Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*, the discussion of page gravity shows how headings help readers find their way easily through the material.

Tips for making headings clear and prominent

Building on the guidelines and advice covered in previous chapters, here are ways to make your headings easy for people to notice, read, and use:

- **Choose an effective font and use its variations to good advantage in your headings.** For detailed advice and examples, see Guidelines 6.1, 6.2, and 6.3 in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typeface), size of print, and contrast.*

- **Left-justify all headings and subheadings.** Left justification makes the headings more prominent. Centering makes headings less prominent, and readers sometimes miss a centered heading (see Guideline 6.10 in Toolkit Part 5, Chapter 3, *Guidelines for fonts, size of print, and contrast*). Moreover, left-justifying all of your headings creates strong, clear alignment on the page, giving a tidy sense of order to your material (see the discussion of page grids under Guideline 5.4 in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*).

- **Use differences in size and font contrast to build a strong hierarchy of headings and subheadings.** A clear hierarchy makes the structure of the material more apparent and helps readers navigate. Experiment a bit to find an effective combination of size and font contrast for your headings and subheadings:

- **Headings and subheadings should differ enough in size to create a hierarchy**. It should be clear at a glance which is a main heading and which is a subheading. Often, a difference of two point sizes in type size will work.

- **Headings and subheadings both need to be large enough to be easy to read, but not *too* large.** When headings are too large, they are less effective. Making them too big actually makes them harder rather than easier to read, because your eye can't take in as much of the heading at one time.

- **Headings, subheadings, and regular text should be in good proportion.** Make the sizes different enough to be obvious, but still in good proportion. Don't rely on size difference alone to create contrast. Instead, use size together with font contrast, and use enough white space around headings to help them stand out.

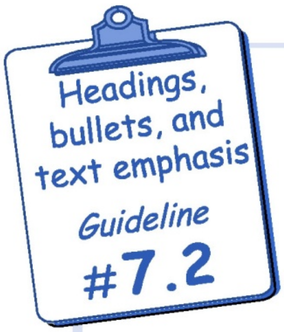
- **Just because a font is used in a heading does not mean it must be in boldface type**. You may not need to use boldface to create good contrast between your headings and regular text. If you do use a boldface version of the font in a heading, make sure that it's easy to read. Boldface type can differ a lot in ease of reading, especially when it is used for relatively small text, such as subheadings. Some font families include a range of boldface; the lighter versions may be easier to read than the darker ones, and still offer good contrast with the regular text.

- **If your material includes a header or footer, make sure that the formatting of the header or footer is subdued**, so that it doesn't "fight for attention" with the headings and subheadings and undermine the hierarchy you are trying to create.

▪ **For best contrast, use black or very dark colored ink for the text in headings**. Ease of reading should be paramount for headings, and using any color other than black reduces ease of reading. If you use colors other than black for text in headings, choose your colors carefully; many colors are unsuitable (such as yellow and orange). Usually, it works best to use colored text sparingly, for emphasis, and to use color in darker shades.

▪ **Format the line space for headings to connect them with the text that follows.** To create a stronger visual link between the heading and the text it introduces, leave a little *less* line space immediately *under* the heading, and a little more space immediately *above* the heading. Maintain enough white space to make the headings stand out, but not so much that you weaken the connection between the heading and text that follows. For details on adjusting line space, see Guideline 6.9 in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typeface), size of print, and contrast.*

Use contrast and other devices to make headings and main points stand out on each page



Use contrast and other devices to make the main points stand out on each page.

Remember that your readers are skimming and looking for information of personal interest. Help them by using devices such as bulleted and numbered lists, captions for illustrations, emphasis on key words and phrases, and summaries of main points. Use design elements or images to accent important information, such as putting a picture of a phone next to the helpline number.

People make quick judgments about what is worth reading. Before they commit to actual reading the sentences and paragraphs, most people want to look the material over to decide if it's worth their time. First impressions are crucial, especially for less-skilled readers. People with low literacy skills find it difficult to interpret and apply new information and they tend to tire quickly. If they can't pick out the topics and main points with ease, many will not make the effort.

If you give people a "wall of words," with no easy way to pick out the main points, it won't matter that the words are simple, the tone is friendly, and the flow of information is smooth.

First impressions are crucial: if it ***looks*** like it's going to be hard to read, it ***is*** hard to read.

So make it as easy as you can for readers to skim through the material and pick up the main points. This will help attract and hold their attention, and make the material easier for them to understand and use it.

What makes materials easy to skim?

It takes a combination of good writing and good graphic design to make material easy to skim. In this Toolkit, many of the guidelines for writing and design are oriented toward making the material easy to skim and helping readers focus on and absorb the main points. To give just a few examples:

- A clean, tidy layout with ample white space makes material more appealing and easier to skim.
- Placing the text and design elements in ways that fit with reader’s usual habits guides them smoothly through the page without diverting or distracting them.
- Using fonts that are easy to read and paying attention to contrast with the paper makes material more appealing and physically easier on the eyes.
- A strong hierarchy of prominent and informative headings helps orient your readers and guide them through the material.
- Devices such bulleted and numbered lists break the text into smaller chunks, making it easier for people to skim and absorb new information.
- Captions for illustrations, emphasis on key words and phrases, and summaries of main points help people identify and remember the main points.
- Visual elements as a design accent can draw attention to the most important points.

Other guidelines and examples in this Toolkit cover many of these features in detail.

Improving the impact of a design accent

You can use graphic design accents to help your readers skim and to put special emphasis on your main points. When you use design accents, think about the subject matter of your material and about what you want to encourage your readers to do. You might come up with something new that improves the tone and impact of your words. Figure 5-4-b below gives an example.

Figure 5-4-b. Improving the impact of visual accents.

The two versions below both say the same thing, and both would draw attention because they stand out from the regular text. Which one do you find more effective?

Call today for a mammogram appointment

This plain formatting lacks visual interest. The text sounds like a command.

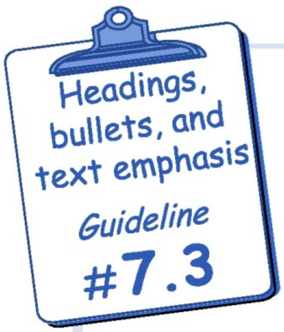
The notepad is much more interesting than a plain box.

The handwriting font (Mayfield) is readable enough to use and adds a personal touch.

Putting the words on this notepad image subtly fosters the impression that a woman has made a commitment to get a mammogram.

Source: Created as an example for this Toolkit.

Format bulleted lists for ease of reading



For ease of reading, use care in formatting bulleted lists.

To set off a list of bulleted points and connect it more closely with the sentence that introduces it, indent the entire list slightly. To make the bulleted points stand out clearly, add extra line space between them and use hanging indents. To set off each point without distracting readers, use bullets that are simple solid shapes. Bullets should be large enough to notice but not so large that they are distracting. Place bullets close to the text that follows them.

Bulleted lists are an excellent device for helping readers understand and use your written material (see Guideline 2.1 in Toolkit Part 4, Chapter 2, *Guidelines for organizing the content (sequencing, grouping, and labeling)*).

How you format a list of bulleted points can have great impact on ease of reading. Figure 5-4-c below gives guidelines for effective formatting:

- It begins with a series of examples that shows how ineffective formatting can make bulleted lists hard to read.

- Then, at the end, it gives specific tips on how to format your bulleted lists for best impact.

Figure 5-4-c. Suggestions for formatting lists of bulleted points.

Examples of common problems

The examples below are formatted in ways that make the lists of bulleted points harder to read

example A

Things you can do in your home to help you hear better:
· Move chairs closer together.
· Use bright lights so you can see people's faces.
· Use carpets, drapes, and chairs covered with cloth. They cut down on background noise.

Problems with this formatting:

- The bulleted points are so close together that it's hard to tell where one bulleted point ends and the next one begins.
- With no hanging indent, the second line of a bulleted point goes back to the left margin, where it competes for attention with the bullets.
- The bullets are too small, and they are placed too low and too far away from the text that follows them.

example B

Things you can do in your home to help you hear better:

- Move chairs closer together.
- Use bright lights so you can see people's faces.
- Use carpets, drapes, and chairs covered with cloth. They cut down on background noise.

Problems with this formatting:

- There's too much space between the lead-in sentence and the block of bulleted points, which weakens the connection between them.
- It's hard to tell one bulleted point from the next because there's no extra space between them.
- Bullets are too close to the text that follows, making it hard to read.

example C

Things you can do in your home to help you hear better:

- Move chairs closer together.
- Use bright lights so you can see people's faces.
- Use carpets, drapes, and chairs covered with cloth. They cut down on background noise.

Problems with this formatting:

- Bullets are too large. They overpower the text. They also make the list harder to skim because their large size encroaches on the extra space between the bulleted points.
- The fancy shape of the bullets makes them too prominent and distracts attention from the text.

example D

Things you can do in your home to help you hear better:

✓ Move chairs closer together.

✓ Use bright lights so you can see people's faces.

✓ Use carpets, drapes, and chairs covered with cloth. They cut down on background noise.

Problems with this formatting:

- Instead of being indented, the bullets are out in the left margin. This placement weakens the connection to the lead-in sentence and to the text that follows each bullet.
- The bulleted points are too far apart. It's hard to perceive them as a block of related text when they are spread so far apart.
- The expansive shape of the check mark bullet makes it harder to make a direct visual connection between the check mark bullet and the text that follows it.

The formatting shown below helps make the bulleted points easy to read

Things you can do in your home to help you hear better:

- Move chairs closer together.
- Use bright lights so you can see people’s faces.
- Use carpets, drapes, and chairs covered with cloth. They cut down on background noise.

Much better. This formatting links the bulleted points to the lead-in sentence and makes them easy to skim.

See below for details on the formatting used in this example.

Indent the entire block of bulleted points slightly.

Formatting and placement of the bullets:

- Use simple, solid shapes for the bullets.
- Use the same style of bullets throughout the material.
- Make bullet size proportional to the text.
- Keep bullets fairly close to the text that follows.

Things you can do in your home to help you hear better:

- Move chairs closer together.
- Use bright lights so you can see people’s faces.
- Use carpets, drapes, and chairs covered with cloth. They cut down on background noise.
- Learn about tools that can help you use the phone.
- Find out about lights that flash on and off when the oven is ready or the washing machine is done.

Watch where lines break (don’t leave one word alone on the second line).

Add extra line space between the bulleted points.

Use a **hanging indent** on each bulleted point.

Summary: the bulleted list

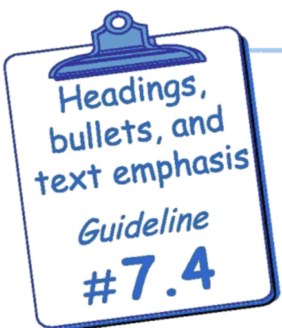
- **Indent the entire block of bulleted points slightly.** This connects the bulleted points more closely to the lead-in sentence, helping readers understand how the material is organized and making it easier to skim.
- **Add extra line space between the bulleted points** to make each one stand out clearly.
- **Use a hanging indent on each bulleted point** to make the list of bulleted points easy to skim.
- **Watch where lines break.** Leave at least two words on the last line of a bulleted point. If there's only one word, it looks awkward and is hard to read.

Summary: the bullets

- **Use simple, solid shapes for the bullets to make them stand out clearly.** Squares and circles work well. The bullets should be solid because outline shapes do not stand out clearly. The shapes need to be simple, such as circles or squares, because using busy shapes or special symbols will distract your readers from the text. Using color can help emphasize the bullets.
- **Use the same style for bullets throughout the material.** Using the same style lends unity and avoids confusing your readers.
- **Make bullet size proportional to the text.** Bullets should be large enough to stand out, but not so large that they overwhelm the text.
- **Keep bullets fairly close to the text that follows.** Bullets should be close enough to establish a good connection with the text that follows, but not so close that the bullet and the text blend together.

Source: All formatting in this Figure was done for purposes of this Toolkit. The text used to show variations in formatting bulleted lists is from page 146 of *What to Do for Senior Health.* This book by Barnett, Rushton, & Mumaw (2004) is one of the "What To Do For Health" series of books by the Institute for Healthcare Advancement (IHA) in La Habra, California. Books in this series are available in multiple languages. CMS thanks the Institute for Healthcare Advancement for permission to use this text in this Figure. In the original source, this text appears in a section about hearing loss in Chapter 6, *Normal Changes with Aging*. The formatting of bullets in the source is similar to the model formatting shown at the end of this Figure.

Use effective ways to emphasize important blocks of text



Choose effective ways to emphasize important blocks of text.

Outline boxes are often used to emphasize text, but they clutter your layout and readers sometimes ignore text that's enclosed by a box. Shaded backgrounds tend to attract the eye, but they also reduce the contrast, making text less legible and therefore less likely to be read. Instead of using outline boxes or shaded backgrounds, try other methods that tend to work better for emphasizing blocks of text (Figure 5-4-d gives suggestions).

Reasons to avoid putting text inside a box or on a shaded background

When a paragraph or two of text is especially important, some written material puts a box around it to help draw the reader's attention. Another popular method for emphasizing a block of text is to print it on a shaded background. For both of these devices, the goal is to get readers to notice the text that's in the outline box or on the shaded background, realize that it's important because of this special formatting, and pay special attention to what it says.

However, studies (Wheildon, 2005; Goodman, 2002; Schriver, 1997) and results from field testing of materials with readers by the author and numerous colleagues show that neither of these approaches for text emphasis is particularly effective. In fact, readers sometimes pay *less* attention, rather than *more* attention, to text encased by a box or printed on a shaded background:

- **Shaded backgrounds are an effective device for *drawing* attention but not for *holding* it: people may give up on reading because text on a shaded background is harder to read**. Shaded backgrounds reduce the contrast between the text and the paper, making the text harder to read. In the preceding chapter, Figure 5-3-c has a series of examples with text of different font styles and color printed on shaded backgrounds that range from very light to dark (see Toolkit Part 5, Chapter 3).

    - The examples in this figure show how printing text on a shaded background makes the text harder to read. Specifically, they show that the darker the background, the harder it is to read the text.

    - The font also makes a difference. On a shaded background, the serif font is harder to read than the sans serif font, non-bolded text is harder to read than boldface, and text printed in colored ink is harder to read than text printed in black ink.

- **Putting text inside a box adds distracting clutter and may create a visual barrier that deters readers.** Having a clean and uncluttered layout helps readers skim and find what they are looking for. Regardless of their size or position on the page, putting boxes around text undermines this clean look.

- **Using a box or shaded background to emphasize text can encourage certain types of formatting that further reduce the ease of reading**. For example:

    - **Using a small box around important text can reduce the line length** so that it becomes too small for easy reading (see Guideline 6.11 in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typeface), size of print, and contrast*).

    - **Using boldface for text on a shaded background improves contrast but makes it harder to read.** Though the added contrast makes the type stand out better against the shaded background, it is very hard on the eyes to read a block of text in boldface type (see the examples for Guideline 6.6 in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typeface), size of print, and contrast*).

What can you do instead to emphasize a block of text?

Given the many drawbacks to using a box or shading to emphasize important text, it makes sense to consider other options. Figure 5-4-d below suggests some other ways to emphasize important blocks of text, using contrast and other devices to draw the reader's attention.

Figure 5-4-d. Replacing the shaded background and boxed-in text: ideas for better ways of emphasizing important blocks of text.

Showing the problem

Outline boxes add clutter to a layout and can be a visual barrier. Shaded backgrounds reduce contrast and make text hard to read. Both of these ways of emphasizing text can actually make people *less likely* to read it.

The four examples below show how outline boxes and shaded backgrounds are commonly used:

A-1

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke. **Call 9-1-1 for medical help right away.**

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

A-2

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke. **Call 9-1-1 for medical help right away.**

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

A-3

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke. **Call 9-1-1 for medical help right away.**

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

A-4

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke. **Call 9-1-1 for medical help right away.**

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

Ideas for better formatting

The examples below show ideas for better ways of emphasizing a block of text. They maintain good contrast, add visual interest, and avoid the clutter of an outline box.

Below we show a series of options to consider when you want to emphasize a block of text. These options have the following in common:

- **They are easy to read**, because the text is always in black on a white background.
- **They are easy to create** (they can all be done using a word processing program).

Other ways of formatting #1

Try using simple lines for emphasis

B-1

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke.
Call 9-1-1 for medical help right away.

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

B-2

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke.
Call 9-1-1 for medical help right away.

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

Figure 5-4-d, continued.

Other ways of formatting # 2

Try adding images and other visual devices to draw attention

C-1

The version below changes the wording slightly by adding a new phrase: "A stroke is an emergency!" The font style for this phrase reinforces a sense of urgency, and the clip art ambulance is positioned to point at this new text. You could choose an urgent phrase that fits your topic, or just say "important!"

Warning signs of a possible stroke

A stroke is an emergency!

If someone has even just *one* of the signs listed below, don't wait. It could be a stroke.
Call 9-1-1 for medical help right away.

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

C-2

In the version below, the thought bubble draws attention. Putting a soft colored background behind the thought bubble makes it stand out.

Could it be a stroke?

If someone has even just *one* of the warning signs listed below, don't wait. It could be a stroke.
Call 9-1-1 for medical help right away.

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

Figure 5-4-d, continued.

C-3

In the version below, the layout is a little different and the heading has been enlarged. The blue accent was made by putting two white lines on top of a blue “AutoShape” available in Microsoft Word and Microsoft PowerPoint. The slanted lines are positioned to guide readers toward the text.

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don’t wait. It could be a stroke. **Call 9-1-1 for medical help right away.**

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

C-4

The version below changes to a more horizontal layout and adds a silhouetted stick figure to draw attention to the warning signs.

Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don’t wait. It could be a stroke. **Call 9-1-1 for medical help right away.**

- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

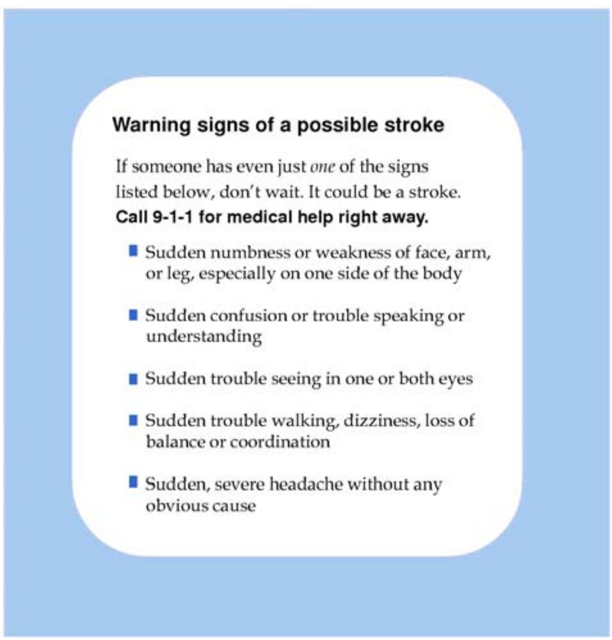
Figure 5-4-d, continued.

Other ways of formatting # 3

Try adding a frame

D-1

This approach does encase the text. But compared to the heavy outline box in A-2 above, using this frame to encase the text would add some style without cluttering the layout. The broad band of color and the contrast of pointed corners on the outside and rounded ones on the inside help accent the text inside the frame.


Warning signs of a possible stroke

If someone has even just *one* of the signs listed below, don’t wait. It could be a stroke.
Call 9-1-1 for medical help right away.

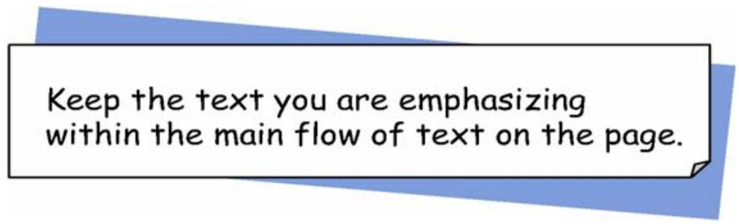
- Sudden numbness or weakness of face, arm, or leg, especially on one side of the body
- Sudden confusion or trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache without any obvious cause

Would this frame be a visual barrier to readers, the way that outline boxes sometimes are? To find out, you could test it with readers.

Source: Created for use as examples in this Toolkit.

Using these devices to emphasize important blocks of text

Whatever method you use to emphasize a block of text, where you place the text is important. In materials for less-skilled readers, it's important to have a clear and obvious path through the material, with nothing to divert or distract them.



In general, it works best to keep the text you are emphasizing within the main flow of text on the page**.** **If you set it apart, you may cause some readers to overlook it, and you will interrupt their natural progression through the page**. For more on this, see the discussion and diagrams of reading gravity in Figure 5-2-c (Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout)*. Another figure in Toolkit Part 5, Chapter 2 shows how putting small blocks of text in a narrow column on the outer edge of the page makes reading burdensome for less-skilled readers (Figure 5-2-e).

End notes

References cited in this chapter

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the "Toolkit Guidelines for Graphic Design"

Chapter 5

Guidelines for use of color

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 5

Guidelines for use of color

List of figures in this chapter:

This document is the fifth of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the *Toolkit for Making Written Material Clear and Effective* includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the fifth of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for use of color. As with all of the Toolkit chapters on design, this chapter assumes that you have not had formal training in design. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); fonts (typefaces), size of print, and contrast (Chapter 3); headings, bulleted lists, and emphasizing blocks of text (Chapter 4); use of photographs, illustrations, and clip art (Chapter 6); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

Using color in printed materials

Color is a powerful magnet for the eyes. Used carefully, it adds visual appeal and can draw your reader’s attention and reinforce your main points. If you are able to add color, then do it. But don’t feel that you must:

- **Color is helpful but not essential for effective materials**. It’s great if you can add some color to your materials, but don’t be too concerned if you can’t. Well-designed materials can look good in black, white, and shades of gray. Moreover, adding color will not compensate for any weaknesses in design, and it may just make them worse.

- **For some materials, black and white may be the best choice**. For example, if materials will usually be reproduced by photocopying, they should be designed from the beginning to look good in black and white. Also, materials designed to be downloaded and printed should be designed to work well whether they are printed in black and white or in color (for more on this, see Toolkit Part 8, *Will your written material be on a website?*).

Two ways to add color

If your written materials are printed on a printing press, here are the two ways of adding color:

Spot color

A limited number of specified colors

- Uses ink that is premixed to match a specific color you choose from a sample book (such as Pantone or PMS colors)
- Typically is used for two-color or three-color jobs. Black is counted as one color.
- You can use your spot colors at their full strength (“100%”) or in a full range of tints.
- Tints are lighter shades of the same color, given as a percentage of the full strength color, such as 20% or 65%.

Process color

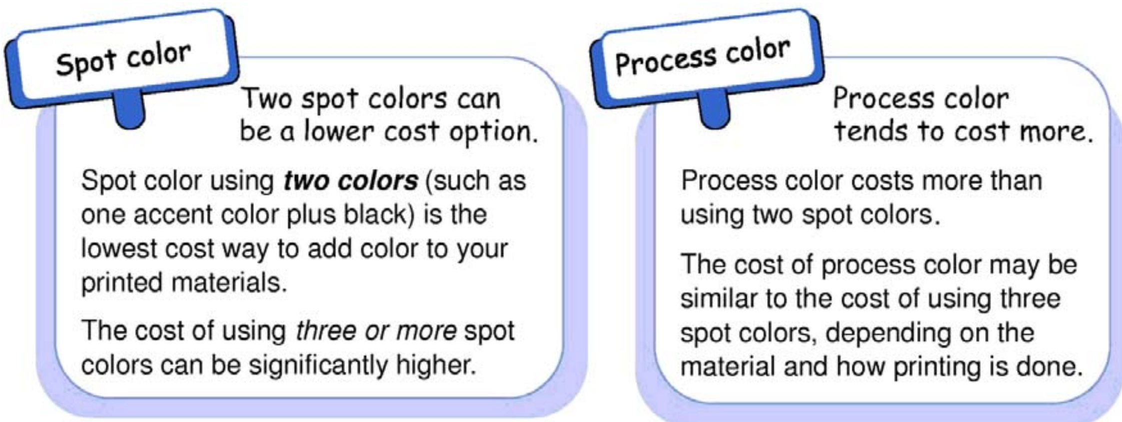
The full range of colors

- Uses four inks (CMYK) to produce any and all colors.
- “**CMYK**” is the abbreviation for the four inks: **C**yan (blue), **M**agenta (purplish-red), **Y**ellow, and Blac**k**. Colors are defined as percentages of CMYK. For example, 100% Magenta plus 100% Yellow makes a strong red.
- Many word processing and desktop publishing programs let you define “custom” colors this same way, as percentages of CMYK (or just CMY).

How much does it cost to add color?

If you are concerned about how much it may cost to use color in your written materials, investigate your options. It may not cost as much as you think to add some color to your materials, depending on how you do it. Here are some factors that affect the cost of using color:

- **The type of color you choose**:



- **The printer and printing press that you use**. There can be big variations in price from one printer to another. If possible, get several bids from printers with good reputations for doing quality work. It can cost less to run the same job on different printing presses, so getting a good match between the press that will be used and the needs of your printing job will help keep your costs under control. For more about this, see *Getting it Printed: How to Work with Printers & Graphic Imaging Services to Assure Quality, Stay on Schedule & Control Costs* (Kenly & Beach, 2004).

- **The nature of your materials, including how you will use color**. Check with your graphic designer to see if there will be a difference in the expense of designing if you add color to your materials.

What about use of color in this Toolkit?

This Toolkit has been designed to allow for two methods of possible distribution. The initial distribution will be by website; the various Parts of the Toolkit will be posted in PDF format so that you download and print them. Later on, printed versions may be made available. For overall economy and flexibility in distribution method, we have produced a single version of the Toolkit. To ensure economical printing, the Toolkit uses only two spot colors. We use black for nearly all of the text, because it offers the best contrast with the paper and makes the text easier to read. We also use an accent color. Typically, this accent color is either green or blue. In this chapter on color, our restriction to only one accent color limits the range of examples we can give about using color.

List of guidelines covered in this chapter

This chapter discusses the guidelines for use of color that are shown below in Figure 5-5-a. (For the full list of guidelines for design, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.)

Figure 5-5-a. Toolkit guidelines for use of color.

Choose colors that are appealing to the intended readers and free from unwanted connotations or problematic cultural significance. Depending on your audience, there can be much variation in the appeal and cultural connotations of various colors and color combinations. To avoid possible problems, get audience reactions to your color choices.

Use color sparingly, in a consistent and deliberate way that reinforces the meaning of your messages and enhances their impact. Resist the impulse to use color in decorative ways that may distract people from the text. For greatest impact, use color with restraint. Using too much color creates "color overload" that can overwhelm and distract your readers. Be cautious about using color coding as a device. If you use color coding, do it in a consistent way and make the meaning clear to readers. Get feedback from readers to verify that they understand the color coding and find it helpful.

Verify that the color scheme and shades of color work well from a design standpoint (including when the material is photocopied or printed in black and white). While color selection is partly a matter of taste, certain colors are less effective than others for text, shaded areas, and other design purposes. Check to be sure that the colors reproduce well when photocopied. If material with color is downloadable from a website, it may work best to produce a separate version for users who will print it in black and white. If you are using two colors in your material, it works best to make one of them black and use it for the text.

Take into account that some readers are likely to have diminished or limited color perception. Check to be sure that your color scheme works well for people who do not perceive the full range of colors, and for older adults who may perceive color less vividly. Be cautious about using color coding in your materials.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Choose colors that are appealing and culturally appropriate

Choose colors that are appealing to the intended readers and free from unwanted connotations or problematic cultural significance.

Depending on your audience, there can be much variation in the appeal and cultural connotations of various colors and color combinations. To avoid possible problems, get audience reactions to your color choices.

If you are using color in your materials, don't settle on a color scheme until you have checked on how your intended readers react to the colors. You'll want to be sure that they find the color scheme appealing, and that there are no problematic cultural meanings attached to the colors.

Choose colors that appeal to your readers

Remember that you are choosing colors for *your readers*, not for yourself. Your own personal preferences can be a poor guide. For example, if you favor subdued earth tones, you may find it hard to appreciate a bright and edgy color scheme that appeals to teenage readers. To be sure you are responding to your readers' taste rather than imposing your own, it's wise to get input on colors from your intended readers at an early stage.

Choose colors that are free of problematic cultural meanings

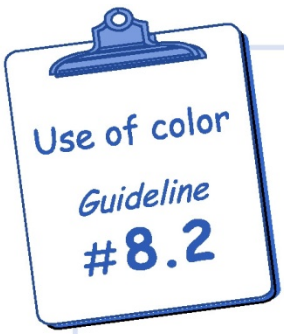
Along with personal taste, culture has great impact on how people react to particular colors. When you are developing a color scheme, take care that you don’t choose colors with problematic cultural meaning for your intended readers. To give just a few examples:

- In a discussion of color choices for materials written for Asians, a report about outreach to multicultural communities cautions against using colors associated with sickness or death or with particular nationalistic emblems. The report suggests using colors associated with pleasurable occasions instead (Washington State Health Care Authority, 1996:26).

- In some cultures, white may be associated with purity or it may be associated with death as well. For example, in many Central American cultures, white is the color of mourning. If you are developing materials for Central Americans, it is very important that health care providers not be portrayed in white lab coats. One hospital in Central America initially had most of their doctors wear white lab coats. Most of the local population refused to visit because they assumed that the doctors were wearing white because the hospital was a place to go to die, and/or that the doctors hastened death (personal communication, Donald Himes, 1999).

To learn about the cross-cultural connotations of colors, talk with your intended readers. Ask for their suggestions for good colors to use, and show them the colors you are considering. Reject any colors that seem likely to draw a negative or other unwanted reaction from members of your intended audience.

Use color sparingly in a consistent and deliberate way



Use color sparingly, in a consistent and deliberate way that reinforces the meaning of your messages and enhances their impact.

Resist the impulse to use color in decorative ways that may distract people from the text. For greatest impact, use color with restraint, since using too much color creates "color overload" that can overwhelm and distract your readers. Be cautious about using color coding as a device. If you use color coding, do it in a consistent way and make the meaning clear to readers. Get feedback from readers to verify that they understand the color coding and find it helpful.

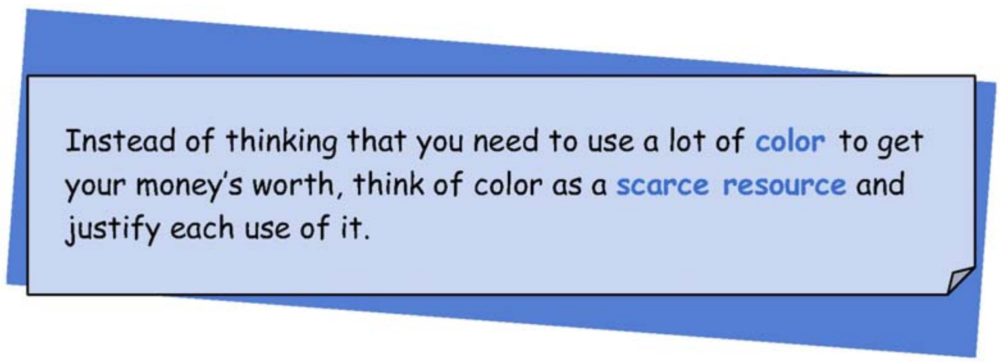
Use color with restraint

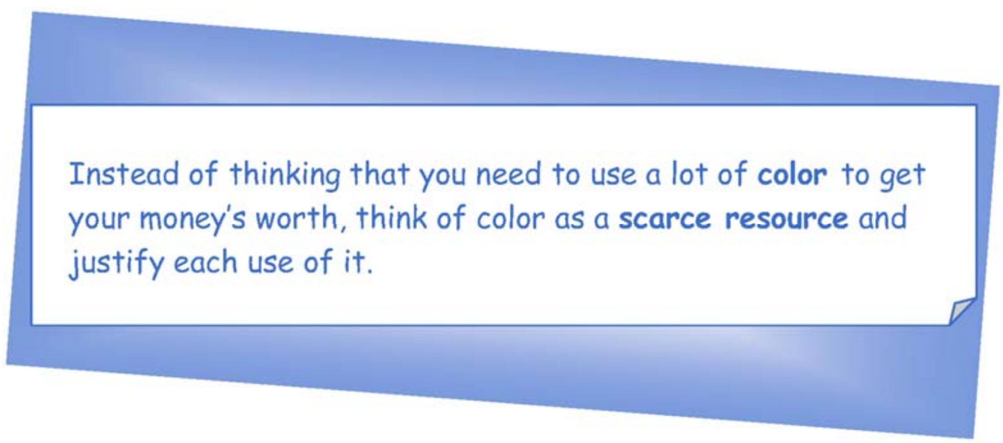
Just because you are using color in your print materials doesn't mean that you should use a *large amount* of color:

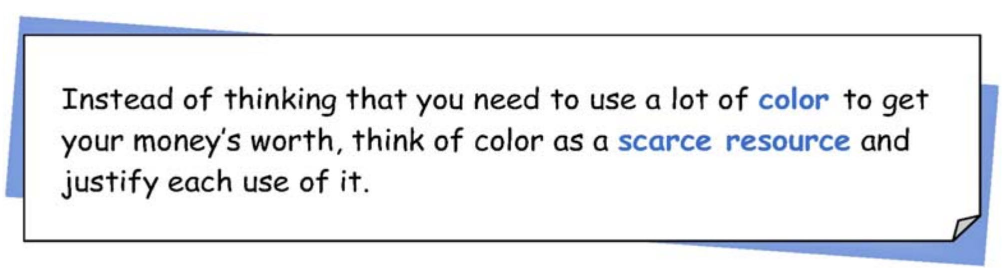
- **The more sparing you are in use of color, the more impact it will have.** Using color in one part of a page reduces the contrast available for using color elsewhere on the page. So the more you use color on a page, the less you notice each instance of color.

- **If you use too much color in your material, you create "color overload" that overwhelms your reader** and essentially destroys the impact of having color.

Compare the examples shown below. Which makes the most effective use of color?







The particular colors you use affect the threshold for color overload. For example, cool colors such as greens and blues tend to recede, compared to warm colors such as reds, oranges, and yellows. This means that you must be especially cautious about overuse of the warm colors, since it takes less of a warm color to catch the eye.

Use color to emphasize what is important

To help readers understand your written material, use color in a thoughtful, deliberate way that reinforces the meaning of the information. To make effective use of color**, think of it as a magnet for the reader's eyes:**

- **Use color to pull your readers toward the most important parts of the material**. Add color to your document in a purposeful way, putting it where you want your readers to look. If you use color just to decorate, you will pull your readers toward less important parts of the material.

- **Use color in a concentrated way**. If you scatter color throughout a page, you will pull your readers in multiple directions. They will get distracted or overwhelmed. Instead, concentrate the use of color where you want to draw their attention.

- **Avoid using colored paper for your materials or colored backgrounds**. If the entire background is already in color, this weakens your ability to use concentrated doses of color in a deliberate way to draw the reader's eye. Moreover, colored backgrounds are a significant barrier to ease of reading. For more about this see Toolkit Part 5, Chapters 3, *Guidelines for fonts (typefaces), size of print, and contrast* (especially Figures 5-3-b and 5-3-c) and Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text* (especially Figure 5-4-d).

- **Be very cautious about using color for text**. For ease of reading, Guideline 6.7 advises using black (or very dark colored ink) for the regular text in your material (for discussion of this guideline, see Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast).* Using any color of ink other than black reduces contrast and makes text harder to read. If you want to use color to accent text in headings, choose the color with care. For more on this, see the next guideline in this chapter.

Tips for assessing the impact of color

When you are working with your layout, here are some tips for dealing with color:

- **Look through examples to get insights into use of color**. If you have collected a resource file with examples of written materials, it can be helpful to go through these examples to get ideas and help train your eye to notice how color is being used. People who are developing written materials sometimes disagree on how much color is too much color, and how to use color to emphasize what's important. You could go through the examples in your resource file as a group and discuss your reactions to how color is being used.

- **To get a fresh perspective on use of color in your materials, try working first in black and white.** Make some photocopies of your material in black and white. Removing the color lets you focus first on the design, and then on use of color:
    - **Check first to see if the design is working well**. You can use this Toolkit's guidelines on design as an assessment tool (see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*). If a layout is good, it should look good in black and white. If it is not looking good, make improvements before you go on to consider use of color. Adding color doesn't fix a layout that isn't working well, and can even make it worse.
    - **Using black and white copies as a tool, try out ways of adding color**. Study the material in black and white, and identify the areas that are most important for readers. Then think about possible ways to use color to accent those parts. Use colored markers to try out your ideas.
- **When you test the materials, watch for readers' reactions to the use of color**. Is it distracting them, or is it helping them use the material?

Be cautious about using color coding as a device

Sometimes, people who develop written material use color coding as a device to help readers see how the material is organized or help them find their way through it. For example, they might use one color to signal the first topic and a different color to signal the next topic.

It is challenging to use color coding in effective ways:

- **When you color code your material, you add an extra cognitive task for readers**. If color coding is to work well, readers must notice it, understand why it's there and what it means, and keep this in mind as they read the document. Sometimes this is easy for readers, and they find the color coding helpful. But the need to notice, learn, and remember a color-coding scheme can be burdensome, especially for less-skilled readers.
- **Some readers have trouble differentiating particular colors**. Depending on the colors you use, color coding can be problematic for some people because they have trouble seeing the differences between particular colors. Some people are unable to perceive the full range of colors from birth, and all of us tend to experience a decline in ability to perceive colors in later life. For more about taking into account your readers' ability to perceive colors, see the discussion of Guideline 8.4 later in this chapter.

If you want to use color coding, do it with care. Here are some tips:

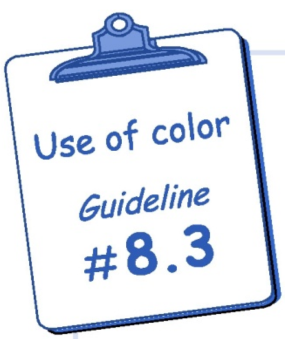
- **Choose colors that will be easy for people to distinguish, and use them consistently.** If you are color coding, a given color should always mean the same thing.

- **Try to reserve the colors *only* for color-coding purposes**. If you use a color in a coded way and also for other purposes, you will weaken the impact of the color coding and may confuse your readers.

- **Make the color coding clear to readers**. Take extra care to make the meaning and purpose of the color coding explicit.

- **Get feedback from readers to verify that the color coding is working as you intend.** Check to see whether readers are noticing the color coding, understanding its meaning, and finding it helpful.

Choose colors that work well for design purposes



Verify that the color scheme and shades of color work well from a design standpoint (including when the material is photocopied or printed in black and white).

While color selection is partly a matter of taste, certain colors are less effective than others for text, shaded areas, and other design purposes. Check to be sure that the colors reproduce well when photocopied. If material with color is downloadable from a website, it may work best to produce a separate version for users who will print it in black and white. If you are using two spot colors in your material, it works best to make one of them black and use it for the text.

While reactions to color are partly a matter a personal taste, some colors work better than others for particular purposes in a document. This section discusses ways to help ensure that your use of color enhances readability rather than reducing it.

Black is by far the best choice for text

Use black for all or nearly all of the text in your materials. Black is the best color for text because it offers the highest contrast with the paper and is therefore easiest to read (see Guideline 6.7 in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast*). If your materials are for people with Medicare, keep in mind that the normal age-related decline in vision makes good contrast even more essential (see Toolkit Part 9, *Things to know if your written material is for older adults*). Using black for most or all of the text, including headings, is generally a good idea.

As we've seen, using two spot colors is the most cost-effective way to add color to your materials. **If you use two spot colors, make one of them black and use it for most or all of the text**.

Sometimes, materials that use two spot colors choose two colors that *don't* include black, as a way to expand the range of colors with least expense. For example, a piece might be printed in deep purple and forest green, or in navy blue and dark brown. Omitting black is not a good idea:

- **Color combinations such as purple and green or navy and brown expand the range of color, but lose a lot in ease of reading**. Printing *all* of your text, including blocks of regular text, in a color such as purple, green, navy blue, or dark brown makes it less legible. This colored text offers less contrast than black text, and is invariably harder for people to read.

- **Omitting black makes color overload more likely**. Color combinations such as purple and green or navy and brown are more likely to produce color overload than the combination of black and an accent color. When black is used, shades of gray are available. Gray helps reduce color overload because it is softer and more subtle than shades of many other colors. Gray is a neutral color that provides a place for eyes to rest in the presence of other colors.

If you use color for text, use special care to make it as readable as possible

Printing text in a color other than black makes it harder to read. For examples that compare text in blue with text in black, see Figures 5-3-b and 5-3-c in Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast.*

If you use color for text, here are tips to keep the material more readable:

- **Use colored text only as an accent for small amounts of text**. Printing text in a color other than black tends to reduce ease of reading and comprehension (Wheildon, 2005). If you want to use colored text, use it as an accent for words, short phrases, or headings. Don't print blocks of text in color.

- **Choose a color that offers good contrast**. For colored text, stick to deep, bright colors that offer enough contrast for ease of reading, such as rich shades of red or burgundy, green, blue, or purple. Do not use colors such as yellow, gold, orange, and light tan for text. Text in such light colors is extremely hard to read because it offers little contrast with the paper.

- **Choose a font that is heavy enough for good contrast**. In general, it's easier to read colored text that is printed in boldface rather than standard or lighter type. It may help to use a sans serif font rather than a serif font (Toolkit Part 5, Chapter 3 explains about serif and sans serif fonts).

- **If you use colored text, don't put it on a colored background.** It's hard enough to read most colored text when it's on a white or cream-colored background. If you print colored text on top of a colored background, you reduce the contrast even more.

Are there any all-around best colors to use?

The quick answer is no, there are no all-around "best" colors to use, because each color has tradeoffs depending on how it used. To help you judge how well a particular color might work for different purposes, there are reference books that show tints and text in color (ask your graphic designer).

To give just two examples of tradeoffs associated with particular colors:

- Deep yellow gold is great to use for design elements, but terrible to use for text. If you plan to put black text on a light shaded background, a very pale shade of yellow-gold is probably your best bet for ease of reading.

- Used in deep shades, red is a great accent color for design elements, but pale tints of red can be unappealing. Deep red can be okay for small amounts of text in headings, depending on the font.

If you are using full color, you can use any given color selectively for the applications where it works best. If you are using spot color, choosing a color is more complicated. If you are using black plus one other color (the most economical choice), what should you choose as your other color? Here are some things to consider:

- Is the color culturally acceptable and generally pleasing to members of your audience?
- If you plan to use the color to accent an occasional heading, does it offer enough depth and contrast to work well for this purpose?
- Does the accent color look good in the full range of shadings that you need? For example, some shades of violet look good at full strength but quite unpleasant in a pale tint.
- And finally, does the accent color have enough contrast for people who have limitations in color perception? (For more about this, see the next guideline in this chapter.)

It may be hard to find a single color with all of the characteristics you need. Perhaps some of the characteristics are less important to your materials than others. In general, shades of blue and green are the most versatile for use in combination with black. Some shades of purple are also flexible enough for a range of applications.

If you are using full color in your materials, emphasize a group of colors that look pleasing in combination

Instead of using the full range of colors, it often works better to pick a smaller group of colors that look good in combination (a color palette). Since a given color can be good for some design uses but not others, your color palette should include at least one color that will work well for each way in which you plan to use color in your material.

Using a limited group of colors as the dominant ones in your material will help give it unity, encouraging readers to focus on your messages rather than how the colors keep changing. If you are using clip art, you can often alter the colors to fit with your color palette (there is more about editing clip art in Toolkit Part 5, Chapter 6, *Guidelines for photographs, illustrations, and clip art)*.

Will the materials be photocopied or downloaded and printed?

If you are preparing material in color, it’s always wise to check on how well your color scheme holds up when the material is photocopied.

If you are distributing the material by posting it to a website, you will need to design the material with this distribution method in mind. For example, the size should be 8 ½ by 11 inches, to match the paper that people will be using to print the downloaded document. Also, for convenience to users, you may want to provide two versions of PDFs, one in color and one in black and white that is optimized for photocopying.

Take into account how your readers perceive colors

Use of color Guideline #8.4

Take into account that some readers are likely to have diminished or limited color perception.

Check to be sure that your color scheme works well for people who do not perceive the full range of colors, and for older adults who may perceive color less vividly. Be cautious about using color-coding in your materials.

Whatever color scheme you use, check to see if there is sufficient contrast among all of the text and visual elements of your design. Good contrast is especially important for readers who have limitations in their perception of color:

- **If your materials are for people with Medicare, take into account the normal age-related changes in perception of colors**. Aging affects people’s ability to perceive colors. As we grow older, colors of green, blue, and violet tend to look a little grayer and may be harder to see. In general, to make a color scheme work well for older readers, you may need to sharpen the contrast and pump up the colors a bit to make them brighter. A color scheme that looks a little harsh or garish to some people may not be perceived that way by older readers who have experienced a loss in color perception.

- **Think about how well the colors you are considering will work for readers who cannot perceive the full range of colors.** Some people are born with limited ability to perceive certain colors. This is much more common among males (about 1 in 12) than among females (about 1 in 200). The term “color blind” is often used to describe this limitation in color perception, but the term is misleading (and some find it culturally inappropriate). People born with this condition do not see the world in shades of gray. Almost all (99%) only have trouble distinguishing between reds and greens. See McIntyre (2002) and the website **http://webexhibits.org/causesofcolor/2.html** for good introductions to the topic. If you are developing material for the web, the website **http://www.vischeck.com** gives a computer simulation that shows how things look to people who cannot perceive the full range of colors.

End notes

References cited in this chapter

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2004 *Getting it printed: How to work with printers & graphic imaging services to assure quality, stay on schedule & control costs.* Fourth edition. Revised by Eric Kenly. Cincinnati, OH: How Design Books.

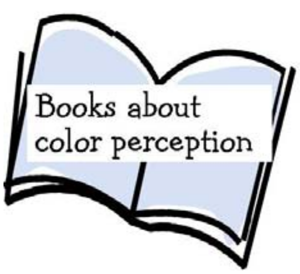
Washington State Health Care Authority
1996 *Washington State: Increasing health coverage in ethnic and racial minority communities. Summary Report — African American, Asian/Pacific Islander, Hispanic/Latino, Native American/Alaskan Native, and Russian-Speaking Communities*. Olympia, Washington: State of Washington Health Care Authority. December.

Wheildon, Colin
2005 *Type & layout: Are you communicating or just making pretty shapes*. With additional material by Geoffrey Heard. Hastings, Victoria, Australia: The Worsley Press. (Note: This is the second edition of this book. The first edition was published in 1996 and titled *Type & layout: How typography and design can get your message across—or get in the way*.)

Resources

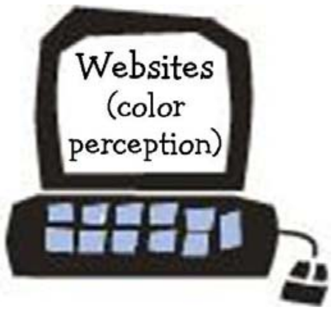
For good resources on using color in written material, see the books listed in Figure 5-1-a of Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals*.

Here are references on color perception:



McIntyre, Donald
2002 *Colour blindness: Causes and effects*. Dalton Publishing, 33 Eaton Road, CH4 7EW, UK: Dalton Publishing. http://www.daltonism.org.uk/. In the U.S., this book can be ordered from The Color Vision Store, http://www.colorblind.to/index.html.

Nassau, Kurt
2001 *The physics and chemistry of color: The fifteen causes of color*. Second edition. New York: John Wiley & Sons.



If you are developing material for the web, the website **http://www.vischeck.com** gives a computer simulation that shows how things look to people who cannot perceive the full range of colors. It was developed by scientists Robert Dougherty and Alex Wade at Stanford University.

For a detailed discussion of limited color perception, see the website **http://webexhibits.org/causesofcolor/2.html**. This website is part of a larger website that discusses color, how and why we perceive it. The material on this website is based on Nassau (2001), listed above under books.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476
September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the "Toolkit Guidelines for Graphic Design"

Chapter 6

Guidelines for use of photographs, illustrations, and clip art

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 6

Guidelines for use of photographs, illustrations, and clip art

List of figures in this chapter:

This document is the sixth of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the sixth of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for photographs, illustrations, and clip art. As with all of the Toolkit chapters on design, this chapter assumes that you have not had formal training in design. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); fonts (typefaces), size of print, and contrast (Chapter 3); headings, bulleted lists, and text emphasis (Chapter 4); use of color (Chapter 5); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

Images are powerful

Adding images such as photographs, line drawings, and other visual accents is a powerful way to enhance your written materials and help people understand the main messages. These visual elements help attract and hold the attention of your readers and help them recall the information (Houts, Doak, Doak, & Loscalzo, 2006). They can entice less-skilled readers by giving your materials a friendly look and making them appear at first glance to be easy to read. You can use images to help explain important concepts, reinforce your main points, add a touch of warmth and human interest, and show awareness and respect for the culture of your readers.

This chapter begins by discussing sources of photographs, illustrations, and clip art. Then it presents a set of guidelines to help you choose and use images in the most effective ways.

Where can you get images for your materials?

There are many sources for photographs and clip art

When you need an image for your materials, there are many possible sources that range in price, variety, suitability, and convenience. Here are options to consider:

1 Get images from commercial stock photography companies

Commercial stock photography companies have huge portfolios of photographs "in stock." Many also have electronic "clip art" illustrations as well. If you can find what you need, stock photographs are quite convenient. The cost can run high, especially if you need a large number of images.

- **Prices and terms differ depending on the company and characteristics of the photograph**. For example, royalty-free sources charge a one-time fee for *non-exclusive* use of the photograph (meaning that other people can "rent" this same photograph). Fees are typically in the range of $50 to $200 on up per photo. The cost varies by photograph and other factors, such as resolution. The price difference between a low and very high resolution version of the same photograph can be huge. For most written materials, you will need low to medium resolution, depending on the size of the finished image.

- **You can browse commercial stock photography sources on the Internet**. Try key word searches for sites that sell stock photographs and for the particular types of photographs or clip art you are seeking. For example, you could try a key word search for "stock photographs" and another key word phrase such as "nursing home" or "multicultural children" or "doctor and patient."

- **Your graphic designer may have collections of stock photographs** that the design firm has purchased for use by clients. Some have books that show tiny "thumbnail" images of the photos that are available (though books of thumbnails have largely been replaced by online catalogs).

- **It will likely take some searching to find commercial stock photographs that suit your needs**. The commercial stock photography sites cater mainly to advertising and business applications, offering images of people who look like models rather than everyday people. Typical poses include people smiling broadly and looking directly at the camera, people in business suits in upscale offices, and couples in love. In recent years, there has been some progress in expanding the racial and cultural diversity of the people in the photographs. There are also collections of particular types of photographs, such as "health care," that may reflect the subject matter you need. Nonetheless, when you are searching for commercial stock photographs and clip art, finding the right combination of diversity, pose, and setting will take patience and persistence.

2 Get images from organizations or government agencies

Depending on the type of photo or illustration you need, there may be some free or low-cost sources on the Internet or in your own community, or through your professional organizations.

- **Check on government websites and other websites**. For example, the National Eye Institute offers free downloads of photos at http://www.nei.nih.gov/photo (see Figure 5-6-c later in this chapter for examples of photos from this website). There are also collections of photographs on many health-related websites, such as the website for the Centers for Disease Control and Prevention (http://www.cdc.gov). You can find many other sources by doing searches on the Internet.

- **Check with community organizations, government agencies, educational institutions, professional associations, and national organizations.** Most of these groups don't maintain a collection of photos and illustrations for general use, but they may have photos or clip art they are willing to share if you ask. Perhaps other departments in your organization have photographs and illustrations you could use.

3 Seek donations of images and/or design services

Some organizations may be willing to donate photos or illustrations or provide pro bono design services. When organizations donate services or images, it's a courtesy to acknowledge their help (but get their approval first).

- **Check with local companies and community organizations**. If you are working on materials for a non-profit organization or a local cause, there may be design firms, advertising agencies, photographers, or other organizations willing to donate (or discount) their services, including the use of photos or clip art.

- **Check with art and design schools.** Many of these schools like to use real-life projects for training their students, and the instructor may provide close supervision. Sometimes advanced students need to complete internships; perhaps your project could use the help of an intern.

4 Get photos and clip art from software programs or collections

You can get photos and clip art through some computer software or in clip art collections that you buy.

- **Computer software**. Many desktop publishing or word processing programs come with a collection of clip art and photographs, and may offer online collections to registered owners of the software.

- **Collections you can buy**. You can also buy separate collections of clip art on CD ROM that include thousands of images, often in multiple formats. Look for these at an office supply store, bookstore, or online. Before you buy, look through the images carefully to be sure the collection offers images you find suitable for your written material.

5 Get images and designs from specialty fonts or books

You can add borders, ethnic patterns, graphic accents, pictures, and similar decorative elements by using specialty fonts or inexpensive books of copyright-free borders and patterns. These resources give you a fun and very affordable way to add visual appeal and cultural imagery to your materials:

- **Often, the books of copyright-free borders and patterns come with electronic images on a companion CD.** We used books of this type as a source for patterns in this Toolkit. You can use a repeating pattern of symbols or other images to create a background texture.

- **Besides using the inexpensive books as a source, you can find interesting and affordable design accents in specialty fonts.** Some are like "dingbat" fonts, with a collection of various shapes and design elements or pictures. Others are devoted to a particular type of image, such as borders or animals.

- **Where to find these resources**. If you are interested in the books of patterns and borders, look for them at libraries, bookstores, or online. For the fonts, check font websites (some are listed in Figure 5-1-a in Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals*).

6 Commission or create your own images

For some purposes, creating your own photographs or illustrations may be cheaper, easier, and more effective than using stock photographs or clip art.

- **Creating your own illustrations and photographs is an excellent way to help ensure they are culturally appropriate**. Creating your own images gives you maximum control over features that affect cultural appropriateness, including choice of models, settings, facial expressions, poses, clothing, and colors. If you are producing materials for readers who have come from other countries, it's helpful to use an artist or photographer who is part of their cultural community. The artist will bring valuable cultural knowledge to the task. If you are doing photographs, consider asking members of the community to be the models (Example Q later in this chapter uses this approach). Members of the community can help you figure out the most effective images to create.

- **Finding an illustrator**. If you need illustrations such as line drawings, ask local art schools to recommend artists who do this type of work. Ask other organizations in your community. Sketch artists at farmers' markets are another possibility; you can even watch them at work.

- **Choosing an artist or photographer**. Artistic style, skill, and fees can vary enormously among artists and photographers. Be sure to meet with candidate photographers and artists to review their portfolios and discuss the details of your project. Be clear about the final format you need. For example, you might be planning to scan the images that the artist creates, or you might want an electronic image of a particular type.

- **Working with an artist or photographer**. Explain exactly what you are trying to accomplish with the photograph or illustration. Provide as much guidance as you can, such as emphasizing the need to avoid details that could be distracting. It is often wise to start by asking for a single photo or drawing to be sure that instructions are clear and the completed work is satisfactory.

- **Get written permissions**. Generally, you will want to get full and exclusive rights to the work you commission, and be sure that models have signed releases. You will need some legal paperwork; consult an attorney to be sure that everyone's rights are protected.

About the images we use as examples in this Toolkit

In this chapter and the others on design, we use a number of photographs and pieces of clip art to make particular points about design. Our examples include excerpts from published materials, adaptations of published materials, and many examples created specifically for this Toolkit.

Many of the images in this Toolkit are copyright protected. Please remember that the examples of photographs and illustrations included in this chapter and elsewhere in this Toolkit are for illustration only. Whatever the source, if you are interested in using images that appear in already published material, contact the original source to get permission.

In this chapter, some of the photographs and examples of clip art were downloaded from Microsoft Clips Online, a resource that is included in Microsoft Office software. If you want to use these or other images from Microsoft Clips Online, you will need to be a registered owner of the Microsoft Office Software and download them yourself. For example, if you are using PowerPoint, select "insert" then "clip art". Look for a link to "Clip art on Office Online" that appears at the bottom of the menu for inserting clip art. Select this link to reach the website where you can search for and download photographs and clip art. Please note that the use of these images from Microsoft Office Online is governed by a legal agreement that appears before you begin downloading clips you have selected.

List of guidelines covered in this chapter

This chapter discusses the guidelines for use of photos and illustrations listed below in Figure 5-6-a. (For a list of all of the Toolkit Guidelines for Writing and Design, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.)

Figure 5-6-a. Toolkit guidelines for use of photos, illustrations, and other visuals.

Use photos, illustrations, symbols, and other visuals that relate directly to the information in the material and reinforce your key messages. Images have great impact, so select them carefully and use them to highlight key points. Instead of using images to decorate the pages, choose images that reflect the subject matter of your materials. Try to show only the behaviors you want to encourage. Avoid using images that are too abstract or hard for readers to understand, such as parts of the body shown in isolation, cross-sections, and highly magnified images.

Use images that are clear, uncluttered, and consistent in style. For greatest appeal and impact on your readers, keep the images clear and simple, with good contrast that emphasizes the main subject. Avoid using photographs or illustrations with cluttered backgrounds or distracting detail (or edit them to remove the clutter). For a unified look, choose images that are compatible in style and color.

Use photos, illustrations, symbols, and other visuals that are culturally appropriate for your intended readers. Choose images of people and activities that are contemporary and representative of the intended audience in their demographics, physical appearance, behavior, and cultural elements. Check to be sure that the images you use are free from unwanted connotations or problematic cultural significance.

When images include people, make sure that their poses, facial expressions, and body language are appropriate to the situation and appealing to the intended audience. Poses that show people engaged in doing something may be more effective than stock photographs of people smiling directly at the camera. If there is more than one person in the image, poses that show the people relating to each other tend to have more impact.

Be very cautious about using symbols or icons to represent concepts or to serve as markers to guide readers through the material. Symbols and icons can be ambiguous or confusing to your readers. Using symbols as shortcuts can hinder more than help by giving less-skilled readers something additional to notice, learn, and remember. If you use symbols or other visual means of marking or representing topics, check to be sure that your readers understand the meaning you intend and find the use of symbols helpful.

Avoid using cartoons, "cute" or humorous images, and caricatures, because these kinds of images may bewilder, confuse, or offend some of your readers. Since humor does not translate well across cultures, attempts at humor may puzzle or confuse some readers. Humor based on irony is especially problematic, because readers who take it literally will completely misinterpret what you mean. In addition, individuals differ in what they may find amusing. When you are choosing images, avoid those with strange camera angles, exaggerated features, or a "cute" look. Distorted or coy images distract readers by drawing too much attention, and people may find them unappealing or culturally offensive.

Pay careful attention to the total number, quality, size, placement, and labeling of the images you use. For best impact, limit the number of images you use. Use images of high quality that will reproduce well, and make each one large enough for good impact. Keep images close to the text they reinforce. Place images in positions that fit with the natural progression of reading so that they do not cause your readers to overlook parts of the text.

Check for accuracy, if applicable, and pretest the images with your intended readers. If your images include technical or medical subject matter, verify that the details are correct. Check on the appeal, cultural appropriateness, and comprehension of the images by getting feedback directly from members of the intended audience.

Source: Created for this Toolkit. For more about development of the guidelines, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Images should relate directly to the material and reinforce its meaning

Photos & illustrations
Guideline #9.1

Use photos, illustrations, symbols, and other visuals that relate directly to the information in the material and reinforce your key messages.

Images have great impact, so select them carefully and use them to highlight key points. Instead of using images to decorate the pages, choose images that reflect the subject matter of your material. Try to show only the behaviors you want to encourage. Avoid using images that are too abstract or hard for readers to understand, such as parts of the body shown in isolation, cross-sections, and highly magnified images.

Search for images that clearly convey your topic

People who have low literacy skills are easily distracted from the task of reading. They also have to work harder than skilled readers to learn and integrate new information (Doak, Doak, & Root, 1996).

To help less-skilled readers understand and use your written material, choose photographs and illustrations that relate directly to the topic and reinforce the meaning of your words. Here are some tips:

- **Avoid images that are purely decorative**. To help keep less-skilled readers on track, avoid decorating the pages with designs or images of people and activities that lack a direct connection to the specific topic of the material.

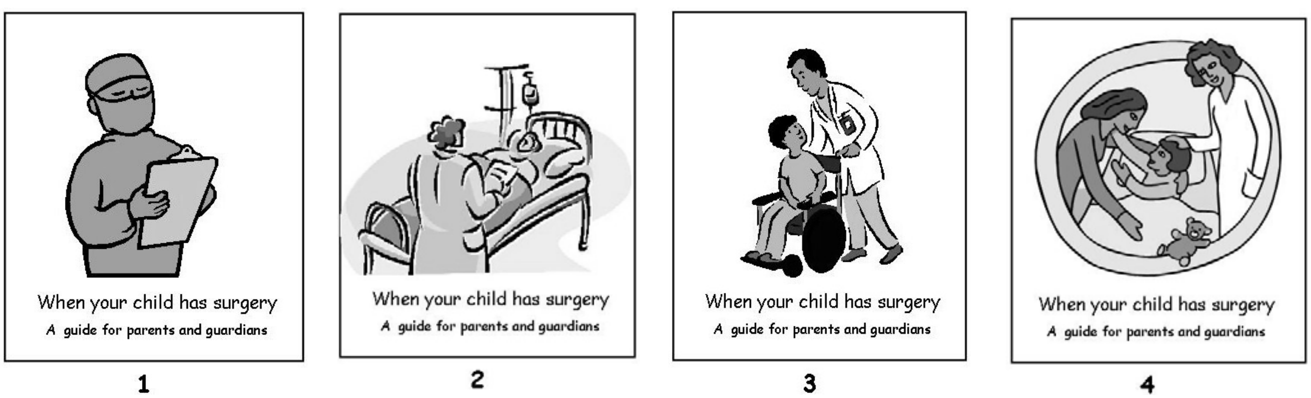
- **Show the specific behaviors you discuss**. For example, if your text asks the reader to write something down, show an image of a person writing something down—not a face smiling into the camera. If you are explaining Medicare beneficiary rights and responsibilities, a picture of an older person reading a flyer is better than a picture of an older couple walking hand in hand on the beach. If your material is about taking children to the doctor for preventive care, show a scene at the doctor's office, not a group of children on a playground. In a brochure to publicize a telephone help line, show images of people talking on the phone.

- **Consider the tone you want to establish and reinforce**. Figure 5-6-b below shows an example.

Figure 5-6-b. Choice of an illustration affects the emotional tone of your material.

example A

This example shows four options for illustrating the cover of a booklet for parents and guardians of children who are hospitalized. The title of the booklet is the same for each one. Each illustration reflects the subject matter of the booklet, which is good. But notice how much they differ in the emotion they convey. For parents and guardians who are concerned about a child's upcoming hospitalization, which illustration establishes the best tone?



Source: Created as an example for this Toolkit.

Using captions to reinforce an image

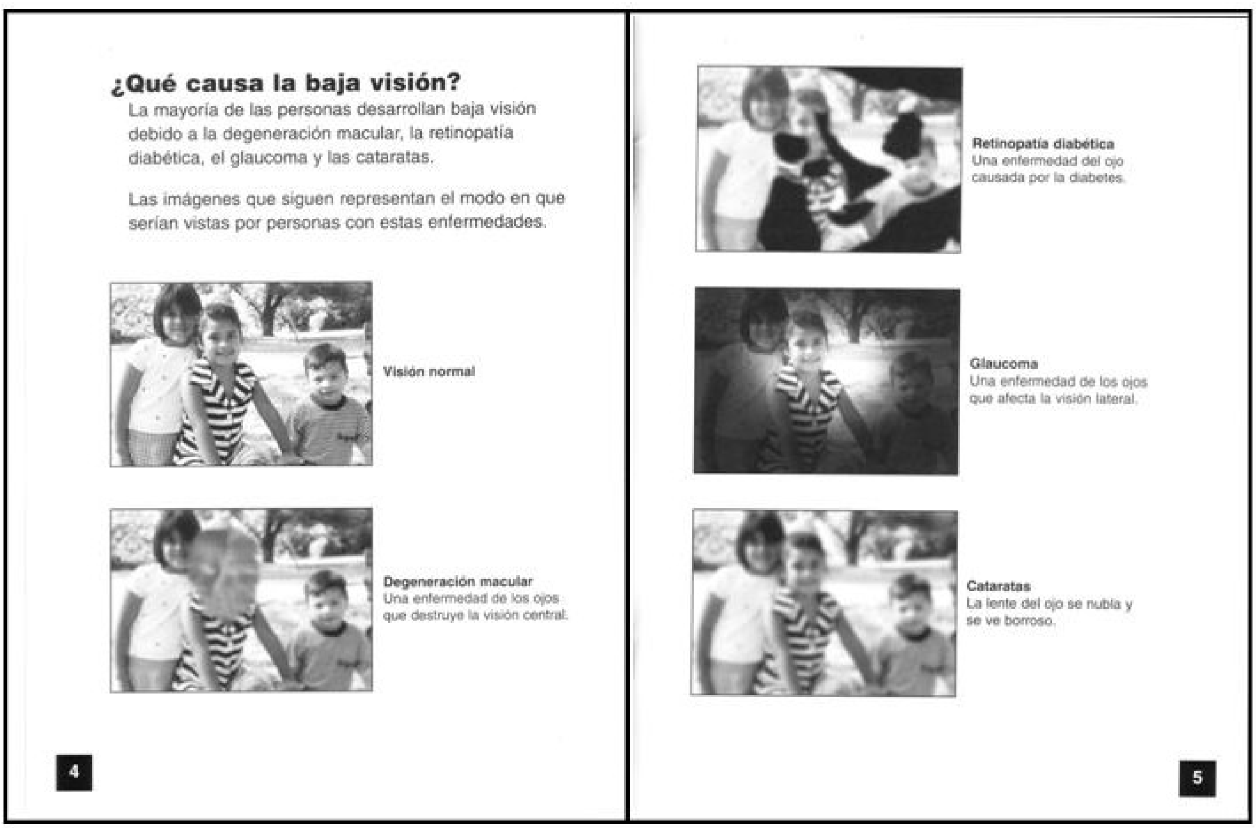
When you draw your reader's eye with an image, you create a powerful opportunity to help them understand the material. Readers tend to stop and read a caption because of its brevity and its position right near an image. Take advantage of this teachable moment by adding a caption. Captions strengthen the relationship between visuals and key messages (Doak et al., 1996; see this source for more about using captions).

Figure 5-6-c below shows an example of using images and captions to good advantage.

Figure 5-6-c. Using images to depict how eye diseases affect vision.

example B

This example shows two pages from the Spanish version of a large print booklet by the Eye Institute about problems of low vision. These pages use photographs of the same scene to show how several eye diseases cause different types of problems with vision. The series of photos shows how the group of children would appear to a person with normal vision. Then it shows how having macular degeneration, diabetic retinopathy, glaucoma, and cataracts would affect the view of this same scene. For a topic like this, showing pictures is far more effective than using words to describe how eye diseases affect vision.



¿Qué causa la baja visión?

La mayoría de las personas desarrollan baja visión debido a la degeneración macular, la retinopatía diabética, el glaucoma y las cataratas.

Las imágenes que siguen representan el modo en que serían vistas por personas con estas enfermedades.

Visión normal

Degeneración macular
Una enfermedad de los ojos que destruye la visión central.

4

Retinopatía diabética
Una enfermedad del ojo causada por la diabetes.

Glaucoma
Una enfermedad de los ojos que afecta la visión lateral.

Cataratas
La lente del ojo se nubla y se ve borroso.

5

Source: National Eye Institute (NEI), National Institutes of Health (NIH). *¡Ojo con su visión! Sepa qué hacer si tiene baja visión*. *Pub No. EY-229.* In English: *Watch Out for Your Vision! What You Should Know About Low Vision*. NEI is located on the NIH campus, 31 Center Drive, Bethesda, MD 20892-2510. To order these publications, call (301) 496-5248, or order online at http://catalog.nei.nih.gov/c-96-low-vision.aspx.

Assume that some readers will look at the images and not read the text

When you select images for your materials, remember that some readers will pay more attention to the images than to what you say about them in the text. This has important implications for how you select images:

- **Try to show the more important things in your images.** Images have great impact, so don't waste them or mislead your readers by depicting something minor. Use the power of the image to emphasize what's important. Later in this chapter, Guideline 9.7 suggests that you can get the greatest impact from your images by using fewer of them, choosing each one carefully, and making each one relatively large.

- **Choose your images so that readers won't be confused or misled if the images are all they look at**. For example, for people with asthma, there are different types of inhalers that need to be used in different ways. In written material that tells how to use an inhaler, it could be problematic to show a picture of only one type.

- **Check to see if the details of a photo or illustration are consistent with healthy behaviors you want to encourage, even if these behaviors are not the topic of your material**. For example, if you show people riding bicycles, are they wearing helmets? In stock photographs, they often don't.

To avoid possible confusion, try to show only the correct way to do something

Some materials use photographs or illustrations to demonstrate both the right and wrong way to do something, such as the right and wrong way to position a seatbelt.

- **Generally, it's best to show only "the right way."** Add a caption that reinforces this point. If you show readers the wrong way as well as the right way, you run the risk of confusing them. Readers tend to skim, and they may not realize when you are showing them something they should *not* do.

- **If you do show a wrong way to do something, label it very clearly and test it with readers**. In some situations, it may be important to show people things they shouldn't do, and explain the reasons why. If you do need to show both a right and wrong way, label each one very clearly and test to be sure that people understand. If you show a wrong way to do something, don't rely just on a symbol such as a big "X" across the wrong way, or a circle with a slash through it. Your readers may not be familiar with these symbols or they may misinterpret them. Symbols to designate something as wrong or forbidden differ by culture and country.

Avoid images that are too abstract or hard for readers to understand

When you are choosing images to reinforce the content of your material, avoid using images that may be hard for people to understand or interpret. Here are some tips on making sure that readers will find the images clear and helpful:

- **Avoid showing parts of the body in isolation.** When you show an arm or foot or other body part out of context, it is disorienting to your readers, especially to less-skilled readers. Images that show an isolated body part can even be disturbing. For example, an ad with an image of a baby's feet sticking out from under the covers was very bothersome to some people. They were worried that something was wrong with the baby because they couldn't see the rest of it. (You can see this photo in *Why Bad Ads Happen to Good Causes* (Goodman, 2002), a publication you can download at http://www.agoodmanonline.com/red.html.)

  So avoid using the types of images shown below:

  example C

  To make it easier on your readers and avoid misunderstandings, select photos and illustrations that show enough context so that the image is easy to understand. Here's an example:

  example D

- **Avoid images that have highly stylized parts of the body, cross-sections, or cutaway images of the body.** When you are already familiar with the subject matter of an image, it can be easy to forget how bewildering a stylized image, cross-section, or cutaway image of the body can be. Health care professionals are accustomed to interpreting images of this sort, and may be unaware of how puzzling and difficult they can be for a reader. If you can, avoid using such images in your written material. At best, they put too great a cognitive burden on your reader, and at worst, they can give your reader a wrong or misleading impression. If it is essential to show cross-sections or other illustrations of body parts, take extra care in selecting and explaining the images, and test them with readers to verify comprehension (see Toolkit Part 6, *How to collect and use feedback from readers*). When you are choosing or creating the images, keep them as realistic as possible. Avoid using stylized or caricatured images such as the example below:

- **Avoid images that show an enlarged version of something that is tiny**. For example, suppose that you are writing about dust mites as a trigger for asthma. Since dust mites are much too tiny to see, you would have to use a greatly enlarged image to show what they look like. This would probably not be a good idea. First, people tend to be concrete and literal about interpreting images, and it is hard for many people to relate to a greatly magnified image of something that is invisible. Second, the image itself would be potentially disturbing, since it would resemble a monster insect from a horror show.

- **If you show a group of images, try to maintain realistic proportions for each part of the group.** When things are out of proportion, an image gives misleading cues. These misleading cues put an extra – and unnecessary – burden on the reader to figure out what the image is about.

Images should be clear, uncluttered, and consistent in style

Photos & illustrations
Guideline #9.2

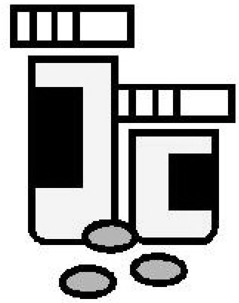
Use images that are clear, uncluttered, and consistent in style.

For greatest appeal and impact on your readers, keep the images clear and simple, with good contrast that emphasizes the main subject. Avoid using photographs or illustrations with cluttered backgrounds or distracting detail (or edit them to remove the clutter). For a unified look, choose images that are compatible in style and color.

Choose images that are clear and simple

For greatest impact, keep your photos and illustrations simple and consistent in style, free of clutter and distracting detail. Readers shouldn’t have to pause or study an image to figure it out. When images are clear and simple, it takes less effort to understand them and they are less likely to be misinterpreted. What about the images shown below—which ones do you find easier to understand at a glance?

example F



Minimizing distraction and clutter in an image is especially important for less-skilled readers because it helps them connect the image with the key messages. There are several ways to get images that are clear, simple, and recognizable at a glance:

- **You can use simple line drawings**. To help keep images clear and simple, specialists in low literacy materials often recommend using simple line drawings (Doak et al., 1996; Houts et al., 2006; Root & Stableford, 1998).

- **You can select photos and illustrations that are clear and uncluttered.** Obviously, it’s quickest and easiest to pick uncluttered images in the first place, but this is not always possible.

- **You can commission or create your own images that are clear and simple**. Since it can be hard to find suitable images for your materials, you may want to consider commissioning or creating your own line drawing or photographs. If so, you can emphasize the need for simple images that are free of clutter and distracting details.

- **You can crop (trim) the background of images to remove unwanted details or clutter**. Cropping alone can improve many images enormously.

- **You can edit the image directly to reduce or remove unwanted clutter**. It’s relatively easy to alter the look of digital photographs by using graphic design software or photo editing programs. You can also make simple improvements to many types of clip art (see tips on editing clip art later in this chapter). Here are two examples of de-cluttering of clip art:

example H

Original image

Too much is going on in this image

The phone distracts from the ambulance. It is disproportionately large and looks odd next to the ambulance. Its receiver is in an odd position, as if it had been dropped.

The tree adds distraction and clutter. Its rounded lollipop shape is too stylized to be instantly recognizable as a tree and it fights with the hospital for the reader’s attention.

Edited image

Simplifying the image helps focus attention on the ambulance and hospital

Removing the phone and the tree simplifies this image. Darkening the lines around the siren on top of the ambulance makes the siren more prominent, helping to identify the vehicle as an ambulance.

example I

Original image

An odd and stylized pose with a distracting background

The figure is abstract and distorted. Proportions of figure and fruit platter are way off. The pattern in the background and the shadow from the figure add clutter.

Edited image

Clear image with simple lines and good contrast

With the figure and patterned background gone, the focus is clearly on the fruit. Removing the color from the platter increased the contrast and makes the pieces of fruit easier to see.

“Cutouts” can add clarity and drama to your images

The background is a vital part of some images because it has cues that establish the setting or reinforce the meaning of the image. But when the background details don’t matter, or when they are distracting or unwanted, removing the background can add clarity and drama to your images. Removing the background can work well with either clip art or photos:

- **Clip art cutouts**. Some clip art already comes as a cutout, so there’s no background to remove. But when clip art does include a background, it’s often easy to remove it by simple editing. As shown in example J below, removing it can help a lot.

example J

Original image

Background is cluttered and distracting

The countertop and cabinets diminish the contrast, making it hard to see what she’s doing.

Edited image

A cleaner and more compelling image

The chair back and table edge are enough to establish the setting. Removing the rest of the background greatly improves the contrast and focuses attention on the pill bottle she is holding.

- **Photo cutouts**. When graphic designers remove the background of a photo, they call it creating a “clipping path.” In this Toolkit, we call it creating a “photo cutout.” Later in this chapter, examples R and U show photo cutouts.

For a unified look, keep images consistent in style

When you use more than one photo or illustration in your material, try to stick with a similar style for all of the images you use. Keeping your images similar in style lends unity and increases the impact of each individual image.

Style variations are especially apparent in clip art. Combining different styles of clip art in the same piece is aesthetically discordant and unappealing. It distracts readers from the subject matter of the images by drawing undue attention to changes in how they are drawn. Suppose, for example, that you needed to select images of health care situations. Compare the examples of clip art shown in Figure 5-6-d below.

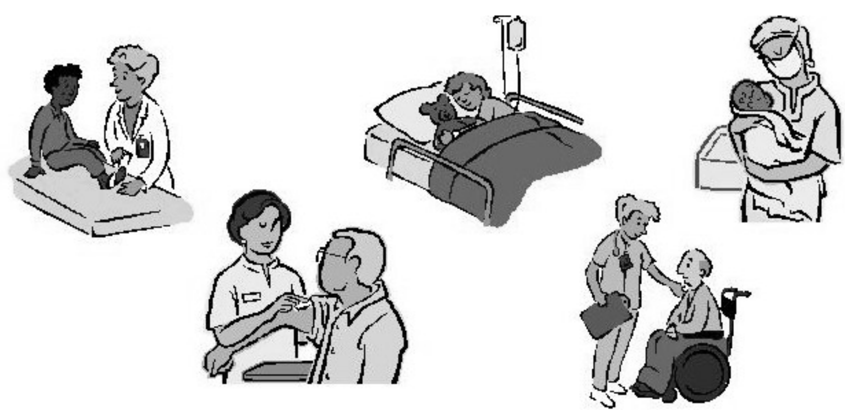
Figure 5-6-d. For a unified look, keep images consistent in style.

example K

The healthcare related images shown below illustrate a wide range of variations in style. Combining such different styles in the same material would be discordant and distracting.

example L

Compared to the images in Example K above, these images shown below look better together because each image in is done in a relatively similar style. Sticking with a single style of clip art helps readers focus on the subject matter of your written material, undistracted by changes in the style of the images.



Source: Clip art collected for use as an example in this Toolkit.

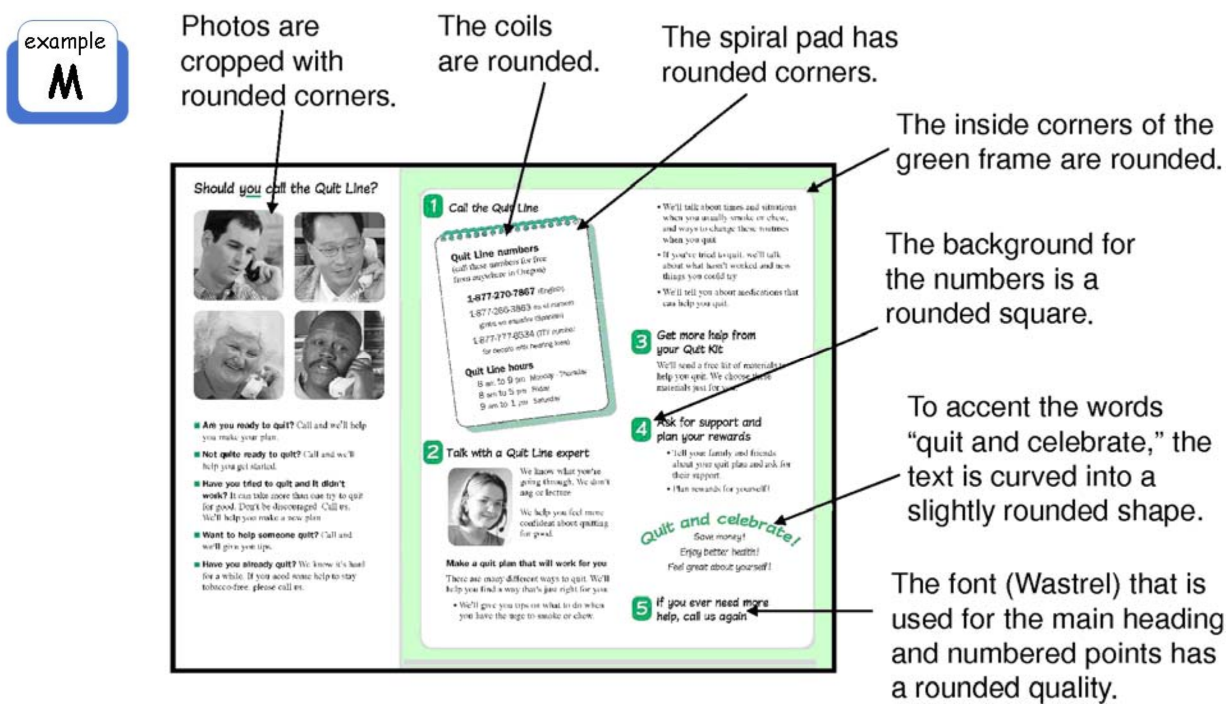
Here are some additional tips for creating consistency in style:

- **Use a color palette.** If you are using full color in your materials, pick a small group of colors that look good in combination (a color palette) and use these as your dominant colors. Using a color palette will help unify the images, encouraging readers to focus on your messages rather than how the colors keep changing. Although we can't show you examples in color in this Toolkit (because this Toolkit uses only black and one accent color), the color combinations in clip art may not fit the color palette you have chosen, or they may be too loud. If so, it may be easy to change the colors, depending on how the clip art has been constructed. We discuss how to edit clip art in a later section of this chapter.

- **Crop (trim) photos in similar ways when they are presented in a group.** For an example, see Figure 5-6-e below.

- **Foster unity of design by repeating key design elements throughout the material**. Repetition of design elements is a basic design principle. Figure 5-6-e below shows an example of using repetition of rounded design elements to unify the overall design.

Figure 5-6-e. Using repetition of design elements to foster unity.



Source: The material shown in this Figure was created for this Toolkit as part of the tri-fold brochure featured in Toolkit Part 10, *"'Before and after" example: Using this Toolkit's guidelines to revise a brochure".* It is based on a brochure produced by the State of Oregon and is adapted with permission for use in this Toolkit. When the brochure is fully opened, you see the three panels that are shown above. For details, see Toolkit Part 10.

Images need to be culturally appropriate

Use photos, illustrations, symbols, and other visuals that are culturally appropriate for your intended readers.

Choose images of people and activities that are contemporary and representative of the intended audience in their demographics, physical appearance, behavior, and cultural elements. Check to be sure that the images you use are free from unwanted connotations or problematic cultural significance.

Throughout this Toolkit, we emphasize the importance of making it easy for your intended readers to relate to your written material. Guideline 9.3 shown above applies this basic point to the images you use. As you think about what makes an image culturally appropriate, remember that your goal is get readers to see themselves and the way they live reflected in the written material. This helps attract and hold their attention, and encourages them to read on.

In this Toolkit, we suggest two ways of helping your readers see themselves in your written material and feel comfortable with what it says and the images it includes. These two basic approaches are shown below.

Two complementary ways to make written material culturally appropriate

1 Add or emphasize cultural elements that are tailored specifically for your readers.

2 Remove or de-emphasize any elements that might be cultural barriers to some or all of your readers.

To make the images in your written material culturally appropriate, use *both* of these strategies. These are just two different ways to accomplish the same goal of helping your readers sense that it was written for them.

- **The first way *adds culturally appropriate elements* to your images.** To attract your readers, you can use images that are *culturally adapted.* This means using images that show people, activities, and settings that reflect the everyday lives of your readers. When your intended readers have a lot in common, it is easier to tailor the material to reflect their demographics, behaviors, and cultural background. Making your images culturally appropriate is a powerful way to show your readers that the materials are intended for them.

- **The second way *removes potential cultural barriers* from your materials.** To *avoid losing* readers, and to make your materials culturally acceptable to a *broader range* of readers, you can remove barriers by using images that are *relatively neutral* in visual elements that are related to culture. Essentially, this means avoiding, removing, or subduing any features in the images that might be cultural barriers or distractions to your readers. For example, you would avoid showing behaviors and settings that are not part of their experiences or lifestyles. You would also avoid images that show extremes or outmoded fashion in hairstyles, clothing, and objects. And of course, you would take special care to avoid showing anything that might be culturally offensive.

The rest of this section gives tips and examples that illustrate ways to apply these strategies to your written material.

Use images that reflect your readers' culture and traditions

Your readers will respond more positively when your written material shows familiar images that reflect their cultural customs and traditions. This includes the foods they generally eat and type of clothing they wear, as well as settings, activities, and objects that are common in their everyday lives. Here are a few examples:

- **Familiar foods**. Materials that discuss diet need to use examples of the types of food their readers eat. For example, a booklet for Hispanics/Latinos who have diabetes shows three types of tortillas in its illustrations about portion size for foods (Health Promotion Council). If material telling how to limit sodium in foods will be used by Asian Americans, it needs to discuss ingredients such as soy sauce. Of course, these food examples may be just as relevant for other race-ethnic groups, since Americans of all backgrounds enjoy Latin and Asian foods.

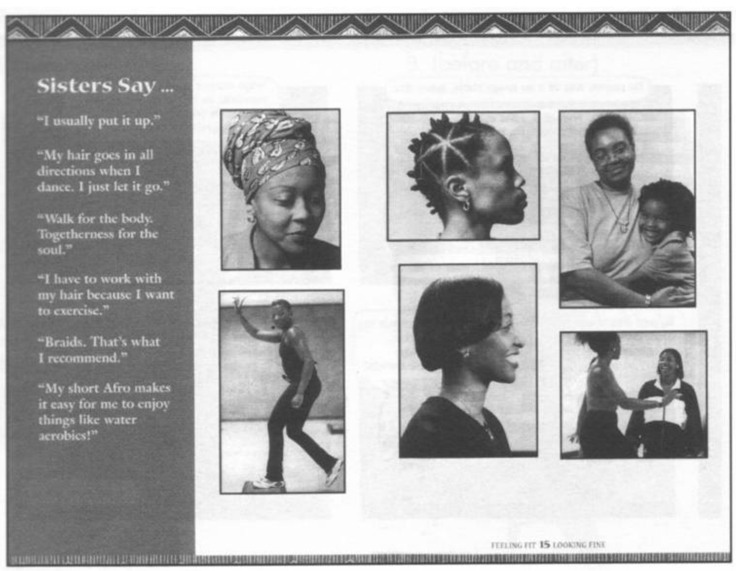
- **Familiar settings.** Showing familiar settings such as grocery stores, playgrounds, and in-home scenes helps make your print materials more comfortable and appealing to your intended readers.

- **Story telling.** Stories are compelling to all readers (Goodman, 2003; Osborne, 2004; Rudd & Comings, 1994; Wheatley, 2002). For some groups, such as Native American or Hispanic groups, stories are a primary means of sharing information. Using images that depict story telling or that illustrate a story being told would be ways to make material culturally appropriate for these groups.

- **You can use patterns and symbols to suggest cultural diversity**, either alone or in combination with other visual elements such as photos and illustrations. Here is an example:

example N

The example below is an excerpt from a booklet called *Hair Care Tips for Sisters on the Move.* It was written by and for African American women to encourage physical activity (Sisters Together Coalition, Boston, MA. Available at http://www.hsph.harvard.edu/healthliteracy/files/sisters.pdf). Notice the band of pattern across the top of the pages that is suggestive of African motifs.



Source: Used with permission, Rima Rudd, Harvard School of Public Health.

Use images that show people who are similar to the intended audience in their demographics and physical appearance

When you use images of people who resemble the age, gender, race, and ethnicity of your intended audience, it's easier for people to relate to your materials.

- **In terms of age and gender**, this means, for example, that Medicare materials should generally show men and women in their sixties, seventies, and older. Of course, pictures that show an older adult with a child or grandchild can also be effective, depending on the topic and purpose of the material.

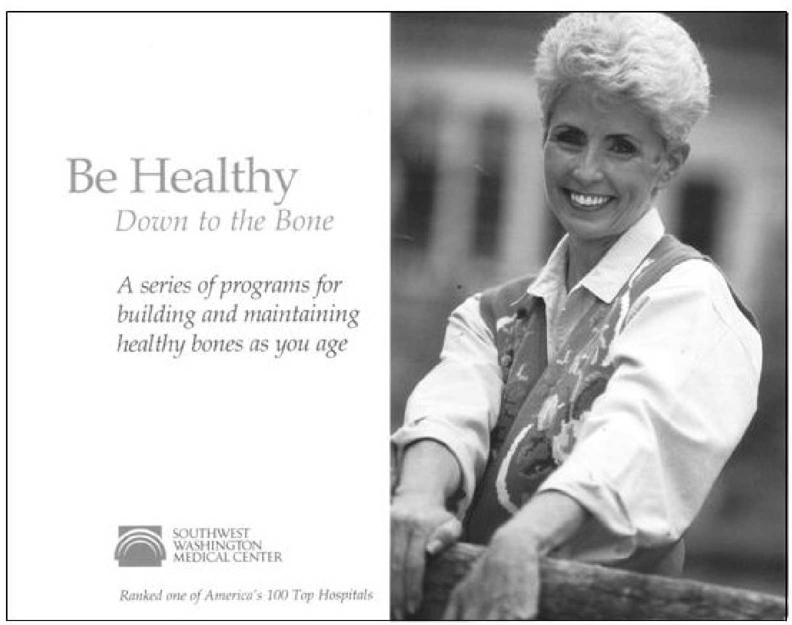
- **In terms of race and ethnicity**, it depends on the racial and ethnic diversity among members of your intended audience. When there is a great deal of racial and ethnic diversity among members of your intended audience*, it can be a challenge to produce print materials that respect this diversity by showing its full range*.
    - **One approach is to choose images that reflect a broad range of diversity**. There are several ways to do this:
        - You can use images of groups of people that show diversity among the individuals in the group. For example, an image might show a group of older people in a retirement center that includes people of different races.
        - Another way is to use images of individuals, but pick them to reflect racial and ethnic diversity. This approach is illustrated in Example M earlier in this chapter. It shows an excerpt from a brochure that includes separate pictures of four people, each of whom is talking on the telephone. The photos were chosen to include men and women of different races and ages as a way of indicating that the tobacco quit line serves everyone in the state.
    - **Another approach is to select images of people who are hard to classify in terms of race and ethnicity, to make it easier for a broader range of your intended readers to identify with them**. If your written material is brief, there may be room for only one or two photographs or illustrations (especially if you follow Guideline 9.7 about limiting the number of images for greater impact). In situations like this, it can be effective to select images of people whose appearance defies easy racial-ethnic identification, suggesting, perhaps, a mix of racial-ethnic family background. This makes it easier for people of different racial-ethnic backgrounds to identify with the image. Here are two examples:

example O

If your audience is racially and ethnically diverse, and the number of images you can use is very limited, silhouettes are an option to consider.

example P

This example shows a stock photo on the cover of a brochure about osteoporosis written for a diverse audience of women in the mid-to-older age range. The photo is suitable for the intended readers because the model has a friendly look and her age and ethnicity are open to different interpretations. The pattern on her vest adds visual interest and a hint of ethnicity, but it is hard to classify in terms of a single cultural background.



Source: Used with permission of Southwest Washington Medical Center.

- **Try to choose images with people who look like ordinary people rather than glamorous models.** As we mentioned near the beginning of this chapter, it can be challenging (and sometimes expensive) to find the type of images you need in stock photographs. Sometimes it works better to create culturally appropriate images by taking your own photographs, as shown in Example Q below. Whatever the source of your images, look for natural poses that show people doing the kinds of things your materials discuss and the kinds of things your readers do.

example Q

The examples below show sample pages of a booklet on safety for babies produced by Multi-Cultural Educational Services (1998). The content has been translated into multiple languages. For ease and economy of distributing the booklets, each version includes translated text in three languages.


This is a book to tell you about safety for babies and children. It will give you some rules for safety indoors and outdoors. If you have any questions or do not understand something talk to your nurse, your doctor or your social worker.

Ova knjiga je namijenjena da vam kaže o sigurnosti za bebe i djecu. Daće vam neka pravila za sigurnost u kući i izvan. Ako imate neka pitanja ili nerazumijete nešto razgovarajte sa vašom medicinskom sestrom, vašim doktorom ili socijalnim radnikom.

هذاكتاب يخبرك عن المامون للاطفال و الاولاد.
سوف يعطيك بعض القواعد للامان في الداخل و الخارج.
إذا كان لديك اية اسئلة او لم تفهمي بعض الاشياء تحدثي
لممرضتك، لطبيبك او الموظف الاجتماعي.

Buuggani waa buug loogu talagalay in u wax kaaga sheego badbaadada ilmaha yaryar iyo caruurta. Waxa u kuu sheegi doonaa dhawr tab ama siyaabo ku saabsan badbaadada iyo ilaalinta guriga dhexdiisa iyo dibada. Haddii ad qabtid su'aal ama wax ad fahmi waydid, la hadal kalkaalisadaada ama kalkaaliyahaaga caafimaad, dhakhtarkaaga ama shaqaalahaaga bulsho oo ah ciddii ku qaabilsan xafiisyada dadka ka caawiya arrimaha bulshada ama gargaarka.

1


This is a book to tell you about safety for babies and children. It will give you some rules for safety indoors and outdoors. If you have any questions or do not understand something talk to your nurse, your doctor or your social worker.

Nov yog ib phau ntawv uas qhia txog kev ceev faj kom tsis txhob muaj kev xwm txheej rau cov mos liab thiab cov me nyuam. Nov yuav qhia tej kev cai kom tsis txhob muaj kev xwm txheej hauv tsev thiab nraum zoov. Yog tias koj muaj tej lus nug los sis koj tsis to taub ib yam cia li nrog koj tus nais maum, tus kws tshuaj, los sis tus neeg sau sau tham.

Đây là một quyển sách nói cho bạn biết về sự an toàn cho những trẻ sơ sinh và các trẻ em. Điều đó sẽ cho bạn biết một vài qui luật về sự an toàn ở trong nhà và ở ngoài. Nếu bạn có bất cứ câu hỏi nào hay không hiểu điều gì hãy nói chuyện với y tá, bác sĩ hay cán sự xã hội của bạn.

1

This page shows text in Bosnian, Arabic, and Somali.

This page, from a different version of the booklet, shows the same text in Hmong, Laotian, and Vietnamese.

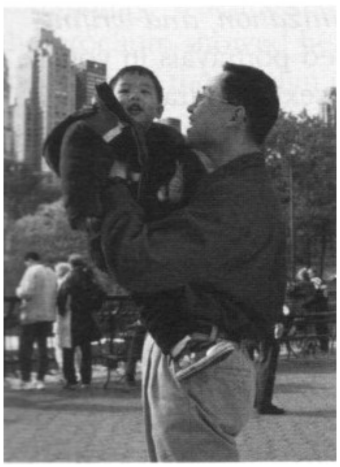
Notice how the photo for each booklet has been chosen for the intended readers. Though this example shows only one photo from each booklet, the other pages of each booklet include photos that represent all three language groups for the booklet. These photos feature images of local children and their families; they were taken specifically for use in these booklets.

Source: Charles and Pam LaRue, Multi-Cultural Educational Services, Coon Rapids, Minnesota. Used with permission. (See full references at end of chapter.)

To make materials culturally appropriate to a highly diverse audience, choose images that are more culturally neutral

For any audience, you will want to avoid or remove features in your images that might be cultural barriers to your readers. When your intended readers differ greatly in lifestyles, attitudes, experiences, geographic location, heritage, languages, socioeconomic status, and demographics, choosing images that are more culturally neutral for your readers can be a good approach. Sometimes you can remove part of an image to make it more culturally neutral, as shown in Example R below.

example R



This stock photograph shows a father and child in a big city setting.

Turning this photo into a “cutout” removes the big city background. Now it will be easier for readers to relate to this photo, regardless of where they live.

When you are considering an image for your written material, check it carefully. Do your best to avoid using images of experiences or lifestyles that are not typical for your readers and images that may have problematic cultural meaning. Here are some tips:

- **Watch for objects in photos that make them look dated or reduce their appeal to some of your readers.** Think of it in terms of keeping your “props” up to date so that you don’t distract your readers. For example, pictures of people using the early large-size versions of cell phones will draw undue attention to the phone itself and make your picture look dated. The appearance of computers has changed a lot in recent years, so using an old photo of a computer may make your written material look older than it is.

- **Consider the impact of hairstyles, clothing, and accessories such as eyeglasses:**
  - Taste in clothing, hairstyle, and accessories can be wide-ranging if your audience is diverse. To make your materials appeal to a broad range of readers, it helps to choose images where people's hairstyles, clothing, and accessories are relatively neutral and unobtrusive. Fashion changes quickly, so sticking to plain, simple, classic styles that don't draw attention will help keep your materials from looking dated.
  - It's wise to avoid using images that have patterns and prints that are prominent enough to distract from people's faces and what they are doing.

- **Take special care to avoid stereotyping.** Throughout this Toolkit, we emphasize the need to avoid stereotyped portrayals in your written material. This advice about avoiding stereotypes applies to images just as much as it does to the words you use. For example:
  - Be alert to avoid potentially sexist portrayals, such as choosing photos for Medicare materials that show a man who looks like he is in his sixties or seventies with a woman who looks like a glamorous model who is decades younger.
  - Figure 4-3-i in Toolkit Part 4, Chapter 3, *Guidelines for writing style*, gives guidelines for writing about people with disabilities, including preferred terminology that gives a positive portrayal. The need for positive portrayal extends to images as well. It is respectful of diversity to include images of people with disabilities in your written material; these should be positive and active images.
  - For more about the issue of avoiding stereotyping, see the website called *The Provider's Guide to Quality & Culture* at http://erc.msh.org/qualityandculture.

As usual, the ultimate test is your readers' reactions

To be sure that the images in your written material are culturally appropriate, it's crucial to test them with your intended readers. It's especially helpful to get your readers involved at an early stage. People who represent your intended audience are the best advisors to help you decide which details should be added to make the material more culturally appropriate. They will also help you identify which details are likely to pose barriers to some or most readers.

You may find that some features of the photos and illustrations matter a lot to your readers, and others not at all. It depends on the particular type of audience as well. For example, if you are writing for teenagers, you may find that the band of cultural acceptance for hairstyle and clothing variations is quite narrow and subject to rapid change.

It can be easy to miss the significance of visual cues that may be problematic to your readers. By testing images with members of the intended audience, you maintain the good will of multicultural communities and avoid the delay and expense of needing to revise materials to make them culturally acceptable.

- When a brochure intended for Detroit's large Arab-American population was tested in a focus group, someone spoke up and said that the brochure was unacceptable for distribution in the community. When asked why, the person replied that a photo of a woman in the brochure showed her naked forearm, which could be offensive to members of the Muslim Orthodox community. The photo was fixed before publication (personal communication, Donald Himes, 1999).

- If you are creating material for American Indians, be sure to check carefully with Indian communities before using any tribe-related images.

Facial expressions and body language should match the situation

Photos & illustrations
Guideline
#9.4

When images include people, make sure that their facial expressions and poses are appropriate to the situation and appealing to the intended audience.

Poses that show people engaged in doing something may be more effective than stock photographs of people smiling directly at the camera. If there is more than one person in the image, poses that show the people relating to each other tend to have more impact.

Many factors, large and small, add up to the overall effectiveness of a photo or other image. Subtleties of facial expression and body language in the images you use can have a big impact on your readers. As you are selecting images for your print material, pay attention to the small details. Here are some tips for choosing appropriate poses and expressions:

Reinforce the messages in your material

Select images with poses and moods that are compatible with the content of your material. Take advantage of power of the image to reinforce your key messages and encourage your readers to take action. Here are some tips:

- **In general, look for photos that show people actually doing something that is related to the content of your written material,** rather than just looking into the camera. When you choose images that show relevant behaviors, you strengthen the connection between the image and your content. For example, the photos below both show people who are totally focused on what they are doing – rather than looking into the camera.

example S

- **Create visual interest and drama by depicting relationships.** When you show more than one person in a photo or illustration, the impact if often more powerful if you show the people relating directly to one another. Images of people doing things and relating to each other will draw your reader in by creating a mood and suggesting that there might be a story to be told. In Example T below, compare the photo that shows a couple looking into the camera with the one that shows a couple orienting toward each other rather than the camera.

example T

- **Remember that smiles are not always appropriate**. If you look through a collection of stock photos, you'll notice that many or most of the photos show people who are smiling. Smiling images tend to dominate because stock photos are oriented toward advertising, and smiling shots are a popular way to convey an upbeat mood in ads and help sell products. But you are creating information materials, not commercial ads, and smiles may not be appropriate for your subject matter. For example, if your flyer is about calling to report Medicare fraud or abuse, you would not want to use a photo of an older person talking on the phone and smiling, because a smile would not suit this situation. Suppose that the material is about the importance of getting treatment for clinical depression. While you wouldn't want the photos to be too downbeat, you also would not want to fill it with images of people smiling.

- **Choose poses that look realistic and natural.** When you are choosing photos or other images, eliminate those with awkward poses or details that undermine the credibility or overall quality of the image. Here are some examples:

example U

Notice how the composition and camera angle makes this pose look awkward. Cropping to remove the plain background and distracting detail on the doorknob would focus more attention on the subject, but it wouldn't fix the basic problem with the pose, camera angle, and shadow on the wall.

example V

This woman looks uncomfortable holding the clipboard so far from her body. Also, she's wearing her stethoscope dangling down in front. Clinicians usually drape it around their neck.

- **Test your images with members of your intended audience for cultural acceptance of expressions and other aspects of body language**. For example, an image that shows one person touching another on the arm might appear to be friendly and supportive to people from some cultures and inappropriate to people from other cultures.

What about using images that are intense or potentially disturbing?

You have many choices about what to show in your images. Some images are easy to rule out, because they foster a tone that is not supportive. Here is an example:

example W

Why show a picture that looks like a doctor who is scolding a patient?

Usually, it works best to favor the upbeat image over one that might be distressing or disturbing to your readers. For example, if the flyer is about calming a colicky baby, an image of a person cuddling a baby in a rocking chair is a lot more soothing and encouraging than a close-up of a baby screaming. On the other hand, for some topics and some readers, it may be quite effective and more appropriate to show an image that is not upbeat. Whenever you are thinking of using an intense or potentially disturbing image, be sure to test it first with members of your intended audience.

Take special care in using symbols

Photos & illustrations
Guideline #9.5

Be very cautious about using symbols or icons to represent concepts or to serve as markers to guide readers through the material.

Symbols and icons can be ambiguous or confusing to your readers. Using symbols as shortcuts can hinder more than help by giving less-skilled readers something additional to notice, learn, and remember. If you use symbols or other visual means of marking or representing topics, check to be sure that your readers understand the meaning you intend and find the use of symbols helpful.

Sometimes, people who develop written material want to use visual images or abstractions to symbolize important concepts, to highlight particular content, or to serve as navigation devices to guide readers through the material. The intent is to be helpful, and sometimes it is, especially when your readers are already familiar with the symbol and its meaning.

However, if you are creating written material for culturally diverse audiences that include people with low literacy skills, consider whether it is wise to use symbols:

- **Very few symbols are truly self-explanatory: people typically need to be taught what a symbol is supposed to mean.** If you are the one who chooses or creates the symbol or icon, you know what you want it to mean, and you assume that it will have this same meaning to others. But others have only the symbol to go on – they lack your background knowledge and intentions. Here is an example:

What is this?

Do you recognize the bottom part as being a tooth? If so, think about the taken-for-granted knowledge you drew upon to know this. This symbol is a stylized convention that includes the root of the tooth, a part we seldom ever see. And yet you knew it was a tooth, because you have learned that this type of symbol means “tooth.” If you were not already familiar with this symbol, it might be baffling to you.

What is the top part of the symbol? Knowing that it’s a tooth at the bottom gives you a clue; you know the top part is not an umbrella keeping off the rain. So, what is it? Is it the inside of an open mouth? Is the dark part the back of the throat? If so, why is that big tooth out front?

- **The meaning of symbols and icons tends to transfer poorly across languages and cultures**. You might think that visual symbols could be a “universal” language, but most are quite culture-bound. Once you know what a symbol means, it can be hard to appreciate how bewildering it might be had you never seen it before.

- **Testing suggests that readers can easily misinterpret symbols.** The author and colleagues have tested various symbols in feedback sessions with readers. Results have shown big differences among people in how they interpret the meaning of the symbols. It’s not unusual for people to interpret a symbol in ways that are radically different from their intended meaning, especially if you show them only the symbol and one of the accompanying texts. It is not surprising that readers might misinterpret symbols, because symbols are often trying to encapsulate a complex and dynamic process with just a few simple lines.

If you want to use a symbol in your written material, develop the symbol with care and teach readers what it means by incorporating an explanation into the written material. Use feedback sessions to verify that readers understand the symbol as you intend and that it helps them understand and use the written material.

Avoid using images with visual humor or caricature

Avoid using cartoons, "cute" or humorous images, and caricatures, because these kinds of images may bewilder, confuse, or offend some of your readers.

Since humor does not translate well across cultures, attempts at humor may puzzle or confuse some readers. Humor based on irony is especially problematic, because readers who take it literally will misinterpret what you mean. In addition, individuals differ in what they may find amusing. When you are choosing images, avoid those with strange camera angles, exaggerated features, or a "cute" look. Distorted or coy images distract readers by drawing too much attention, and people may find them unappealing or culturally offensive.

This Guideline recommends against incorporating cartoons or other visual humor in your written materials. The desire to lighten up your material with a touch of humor is understandable, but there are some good reasons to be cautious, especially if your written material is for audiences that are culturally diverse and include people with low literacy skills.

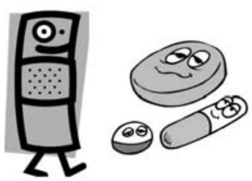
- **Cultural differences in humor can leave people bewildered or confused.** Humor is deeply embedded in culture, and may not transfer well across cultural groups. Humor is likely to be misunderstood by people who lack the cultural background presumed by a cartoon or joke or other injection of humor into materials.

- **Many people react negatively to cartoon-like or caricatured images**. Images that are excessively stylized or "cute" can be confusing or unappealing to members of your audience. Besides the potential for misunderstanding, there is potential to offend. Here are examples of the type of caricatured poses and "cute" cartoon-like images to avoid:

example y

Avoid using faces with extreme or distorted expressions such as this example.

Using this type of coy image of a heart with a bandage on it will not enhance your written material. It will be a burden on your readers to figure out what it is supposed to mean. Some may interpret this image as trivializing a serious matter (what good is a band-aid when you have a heart problem?).



Putting little faces on pills and bandages doesn't set quite the right tone for discussions of medical care.

- **People differ in what they may find amusing**. Even within groups that share the same languages, values, and experiences, individuals differ in what they consider to be amusing. Differences can be profound across cultures.

- **Some may miss the irony and interpret humor literally.** When people don't get a joke that is based on irony, they may misunderstand the point and take *exactly the opposite meaning* from what you intend.

Given all of these reasons for caution, it seems advisable to avoid cartoons and other applications of humor in your materials. There are many other more effective ways to establish a warm and friendly tone. For suggestions and examples, see Toolkit Part 4, Chapter 4, *Guidelines for engaging, motivating, and supporting your readers.*

Pay attention to quality, size, labeling, and placement of images

Pay careful attention to the total number, quality, size, placement, and labeling of the images you use.

For best impact, limit the number of images you use. Use images of high quality that will reproduce well, and make each one large enough for good impact. Place images in positions that fit with the natural progression of reading so that they do not cause your readers to overlook parts of the text. Keep images close to the text they reinforce.

For best impact, use a small number of carefully-chosen images

While using uncluttered images is especially helpful for a low literacy audience, it's a good idea for all readers. The *keep it simple* principle applies to the total *number* of images you use, as well as the simplicity of each image:

- **A few relatively large images have more impact than many small ones**. Instead of sprinkling a layout with several small pieces of clip art on each page, keep it to just one or two carefully-chosen image on each page, and make each one large enough for good impact. It will be more appealing. Even just one or two photos can have positive impact on the tone of a booklet.

- **Using "cutout" photos that have no background will increase the contrast and add drama.**

- **Be selective and use fewer images that all seem to belong together**. You don't have to fill all of the available space with images. Often, it is more effective to use fewer images and increase the amount of white space in the written material.

Effective placement of images

Here are a few ideas to consider for effective use of photographs, illustrations, and other visual elements:

- **To help set a friendly tone, place an image or two near the beginning of the material**, where readers will see them right away.

- **Place photos and illustrations strategically where they will help guide readers smoothly through all of the material.** Images are like a magnet for the eyes. To avoid distracting your readers and causing them to skip over parts of the text, place images in positions that fit with and reinforce a reader's natural progression through the page. For more about this, see the discussion and examples of "reading gravity" in Figure 5-2-c in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

- **Keep images close to the text they reinforce.** This helps readers make the connection between image and text. Use images to draw attention to the most important messages.

- **In longer documents, consider using images to fill in an empty page at the end of a section or help signal the start of a new section.** For example, an easy-to-read book for pregnant women called *Baby Basics* marks the beginning of each section with a full-page colorful collage of small squares that mixes images, a quotation, and solid blocks of color (What to Expect Foundation).

Choose high-quality images with a professional look

Keeping your images simple, closely linked to the content of your materials, and large enough for good impact all contribute to an overall look of quality in your materials. Technical details of production also affect how good the images will look in the final printed piece. To learn more about the technical details of getting your materials printed, see *Getting it Printed: How to Work with Printers & Graphic Imaging Services to Assure Quality, Stay on Schedule & Control Costs*, Fourth edition (Kenly & Beach, 2004).

Choose photos and clip art with a high quality professional look. Look for good proportions, good composition, and good contrast. Here are some tips:

- **To make sure they reproduce well when the material is printed, choose images that are clear and show high contrast:**
    - Photos should look sharp, with good contrast that emphasizes the main subject. Avoid photos that are too dark (or use photo editing to improve the appearance).

- Clip art should have the appearance of being drawn with a sure, skilled hand. Look for clean lines with a minimum of distracting details or embellishment. It should have sufficient "weight" to reproduce well, but not such heavy lines that it looks harsh. Avoid using clip art that is pale or uses light sketchy lines, because it will not reproduce well.

- **Good contrast is especially vital for images that will be printed in a small size.** You don't want readers squinting to see what the photo is about. Smaller photos may look better with closer cropping.

- **For best impact, consider whether cropping (trimming), editing, and minor touchups might improve your images.** Unfortunately, some photos and clip art come already cropped in ways that detract from the quality and impact of the image. Try to avoid using these images that are cropped in odd ways.

- **When you put a group of images together, it's important to maintain a consistent style of cropping and consistent proportions for all of them.** Images of people that are grouped together have better unity and impact if you keep all of the faces approximately the same size.

Check for accuracy and pretest with readers

Check for accuracy, if applicable, and pretest the images with your intended readers.

If your images include technical or medical subject matter, check to be sure that the details are correct. Check on appeal, cultural appropriateness, and comprehension of the images by getting feedback directly from members of the intended audience.

Check images for accuracy

If applicable, make sure that photos and illustrations are clinically accurate and technically correct. It's wise to have clinicians or other subject matter experts review the images to be sure they are appropriate. Keeping images up to date can be a challenge if you are addressing areas that are experiencing rapid changes in clinical advances or best practices. For example, if you are writing about healthy diets, you would want to stay up to date on the latest revisions of the Food Pyramid (visit http://www.mypyramid.gov).

Pretest images with your intended readers

When you choose images for your materials, *you* know what they are supposed to mean. But will your readers interpret them in the same way? It's wise to double check by getting readers' reactions to photographs and illustrations (for methods to use, see Toolkit Part 6, *How to collect and use feedback from readers*). Here are some reasons why it's important to get readers' reactions to the images you plan to use in your written material:

- **Readers can interpret an image in a way that's very different from what you want or expect.** For example, an early draft of a flyer used a photo of an empty hospital bed to show that a patient had been discharged and was back at home recuperating. But during pre-testing, people interpreted the image in a different way and reacted negatively to it: they figured that an empty bed meant someone had died. The image was replaced with something more suitable (personal communication, Letitia English).

- **Images can be ambiguous.** For example, a brochure on asthma includes a drawing of a person with hands on a window that is halfway open. You can't tell from the drawing alone whether the person is opening or closing the window. Closing the window is appropriate if the purpose is to reduce exposure to air pollution outside that will irritate the lungs. But opening it is appropriate if the goal is to reduce exposure to air quality problems inside the home, such as second-hand smoke or smoke from a grease fire on the stove. Of course, the text would tell people about the image, but some people may not read the text. In general, *it's better to choose images that do not rely upon an explanation in the text.*

- **Images may trigger unwanted associations**. For example, selecting appropriate images for tobacco cessation programs can be very challenging. A crushed-out cigarette seems like an appropriate image for a brochure about quitting, but a focus group discussion showed that seeing this image made some smokers want a cigarette (personal communication, Mary Hunter 2004).

- **Images that show instructions may be incomplete or hard to follow.** For example, if you are using illustrations to explain a complex or dynamic process, be sure to break it down into a series of steps so that the process will be clear to readers.

Additional tips for choosing and editing clip art

Clip art is popular way to add visual interest to low literacy written material. It's readily available and easy to insert into material. Best of all, it is inexpensive and often it is free. This chapter has already covered the basics of what to look for in photographs and clip art, and has used clip art examples to illustrate some of the guidelines. But to help you use clip art in the most effective ways, this section gives additional examples. Since it can be hard to find just what you need, we also discuss how you can make simple edits to improve clip art.

More examples of what to look for in clip art

In Figure 5-6-f below, we show a series of examples of pharmacy-related clip art. The commentary for these examples applies a number of the guidelines that were presented in earlier sections of this chapter.

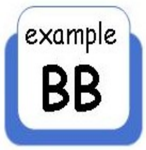
Figure 5-6-f. Choosing clip art that looks realistic, natural, and respectful.

example Z

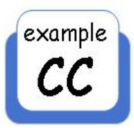
Caricature of a pharmacist. This image is distorted and makes the pharmacist look unprofessional. It sets an inappropriate tone and could be interpreted by some readers as disrespectful.

example AA

Problematic facial expression. This pharmacist looks stern or skeptical.



An excessively stylized portrayal of pharmacist and patient. The bodies are greatly distorted and the faces are literally blank. Most readers do not like images of people that have no eyes, nose, or mouth. Also, the "Rx" on the bottle is the only clue that this is a pharmacy situation. It is a weak clue because it relies on people to know what is meant by "Rx" and because the heavy lines and poor contrast keep the bottle from standing out.



The images of pharmacist and patient shown below are most suitable than the ones shown above. In the images below, the poses look natural and suggest that the pharmacist is talking the time to talk with the patient.

Each could be improved by editing. In both illustrations, the contrast could be increased to make the pill bottles standout more clearly. The hairstyle of the pharmacist on the right looks dated, but this could probably be fixed by editing.

Source: Commentary created for this Toolkit.

Using editing to improve clip art

It's often possible to make some big improvements in clip art by doing simple edits. For example, you might be able to fix a problem just by changing the colors or deleting a cluttered background. Depending on how the clip art has been constructed, you may be able to do other types of edits that make the clip art much more suitable for your written material.

Graphic designers have the skills, experience, and software that are needed to edit clip art. But you may be able to do a good deal of editing yourself, without the help of a professional designer. If you are experienced in using photo editing programs such as Adobe Photoshop, software that comes with a scanner, or presentation programs such as Microsoft PowerPoint, you may be surprised at how easy it is for you to improve clip art on your own. Even if you lack access to these types of programs or you lack the skills or inclination to use them, the discussion in this section will introduce you to easy ways to use editing to make improvements in clip art (with a little help from others).

Since this section discusses ways to edit clip art yourself, the comments below and the examples that follow focus on things that can be done using features that are available in presentation software and simple photo editing programs. (If you were a professional designer, you would do the editing in other ways using more sophisticated software.) We can’t give specific instructions for editing because the details of features, menus, and commands differ so much depending on which program you use. Our goal is simply to give you a sense of the improvements that you might be able to make, and encourage you to explore and experiment with the editing capabilities available in the programs you use. You will need to consult your online help and other software instructions for the details of how to do the editing.

To help get you started, here are a few things to know about editing of clip art:

- **The ease of editing clip art depends on how it is constructed and the format it is in**. When clip art is constructed so that each part is a separate unit, it will be relatively easy for you to use presentation or photo editing software to make certain kinds of changes. For example, suppose that a piece of clip art shows a man wearing a necktie, and you want to remove the necktie to make the image more culturally appropriate. If the necktie is a separate component part of the clip art, it might be quick and easy for you to “ungroup” the image into its component parts (see below), select just the necktie component, and delete it. But if all of the lines in the clip art are constructed as a single unit, including the lines that make up the necktie, removing the necktie will be challenging and time consuming, and probably not worth the effort.

- **Adjusting color, contrast, and brightness.** Check your software for features that make it easy for you to adjust the brightness and contrast of a clip art image and “recolor” it. For example, if you are working in Microsoft PowerPoint, try right-clicking on the image, and then select “format picture” from the menu that appears. “Format picture” offers a number of options that make it easy to do such things as change a color image into grayscale or resize the image. The “recolor” option shows you all the colors that appear in the clip art and lets you change them one by one.

- **“Ungrouping” an image to break it into its component parts.** To do certain types of edits, you may need to “ungroup” the image. “Ungrouping breaks an image into its component parts, so that you can edit each part separately. Depending on your software, there may be several ways to do this; you may need to consult the manual and do a bit of searching. For example, there may be options under a draw menu that will let you convert it to a “drawing object.”

Examples that follow used "ungrouping" as part of the editing that was done to improve the images. The first, in Figure 5-6-g below, is a "before" and "after" example that shows how you can use editing to remove distracting details and focus the reader's attention on the main theme of the image.

Figure 5-6-g. Editing clip art to improve the focus on the main subject.

example DD

What's wrong?

This picture is about resting with your leg up when you are recovering from injury or surgery. But notice how easy it is to miss the bandage or cast on her leg.

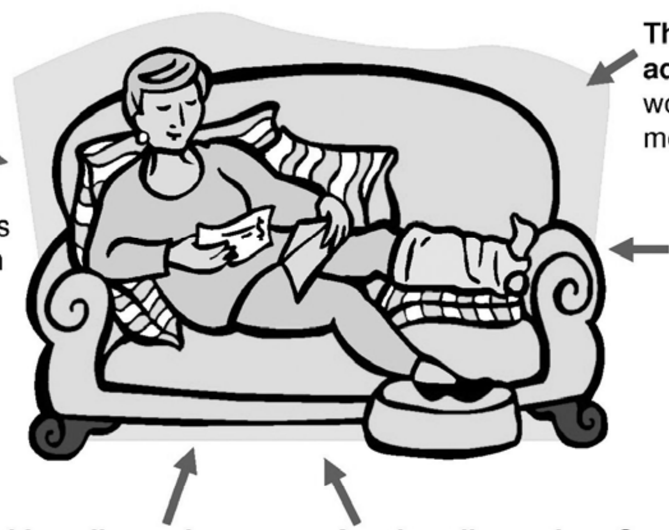
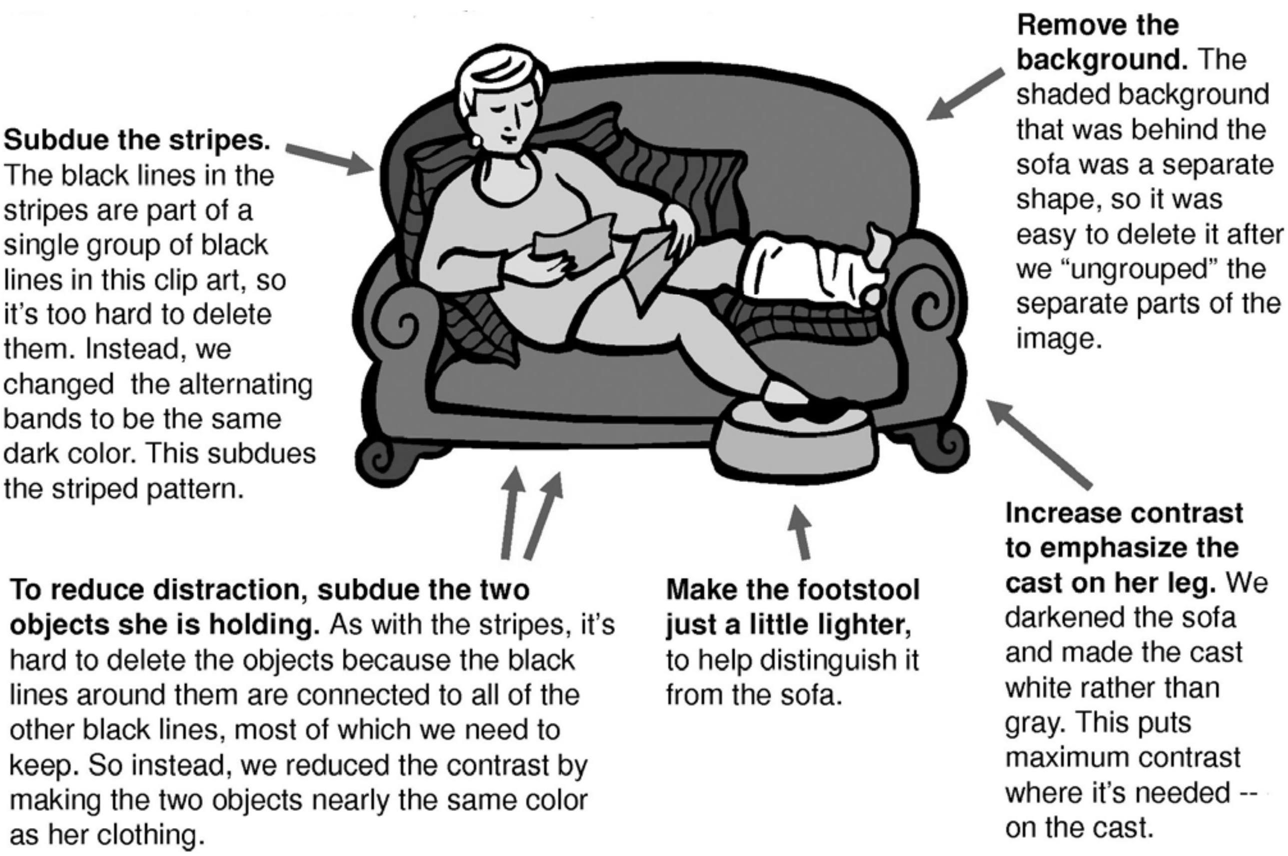


Figure 5-6-g., continued.

example EE

How can we fix it?

For the edits shown below, we used the “ungroup” command to disaggregate the image, and then edited different parts of it separately.



Source: Created for this Toolkit.

End notes

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Health Promotion Council

260 South Broad Street, Philadelphia, PA 19102. Telephone (215) 731-6150. Visit online at http://www.hpcpa.org/.

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Baby basics: Your month by month guide to a healthy pregnancy. The What to Expect Foundation, 211 West 80th Street, Lower Level, New York, NY 10024. (212) 712-9764. http://www.whattoexpect.org/baby_basics.

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Suggested resources

These resources have good examples and many suggestions for effective editing. If you are adept with a digital camera and want to create your own custom photographs to use in written material, the book on portraits may be helpful.

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476

September 2010

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the “Toolkit Guidelines for Graphic Design”

Chapter 7

Guidelines for tables, charts, and diagrams

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 7

Guidelines for tables, charts, and diagrams

List of figures in this chapter:

This document is the seventh of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

To help you develop or revise your written material, the *Toolkit for Making Written Material Clear and Effective* includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the seventh of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for designing tables, chart, and diagrams. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

In this chapter, we use the phrase "tables, charts, and diagrams" very broadly. Reflecting popular usage, we use "chart" as a general term that encompasses a variety of formats, and we often use "chart" to designate any type of table, chart, or diagram. We use the term "rows-and-columns format" to identify a table or chart that is in a "matrix" format with rows and columns. We do not discuss complex graphs that present statistical or survey information. The Toolkit focuses on developing and testing written material for diverse audiences that include people with low literacy skills. Complex graphs are not appropriate for these audiences.

What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); fonts (typefaces), size of print, and contrast (Chapter 3); headings, bulleted lists, and emphasizing blocks of text (Chapter 4); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); and forms and questionnaires (Chapter 8).

Toolkit guidelines for tables, charts, and diagrams

How can you use these formats?

You can use tables, charts, and diagrams in a variety of ways. For example, you can use them to:

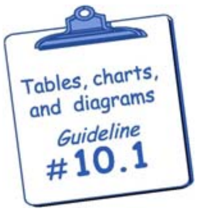
- **Help readers understand something visual**, such as the label on prescription medicines or a diagram of body parts. When you design your diagrams, you can include helpful devices such as captions and arrows that point out certain parts of a diagram and help readers understand it. Tables, charts, and diagrams lend visual interest to your written material. They can draw the eye more effectively than blocks of text. You can use them to help emphasize the most important points.
- **Provide a convenient display of information for easy reference.** Tables and charts are often used to summarize information that people use for reference. Examples include schedules for preventive care, charts that tell about health care benefits and coverage, and provider directories that tell people which doctors and other health care providers they can use.
- **Help readers understand a complex idea or comparison**. When you need to share information that is challenging for people to understand, including a carefully-constructed chart or diagram can enhance your written description. Sometimes a table, chart or diagram can replace a lengthy explanation and get your point across more effectively.

Making these formats clear and effective

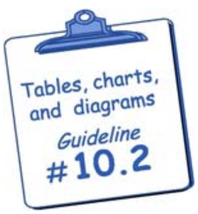
Tables, charts, and diagrams can be very helpful to readers, but making them clear and effective requires careful attention. This Toolkit can help. In this chapter, we give suggestions for making your tables, charts, and diagrams easier for people to understand and use. The Toolkit guidelines in this chapter focus on issues that are unique to tables, charts, and diagrams. You can find additional help in other chapters of the Toolkit, since many of the guidelines we cover in other chapters also apply to tables, charts, and diagrams. To give just two examples, whether you are writing text or creating a chart, you want to be selective about how much and which information you include (Guidelines 1.2 and 1.6 in Toolkit Part 4 Chapter 1) and use technical terms only when necessary and explain them if you do (Guideline 3.7 in Toolkit Part 4, Chapter 3). For the full list of guidelines for writing and design, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

This chapter discusses the guidelines shown below in Figure 5-7-a.

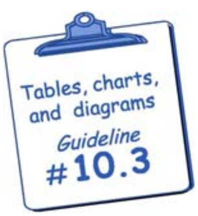
Figure 5-7-a. Toolkit guidelines for tables, charts, and diagrams.



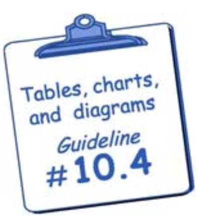
Take a reader-centered approach to the use of tables, charts and diagrams. In deciding whether and how to use these formats, take into account the literacy skills and needs of your intended readers.



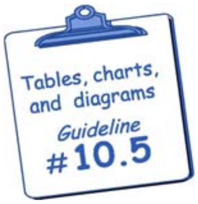
Make titles, headings, and other labeling specific and complete enough for easy understanding. To help readers understand and interpret the meaning of charts and diagrams, use informative text in all labeling. To reduce cognitive burden and the possibility of misinterpretations, avoid using abbreviations, acronyms, footnotes, and cross-references.



Create a clean, uncluttered layout with strong visual and written cues to guide readers and help them interpret the information correctly. Keep the layout tidy and uncluttered, with ample margins and white space. Help readers understand and absorb the information in a chart or diagram by using devices such as taglines, examples, captions, and step-by-step instructions. If you use symbols in a comparison chart, make them as self-explanatory as possible, tell what they mean, and design them with good contrast.



If there are any numbers or calculations, explain them carefully and give examples. Since math is hard for many people, and can be especially hard for people with low literacy skills, take special care with explanations that involve numbers. With calculations, use examples that show each step and explain it clearly. Simplify numeric examples by using rounded whole numbers as much as you can. To help people understand weights and measurements, make comparisons to familiar objects.



Pretest your tables, charts, and diagrams to be sure that your intended readers can understand and use them. Direct feedback from readers is the best way to check on comprehension, cultural appropriateness, and usability of the information you present in a table, chart, diagram, or graph.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

A reader-centered approach to using tables, charts, and diagrams

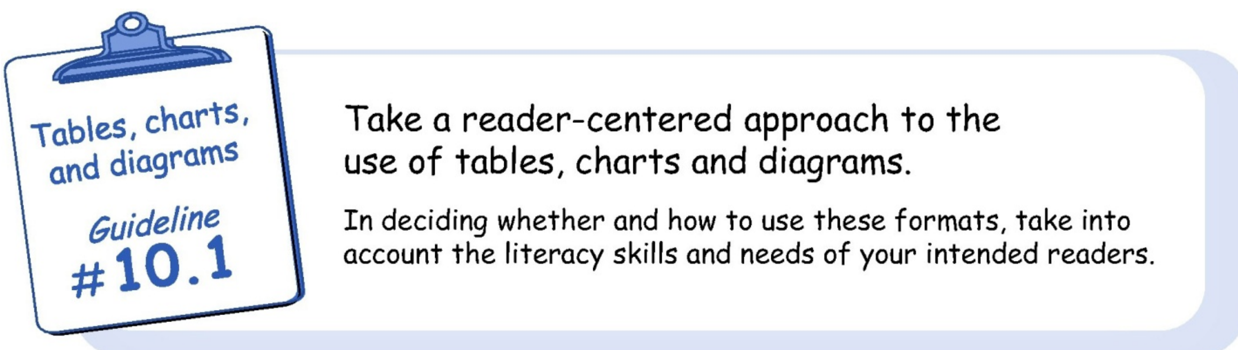


Chart formats can be challenging

This first guideline shown above is a reminder to take your intended readers' needs and skills into account when you create a table, chart, or diagram. It can be challenging to read and interpret a table, chart, or diagram. These formats are visual displays, and using them effectively requires, among other things, good navigation skills. For example, where should you look first? What path are you supposed to follow through the chart or diagram? What connections must you make to extract information from such formats? If there are numbers involved, the skills related to dealing with numbers and calculations also come into play. These are sometimes called "numeracy skills" (Paulos, 1992).

When you are familiar with tables, charts and diagrams and adept at using them, it's easy to take for granted the numeracy skills, navigational skills, and other skills they require. For example, think about what it takes to understand and use a chart with rows and columns (a "grid" or "matrix" format). This type of chart is very common. To use it, you need to comprehend how it is structured and be able to juggle the row dimension and column dimension simultaneously. To extract information from this type of chart, you must (a) interpret the meaning of the row and column headings, (b) select the particular row and column that are of interest, and then (c) locate the cell within the table that is formed by the intersection of that row and column. This process typically requires repeated scanning up and down, back and forth. You might need to make a series of comparisons that may involve looking at two or more cells that appear in different parts of the table.

What we've just described is second nature to you, but it may be quite difficult for your intended readers. Making repeated scans, comparisons, and interpretations within a rows-and-columns chart imposes a heavy cognitive demand. This type of chart can be too difficult for people with low literacy skills and people who have limited experience in using this type of chart. In addition, if your material is intended for people with Medicare or other older adults, it is important to know that the cognitive skills people use to interpret a row and columns chart can decline as they grow older (see Toolkit Part 9, *Things to know if your written material is for older adults*).

By testing rows-and columns charts with readers, you can learn what happens when people lack the skills to use them. When people don't grasp the need to focus on the intersection of a row and column, they generally focus either on the rows or the columns. For example, they might read across the rows and ignore the column headings, or they might go down each column and ignore the row labels. Either way, the chart won't make sense to them, and they may get discouraged or frustrated.

Will a chart work well for your intended readers?

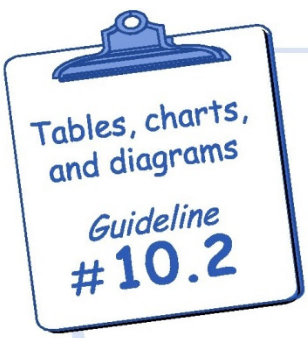
There's usually more than one way to present information. Tables, charts, and diagrams can be quite effective, but only if they are easy for your readers to understand and use. So before using these formats, take your intended readers' literacy skills into account. Is there a good match between their skills and the skills that will be required to use the table, chart or diagram?

While tables, charts, and diagrams are often difficult for people with low literacy skills, research has shown that people with strong literacy skills can also misinterpret tables and charts. For example, one study investigated how college-educated people with strong quantitative and analytical experience (primarily people with engineering backgrounds) interpreted graphs containing data on energy-related commodities (Blessing, Bradsher-Fredrick, Miller, Miller, & Rutchik, 2003).

The graphs in this study show changes over time, displayed as bar graphs or line graphs or both. Participants were asked to give interpretations and conclusions about each graph. The findings of the study demonstrate that even readers who are well-educated and knowledgeable make numerous mistakes when interpreting graphs, and often can draw correct conclusions only with a great deal of effort.

Given the difficulties that graphs pose to highly skilled readers, it is particularly important that charts and diagrams used with less skilled readers be carefully designed and tested. The discussion of Guidelines 10.2 through 10.5 that follows will help you make your charts or other displays as clear and effective as possible. It includes examples of ways you can adapt charts to make them more suitable for people with low literacy skills. The final guideline in this chapter emphasizes the need to test charts and other displays with readers to be sure they are working well.

Provide clear and informative labeling

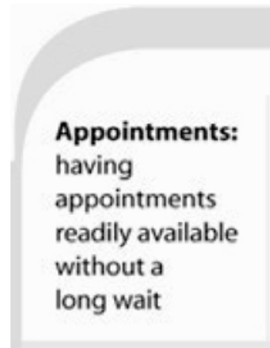


Make titles, headings, and other labeling specific and complete enough for easy understanding.

To help readers understand and interpret the meaning of charts and diagrams, use informative text in all labeling. To reduce cognitive burden and the possibility of misinterpretations, avoid using abbreviations, acronyms, footnotes, and cross-references.

When you use tables, charts, diagrams, and similar visuals, take extra care to make the text in your titles, headings, and other labels as unambiguous and informative as you can. Here are some tips:

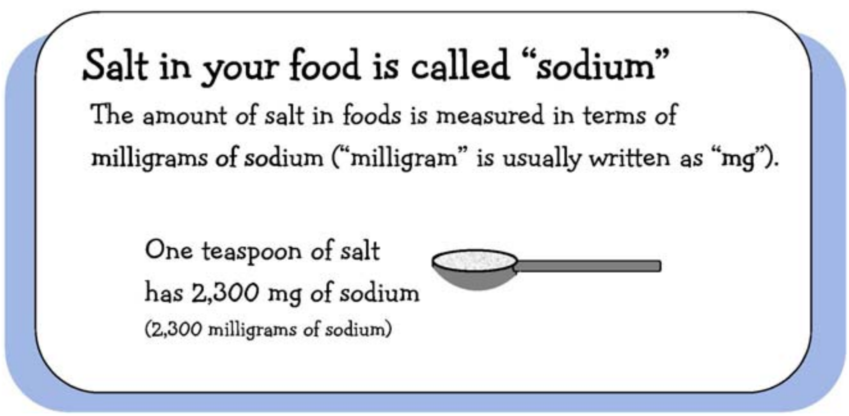
1. **Be specific and informative.** Keeping text extremely brief will take up less space in your chart or diagram, but it won’t be helpful to your readers if it’s ambiguous or misleading. Below is an example of two possible headings for a comparison chart column (these are from charts shown later in this chapter in Figure 5-7-c). Compare the brief but ambiguous one-word heading, “appointments” on the left with the slightly longer but much more informative one on the right:



2. **Avoid using abbreviations, acronyms, and footnotes.** Unless they are already familiar to your intended readers, abbreviations and acronyms make material more difficult to read and understand.

   - Footnotes are unfamiliar to many less-skilled readers, and they add burden for any reader. They are also easy to overlook. If there is something important that the reader should know, *incorporate it into the main text* rather than using a footnote.

   - Sometimes it may be important to teach the meaning of an acronym or abbreviation, because that is the form of the word that readers will encounter. If this is the case, explain it carefully. Here's an example that explains the abbreviation "mg."

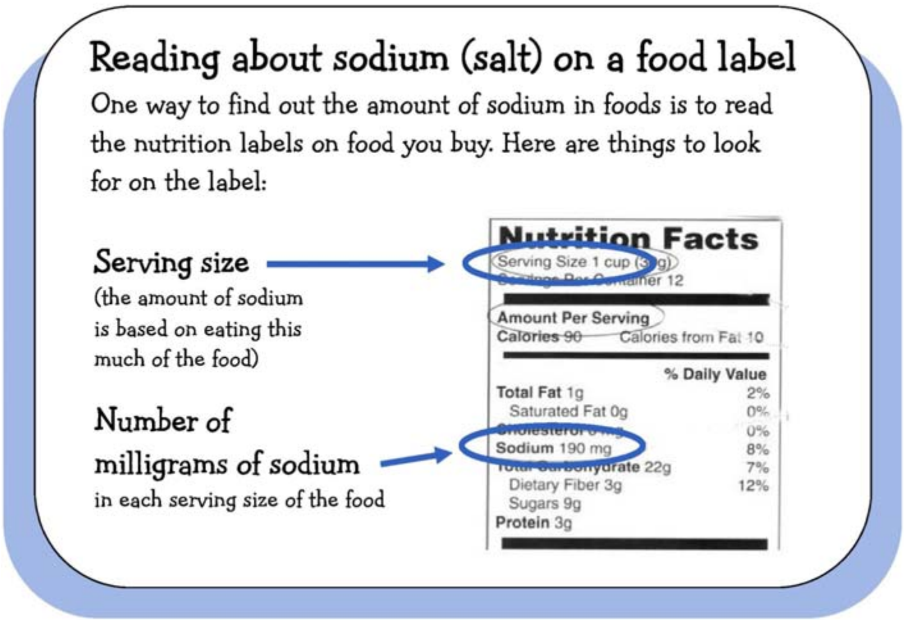


Source: This example and others about sodium that appear elsewhere in this chapter have been adapted from visual displays the Toolkit writer created for a project.

3. **Make sure that text and numbers are readable and understandable at a glance.** Don't make readers pause or struggle to see small print in a diagram or figure out what type of number you are showing them. Keep the text for labels and numbers large enough that it is easy to read. If

numbers are percentages, put a percent sign after each number, and if they are dollar amounts, put a dollar sign in front of each number.

4. **Make your explanations cohesive and give examples.** Since it can be hard for readers with low literacy skills to absorb and apply new concepts, be as explicit as possible in explaining the connections among concepts and what they mean. Give examples and use devices such as captions and step-by-step instructions and explanations. Here is an example of an explanation that uses captions:



5. **Considering explaining something in more than one way**. For example, suppose that you need to tell people how to get to your location. Some people like to use maps, and others may prefer written instructions for driving. Why not include both a map and written directions? Readers can choose the one they prefer or use both. Here are some tips for giving directions:

   - When you do the written directions, consider the most common routes people are likely to take, and be very clear about the starting point. Since many people have trouble with geographic directions, it's helpful to include references to north, south, east, and west as well as references to making left and right turns.

   - Make the map large enough for easy reading and label it carefully. For tips on formatting your map to make it easier for people to understand and use, compare the examples on page 81 of *Before & After Page Design* (McWade, 2003).

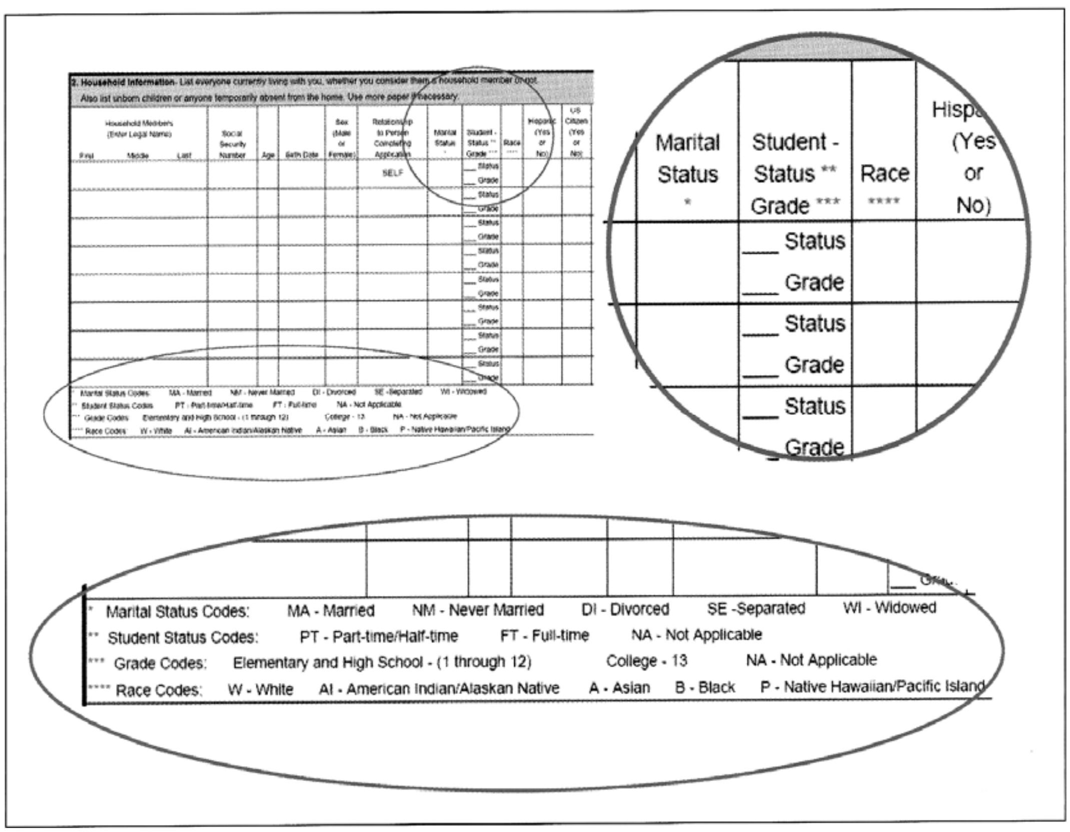
6. **Reduce cognitive burden by avoiding cross-references.** Figure 5-7-b below discusses how cross referencing within a rows-and-columns or “grid” format makes the chart harder to understand and use and suggests other approaches you can use.

Figure 5-7-b. Reducing the cognitive burden of cross-referencing within a chart.

NOTE: This Figure is based on text and tables from *The Health Literacy Style Manual* (MAXIMUS, 2005: 74-76).

Forms and applications typically use charts and tables to collect information. They don’t take up much space, and they are often neat and efficient. The problem is that they are very difficult to read and complete, because they’re often crowded, the print is small, and they require readers to cross-reference.

Examples of cross-referencing:

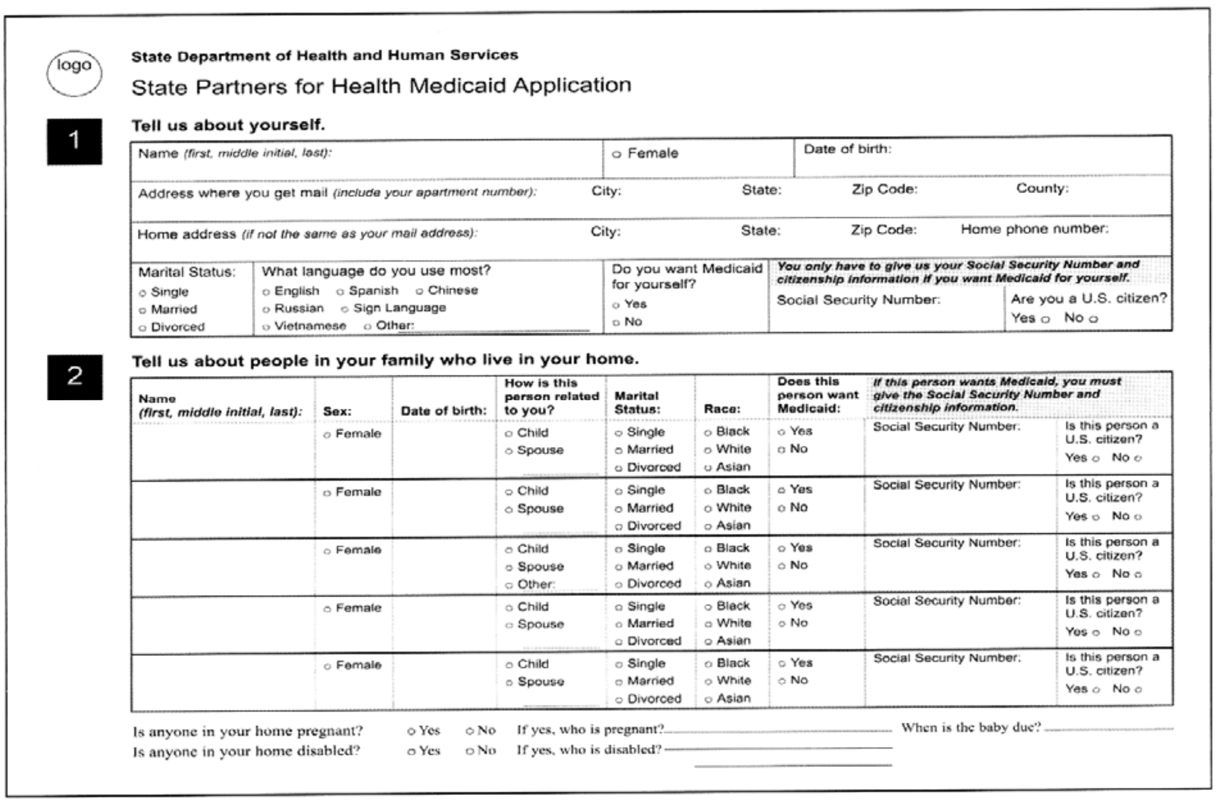


To *cross-reference* means to refer to another part of the document that is related to the first. Cross-referencing forces readers to move their eyes from the line they’re reading to another line, or another part of the same page, or another page in the document, and then to return to the first line. They must break from the familiar left to right pattern of reading and read up and down as well. Readers may lose their places or forget what they were reading about.

Here are some examples of cross-referencing that you often see in charts and tables:

- **Column heads.** Applicants have to read them, then drop their eyes to the fill-in line, then read the column head again (or the next column head), and continue in that manner.
- **Coding.** Assigning codes for categories forces applicants to read all codes and categories to identify the one that fits them. Then they have to remember the code and write it somewhere else on the form.
- **Asterisks.** Asterisks require readers to drop their eyes to the bottom of the chart or page in order to read what the asterisk refers to, and then somehow find their places again. Using asterisks also assumes that all readers know what an asterisk signifies – and most poor readers do *not* know what an asterisk signifies.

In the example shown below, the application doesn't avoid cross-referencing, but it mitigates the problem somewhat by using checkboxes within the fields to help applicants answer questions. Note that there are no asterisks.



logo

State Department of Health and Human Services

State Partners for Health Medicaid Application

1 **Tell us about yourself.**

Name *(first, middle initial, last)*:		○ Female	Date of birth:	
Address where you get mail *(include your apartment number)*:	City:	State:	Zip Code:	County:
Home address *(if not the same as your mail address)*:	City:	State:	Zip Code:	Home phone number:
Marital Status: ○ Single ○ Married ○ Divorced	What language do you use most? ○ English ○ Spanish ○ Chinese ○ Russian ○ Sign Language ○ Vietnamese ○ Other:	Do you want Medicaid for yourself? ○ Yes ○ No	***You only have to give us your Social Security Number and citizenship information if you want Medicaid for yourself.*** Social Security Number:	Are you a U.S. citizen? Yes ○ No ○

2 **Tell us about people in your family who live in your home.**

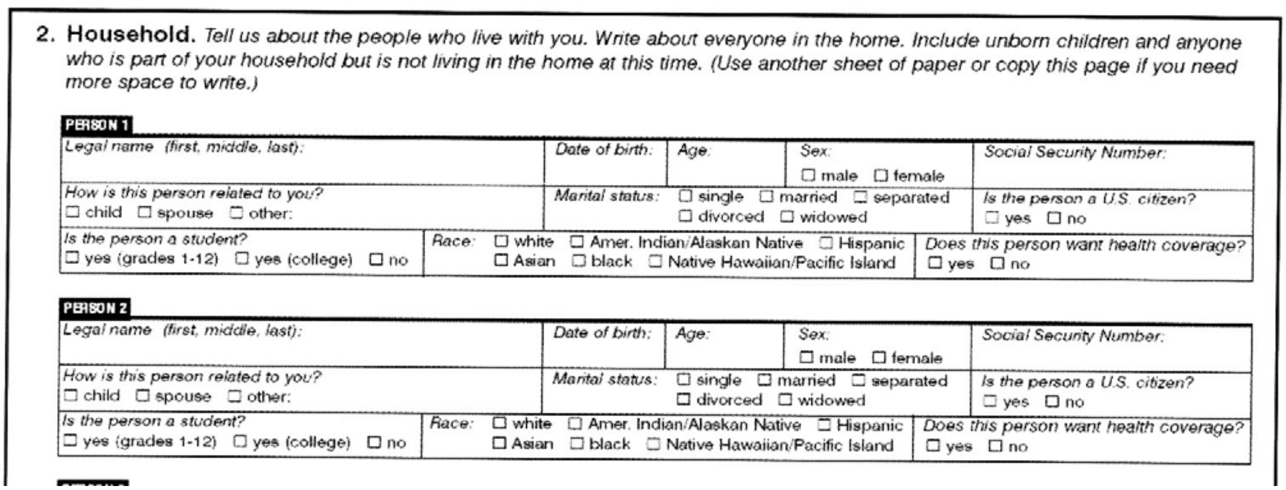
Name ***(first, middle initial, last)*:**	**Sex:**	**Date of birth:**	**How is this person related to you?**	**Marital Status:**	**Race:**	**Does this person want Medicaid:**	***If this person wants Medicaid, you must give the Social Security Number and citizenship information.***	
	○ Female		○ Child ○ Spouse	○ Single ○ Married ○ Divorced	○ Black ○ White ○ Asian	○ Yes ○ No	Social Security Number:	Is this person a U.S. citizen? Yes ○ No ○
	○ Female		○ Child ○ Spouse	○ Single ○ Married ○ Divorced	○ Black ○ White ○ Asian	○ Yes ○ No	Social Security Number:	Is this person a U.S. citizen? Yes ○ No ○
	○ Female		○ Child ○ Spouse ○ Other:	○ Single ○ Married ○ Divorced	○ Black ○ White ○ Asian	○ Yes ○ No	Social Security Number:	Is this person a U.S. citizen? Yes ○ No ○
	○ Female		○ Child ○ Spouse	○ Single ○ Married ○ Divorced	○ Black ○ White ○ Asian	○ Yes ○ No	Social Security Number:	Is this person a U.S. citizen? Yes ○ No ○
	○ Female		○ Child ○ Spouse	○ Single ○ Married ○ Divorced	○ Black ○ White ○ Asian	○ Yes ○ No	Social Security Number:	Is this person a U.S. citizen? Yes ○ No ○

Is anyone in your home pregnant? ○ Yes ○ No If yes, who is pregnant? ______ When is the baby due? ______
Is anyone in your home disabled? ○ Yes ○ No If yes, who is disabled? ______

Person boxes

One alternative to using charts and tables is to collect all of the information for each individual applicant before moving on to the next applicant. That way, applicants can concentrate on one person at a time, while reading and writing from left to right.

Below is an example that shows the first two entries on a page of “person boxes.” Applicants can read and answer from left to right, rather than up and down – one person at a time. They don’t have to look up or remember any codes, such as codes for race or ethnicity, because the form has simple check boxes within the fields.



2. Household. *Tell us about the people who live with you. Write about everyone in the home. Include unborn children and anyone who is part of your household but is not living in the home at this time. (Use another sheet of paper or copy this page if you need more space to write.)*

PERSON 1

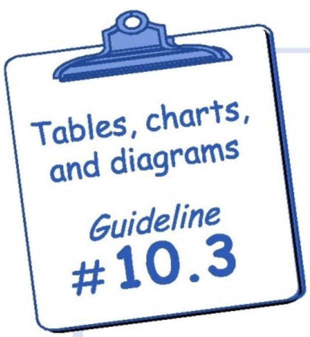
Legal name (first, middle, last):	*Date of birth:*	*Age:*	*Sex:* ☐ male ☐ female	*Social Security Number:*
How is this person related to you? ☐ child ☐ spouse ☐ other:	*Marital status:* ☐ single ☐ married ☐ separated ☐ divorced ☐ widowed			*Is the person a U.S. citizen?* ☐ yes ☐ no
Is the person a student? ☐ yes (grades 1-12) ☐ yes (college) ☐ no	*Race:* ☐ white ☐ Amer. Indian/Alaskan Native ☐ Hispanic ☐ Asian ☐ black ☐ Native Hawaiian/Pacific Island			*Does this person want health coverage?* ☐ yes ☐ no

PERSON 2

Legal name (first, middle, last):	*Date of birth:*	*Age:*	*Sex:* ☐ male ☐ female	*Social Security Number:*
How is this person related to you? ☐ child ☐ spouse ☐ other:	*Marital status:* ☐ single ☐ married ☐ separated ☐ divorced ☐ widowed			*Is the person a U.S. citizen?* ☐ yes ☐ no
Is the person a student? ☐ yes (grades 1-12) ☐ yes (college) ☐ no	*Race:* ☐ white ☐ Amer. Indian/Alaskan Native ☐ Hispanic ☐ Asian ☐ black ☐ Native Hawaiian/Pacific Island			*Does this person want health coverage?* ☐ yes ☐ no

Source: This Figure is based on text and tables in *The Health Literacy Style Manual* (MAXIMUS, 2005:78-79). The text has been adapted with permission to serve as an example in this Toolkit. For more information, see references at the end of this chapter.

Create a clear and uncluttered layout that includes strong visual and written cues



Create a clean, uncluttered layout with strong visual and written cues to guide readers and help them interpret the information correctly.

Keep the layout tidy and uncluttered, with ample margins and white space. Help readers understand and absorb the information in a chart or diagram by using devices such as taglines, examples, captions, and step-by-step instructions. If you use symbols in a comparison chart, make them as self-explanatory as possible, tell what they mean, and design them with good contrast.

To illustrate the impact of formatting, Figure 5-7-c below uses comparison charts as an example. This figure shows three versions of a chart that summarizes results from a fictional survey of patients that asked about their experiences with their family doctor. The information is the same in each chart, but the formatting differs. By comparing Charts A, B, and C, you will see the difference between a cluttered and clean layout. You will also see ways of using formatting features to guide readers and help them interpret the information correctly.

Figure 5-7-c. Making comparison charts easier for people to understand and use.

Charts A and B below illustrate ways of formatting comparison charts that pose barriers for readers. These barriers make the charts less appealing at first glance as well as making them harder to understand and use.

chart **A**

Centering the names weakens alignment and reduces appeal

Strong alignments are crucial for a clean and tidy layout, and they make text easier to read.

Usually text within a column should be left-justified. Here, in the column of names, either left-justification or right-justification would work well and be better than centering.

Centering the star symbols weakens visual cues for comparing them

Centering the stars makes them hard to compare. The stars should be left-justified for ease of comparison. When they are left-justified, three stars extend much farther than two stars, which in turn extend farther than one star (see Chart B below).

	Appointments	Listening	Explanations	Time
Dr. P Brown	☆☆☆	☆☆	☆☆☆	☆☆
Dr. R. Connelly	☆☆	☆☆	☆☆	☆☆
Dr. B. Layco	☆	☆☆	☆	☆
Dr. N. Linn	☆☆☆	☆☆	☆☆	☆☆
Dr. E. Melton	☆☆☆	☆☆☆	☆☆	☆☆☆
Dr. C. Perry	☆☆	☆☆☆	☆☆☆	☆☆
Dr. V. Rema	☆☆	☆☆	☆☆	☆☆
Dr. F. Springer	☆	☆☆	☆☆	☆

☆☆☆ Above average ☆☆ Average ☆ Below average

Meaning of the headings is unclear

These one-word headings are so brief and generic that it’s hard to know what they mean.

Overall layout is busy, cluttered, cramped, and hard to read

The layout is cluttered with unnecessary lines. Margins are tight and there is little white space.

Color banding hinders rather than helps

The color banding is supposed to make it easier to track across the rows, but it adds clutter and draws too much attention. The color banding interferes with pattern recognition when you try to interpret the star symbols.

Placement of the legend reduces its impact

Putting it here at the bottom makes it more likely that some readers will ignore or overlook it.

Figure 5-7-c, continued.

This next example, Chart B, reduces some of the barriers shown above in Chart A, but there is still plenty of room for improvement in formatting.

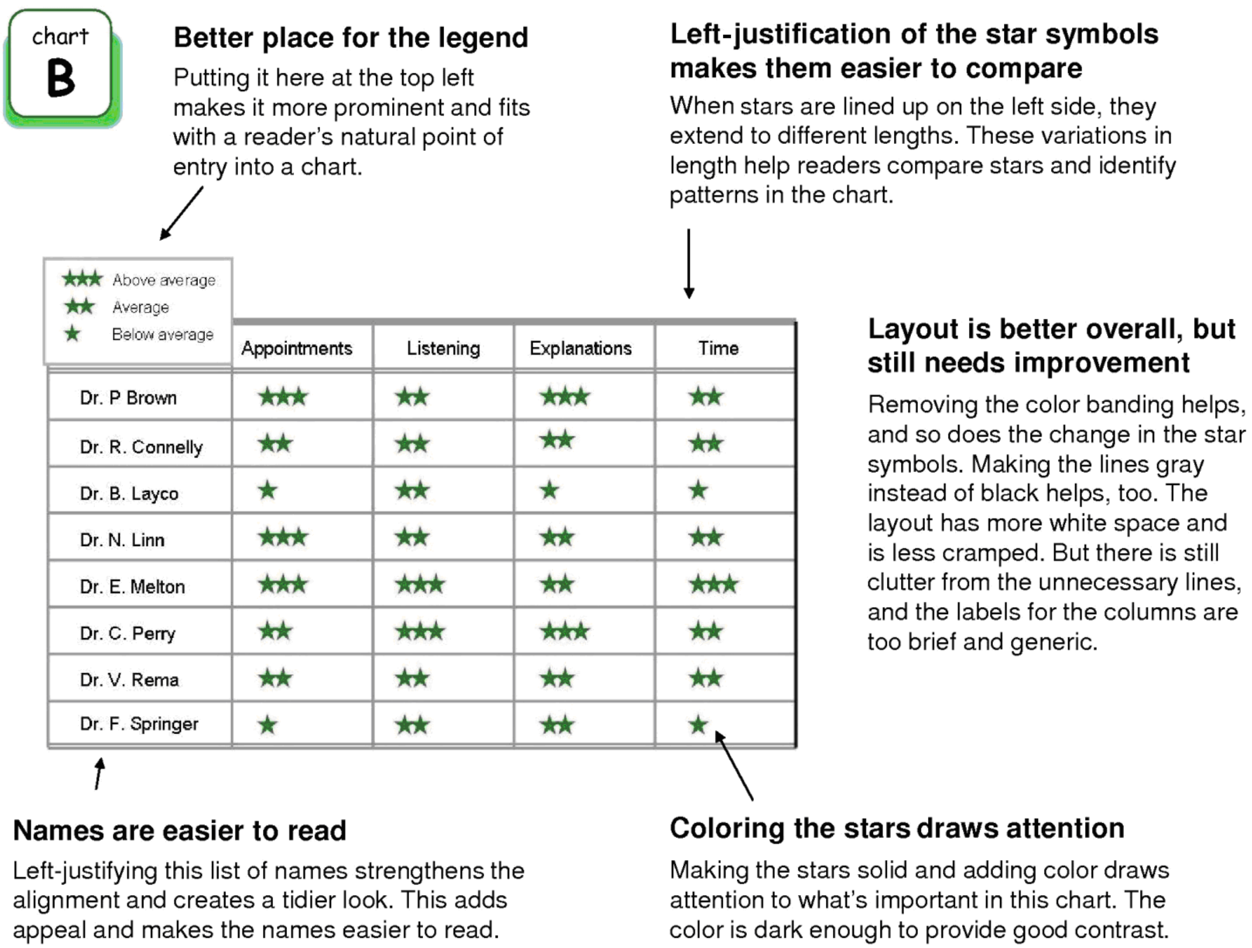
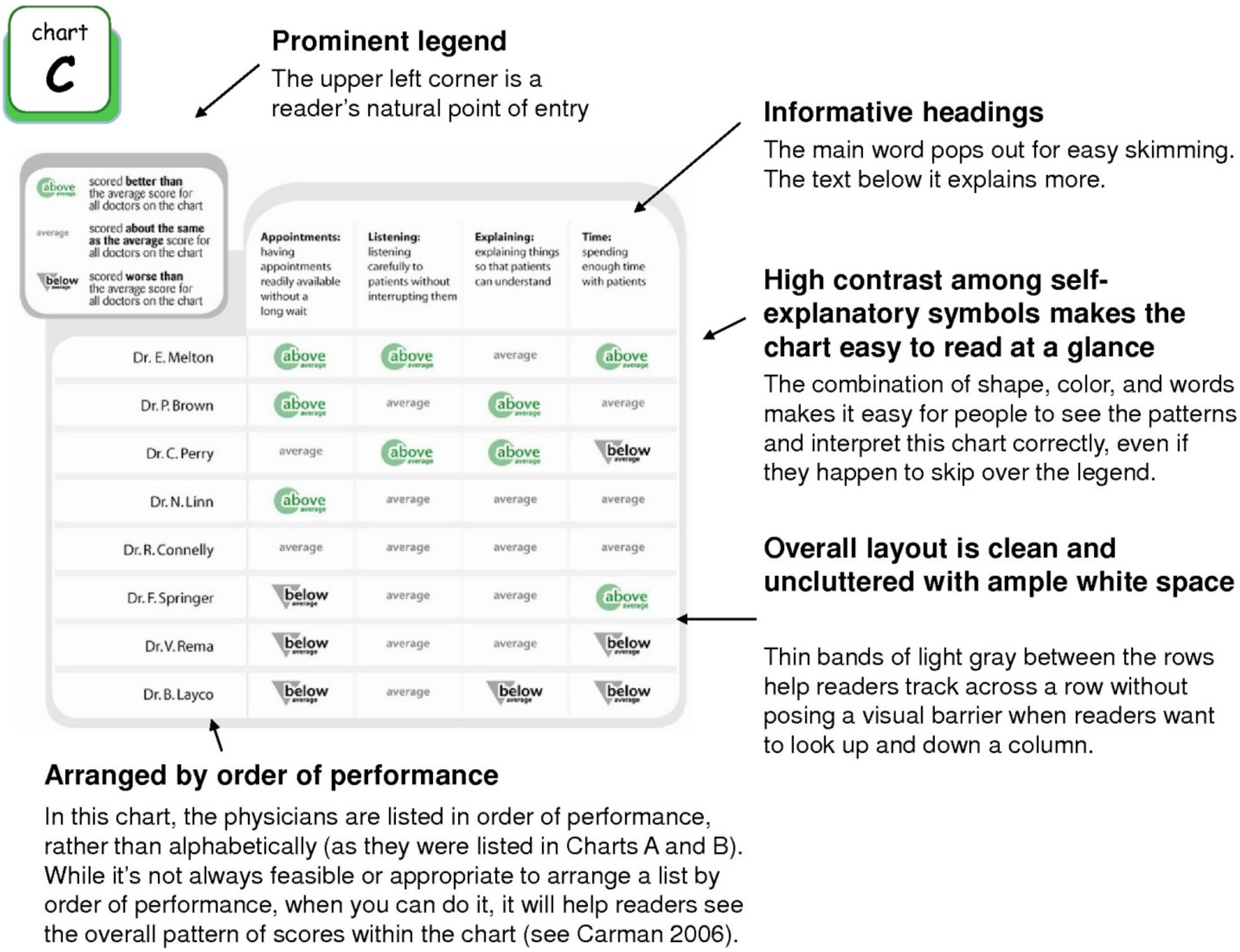


Figure 5-7-c, continued.

The formatting in Chart C below has addressed the barriers illustrated above in Charts A and B.



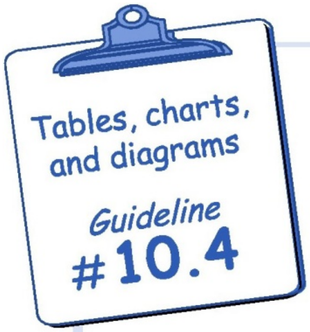
Source: This series of charts and commentary was created for use in this Toolkit. Information in the charts is fictional. Chart C, which illustrates some features of "good" formatting, has been adapted from charts designed by the Toolkit writer for use in a CAHPS study of the impact of formatting on readers' use of comparison charts (Carman & McGee, 2006).

Contrast as a tool for guiding readers

"Contrast" refers to the degree of difference, such as differences in light and dark, differences in shape or size, etc. As shown in the charts in Figure 5-7-c above, you can use contrast to help guide your readers:

- **To help draw readers' attention to what's important, try *increasing* the contrast**. For example, in Chart C above, the key word in the headings is formatted with strong contrast to make it pop out. When you are developing your own charts, strong contrast might mean choosing a font with a heavier look, or making the type size a little larger. You may need to experiment with variations in font size, style, and weight to get the desired effect (for help with this, see Toolkit Part 5, Chapter 3, *Guidelines for fonts, size of print, and contrast*).
- **To help subdue possible distractions, try *reducing* the contrast.** Suppose, for example, that you have a large chart and you need to add some horizontal lines between the rows to help readers track accurately across the page. To make these lines effective but not distracting, try reducing the contrast until the line is as subtle as possible, while still serving the function of separating the rows. Experiment to see what works. For an example, compare the black lines in Chart A above with the subdued light gray narrow bands in Chart C.
- **Fine-tune the contrast to help readers make comparisons.** For example, if you are using symbols in a comparison chart, choosing symbols that contrast well with each other helps readers compare them and pick out patterns in the chart. Chart C shows how this can work.

Take extra care in explaining numbers and calculations



If there are any numbers or calculations, explain them carefully and give examples.

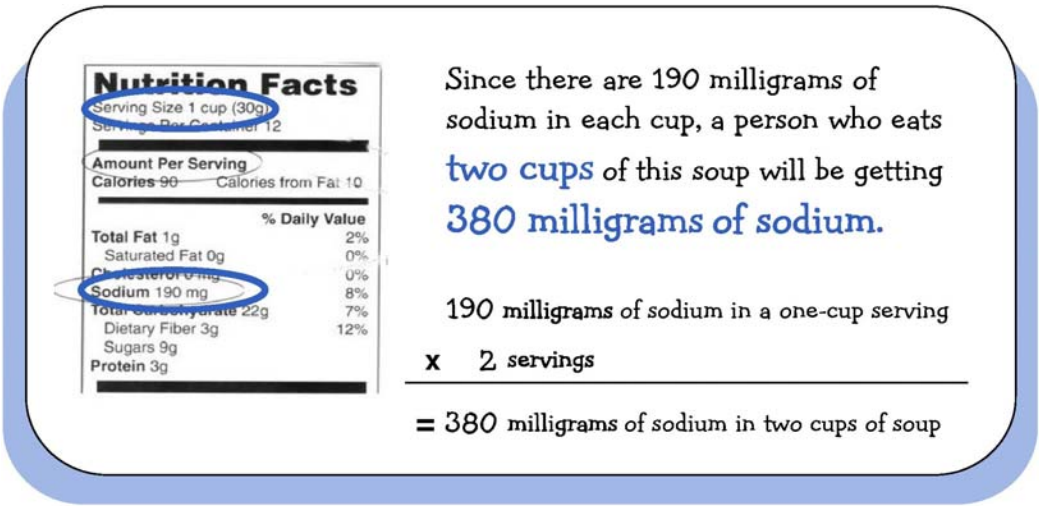
Since math is hard for many people, and can be especially hard for people with low literacy skills, take special care with explanations that involve numbers. With calculations, use examples that show each step and explain it clearly. Simplify numeric examples by using rounded whole numbers as much as you can. To help people understand weights and measurements, make comparisons to familiar objects.

Being able to understand and manipulate numbers (“numeracy” or “numerical literacy”) is an important part of literacy skills. In 2003, the National Assessment of Adult Literacy gave literacy tasks to a large sample of U.S. adults. This study assessed health literacy by examining people’s ability to use written information to do a broad range of health-related tasks. Results showed that many people find numerical information difficult to understand and use (National Center for Education Statistics [NCES], 2006; see also the discussion of literacy skills in Toolkit Part 1).

If your written material includes any numbers or calculations, it’s vital to explain them very clearly and carefully. Here are some tips:

1. **Give examples and base them on whole rounded numbers if you can.** Many people have difficulty when numbers are expressed as decimals and fractions. Whenever possible, round to whole numbers.

2. **If there are calculations, break them down into a series of steps and explain each step.** If you show addition, subtraction, multiplication, or division, present the calculations in the usual way, rather than describing them in words or using an unconventional visual presentation. Here is an example:



In this example, notice how it begins with text that provides context and prepares the reader for the calculation that follows. Pertinent parts of the label are circled to remind readers where the numbers come from. The calculation itself (190 x 2 = 380) uses the standard formatting that is presented in schools when people learn how to do multiplication. To reinforce understanding, the calculation itself is expanded with explanatory text.

3. **To help people interpret numbers and quantities, make comparisons to familiar objects**. For example, a four-ounce serving of meat is often compared to the size of a deck of cards. Earlier in this chapter, we showed an example that told how many milligrams of sodium are in a measuring teaspoon of table salt.

4. **If a table of numbers is likely to be too challenging for some readers, consider converting it to a different format**. To get the main points across you may have to delete some of the details. Figure out what readers truly need to know and then adapt the amount of information and the way you present it so that you help them understand the main message without misleading or confusing them. Figure 5-7-d below gives an example.

Figure 5-7-d. Income charts are hard to interpret.

NOTE: This Figure is from *The Health Literacy Style Manual* (MAXIMUS, 2005:78-79).

Income charts are particularly hard to understand and follow. The main problem is that they contain lots of numbers, and readers with limited literacy skills often have limited numerical literacy skills too. In other words, they have difficulty reading and understanding numbers. In addition, income charts are often outdated as soon as they're published!

It's hard (or maybe impossible) to make income charts easy to follow and useful. It's better to summarize the information for each income category generally and present it in narrative format.

Usually the goal of displaying an income chart is to encourage applicants to apply – not to ask them to self-screen. If that's the case, it's better to give them some general information; let them apply, and then let them know if their income is higher (or lower) than the program allows.

Here's an income chart that's hard to follow:"

ARKIDS First Income Eligibility

Family Size	ARKids A				ARKids B	
	Under Age 6		Age 6 and Over			
	Annually	Monthly	Annually	Monthly	Annually	Monthly
2	$16,120	$1,343	$12,120	$1,010	$24,240	$2,020
3	$20,296	$1,691	$15,260	$1,272	$30,520	$2,543
4	$24,472	$2,039	$18,400	$1,533	$36,800	$3,067
5	$28,648	$2,387	$21,540	$1,795	$43,080	$3,590
6	$32,824	$2,735	$24,680	$2,057	$49,360	$4,113
7	$37,001	$3,083	$27,820	$2,318	$55,640	$4,637
8	$41,177	$3,431	$30,960	$2,580	$61,920	$5,160
Add for each additional member	$4,176	$348	$3,140	$262	$6,280	$523

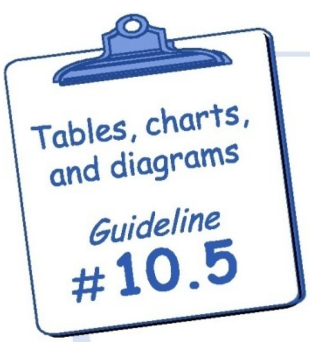
The above income limits will increase slightly on April 1, 2004.

Here is a revision that gives general information in narrative form:

> If you have 2 people in your family and you make less than $2,020 each month, you may be able to get ARKids A or ARKids B.
>
> If you have 3 people in your family and you make less than $2,543 each month, you may be able to get ARKids A or ARKids B.
>
> If you have 4 people in your family and you make less than $3,067 each month, you may be able to get ARKids A or ARKids B.
>
> If you have 5 people in your family and you make less than $3,590 each month, you may be able to get ARKids A or ARKids B."

Source: This Figure is based on text and an accompanying table in *The Health Literacy Style Manual* (MAXIMUS, 2005:78-79). The text has been adapted slightly, with permission, to serve as an example in this Toolkit. For more information, see references at the end of this chapter.

Verify ease of understanding by getting feedback from readers



Pretest your tables, charts, and diagrams to be sure that your intended readers can understand and use them.

Direct feedback from readers is the best way to check on comprehension, cultural appropriateness, and usability of the information you present in a table, chart, diagram, or graph.

Getting reader feedback is the best way to create useful and understandable charts and diagrams. Use the feedback you get from members of your intended audience to fix problems and fine tune the formatting. Add explanations and labeling that will help guide readers to identify main points and make a correct interpretation, and remove or change things that might confuse them.

You may be tempted to skip this important step of getting reader feedback, but getting feedback about tables, charts and diagrams is especially important. Because you are familiar and comfortable with using tables, charts, and diagrams, it can be hard to keep in mind that many of your readers are not. Many readers may find this way of presenting information to be intimidating and difficult, especially those with low literacy skills. When you use a table, chart, or diagram in your written material, it is crucial to verify that your readers are able to interpret them correctly and find them easy to use.

The most effective way to check on how well a table, chart, or diagram is working is to show it to readers and get their reactions. How you ask for their feedback is important. Don't ask directly for an opinion about whether the chart is easy to understand. Instead, to get the most meaningful feedback, ask your readers to tell in their own words what the chart is about. Give them some tasks to do that will help demonstrate whether they are able to understand and apply the information it presents (this is called "usability testing"). For help on how to test your charts and diagrams, see Toolkit Part 6, *How to collect and use feedback from readers.*

End notes

Thanks to Penny Lane, Mark Evers, and Julie Carson for their contributions to this chapter.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 2: Detailed guidelines for writing and design

PART 5

Understanding and using the "Toolkit Guidelines for Graphic Design"

Chapter 8

Guidelines for forms and questionnaires

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 5, Chapter 8

Guidelines for forms and questionnaires

List of figures in this chapter:

This document is the last of eight chapters in Part 5 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the last of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for forms and questionnaires. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

What aspects of design are covered in the other chapters?

The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); fonts, size of print, and contrast (Chapter 3); headings, bulleted lists, and text emphasis (Chapter 4); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); and tables, charts, and diagrams (Chapter 7).

About forms and questionnaires

This chapter is about designing forms and questionnaires. The unique feature of these formats is that they are designed to collect information from people. Forms and questionnaires are generally either printed or electronic; this chapter focuses on designing printed versions. Typically, printed forms and questionnaires collect information by leaving blank lines or spaces to be filled in, and by setting up things to be marked, such as boxes to check or choices to be circled. Forms and questionnaires can range from brief to lengthy.

Different types of forms and questionnaires are used for different purposes. Here are a few examples:

- **Application forms**. Examples are applications for Medicaid or CHIP (Children's Health Insurance Program), applications to receive Social Security benefits, and applications for Medicare supplemental health insurance.

- **Information forms used for reference**. Examples include wallet cards with emergency health information and logs of blood sugar records kept by people with diabetes.

- **Permission forms**. Examples are informed consent forms for medical treatment and forms that give school staff permission to administer medications to children during school hours.

- **Other types, such as questionnaires and worksheets.** Examples are health history questionnaires for patients and worksheets that help people do numeric calculations.

Why work on improving your forms and questionnaires?

When forms are not working well, the costs can be substantial

Many forms are too difficult for people to understand and complete. The purpose is unclear, the instructions are difficult, it's hard to know what the questions are asking, and the page is crowded with little space available for writing down an answer. People get confused, discouraged, and frustrated. They make mistakes. They skip parts they don't understand. They may delay in finishing the form, or maybe they give up altogether.

When forms are too difficult, the resulting errors and missing information cause a lot of problems for the agencies that are using the forms to collect information. Staff must spend more time answering questions, providing assistance, and correcting errors and problems. The need to follow up on problems caused by poorly designed forms and questionnaires takes them away from other work. Resources are wasted because people make mistakes and then have to fill out the same form again. When there are mistakes or delays in processing the information, clients may go without vital services they need.

> "It has been estimated that for every dollar spent on producing a form, $20 to $97 will be spent to complete, handle, process, and store it. Forms with errors can cost up to 10 times more to process. Therefore, it is important that we pay attention to how we create forms and reduce the costs associated with processing them."

Source: *Creating Plain Language Forms for Seniors*
(Canadian Public Health Association, 1998:1). Used with permission.

There's a strong business case for improving your forms

A project by the National Literacy and Health Program and the Canadian Public Health Association studied the costs associated with using forms that are too difficult for people to understand and complete, and looked at the business case for improving forms. They conducted focus groups with older adults to get their reactions to existing forms. They used the results to identify ways to improve forms, which they summarize in their report titled *Creating Plain Language Forms for Seniors: A Guide for the Public, Private, and Not-for-Profit Sectors*. This report uses a number of examples from Canadian and Australian businesses and governments to document the business case for improving forms.

> ". . . plain language forms and policies make good business sense . . . [there are many] encouraging examples of the huge time and cost savings reported by business and government after switching to plain language forms."

Source: *Creating Plain Language Forms for Seniors*
(Canadian Public Health Association, 1998:3). Used with permission.

Making forms easier to fill out improves the completeness and accuracy of the answers people give. People who fill out the forms are less frustrated, and so are the people who process them. The forms are quicker, easier, and more cost-effective to process, and people get the services they need in a more timely fashion.

The Toolkit Guidelines can help

The guidelines we discuss in this chapter will help you create forms that make it easier for people to provide complete and accurate information that will be easier and more cost-effective for you to process. You can use the guidelines to help create forms that are easy for people to understand and complete because they:

- **Have clear and simple instructions.** People will understand right away what they are supposed to do with the form, and the instructions will anticipate and address any questions that are likely to come up in their minds.

- **Have questions that are easy to understand and answer.** People will be able to focus on giving the answer to the question rather than trying to figure out what the question is asking or what they are supposed to do. It will be easy for them to figure out what to mark or write down. There will be plenty of space to fill in the responses, and if any answer choices are given, they will be clear and make sense.

- **Have a layout that is uncrowded and easy to follow.** People will be able "navigate" through the form without distractions or frustration, moving smoothly from one part to the next.

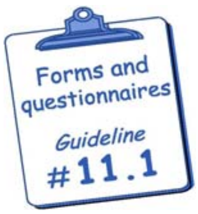
- **Make clear what to do when the form is completed.** People will know what they are supposed to do with it after they fill it out.

Guidelines for forms and questionnaires

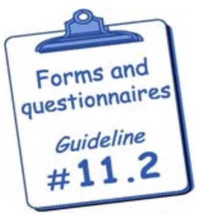
In this chapter, the guidelines we discuss focus on *issues unique to forms and questionnaires*. They are listed below in Figure 5-8-a.

[You will find that many of the other *Toolkit Guidelines for Writing and Design* that we discuss in other chapters also apply to forms and questionnaires, but we don't repeat them here. For the full list of guidelines see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.]

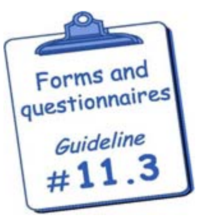
Figure 5-8-a. Toolkit guidelines for forms and questionnaires.



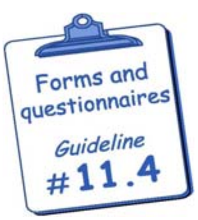
Begin a form or questionnaire with an informative title and brief explanation of its purpose. At the beginning of the form or questionnaire, tell what the document is for and what people should do with it, using words they will understand. Explain any program titles or agency names that may be unfamiliar to them. Explain how the information will be used and, if applicable, how privacy will be protected.



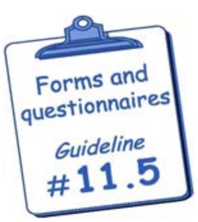
Ask only for information you really need and will definitely use. Filling out a form or questionnaire can be burdensome and time consuming, so keep it as short as you can. Don’t collect information that is unnecessary or readily available elsewhere. Ask for each piece of information only one time.



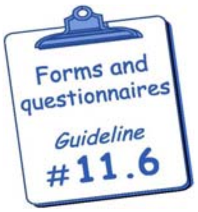
Make the layout clear, uncrowded, and appealing. Do not crowd a form or questionnaire into space that is too small for easy reading and writing. Spreading it out into the amount of space required for easy completion will work better than forcing it to fit into some predetermined length (such as “no longer than one page”).



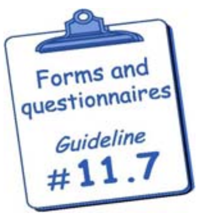
Integrate instructions and explanations into the form or questionnaire, placing them right where they are needed by the reader. Integrating the instructions into your form is a powerful way to show consideration for your readers and improve ease and accuracy of response. Do not use footnotes or asterisks, because many less-skilled readers do not understand their function, and using them adds an extra burden for any reader. At the end, tell readers what to do with the completed form or questionnaire.



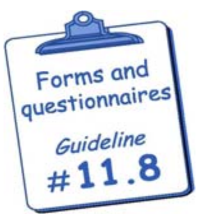
Limit the number of formats for collecting answers and use them in a consistent way. Make the task of supplying information as simple and intuitive for your readers as you can, so that they don’t have to stop and think about what you are asking or how to answer. To encourage full and accurate completion, provide clear, complete labels on the fields to be filled in.



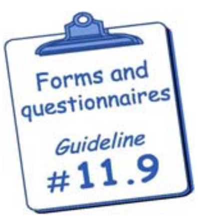
In a form for people with low literacy skills, avoid using a grid or matrix format to collect information. A grid or matrix format has rows and columns. When you use a grid to collect information, readers have to keep looking up at the headings at the top of the columns to understand what you are asking for. To make it easier for people to give accurate answers, consider breaking each part of the grid into a fully labeled separate item.



Create a clear and obvious path through the form that minimizes cross-references and skip patterns. Arrange the items in an order that makes sense to readers and eliminates (or greatly minimizes) the need to skip around among the sections.



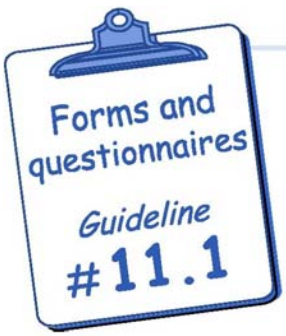
Conduct usability testing. To find out whether a form or questionnaire is working well, conduct usability testing with intended users. Have them fill it out, and then talk with them to get their reactions and suggestions.



Take into account how the form or questionnaire will be produced, distributed, and processed. Work with others to produce a form that is both easy to fill out and easy to process.

Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design".*

Begin with a clear title and statement of purpose



Begin a form or questionnaire with an informative title and brief explanation of its purpose.

At the beginning of the form or questionnaire, tell what the document is for and what people should do with it, using words they will understand. Explain any program titles or agency names that may be unfamiliar to them. Explain how the information will be used and, if applicable, how privacy will be protected.

Provide an informative title

People want and need to know immediately about the purpose of a form or questionnaire, and what they are supposed to do with it. To help them, start by giving the document an informative title that lets them know what to expect. Since the title is probably the first thing people will notice, use it as a way to encourage them and make them feel that the document is going to be easy to understand and use:

- **Avoid using generic titles** such as "application form."
- **Avoid using a terse and bureaucratic-sounding title with difficult vocabulary** (such as the one shown in Figure 5-8-b below, "Health Assessment for Influenza Immunization").
- **Instead create an informative title that uses familiar words and simple syntax** (such as the one in Figure 5-8-b below, "Flu shot form").

Explain the purpose

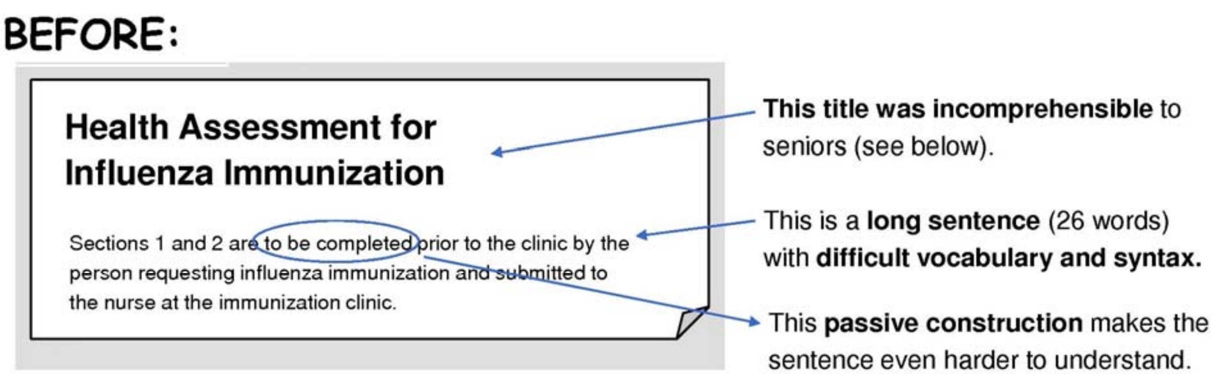
Include an introduction at the beginning of your form or questionnaire. Use this introduction to give your intended respondents clear and simple answers to the questions they are likely to have:

- **Who are you?** Be sure to spell out the full name of organizations, rather than relying on acronyms. Remember that people outside your agency may know you by another name or nickname. If so, include the other names that are familiar to them as well as the "official name." Use program titles and explanations that will be familiar and understandable to your readers, not just to staff.

- **Why are you asking for information and what you will do with it?** Include assurances of privacy if applicable.
- **What do I need to do?** Explain clearly and simply what they are supposed to do with the form. If applicable, explain about the deadline (and what will happen if they don't meet it). Address other questions they may have, such as whether completing the form is voluntary or required. Explain any rights or rules that are applicable.

To encourage a fast and accurate response, put this explanation in a prominent place at the very beginning of the material. Keep it brief, make it easy to skim, and give it a friendly tone. Figure 5-8-b below gives an example of how to turn a difficult and bureaucratic-sounding introduction into one that is easy for people to understand.

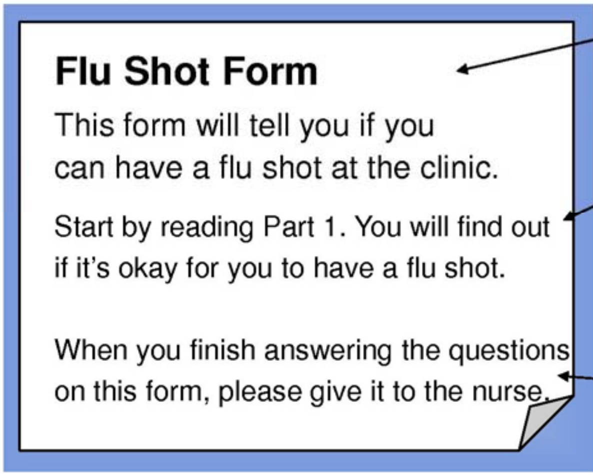
Figure 5-8-b. Improving the title and initial instructions on a form.



This form was tested in focus groups with seniors. Results showed that:

- **The vocabulary was too difficult, including most of the words in the title**. Seniors couldn't understand the words *assessment*, *influenza,* and *immunization*. Other hard words include *prior to*, *requesting*, and *submitted.*
- **Using the simple word "clinic" in an unfamiliar way confused them**. Usually, *clinic* refers to a physical place that provides health care. But in health care jargon, *immunization clinic* can mean times when flu shots are available. The example shown above confused seniors by using *clinic* to mean a time rather than a place (it says to complete the sections "*prior to the clinic,"* which means to complete them *before the time you go to have your flu shot*).

AFTER:


Flu Shot Form

This form will tell you if you can have a flu shot at the clinic.

Start by reading Part 1. You will find out if it's okay for you to have a flu shot.

When you finish answering the questions on this form, please give it to the nurse.

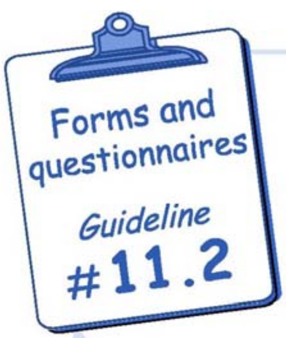
The revised **main title** is brief and easy to understand. The **subtitle** that follows helps convey the full meaning of the original title without using difficult words such as *assessment*.

The **initial instructions are rewritten in the active voice using simple words.** They give enough direction to get the reader started. The rest of the instructions are integrated into the form itself, right where the reader needs them.

The last sentence **tells people what to do with the form** when they are finished filling it out.

Source: The text only (not the visual formatting and commentary) has been adapted with permission for use in this Toolkit from a before-and-after example in *Creating Plain Language Forms for Seniors: A Guide for the Public, Private, and Not-for-Profit Sectors* (Canadian Public Health Association, National Literacy and Health Program, 1998:14-15). To help generate the practical advice in this publication, the Canadian Public Health Association National Literacy and Health Program did focus groups with seniors.

Ask only for information that's really necessary



Ask only for information you really need and will definitely use.

Filling out a form or questionnaire can be burdensome and time consuming, so keep it as short as you can. Don't collect information that is unnecessary or readily available elsewhere. Ask for each piece of information only one time.

Filling out a form or responding to a questionnaire can be burdensome to any reader. Forms or questionnaires that ask for less information are faster and easier to fill out. They are also quicker and easier for you to process.

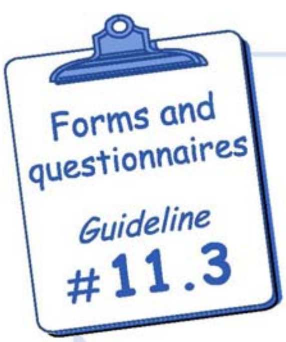
When you are developing or revising a form or questionnaire, here are some things to consider about the information you are planning to collect:

- **Is it really necessary to know?** To justify that a piece of information is needed, be explicit about how you plan to use it. Discussing how you will use the information before you collect it can help you eliminate unnecessary data collection. It also serves as a good check on whether you are collecting each piece of information in ways that make it the most usable (at the right level of detail, etc.).

- **Is it readily available elsewhere?** Sometimes you can streamline your data collection because the information you seek is already available from another source.

- **Are you asking for the same information more than once?** It's annoying to be asked the same question several times in different ways. For example, if you ask for a date of birth, don't ask also for a person's age.

Make the layout clear, uncrowded, and appealing



Make the layout clear, uncrowded, and appealing.

Do not crowd a form or questionnaire into space that is too small for easy reading and writing. Spreading it out into the amount of space required for easy completion will work better than forcing it to fit into some predetermined length (such as "no longer than one page").

Creating a clear, uncrowded, and appealing layout is worth the effort. It will encourage people to supply information that is accurate and complete. This will help you process the completed form or questionnaire more quickly and efficiently.

Here are tips for creating a clear and effective layout:

- **Be sure to allow enough space on the form for people to fill in their answers**. Space that is too cramped causes serious problems both for the person who is filling out the form and for those who are using the information it collects. When there's not enough space to fill in the answer, people may get frustrated, discouraged, or annoyed. They may skip the question, give an incomplete answer, squeeze in an answer that's hard to read, or resort to abbreviations that you cannot decipher. These reactions, in turn, reduce the accuracy of the information. Depending on the purpose of the form, it could cost you a lot of time and money to follow up. Leaving ample room for fill-in answers helps prevent such problems.

- **Be especially generous with the space for fill-in answers if the material is for people with Medicare or other older adults.** Adding extra space for fill-in answers may make the form a little longer, but it's worth it.

- **Make *all* of the text large enough for easy reading, including any legal notices.** Legal notices are sometimes called "fine print" because they are often printed smaller than the rest of the text. Don't do this in your forms and questionnaires. If the text is important enough to include, make it easy for people to read.

For more help on layout, see Toolkit Part 5, Chapter 2 (*Guidelines for overall design and page layout*), Chapter 3 (G*uidelines for fonts (typeface), size of print, and contrast)*, and Chapter 4 (G*uidelines for headings, bulleted lists, and emphasizing blocks of text).*

What about the length of a form or questionnaire?

When you are creating a form or questionnaire, the total length is important. Keeping it as short as you can helps encourage a good response -- provided that the document is easy for people to read and fill out. Ideally, the length of your document will be determined by the amount of space you need to create a clear, uncrowded and appealing layout that accommodates all of the questions you need to ask. But sometimes you may have set a goal for the overall length of your form or questionnaire. Or there may be a maximum length that you cannot exceed due to budgetary or other considerations.

If you want to keep your form or questionnaire to a predetermined length, and you find that the document exceeds this length, what can you do? Forcing the questions to fit into the space available is not a reader-friendly solution.

> "Seniors don't like to see a great deal of text compressed onto one sheet of paper because it overwhelms them. They also prefer a larger font, even if it means filling out more pages."

Source: *Creating Plain Language Forms for Seniors* (Canadian Public Health Association, 1998:6). Used with permission.

Crowding too many questions into too little space is likely to be counter-productive for everyone involved. Here are some reasons why crowding your form can lead to confusion, inaccurate information, and missing data:

- If you reduce the size of the font to save space, you will make the text harder for people to read.
- If you cut corners on the instructions, you may make the form more difficult. If you make changes to save space that involve dropping or condensing definitions and instructions, or putting them apart from the questions they refer to, you will put a greater burden on respondents. They may get discouraged or confused and give incomplete or inaccurate answers.
- If you save space by giving people less space for filling in an answer, it will be hard for them to squeeze in their answer and hard for you to decipher it.
- If you crowd questions together, removing white space and graphic design elements, you will create an intimidating "wall of words" that makes the document less appealing and harder to fill out.

As you can see from the list above, crowding your form has a negative impact on the respondents and, ultimately, on you as well. While you may save a little on paper, you can create a lot of new problems because you have made the form more difficult. Instead of crowding the form, see if one of these two options might work:

1. **Revisit the questions you want to ask – can any of them be dropped?** If you find that a form runs too long, instead of squeezing everything in, take another look. Try to drop some of the questions. Examine them carefully to see if you are asking for any information that's not really necessary (See Guideline 11-2 above).
2. **Revisit the limit on length - what is the best length, all things considered?** If you cannot drop enough questions to allow for good formatting, consider whether the predetermined length can be expanded. If the desired length is just a goal, ask yourself whether this goal reflects what your

readers really need. For example, people who create forms and questionnaires sometimes think that one page is the magic size. But to respondents, what's important is how easy it is to read, understand, and respond to the first few questions on a page. If the first page of the form is easy for them, whether the form is one or two pages won't matter. If it's *not* easy to answer the first few questions, they will be frustrated in any case, and will not be grateful that you kept the form to just one page.

Keep instructions brief and place them right where they are needed

Forms and questionnaires
Guideline
#11.4

Integrate instructions and explanations into the form or questionnaire, placing them right where they are needed by the reader.

Integrating the instructions into your form is a powerful way to show consideration for your readers and improve ease and accuracy of response. Do not use footnotes or asterisks, because many less-skilled readers do not understand their function, and using them adds an extra burden for any reader. At the end, tell readers what to do with the completed form or questionnaire.

Many forms put a needless burden on respondents by forcing them to hunt for instructions, definitions, and explanations. For example, instructions that apply to various questions that come later in the form are sometimes grouped together at the beginning. Instructions are sometimes numbered to correspond to the question numbers and then placed in a separate section or on the back of the form.

This common practice of separating the instructions from the questions causes problems:

- **It increases the likelihood that people will *overlook* the instructions**.

- **It increases the likelihood that people may deliberately *skip* the instructions**. When instructions are in a separate section, people have no immediate need to read them, and may just skip over them. Many people like to start right in, without pausing to read a section of instructions, especially if the instructions look long or complicated.

- **It makes it harder for people to *follow* the instructions**. Separating the instructions from the questions they refer to forces respondents to skip back and forth between the instructions and filling out the form. This is frustrating and confusing to anyone, but especially burdensome to less-skilled readers who are apt to lose their train of thought while skipping back and forth.

When people fail to notice or use the instructions, errors and omissions are more likely. When people provide incomplete or inaccurate information, it can cost you a lot of time and resources in following up. So help the respondents and your own agency or organization by keeping the instructions brief and integrating them into the main part of the form:

- **Keep the instructions as short and clear as possible.** When instructions are brief, people are more likely to take the time to read them carefully.

- **Put each instruction right where it is needed**. For example, you might put instructions at the top of a field that's to be filled in, or integrate them into the question itself. For help in wording your instructions, see the discussion of Guideline 3.4 in Toolkit Part 4, Chapter 3, *Guidelines for writing style*. Guideline 3.4 calls for giving the context first and incorporating definitions and explanations into the text.

- **Do not use footnotes or asterisks**. Consumer testing of written material done by the author and colleagues has shown that people with limited skill and experience in reading don't understand the function of a footnote. They also tend to be unfamiliar with the use of asterisks or other symbols (such as numbers or small letters of the alphabet) to signal that there is a footnote. Moreover, even skilled readers can easily miss a footnote, especially if it has been formatted in an ineffective way (they are often printed in a font size that is tiny).

Use elaborated instructions that incorporate explanations

Sometimes people appreciate knowing why they are being asked for particular information and how it will be used, especially if it is about a sensitive topic or it seems unrelated to the purpose of the form. Try to anticipate when your readers might have questions or concerns about information requested on a form, and incorporate a comment or explanation.

Figure 5-8-c below shows a few examples. As you can see from these examples, expanding a terse instruction to include the context can change the tone of a form from terse and bureaucratic to friendly and respectful. A better tone may help encourage a higher completion rate and greater accuracy of the information that is collected.

Figure 5-8-c. Use elaborated instructions to provide context and incorporate explanations.

EXAMPLE A: Incorporating definitions and context:

> In the space below, write any income you or anyone in your house gets.

Original instructions
They tell what to do, but that's all.

> In the space below, write any income you or anyone in your house gets. When we decide if a child should get Medicaid, the income of the child's parents and stepparents is counted. The child's own income is counted, too.

Revised instructions
This version uses the same first sentence, then adds two more sentences of explanation. These elaborated instructions anticipate and answer questions that may come up about what income counts and how it will be used.

EXAMPLE B: Explaining how information will be used

> List any expenses for child or adult care.

Original instructions
They tell what to do, but that's all.

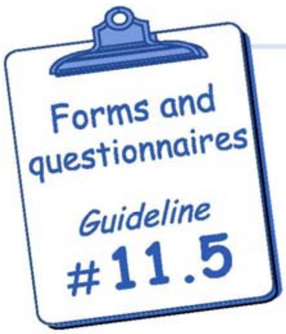
> Child and adult care expenses
> Please tell us what you pay for child care and adult care. Those expenses are necessary so you can work, and we will subtract (take away) those amounts from your income when we decide if you qualify for this program.

Revised instructions
Notice how adding an explanation changes the tone, making this request for financial information more friendly and informative.

Also, this revision adds a heading to signal the topic. Headings that stand out help readers see at a glance what a form is about and how it's organized.

Source: This example is adapted from work done by Christina Zarcadoolas, Penny Lane, Holly Smith Mirenda, and Mercedes Blanco as part of a project for the Centers for Medicare & Medicaid Services done by the MAXIMUS Center for Health Literacy (visit http://www.maximus.com/services/health/health-literacy).

Limit the number of formats for collecting answers



Limit the number of formats for collecting answers and use them in a consistent way.

Make the task of supplying information as simple and intuitive for your readers as you can, so that they don't have to stop and think about what you are asking or how to answer. To encourage full and accurate completion, provide clear, complete labels on the fields to be filled in.

Keep answer formats simple and consistent

When you are choosing answer formats for questionnaire items, look for ways to keep them simple. Here are some tips:

- **In general, choose the shortest and simplest answer format that will provide the information you need.** For example, it's much easier for people to answer a yes-no question than to respond to a complex rating scale with answer choices they have never seen. When you are choosing an answer format, consider whether it makes distinctions that are finer than your respondents would make and more precise than you need. For example, if all you need to know is whether people have been satisfied or not, why ask people to mark their answer on a rating scale with seven categories that range from 1 = extremely dissatisfied to 7= extremely satisfied?

- **Limit the number of different answer formats you use.** Limiting the number of answer formats eases the cognitive burden on respondents. Switching from one type of format to another forces people to slow down and ponder answer choices that have changed and decide what to mark. Frequent switching of answer formats can make respondents feel discouraged, confused, or frustrated. It can depress the response rate and affect the accuracy of people's responses.

- **Include specific instructions and incorporate any definitions that might be needed.** Tell people how to mark their answers, especially if they might need to mark more than one answer for a question. If a question uses words or terminology that respondents might not understand, include a definition. Put the definition right where they need it, either immediately before the question or incorporated into it.

- **Make it easy for people to tell you when they don't know the answer or when the question doesn't apply to them.** Whenever you can anticipate that a question asks about something people may not know, include a "don't know" option or an answer marked "other" with space for them to fill in. If you do not include other options such as "other" or "don't know," people may just skip the question, and you will not know why. Or they might mark the answer that comes closest, even though it is not accurate.

- **Be consistent in wordings, numbering schemes, and formatting**. When you use a particular answer format, be sure to list the choices in the same order every time you use it. For example, if it's a *yes-no* choice, don't switch between *yes-no* and *no-yes*. When you set up numeric or other rating scales, be thoughtful and consistent in your labeling and in how you position the positive and negative ends of the scale (such as always using the highest number for the most positive response).

Figure 5-8-d below shows a one-page questionnaire. It illustrates how to apply many of these recommendations for choosing a limited number of formats for collecting answers and using them in a consistent way.

Figure 5-8-d. Sample questionnaire with examples of formatting.

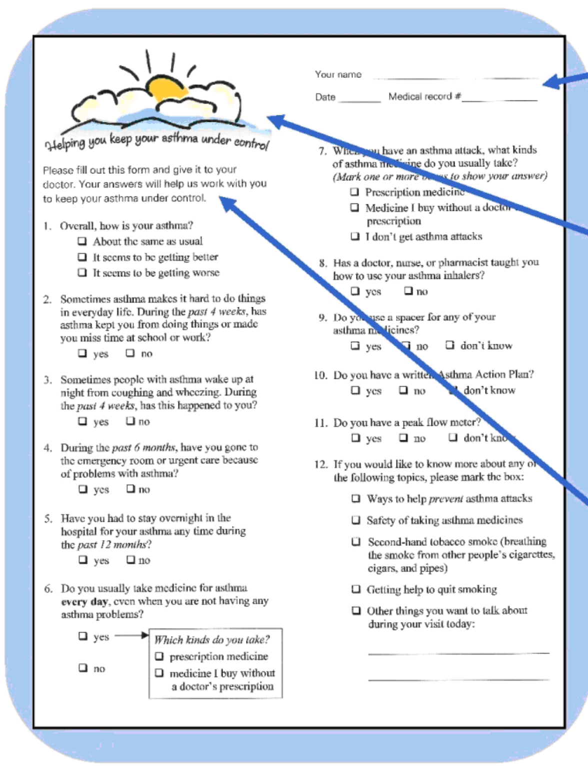
The questionnaire below is designed for people with asthma to fill out at the doctor’s office while they are waiting to be seen.

The overall design and layout make a good first impression:

It looks uncrowded and reasonably short (only 12 questions on one page).
It looks like it will be easy to read and easy to mark the answers.

Overall, the layout has an organized and tidy look and it’s easy to skim:

- Strong and consistent alignments. The coulmns and question numbers stand out clearly.
- Indenting the check boxes under each question creates a visual unit for each question, making the questionnaire easy to skim.
- Ample white space around the edges and between the questions.



Helping you keep your asthma under control

Please fill out this form and give it to your doctor. Your answers will help us work with you to keep your asthma under control.

1. Overall, how is your asthma?
   - ☐ About the same as usual
   - ☐ It seems to be getting better
   - ☐ It seems to be getting worse
2. Sometimes asthma makes it hard to do things in everyday life. During the *past 4 weeks*, has asthma kept you from doing things or made you miss time at school or work?
   ☐ yes ☐ no
3. Sometimes people with asthma wake up at night from coughing and wheezing. During the *past 4 weeks*, has this happened to you?
   ☐ yes ☐ no
4. During the *past 6 months*, have you gone to the emergency room or urgent care because of problems with asthma?
   ☐ yes ☐ no
5. Have you had to stay overnight in the hospital for your asthma any time during the *past 12 months*?
   ☐ yes ☐ no
6. Do you usually take medicine for asthma **every day**, even when you are not having any asthma problems?
   ☐ yes → *Which kinds do you take?* ☐ prescription medicine ☐ medicine I buy without a doctor’s prescription
   ☐ no

Your name ______________
Date ________ Medical record # ______________

7. When you have an asthma attack, what kinds of asthma medicine do you usually take? *(Mark one or more boxes to show your answer)*
   - ☐ Prescription medicine
   - ☐ Medicine I buy without a doctor’s prescription
   - ☐ I don’t get asthma attacks
8. Has a doctor, nurse, or pharmacist taught you how to use your asthma inhalers?
   ☐ yes ☐ no
9. Do you use a spacer for any of your asthma medicines?
   ☐ yes ☐ no ☐ don’t know
10. Do you have a written Asthma Action Plan?
    ☐ yes ☐ no ☐ don’t know
11. Do you have a peak flow meter?
    ☐ yes ☐ no ☐ don’t know
12. If you would like to know more about any of the following topics, please mark the box:
    - ☐ Ways to help *prevent* asthma attacks
    - ☐ Safety of taking asthma medicines
    - ☐ Second-hand tobacco smoke (breathing the smoke from other people’s cigarettes, cigars, and pipes)
    - ☐ Getting help to quit smoking
    - ☐ Other things you want to talk about during your visit today:

The receptionist or nurse will fill this part in (date, name of patient, chart number) before giving it to the patient.

The clip art with a motto underneath *(“Helping you keep your asthma under control”)* adds upbeat visual interest and a strong point of entry into the page.

It starts by explaining its purpose, emphasizing the key message of working together to keep asthma under good control.

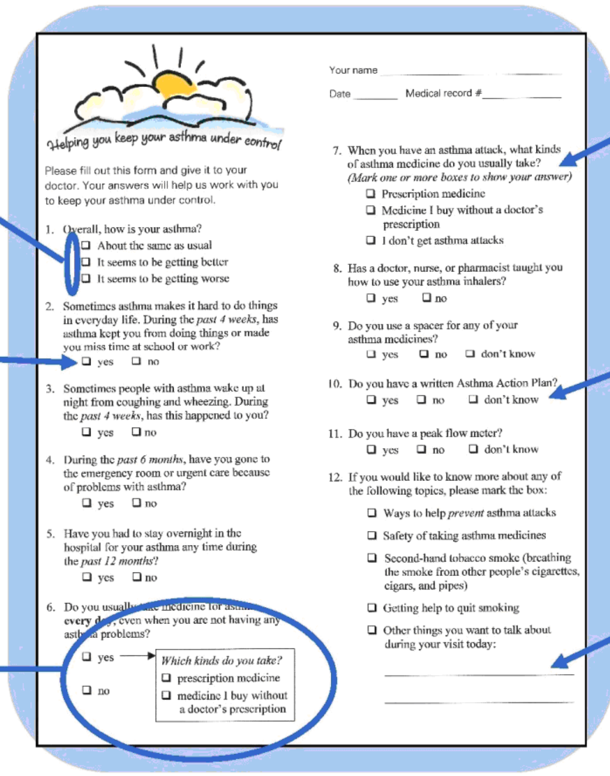
Figure 5-8-d, continued.

It has mostly yes-no questions, and it uses check boxes for nearly all of the answer choices.

Indenting the column of check boxes under each question strengthens the visual link between each question and its answer choices.

Ideally, the check boxes for *yes* and *no* would be stacked like the other check boxes. Instead, they are on a single line to save space.

Avoids a skip pattern by using an arrow leading to a boxed-in follow-up question. For more about this and a close-up view, see Figure 5-8-f later in this section.



Helping you keep your asthma under control

Please fill out this form and give it to your doctor. Your answers will help us work with you to keep your asthma under control.

1. Overall, how is your asthma?
   - ❑ About the same as usual
   - ❑ It seems to be getting better
   - ❑ It seems to be getting worse
2. Sometimes asthma makes it hard to do things in everyday life. During the *past 4 weeks*, has asthma kept you from doing things or made you miss time at school or work?
   ❑ yes ❑ no
3. Sometimes people with asthma wake up at night from coughing and wheezing. During the *past 4 weeks*, has this happened to you?
   ❑ yes ❑ no
4. During the *past 6 months*, have you gone to the emergency room or urgent care because of problems with asthma?
   ❑ yes ❑ no
5. Have you had to stay overnight in the hospital for your asthma any time during the *past 12 months*?
   ❑ yes ❑ no
6. Do you usually take medicine for asthma **every day**, even when you are not having any asthma problems?
   ❑ yes → *Which kinds do you take?* ❑ prescription medicine ❑ medicine I buy without a doctor's prescription
   ❑ no

Your name ____________
Date ________ Medical record #____________

7. When you have an asthma attack, what kinds of asthma medicine do you usually take? *(Mark one or more boxes to show your answer)*
   - ❑ Prescription medicine
   - ❑ Medicine I buy without a doctor's prescription
   - ❑ I don't get asthma attacks
8. Has a doctor, nurse, or pharmacist taught you how to use your asthma inhalers?
   ❑ yes ❑ no
9. Do you use a spacer for any of your asthma medicines?
   ❑ yes ❑ no ❑ don't know
10. Do you have a written Asthma Action Plan?
   ❑ yes ❑ no ❑ don't know
11. Do you have a peak flow meter?
   ❑ yes ❑ no ❑ don't know
12. If you would like to know more about any of the following topics, please mark the box:
   - ❑ Ways to help *prevent* asthma attacks
   - ❑ Safety of taking asthma medicines
   - ❑ Second-hand tobacco smoke (breathing the smoke from other people's cigarettes, cigars, and pipes)
   - ❑ Getting help to quit smoking
   - ❑ Other things you want to talk about during your visit today:

   ____
   ____

This question includes specific instructions about marking "one or more boxes."

"Don't know" is included as an answer choice for questions where the respondent might not have an answer or might be unfamiliar with a term.

Lines for this fill-in answer at the end allow enough space for easy writing.

Figure 5-8-d, continued.

Give respondents an easy way to tell you that a question does not apply to them.

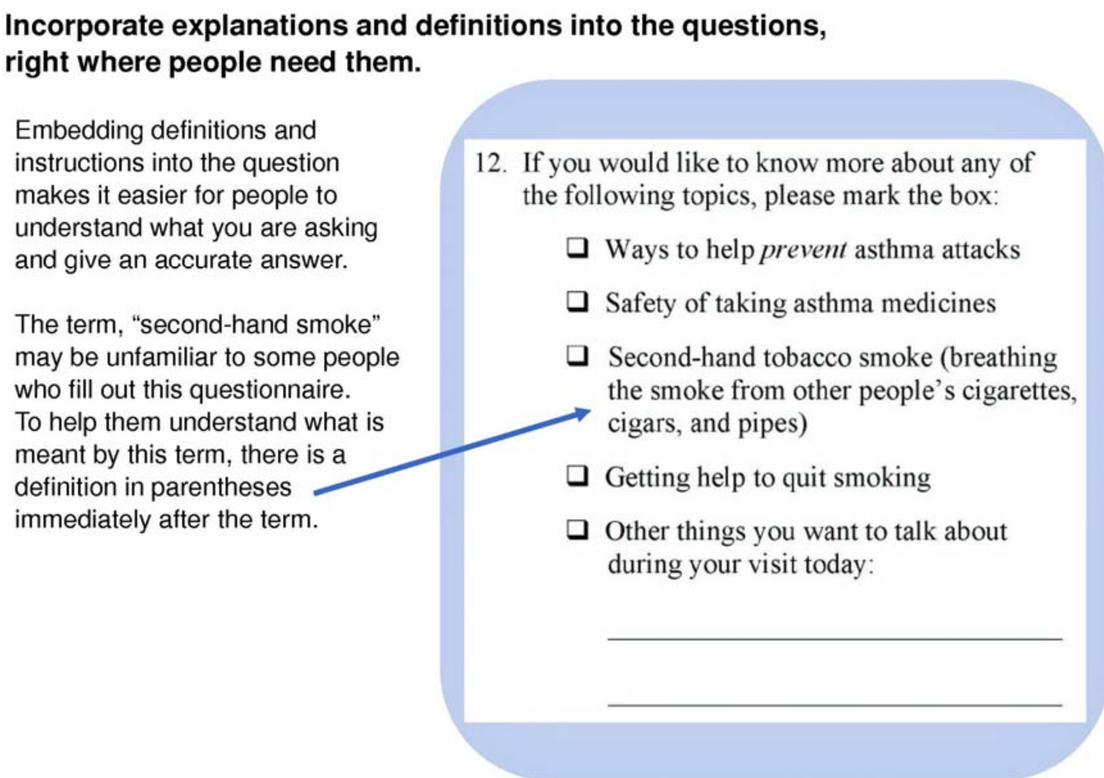
Answer choices such as "not applicable" or "does not apply" can be hard for readers with low literacy skills to understand.

Instead of using "not applicable" or "does not apply," it may work better to create a customized version of "not applicable," using words that fit with the question. Some researchers call this type of answer option a "tailored not applicable." The question below gives an example.

This last answer choice is worded to make it easy for respondents to say that the question does not apply to them. It uses familiar words that reflect the topic of the question.

7. When you have an asthma attack, what kinds of asthma medicine do you usually take?
(Mark one or more boxes to show your answer)
   - ❑ Prescription medicine
   - ❑ Medicine I buy without a doctor's prescription
   - ❑ I don't get asthma attacks

Figure 5-8-d, continued.



Source: This example shows a version of a questionnaire that was developed and tested for the Oregon Asthma Resource Bank by the Toolkit writer and her partner, Mark Evers (McGee & Evers Consulting, Inc.), for the State of Oregon. Used as example in this Toolkit with permission from the State of Oregon. For more about the Resource Bank, visit http://www.oregon.gov/DHS/ph/asthma/resourcebank/.

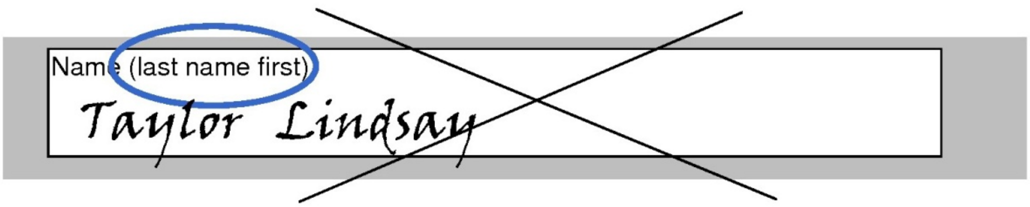
Ask for information in ways that will be intuitive to respondents

A reader-centered approach to forms and questionnaires focuses on making the process of supplying information as easy and intuitive as possible. When you ask for information in the ways that your readers are used to thinking about it, it's easier for them to respond and they are less likely to make errors. Figure 5-8-e illustrates this point by comparing hard and easy ways to ask people for information.

Figure 5-8-e. Comparing hard and easy ways to ask for name and date of birth.

EXAMPLE A - asking for a person's name (hard way, easy way)

Hard way (slows readers down and may lead to errors)



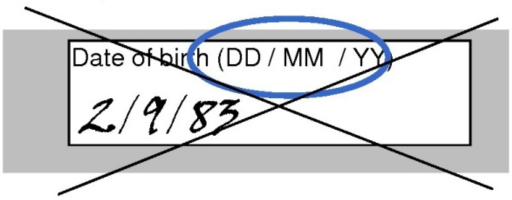
- Slows readers down to have instructions in parentheses for such a simple item.
- Asks for the name in a different order than usual (last name first), forcing readers to stop and think a bit.
- In this example, did the person follow the instruction about putting the last name first? It's hard to tell. There's no comma separating the names, and *Taylor* could be either a first or last name. So could *Lindsay.*

Easy way (more intuitive for readers, more accurate information)

- Asks for the full name in its usual order.
- Has self-explanatory labels with designated places to write each part.
- Is quick and easy to complete without stopping to think.

EXAMPLE B –asking for date of birth (hard way, easy way)

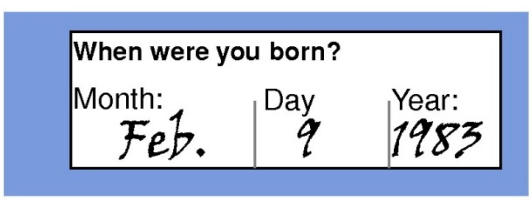
Hard way (slows readers down and may lead to errors)



Has there been an error? If the reader missed the instructions or didn’t understand them, the date that is filled in could be February 9 rather than September 2.

- It slows down readers to have instructions in parentheses for such a simple item – and some readers won’t understand what is meant by “DD / MM / YY.”
- It requests the date in an order that’s less common for most readers (day first), forcing them to stop and think a bit more than usual.

Easy way (more intuitive for readers, more accurate information)



- Self-explanatory labels and designated places to write each part.
- It’s quick and easy for a reader to write the date correctly without stopping to think about it.

Leaving more space for the month lets people write it out if they prefer, rather than using a number. If they do write the name of the month, it’s easy to convert it to a number if the information is entered into a database.

Source: These fictional examples about ways to ask for name and birth date (not the visual formatting and commentary) are adapted with permission from *Creating Plain Language Forms for Seniors: A Guide for the Public, Private, and Not-for-Profit Sectors* (Canadian Public Health Association, National Literacy and Health Program, 1998:19).

As shown by the examples above, when you match the way you ask your questions to your respondents’ logic, they don’t have to stop and think about what you are asking for or how to answer.

Formatting and labeling of fill-in questions

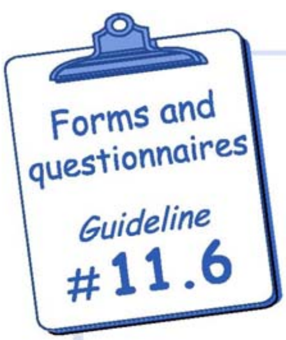
When you are designing fields that will ask respondents to fill in an answer, be sure to label them clearly and leave plenty of space for the answer. Good labeling gives a clear signal about what the question is asking and makes it faster and easier for people to provide accurate answers.

It works best to put the label in the upper left-hand corner of the top of the field, as shown in the examples in Figure 5-8-e above. Putting the label in this position makes it easier for people to respond:

- When you put the label in the top left corner, it fits with the normal pattern of reading (from left to right, starting at the top left corner).

- When you put the label at the top of the field, leaving space below it for the fill-in answer, it leaves the maximum amount of space for writing.

Try to avoid using a grid format to collect information



In a form for people with low literacy skills, avoid using a grid or matrix format to collect information.

A grid or matrix format has rows and columns. When you use a grid to collect information, readers have to keep looking up at the headings at the top of the columns to understand what you are asking for. To make it easier for people to give accurate answers, consider breaking each part of the grid into a fully labeled separate item.

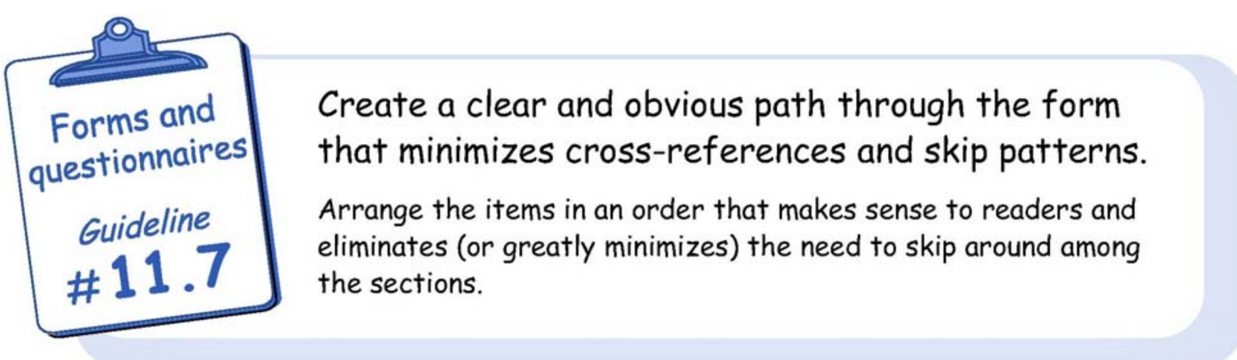
Suppose that you are designing an application form for Medicaid or CHIP and you are working on the section that asks for demographic information about each family member (name, date of birth, etc.). Since it asks for the same demographic information for each person, one option is to use a grid format with rows and columns to collect this information. There would be one row for each family member and each column would have a heading that identifies the type of demographic information to be filled in.

Although this type of grid layout is widely used in forms, it is not a good choice if the form is to be completed by people with low literacy skills. If you are not accustomed to grid formats, it can be hard to know what you are supposed to do. And even when you do understand how the rows and columns work in a grid format, it is burdensome to keep going back and forth across a row and up and down the columns.

Instead of using a grid format, try turning each row of the grid into a separate question with its own labels for each field. If the questions ask for demographic information, there would be a separate one for each family member that has a fill-in field for each piece of demographic information about that family member.

Although it will take up more space than a grid format, **converting a grid format into separate questions reduces the cognitive burden** and makes it much easier for people with low literacy skills to understand the questions and supply accurate answers. This approach of converting a grid format into separate questions was used to simplify the United States Census form for the year 2000. This improvement to the Census Form is described in detail by Don Dillman (2000:102-105). He discusses the cognitive burdens imposed by the rows-and-columns format and shows the "before" and "after" versions of the form. For another example, see Figure 5-7- b in the previous chapter (Toolkit Part 5, Chapter 7, *Guidelines for tables, charts, and diagrams*).

Create a straight and simple path through the form that minimizes cross-references and skip patterns



To guide your readers quickly and easily through a form or questionnaire, create a clear and obvious path for them to follow. This section gives tips about ways to create an effective layout that minimizes distractions.

Create a layout that guides readers through the page

As noted earlier in this chapter under Guideline 11.3, it's important to keep the layout clear and uncrowded. It's also important that the layout be consistent with the way readers typically work their way through a document. In another chapter of this Toolkit, we give tips on how to create effective layouts that fit with readers' natural tendencies and help them notice everything on a page. See the diagrams of "reading gravity" in Figure 5-2-c and the discussion of Guideline 5.3. Both are in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

For an example of a layout that helps guide readers through the page, see the questionnaire that appears earlier in this chapter in Figure 5-8-d. The prominent question numbers, two-column layout, and ample white space all help create a clear and obvious path for readers to follow.

Minimize detours and distractions

In a form or questionnaire, cross-references and skip instructions can be distracting and confusing to respondents, especially if the respondents have low literacy skills (MAXIMUS, 2005). Make the task of completing the form or questionnaire easier by avoiding cross-references and skip instructions as much as you can:

- Cross-references to other sections of a form or questionnaire interrupt a respondent's smooth progression through the document. Try to arrange the items so that cross-references are not necessary. Incorporating instructions and explanations into the questions helps avoid the need to send respondents to another section of the document.

- When questions might not apply to certain respondents, the instructions sometimes tell people to skip over the questions that don't apply (such as saying "skip ahead to question 15"). Skip instructions of this type are often called skip patterns. When you put skip patterns into a questionnaire, you increase its complexity and the likelihood that people will make mistakes when they fill it out. For any questionnaire, it's wise to avoid skip patterns as much as you can. If your respondents will include people with low literacy skills, it's especially important to eliminate as many skip patterns as you can. Here are some tips:

    - **Try expanding the answer choices to include a way for people to tell you when a question doesn't apply to them.** There's an example in Figure 5-8-d earlier in this chapter. Question 7 asks "When you get an asthma attack, what kind of asthma medicine do you usually take?" The answer choices include "I don't get asthma attacks." Including this choice gives respondents an easy way to say that the question does not apply to them, so a skip instruction is not needed. (That is, you don't have to say, "If you don't get asthma attacks, skip ahead to question 8.")

- **If there is just a single follow-up question, try formatting it off to the side**. Figure 5-8-f below shows an example that uses formatting to avoid the need for a skip pattern.

- **If you must include skip patterns in a form or questionnaire, label them clearly and check on how well they are working.** Test the questionnaire with respondents to be sure that they notice and understand the skip instructions, and are able to follow them without difficulty.

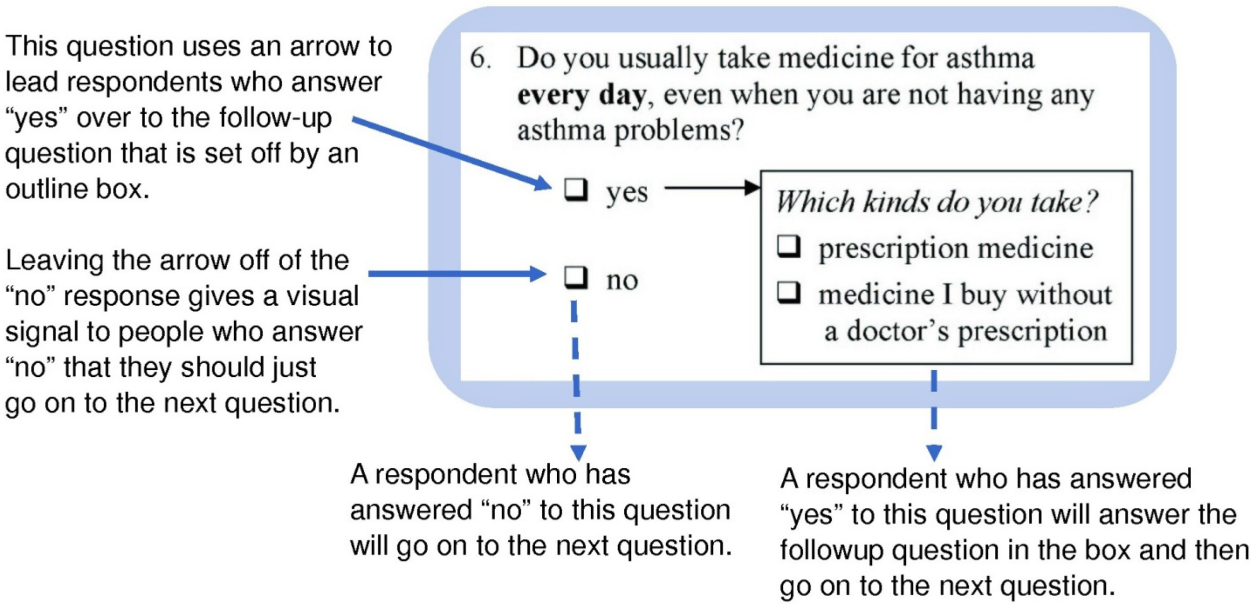
Figure 5-8-f. Formatting a follow-up question to avoid the need for skip instructions.

This example is a close-up of Question 6 from the asthma patient questionnaire that was shown earlier in this chapter in Figure 5-8-e.

Using an arrow and boxed-in question to replace skip instructions.

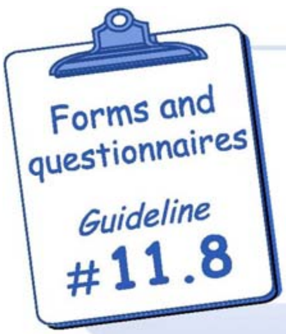
Telling respondents to skip over questions that don't apply to them makes a questionnaire more difficult and can lead to missing or inaccurate answers.

Instead of giving skip instructions, the question shown below sets the follow-up question off to the side.



Source: This example shows an excerpt from a version of a questionnaire that was developed and tested for the Oregon Asthma Resource Bank by the Toolkit writer and her partner, Mark Evers (McGee & Evers Consulting, Inc.), for the State of Oregon. Used as an example in this Toolkit with permission from the State of Oregon. For more about the Resource Bank, visit http://www.oregon.gov/DHS/ph/asthma/resourcebank/.

Do usability testing to get reactions from readers



Conduct usability testing.

To find out whether a form or questionnaire is working well, conduct usability testing with intended users. Have them fill it out, and then talk with them to get their reactions and suggestions.

When you are developing forms and questionnaires, keep reminding yourself that these formats can be quite challenging for many people to understand and use, especially for people with low literacy skills. Completing a form or questionnaire can require writing as well as reading skills, and many people have had very limited exposure to these formats.

The best way to find out how well respondents can understand and use a form or questionnaire is to do usability testing. Usability interviews are very informative because they focus on whether, and how well, people are able to put the document to its intended use. You give the form or questionnaire to a respondent and have them fill it out. You can watch as they do this, and encourage them to share any comments they have while they are working on completing it. When they have finished, you can talk with them about their reactions to the form or questionnaire. For example, you can get insights into comprehension by asking them to share what they thought each question was asking and how they decided which answer to mark.

If you have never done usability testing, you may be amazed at how much you can learn and how helpful the results can be. You don’t need to spend a lot of time and money on usability testing; you can get useful feedback from a small number of interviews. To get the greatest benefit from usability testing, it’s helpful to start doing usability testing as soon as you have a draft of the form or questionnaire. Starting early helps you catch and fix any big problems while there is still plenty of time available. It’s wise to split your testing into two rounds so that you can use the second round to check on how well your revisions are working.

For details on how to do usability testing, see Toolkit Part 6, *How to collect and use feedback from readers.*

Take into account how forms and questionnaires will be processed

Forms and questionnaires

Guideline #11.9

When you are designing a form or questionnaire, take into account how it will be produced, distributed, and processed.

Work with others to produce a form that is both easy to fill out and easy to process.

So far, the guidelines in this chapter have focused on ways to make forms and questionnaires easier for people to understand and use. Ideally, the things you need to do to make forms and questionnaires work well for respondents will be compatible with the requirements and constraints related to producing, distributing, and processing the forms. But sometimes the needs of respondents may be at odds with some practical constraints. For example, the need to maintain consistency with existing forms or meet data entry requirements may limit your ability to make certain kinds of improvements in a form (see discussion in *Creating Plain Language Forms for Seniors* (Canadian Public Health Association, 1998).

As you work on developing a form or questionnaire, try to anticipate possible problems at an early stage. Work with staff in other departments to find solutions that meet their needs as well as those of the respondents.

End notes

Acknowledgments

Thanks to Penny Lane and Mark Evers for their substantial contributions to this chapter. Some guidelines in this chapter are based in part on work by Christina Zarcadoolas, Penny Lane, Holly Smith Mirenda, and Mercedes Blanco on a project done for the Centers for Medicare & Medicaid Services by the MAXIMUS Center for Health Literacy in Reston, Virginia (visit http://www.maximus.com/services/health/health-literacy).

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CAHPS (Consumer Assessments of Healthcare Providers and Systems)

The CAHPS program is a public-private initiative to develop standardized surveys of patients' experiences with health care. CAHPS results are used by health care organizations, public and private purchasers, consumers, and researchers. For more information, see http://www.cahps.ahrq.gov/ (accessed September 8, 2006).

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MAXIMUS

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476
September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 1

Introduction to Toolkit Part 6

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 1

Introduction to Toolkit Part 6

List of figures in this chapter:

This document is the first of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Background on the Toolkit

Toolkit Part 6, *How to collect and use feedback from readers*, is a step-by-step guide to methods of testing written material with the intended readers. It is part of the *Toolkit for Making Written Material Clear and Effective*. To provide context for this guide to methods of testing, we begin by describing the Toolkit as a whole.

What is the Toolkit?

The *Toolkit for Making Written Material Clear and Effective* is a health literacy resource (see Toolkit Part 1). It's a detailed and comprehensive set of tools to help you make written material easier for people to understand and use.

This Toolkit is from the Centers for Medicare & Medicaid Services (CMS) and it is oriented toward the programs administered by CMS. These programs include Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). In this Toolkit, we focus on material in printed formats that is written for people with Medicare or Medicaid and the parents or guardians of children with coverage through CHIP. These "CMS audiences" are culturally, linguistically, and demographically diverse, and they include significant numbers of people with low literacy skills. Much of the discussion in the Toolkit also applies to material that is written for those who work with or assist members of CMS audiences. To give just a few examples, this includes material written for family members of people with Medicare, outreach workers, agency staff, community organizations, and care providers.

As indicated by the title, this Toolkit promises to help you make your written material clear and effective. By "clear and effective," we mean that it must attract the readers' attention, hold their attention, make them feel respected and understood, help them understand the main messages, and help move them to action. This definition of "clear and effective" reflects the reader-centered approach of the Toolkit. This approach stresses the need to learn about your audience of intended readers and the benefits of actively involving them in the development and testing of your material. The more you understand your intended readers, the more responsive you can be to their information interests and needs, and the more successful you will be in motivating them.

The Toolkit has 11 parts that cover a broad range of topics to help you evaluate, write, design, test, and translate written material. It takes a reader-centered approach and provides detailed guidelines for writing in clear and simple language, using graphic design to help readers understand the text, and translating material from English into other languages in a culturally appropriate way. Written in non-technical style for people with limited time and resources, this resource includes many practical tips and examples to help you understand and apply the guidelines and other suggestions it offers.

What is Toolkit Part 6 about?

This part of the Toolkit, Part 6, gives you step-by-step guidance on how to collect and use reactions from readers to improve written material. It's a book-length guide with 19 chapters on methods of testing. We teach you how to conduct "feedback sessions" with people who represent the intended readers of your written material. These sessions will help you look at the material from your readers' point of view, making it easier for you to identify and remove barriers to your readers' attention, comprehension, and use of the material.

What happens in a feedback session?

In a feedback session, you sit down with readers, show them the written material, and get their reactions to it. During the session, you are collecting evidence to help you judge how well the material is working and how it might be improved. To collect this evidence, you need to get readers to engage with the material in ways that reveal which parts are attracting their attention, how they are interpreting what they read, and whether they find it appealing and useful. Here are the methods we teach you to use:

- **"Think aloud."** You encourage readers to share whatever comes to mind while they are going through the material, and listen carefully to what they say.

- **Ask questions.** In all of your feedback sessions, you will be asking questions to get readers to reveal how they are reacting to the material and what they think it is about. For example, to check on how well they understand the material, you can ask them to say in their own words what they think it's about. You will also use questions to follow up on what people say about the material, to clarify and to get them to give a more specific response.

- **Give them tasks to perform.** To test the "usability" of the material, you can give readers a task to perform, such as looking up a particular topic, using the information it contains to make a decision, or filling it out if it's a form. By giving readers tasks to perform, you find out whether they can actually use the material for its intended purpose.

- **Watch what they do with the material**. When you are getting feedback from readers, you can get insights by observing their behavior. For example, you can take note of what they look at first in the material, where they hesitate or linger, and which parts they skip. You can also watch for non-verbal cues such as smiles, frowns, or wrinkled brows.

[*A note on terminology*: You may have heard other names for the methods we have just described. These four methods are the ones used in "cognitive interviewing," an approach that is often associated with testing of survey questions (for example, see Willis, 2005; Presser et al., 2004). The method of giving tasks for the reader to perform is the main method used in an approach called “usability testing,” which focuses on assessing ease of use (for example see, Dumas & Redish, 1999) Usability testing is often associated with the testing of websites (for example see, http://www.usability.gov). Since this Toolkit is written in non-technical style for people without a formal research background, we keep our terminology simple and inclusive. “Feedback session” is the general term we use to mean collecting readers’ reactions to written material. For purposes of this Toolkit, a feedback session might include any or all of the methods of cognitive interviewing and usability testing.]

What can you learn from readers?

Getting readers’ reactions to written materials is informative and fascinating. By watching and listening carefully to readers, you can learn about the background, experiences, and assumptions they are bringing to the task of reading the material. The feedback you get will demonstrate the active ways in which they seek meaning in what they read (see Toolkit Part 2, *Using a reader-centered approach to develop and test written material*).

As you listen to readers and watch what they do, you will find out what is working well with the material and what is not. When your goal is to make improvements, it’s especially helpful to identify what isn’t working well. For example, in your feedback sessions, readers may stumble over words you assumed they would know, or struggle to make sense of something you thought would be perfectly clear. They might show little interest in the messages you are trying to stress, react negatively to a color scheme, be put off by the tone of the material, or misinterpret the advice you give. Figure 6-1-a below gives some real-life examples of the types of things you can learn when you sit down with readers and show them your material.

Figure 6-1-a. Examples of problems you can discover by doing reader feedback sessions.

Things you can learn in a feedback session

Readers can interpret words and images in ways you don't anticipate

- A man is participating in a feedback session to give reactions to a pamphlet about hospital discharge planning. When he sees a photo of an empty hospital bed, he is alarmed. Since the bed is empty, he figures the patient has died. But actually, the people who created the pamphlet had picked the photo of the empty bed to indicate that the patient got better and went home sooner.

- A woman is reading a brochure about children's preventive health care services. She skips over an entire section after glancing at a photo. When the interviewer asks why, she explains that when she saw the picture of the baby, she knew that she didn't need to read that part because her children are not babies anymore.

- A woman is looking at the table of contents for a booklet about choosing a Medicaid health plan. Intrigued by an entry that says, *What do the stars tell you?*, she wonders why a booklet about health care would be saying something about movie stars or horoscopes. Turning to page 6, she is surprised to find a chart filled with star symbols that show ratings of the health plans she can choose from.

- The interviewer shows a member handbook that describes health benefits and services. The title is *Evidence of Coverage.* The man who is giving his feedback on the handbook says this title makes him uneasy. It makes him think of courtrooms and legal paperwork, and that he might have to prove something. He tells the interviewer that if he got the booklet in the mail at home, he would not even open it.

Folding a piece of written material in an unconventional way can cause problems

- A man is reading a pamphlet about diabetes care, but he misses most of what's inside the pamphlet because he never opens it up all the way. He doesn't realize that the pamphlet has been folded twice in an unusual way that requires people to open it like a book, and then lift up to reveal the rest of what's inside. He opens it like a book and doesn't notice that it's still folded. Since he doesn't lift up the fold, he misses all of the information that is buried under the fold.

Navigation and reference skills you take for granted might be unfamiliar to your readers

- A woman is reading a health plan member handbook and sees the words, "Look in the appendix for more about this." She is perplexed, because, as she tells the interviewer, an appendix is something doctors take out during an operation.

- A man is reading a Medicaid application form and he notices a little star at the end of a sentence. He doesn't search for the footnote, because he's not familiar with asterisks or footnotes. He tells the interviewer that he figures the little star is there to tell him that the word right next to it is pretty important.

Source: Adapted from feedback sessions conducted by the Toolkit writer and by members of the CAHPS I reports team, researchers on a CMS project, and researchers on a project for the MAXIMUS Center for Health Literacy.

Interviews or group sessions?

When you are getting readers' reactions to written material, you can work with them individually or in small groups that are sometimes called "focus groups." Although focus groups are better known and more widely used than interviews, this Toolkit emphasizes using individual interviews. Interviews provide privacy and greater flexibility than group sessions, and they work better for many feedback purposes (see Toolkit Part 6, Chapter 6, *Should you do individual interviews or focus groups?*). If doing feedback sessions is new for you, you'll find it easier to do a one-on-one interview than to manage the complex interaction of a focus group discussion. In addition, depending on how you design your sessions and recruit the participants, interviews can be a more efficient and cost-effective choice.

Emphasis on printed formats

To keep the scope manageable, all parts of the Toolkit focus on written material in printed formats. This means that Toolkit Part 6 focuses on methods for testing material that people read in a printed format (typically, printed on paper). This could include booklets, posters, pamphlets, comparison charts, and other types of written material that tell about the CMS programs or about health-related topics. It also includes written material that asks the reader to give a response, such as enrollment forms, health history questionnaires, or satisfaction surveys.

It's beyond the scope of this Toolkit to cover ways to test material that people read on a computer screen while they are online. Reading something while you are online is quite different from reading something in a printed format (see Toolkit Part 8, *Will your written material be on a website?*). However, websites are sometimes used as a way to distribute written material that has been designed specifically to be downloaded, printed, and then used as a printed document. Once you have printed the file, the written material is in print format, and so the methods we describe can be used to test it with readers.

Why get feedback directly from readers?

Just because material is widely used does not guarantee that it is working well for the people who use it. A large body of evidence shows that much health-related written material is too difficult for its intended readers, and the consequences can be serious (Agency for Healthcare Research and Quality [AHRQ], 2004; Institute of Medicine [IOM], 2004; National Library of Medicine [NLM], 2004; Rudd, Kaphingst, Colton, Gregoire, & Hyde, 2004; Schwartzberg, VanGeest, &Wang, 2005). To be sure that your written material is clear and effective, feedback from readers is a powerful and indispensable tool. It's the most meaningful way to assess written material.

Feedback from readers is the gold standard of evidence on whether your written material is clear and effective.

This Toolkit gives you detailed guidelines to help you write and design material that is clear and effective (see Toolkit Parts 3, 4, and 5), and warns about the pitfalls of relying on readability formulas to judge the suitability of written material (see Toolkit Part 7, *Using readability formulas: a cautionary note*). But the ultimate test of whether your material is clear and effective is the reactions you get from readers.

No matter how carefully you create or select written material, it's the intended readers who decide whether the material is worth reading, and whether they can understand and use it. This means that feedback from readers is the "gold standard" of evidence on how well your written material is working. **Ultimately, nothing else matters much if the intended readers find the material unappealing, hard to understand, or unusable**. Since readers' reactions let you know what is not working well, they are, by definition, the best evidence about what needs to be improved.

Doing feedback sessions to get reactions directly from readers will give you valuable insights that are hard to get in any other way. Here are just a few examples:

- **Testing material with readers helps you catch problems that can affect the quality and outcomes of medical care.** For example, during a physical therapy session, therapists often show patients a series of new exercises and then give them written instruction sheets for reference at home. If patients forget what they were shown, and do the exercises incorrectly because the written instructions are not clear, it can impede their recovery. Reader feedback sessions would reveal this type of problem. For example, you could hand the instruction sheet to the participant during an interview, and ask him or her to do the exercise that is pictured. What if only half of the participants are able to do the exercise correctly just from reading the instructions, and several do it in a way that makes their injury worse? Without the feedback sessions, you might not know.

- **Feedback from readers lets you know whether they find the material culturally acceptable.** Readers' reactions are the ultimate test of whether the materials are culturally acceptable. If the written material is not culturally acceptable, it's a waste of time and money to produce it, because people will not use it. For example, an Asian person with diabetes who generally eats Asian foods will find it hard to relate to a diabetes nutrition guide that shows only western foods in its guidelines and examples. You would identify this problem very quickly if you showed a draft version of the diabetes nutrition guide to readers of different cultural-linguistic backgrounds.

- **Getting feedback from readers will show you the variation in how readers approach written material, which reminds you to be realistic in what you assume.** When you work on developing written material, it's tempting to assume that your intended readers will start at the beginning, notice everything, and read it from beginning to end. But after you have done feedback sessions where you watch what readers actually do with the material, you'll find that this assumption doesn't hold. Observing a reader's behavior can help you find out whether the layout and organization are working well for the whole range of readers who have different ways of approaching and using the material.

- **Observing what readers do with the material can give you important clues about possible problems.** For example, if you are watching closely, you may notice that most readers skip over the top part of a particular page. This behavior by readers is a clue that maybe there's a problem with the top of this page. For example, is there something about the layout or design that is causing people to overlook that part of the page? Are they skipping it deliberately due to lack of interest in the topic? Or are they skipping it because it uses words they don't know and it looks hard to read?

When you are a skilled reader yourself, you tend to forget how intimidating written material can be to some people. You can also forget that just because you think the material meets a real need doesn't automatically mean that your intended readers will, too. Typically, there will be many gaps between you and your intended readers. You will likely differ in subject matter knowledge, literacy skills, attitudes and assumptions about the subject matter, and views about the usefulness and importance of the material (see Toolkit Part 2, Figure 2-b, *Common differences between those who create written material and the readers who use it*).

When the gaps between you and your intended readers are large, it can be hard for you to see the written material from your readers' point of view. And if it's hard to see the material from your readers' point of view, it's easy to end up writing the material for the audience you know best, *which is you and others like you.* For example, clinicians who are creating patient education material about asthma may think it's best to start by showing cross-sections of airways that are swollen and irritated. Starting with anatomy works well for clinicians, but it generally doesn't work well for patients (see Toolkit Part 4, Chapter 2, Figure 4-2-b, *Six ways to organize and present information*). By letting you see your written material from the reader's perspective, doing feedback sessions will help keep you from creating material that works well for you but not for your intended readers.

Benefits to you and your organization

The skills and experience you gain by doing reader feedback sessions will help you produce suitable materials in a more efficient and cost effective way.

- **The insights and the skills you develop and refine by learning directly from readers will carry over into your other projects**. The more you watch, listen, and learn from readers, the more you will be able to see the written material from their point of view. This will change the way you look at information materials and sharpen your skills.
  - People from your organization might want to sit in on a feedback session to see for themselves how readers react to the written material. Or they may watch a videotape or listen to an audiotape of the interview later on. This first-hand experience can be especially helpful to writers and graphic designers who have had little direct exposure to readers who are engaged in using the materials they have created. Whether the comments

are positive or negative, it is compelling to hear them directly, in people's own words. Many find it quite enlightening to watch and listen.

- Whatever your background and purpose in collecting readers' reactions, the more you do it, the more insights you will gain about what it takes to make written materials clear and effective for a particular audience. Building your skills can save you time and money. As you learn to anticipate more accurately what will and will not work well for readers, it will become easier and more efficient for you to produce or select materials that are clear and effective.

- **Readers' reactions provide compelling evidence to convince others that a document isn't working well.** When feedback from readers reveals problems with written material, sharing the themes and anecdotes of this feedback can help you make the case to others in your organization that it's time to make revisions. Hearing readers stumble over an acronym or misinterpret a sentence can be more convincing than hearing a staff member say that the material needs rewriting. Sharing feedback from readers is a powerful way to mobilize support from others and get a commitment for the resources you need to make revisions.

How can you use the results from feedback sessions?

Here are three ways to apply what you learn by getting feedback directly from your intended readers:

1. To guide the development and revision of the material

If you are developing written material, getting reactions from readers at an early stage will help you understand what information they really want and need. Readers' reactions to draft versions of the material can help you spot problems, and their reactions may give you ideas about how to fix these problems. Once you've made revisions, it's helpful to get more feedback from readers to see how well the changes are working and to make sure that you didn't create any new problems.

2. To evaluate materials and pick the most effective ones

If you are evaluating written materials, you can use readers' reactions to help select the ones that work best with the audience you are trying to reach. Getting reactions from some representative members of the intended audience will tell you which of the materials are culturally appropriate and easiest for people to understand and use.

3. To identify areas of potential confusion so that you can clarify them when you give the written material to clients or patients

If you give forms, handouts, instruction sheets, or other written material to clients or patients, you want to be sure that this material is clear and effective. You can use the methods in this book to find out first-hand from your clients or patients how well they can understand and use the material. If their reactions reveal any problems, there are several options. You may be able to select other written material that works better, or make revisions to clear up areas of confusion. If not, perhaps you can figure out ways to compensate for the weaknesses that you have identified. For example, instead of just handing the material to your clients or patients to read later on their own, you can take a moment to go over it with them and offer clarifications or additional explanations. It may help to add a few handwritten notes of clarification as you discuss the material with them.

Improved communication can lead to many good outcomes

Whether you use reactions from readers to improve materials, to evaluate them, or to adapt how you use them with people, the **immediate benefit** is the same: more effective communication with the people you are trying to reach. Improving communication by making written materials exceptionally clear and effective can lead to a number of good outcomes. These include direct monetary savings and other less tangible benefits that occur when the materials are successful in helping to change readers' behavior. These benefits vary depending on the information and its purpose, and the impact on behavior. Dollar savings can result from such things as reductions in unnecessary care, administrative paperwork, and staff time. For example, information materials can contribute to better health outcomes and more cost-effective care when they influence women to show up for prenatal care in their first trimester, or when people stop smoking, or children wear bike helmets. When information helps enrollees understand how to use their Medicare managed care organization to get specialty care or after-hours care, enrollees have fewer questions and misunderstandings, which means fewer calls to customer service, less need for problem solving or personal assistance, and less frustration for everyone.

As we explain in the next chapter on planning your project, you can include an evaluation component to help document the benefits of producing effective written materials. This documentation will help demonstrate the value of investing in sessions with readers.

How can you use Toolkit Part 6?

How you use Toolkit Part 6 depends on your role and the written material you work with:

- **If you have never done sessions with readers** to get their reactions to your written material, we hope to convince you of the value of getting feedback directly from readers, and give you the encouragement and information you need to begin.

- **If you have experience** working with readers to get their reactions to written materials, we hope to give you some fresh insights and useful tips on technique. For example, if you generally rely on focus groups as your method, this part of the Toolkit shows you how individual interviews can work better than focus groups for many purposes.

- **If you supervise the people who develop written materials, or you hire outside consultants** to do this work, this part of the Toolkit will help you understand the value of incorporating reader feedback sessions in the development process and show you some cost-effective ways to do it.

- **If you use handouts or other written material in your work as a care provider or patient educator,** you can use the techniques we teach in this book to get feedback from your clients or patients on the materials you are using. This feedback will help you determine how well the written materials are working and identify places where you may need to offer additional explanation or clarification when you talk with your clients or patients.

End notes

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Finally, the guidance offered in Toolkit Part 6 on methods for testing written material with readers reflects things the writer has learned by conducting dozens of focus groups and hundreds of interviews to get feedback on written material. Many thanks to the people who participated in these sessions.

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September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 2

What's involved in doing a project to get feedback from readers?

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 2

What's involved in doing a project to get feedback from readers?

List of figures in this chapter:

This document is the second of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

In this chapter, we give you the big picture of what's involved in planning and conducting feedback sessions with readers and using the results.

"feedback sessions"

In this Toolkit, we use the term "feedback sessions" to mean face-to face encounters with readers to get their reactions to written material.

You can work with readers individually in these sessions, by doing interviews, or you can work with them in small groups. A group session might range in size from two to about ten people.

This chapter goes through all of the steps of planning and conducting feedback sessions. Since reader feedback sessions are usually part of a project to develop or revise written material, you can incorporate the planning steps for your feedback sessions into your planning for the project as a whole (see, for example, National Cancer Institute [NCI], 2002).

You can keep it short and simple

Choices you make at each step of planning and implementing your feedback project affect how much time, money, and staff effort will be needed. We outline a detailed list of steps in this chapter, but feedback sessions don't necessarily require a long or complex planning process.

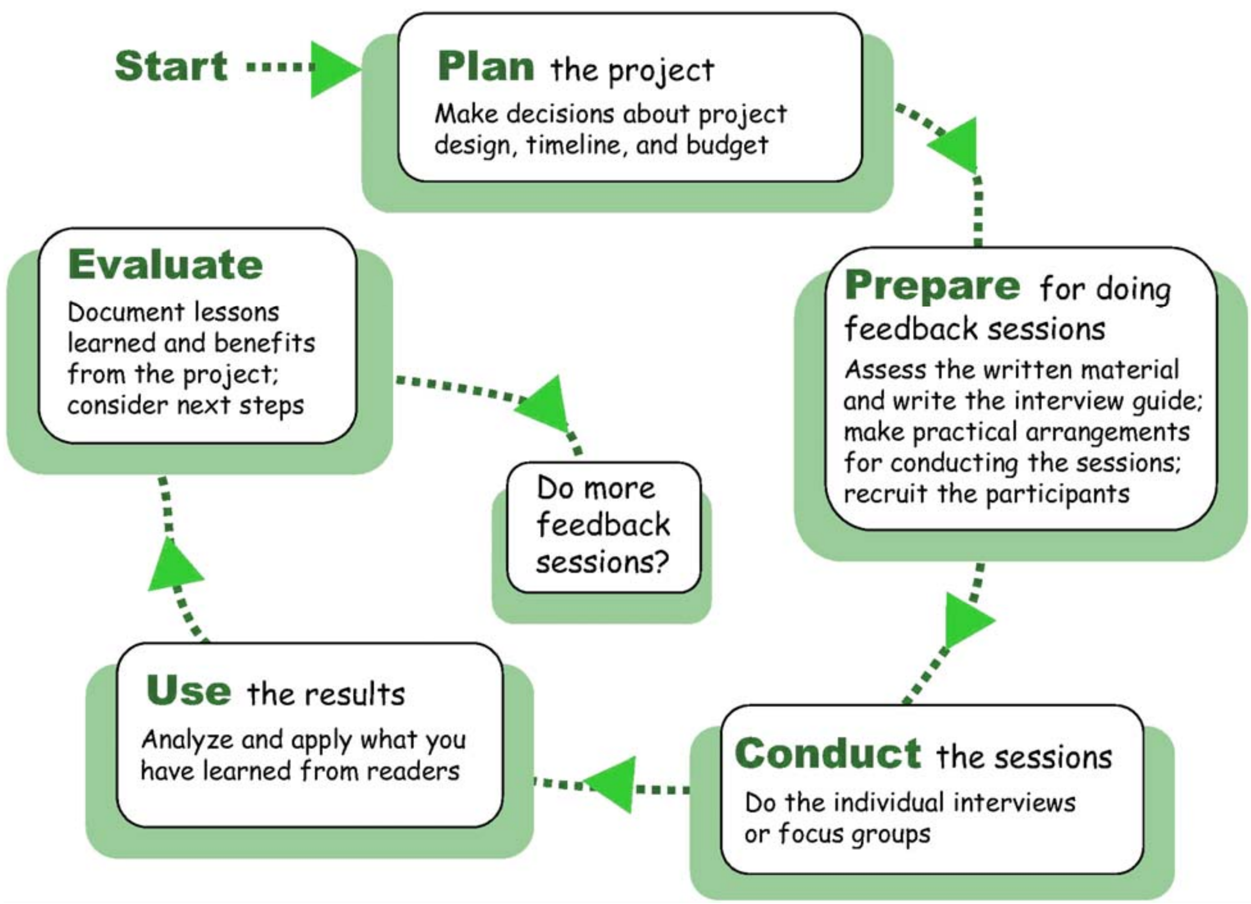
- **If doing reader feedback sessions is new to you, you will want to keep the sessions short and simple, especially at first**. You can get a lot of helpful feedback by interviewing a small number of people.

- **You don't have to spend a lot of time and resources to collect feedback**. In this chapter and other parts of the Toolkit, we include practical advice about how to plan a feedback project that is efficient and cost-effective.

Overview of steps involved in a feedback project

The diagram in Figure 6-2-a below shows the five basic steps in a reader feedback project. This diagram shows the steps of *plan - prepare - conduct - use - evaluate* as a cycle. The cycle ends with the question, "Do more feedback sessions?", because it is often helpful to get feedback from readers more than once, at different stages in your project:

Figure 6-2-a. Cycle of steps in a reader feedback project.



Source: Created for this Toolkit.

Decisions to make in planning your project

Now let's take a closer look at the tasks involved in the *plan-prepare-conduct-use-evaluate* diagram shown above. Below, in Figure 6-2-b, we show these tasks in the form of questions to guide the planning process. To help you get started on your project, this chapter has a brief discussion of each question and the decisions it involves. For many of the steps, other chapters give you the details.

The list of planning questions and decisions in Figure 6-2-b is long, but don't be discouraged when you read it. Depending on the decisions you make in planning your feedback sessions, it's possible to do the sessions quickly, simply, and at relatively low cost. To give just a few examples: instead of using expensive research facilities, you can find community settings to serve as low-cost or free sites. Instead of hiring outside experts to design and conduct the sessions, you can invest a little time and energy and learn to do it yourselves. Instead of spending time and money to recruit people in advance for focus groups, you can recruit participants on site for immediate participation in a feedback interview. This chapter explains these and other choices you can make.

Once you are familiar with the basic methods and procedures for getting feedback from readers, you will be able to plan and implement a simple feedback project in a relatively short time. As you gain experience, you'll learn first-hand how valuable it is to get feedback directly from readers. With practice, the whole process of planning and conducting feedback sessions will seem much simpler and it will go more quickly.

Figure 6-2-b. Questions to guide the planning of your reader feedback project.

What type of written material, for what audience and purpose?

- What is the nature and purpose of the written material?
- Who are the intended readers? How will they get the material and how will they use it?

What do you want to accomplish?

- Why do you want to get reactions from readers, and how will you use the feedback you get?
- What are the specific things you want to learn from readers -- that is, what are the "feedback issues" you will focus on during the sessions?

Who will do the work?

- Who is sponsoring and leading this project? Who else is participating?
- Who will be responsible for each of the various tasks?

How much and what type of testing will you do?

- To get feedback from readers, will you use individual interviews, group sessions, or both?
- How long should each interview or group session be? How many sessions do you need to do?

How will you select and recruit your participants?

- What participant characteristics are you looking for, and how will you find people who meet these requirements?
- Will you recruit people on site for immediate participation, or recruit people to participate later on at a scheduled time and place?
- Who will do the recruiting?

Where will you conduct the feedback sessions?

- What type of setting will be convenient for participants and put them at ease?
- Does the setting provide enough privacy and noise control? Is it affordable?
- If you plan to recruit participants on site for immediate participation, is the setting suitable for this purpose, and can you get permission?

How will you get the written material ready to test?

- Would it be helpful to review and improve the material before you show it to readers (for example, by using the *Toolkit Guidelines for Writing and Design* or getting comments from expert reviewers)?
- What will you show readers during the session? Will you show part or all of the material? Will you show them different versions to compare?

How will you design and conduct the sessions?

- Which methods will you use to get reactions to each feedback issue or section of the material?
- Who will write the questions you prepare in advance and create the written guide for conducting the sessions?
- Who will conduct the sessions? Who will take notes during the feedback sessions? Do you want to audio tape or video tape the sessions?

How will you use the feedback you get?

- How will you analyze the feedback you get from readers?
- How will you use the results?

What is your budget and timeline?

- What is your estimated budget? What resources are available for this project? Are there ways to cut costs without sacrificing quality?
- What is your timeline?

How will you evaluate the project and document its benefits?

- How will you keep track of the practical things you learn from doing this project so that you can apply them when you do your next project?
- How will you document the benefits of getting feedback from readers?

Source: Created for this Toolkit.

What type of written material, for what audience and purpose?

What type of written material, for what audience and purpose?

- What is the nature and purpose of the written material?
- Who are the intended readers? How will they get the material, and how will they use it?

To begin planning your feedback sessions, start by considering the material itself. The type of material you will be testing affects how you design and conduct your reader feedback sessions, and it also affects your timeline and budget. For example, it is faster and easier to plan and implement feedback sessions for a short leaflet than for a long application form.

Having a clear sense of who you are trying to reach and influence with the written material is also important for your planning:

- When you do feedback sessions, you will get the most meaningful feedback if your participants are similar to the intended readers of the material. Describing the intended readers will help you set requirements for participation in your feedback sessions and estimate how hard or easy it might be to find and recruit feedback session participants who meet these requirements.

- As you think about how readers will receive the material and what you want them to do with it, you will get ideas about topics to cover in your feedback sessions. For example, if you are considering different ways of distributing the material, you could use the feedback sessions to find out from readers what they think would work best.

What do you want to accomplish in your sessions with readers?

What do want to accomplish?

- Why do you want to get reactions from readers, and how will you use the feedback you get?
- What are the specific things you want to learn from readers (that is, what are the "feedback issues" you will focus on during the sessions)?

In this second step of planning your feedback sessions, you figure out what you want to learn from readers about the particular material you are going to test. We call these things you want to learn from readers your "feedback issues" for the material.

The Toolkit has a separate chapter on feedback issues that tells how to identify them and decide which ones are most important to cover during your sessions with readers (Toolkit Part 6, Chapter 5, *Creating a list of "feedback issues" to use in testing the material*).

Another chapter of the Toolkit offers more detailed guidance. In Toolkit Part 6, Chapter 9, *Tips for collecting particular types of feedback from readers,* we discuss ways to collect the types of feedback you are most likely to seek. These are:

- How to assess appeal, cultural suitability, and personal relevance
- How to assess ease of "navigation" (effectiveness of the layout and organization)
- How to get reactions to photos, illustrations, and other visual elements
- How to find out whether readers understand the material
- How to find out whether the content meets readers' interests and needs
- How to assess usability (Can readers actually use the material? Do they think they would?)

Who will do the work?

Who will do the work?

- Who is sponsoring and leading this project? Who else is participating?
- Who will be responsible for each of the various tasks?

Who will be involved?

When you begin to plan your sessions with readers, you’ll need to decide which groups and individuals should be involved and how each will participate. This includes deciding who will lead the project and how decisions will be made.

To get the most from your sessions with readers, it’s helpful to begin at an early stage to identify and involve groups that have an interest in the outcomes of your project. These groups that share your goals and support the project are your stakeholders. For example, suppose that you are with an outreach organization that is developing written material to encourage parents to get health insurance coverage for their children through the Children’s Health Insurance Program. The stakeholders for your reader feedback project might include the state Medicaid agency, the WIC (Women’s, Infants, Children) program, social workers, state and county health departments, school nurses, doctors, clinics and hospitals, medical associations, educators and school administrators.

Getting help from your stakeholders

Stakeholders include groups that can serve as informants by giving you information and advice about addressing ethnic, linguistic, and other cultural differences among members of your intended audience. Stakeholders can include subject matter experts. They also include people and organizations that serve as “information intermediaries” for your intended readers by sharing information or providing guidance. For example, staff at the State Health Insurance Assistance Program and at area Agencies on Aging are information intermediaries for people with Medicare. Stakeholders also include groups that can help you locate or recruit participants for the reader feedback sessions, and groups whose support and assistance you want to enlist, such as advertising agencies or local media that might be willing to donate time or materials to your cause. Of course, the intended readers themselves are always among the stakeholders, and you will be involving representatives of this group directly by seeking their feedback on the written material.

You can work with stakeholders in various ways. You can consult informally with them, individually or in groups, at different stages of your project, depending on the type of advice or assistance you need. This could include, for example, asking them to review early drafts and give suggestions for improvement. Some may participate actively throughout the project, while others may play a very limited role, such as putting you in touch with a community-based organization that will help you recruit participants.

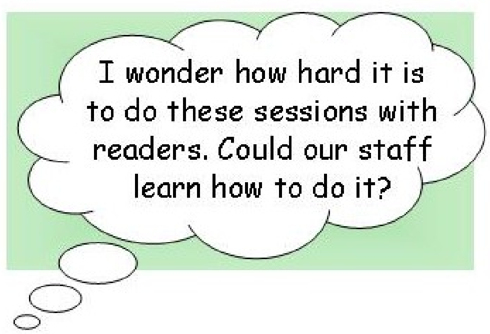
What skills are required to do the work?

Planning your project includes identifying people who are willing and able to manage the project and budget, recruit participants and make practical arrangements, design and conduct the sessions, and analyze and use the results. People on your project team might include writers, graphic designers, and people who prepare reports and presentations. Overall, these tasks require a broad range of skills, some of which are specialized.

In particular, you might wonder about the skills that are required to conduct reader feedback sessions. For those who are directly involved in interviewing readers, the most important qualities are interpersonal skills. Staff who lead a feedback session need to conduct the session in a friendly and non-defensive way that shows respect for readers, puts them at ease, and listens to them carefully.

Hire outside experts to conduct the sessions or do it yourself?

When you are deciding who will do the work, especially the work of designing and conducting the feedback sessions, you have choices. One choice is to hire experienced professionals to help you or do it for you. On the other hand, your budget may not allow for hiring outside help, or it may be hard to find consultants who are experienced in conducting reader feedback sessions. Another choice – one we encourage and support – is to learn how to do it yourselves:



It will take some time and practice to learn and refine your skills, but you will get a big payoff from this investment.

- **If your organization has never done a reader feedback project, don't be discouraged by your lack of experience**. The technical skills needed to design and conduct feedback sessions and analyze the results can be learned. Research background or similar training and experience is helpful but not necessary. Perhaps some members of your project team have done other types of interviewing that would give them a head start in learning the interviewing techniques that are used to get readers' reactions to written materials. For example, nurses and social workers receive a good deal of training in how to interview patients or clients and their family members.

- **This Toolkit teaches you the basics of designing and conducting feedback sessions**. If you have never done feedback sessions, this and the other chapters in Toolkit Part 6 will help you learn the skills you need.

- **If it's possible to get some help from experienced professionals, structure their work to emphasize coaching and training of your staff.** It will take longer for experts to add this extra task of helping your staff develop their skills, but the investment will pay off by preparing you to handle future projects more independently and at less cost. In addition, the added task of mentoring your staff keeps the outside experts in close touch with the context and details of your project, and can produce better results for you.

How much and what type of testing?

How much and what type of testing will you do?

- To get feedback from readers, will you use interviews, group sessions, or both?
- How long should each interview or focus group be? How many sessions do you need to do?

This planning question focuses on which approach you will take and how extensive your testing will be. If you work individually with readers to get their reactions, we call this type of feedback session an "interview." If you work with readers in small groups to get their feedback, we call it a "group session." A group session might range in size from a very small group of just two or three people to a "focus group" with about six to nine people.

Deciding how much and what type of testing you will do is a big topic, and we deal with it separately in Toolkit Part 6, Chapter 6, *Should you do individual interviews or focus groups?* Chapter 6 compares the strengths and limitations of each approach and discusses things to consider in deciding how many sessions to do and how long they should be.

In this Toolkit, we cover both interviews and group sessions, but our main emphasis is on interviews:

- **Interviews allow you to use the full range of feedback methods and they work better than group discussions for collecting many types of feedback**. Interviews are not as well known or widely used as focus groups. When you are collecting readers' reactions to written material, interviews offer more privacy and flexibility than group sessions and they tend to work better for many testing purposes including assessing comprehension and usability.

- **In general, it is easier to conduct individual interviews than group sessions**. Conducting a group feedback session can be challenging due to the added task of managing group interaction. If you are building your interviewing skills, it's wise to start by working individually with readers. Later, as you gain skills and confidence, you could try conducting a group session.

How will you select and recruit your participants?

How will you select and recruit your participants?

- What participant characteristics are you looking for, and how will you find people who meet these requirements?
- Will you recruit people on site for immediate participation, or recruit people to participate later on at a scheduled time and place?
- Who will do the recruiting?

Selecting and recruiting participants is another major topic. We cover this topic separately in the following series of three chapters in Toolkit Part 6:

- Chapter 14, *How will you select and recruit participants?* gives the details on how to set requirements for participation and find people who meet these requirements. To help you decide on the best approach for your project, this chapter compares two methods of recruitment. The most common approach is to recruit people in advance, setting up appointments for them to come to a particular location for a group session or individual interview. Another strategy that works well for individual interviews is to go directly to the location where you will conduct the sessions, and recruit people on the spot for immediate participation. When you do on-site recruitment for immediate participation in an interview, researchers call it "intercept" interviewing.

- Chapter 15, *Tips for recruiting people on site for immediate participation in a feedback interview*, tells you how to implement on-site recruitment. If you can find an appropriate setting for on-site recruitment, this approach can be very fast and cost-effective. It works best for individual interviews. It is generally not practical for group sessions because it's too hard to recruit a whole group for immediate participation. However, on-site recruitment can sometimes work to recruit a very small group, such as a group of two or three people.

- Chapter 16, *Tips for recruiting people by telephone to set appointments for feedback sessions*, tells you how to contact potential participants, check on whether they meet your requirements, and set appointments for individual interviews or group feedback sessions. Compared to on-site recruitment, this approach takes longer and costs more because of the time involved in identifying possible participants, contacting them, and following up with reminders.

What location will you use for the feedback sessions?

Where will you conduct the feedback sessions?

- What type of setting will be convenient for participants and put them at ease?
- Does the setting provide enough privacy and noise control? Is it affordable?
- If you plan to recruit participants on site for immediate participation, is the setting suitable for this purpose, and can you get permission?

The location you pick for your sessions with readers affects the quality of the feedback you collect and the cost of your sessions. To put your participants at ease, you need a setting that will be familiar and comfortable for them. There are other issues to consider, too, including convenience, size and flexibility of the space itself, and cost, if any, for using the setting.

To help you choose a suitable location for your interviews or focus groups, Toolkit Part 6, Chapter 13, *Choosing a location for your feedback sessions,* discusses issues to consider. It also covers practical matters such as arranging to help participants with transportation.

How will you get the material ready to test?

How will you get the written material ready to test?

- Would it be helpful to review and improve the material before you show it to readers (for example, by using the *Toolkit Guidelines for Writing and Design* or getting comments from reviewers)?
- What will you show to readers during the session? Will you show part or all of the material? Will you show them different versions to compare?

This seventh step in planning your sessions urges you to take a careful look at the material before you test it:

- **Are there any obvious problems that you should correct before you show the material to readers?** Even if you don't make any improvements before you show the material to readers, doing a careful assessment will help you identify important feedback issues to focus on during your sessions with readers.

- **Are there any places where it might be helpful to develop more than one option for revision**, and then show the different options to readers and see what they think? For example, if you think a particular page needs more visual interest, you could gather some candidate photos and show them to readers during the feedback sessions.

Here are ways to help assess and improve the material before you test it with readers:

- **Ask for "expert review."** It helps to have people who are knowledgeable about writing, graphic design, and the needs of less-skilled readers review your written material and give you their recommendations for improvement. Experts can also include people with insights into ways to make the material more culturally and linguistically appropriate for the intended readers.

- **Do a systematic assessment based on a checklist of desirable features**. For example, you could use the *"Toolkit Guidelines for Writing and Design"* as your assessment tool. These guidelines are listed in Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*. In all, there are 26 guidelines for writing and 46 guidelines for design.

- Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"* includes tips for using the guidelines as an assessment tool. Using the guidelines as a checklist gives you a systematic way to spot places where you can make improvements before you show the material to readers.

- If you decide improvements are needed, other parts of the Toolkit provide detailed guidance on how to apply each guideline, using many examples. See Toolkit Part 4, *Understanding and using the "Toolkit Guidelines for Writing"* and Toolkit Part 5, *Understanding and using the "Toolkit Guidelines for Graphic Design."*

How will you design and conduct the sessions?

How will you design and conduct the sessions?

- Which methods will you use to get reactions to each feedback issue or section of the material?
- Who will write the questions you prepare in advance and create the written guide for conducting the sessions?
- Who will conduct the sessions? Who will take notes?
- Will you audiotape or videotape the sessions?
- Will there be any observers?

In this eighth step of planning, you decide which methods you will use in your sessions, and which people will take responsibility for the various tasks involved in implementing the sessions:

- **Start by learning more about what's involved in designing and conducting the sessions**. In the chapters that follow, Toolkit Part 6 gives you guidance on how to go about designing and conducting your feedback sessions. These chapters cover methods of collecting of feedback from readers and explain how to apply these methods in your own sessions. Topics include how to prepare a written guide and other materials to use in conducting the sessions. And tips on effective interviewing technique. Reading these chapters will give you a sense of what skills and level of effort are required to design and conduct your sessions.

- **Then, decide which people will do the various tasks.** Different tasks require different sets of skills and experience. Perhaps you have people on your project team who can handle all of the tasks. Or you may need to seek help on certain tasks from other individuals or organizations.

Who will conduct the interviews and who will take the notes?

During your feedback sessions, someone needs to serve as interviewer. It's also vital for someone to take notes on people's reactions to the written material you are testing. These notes are an important written record of the feedback you get. Sometimes you may choose to supplement your written notes by audio taping or videotaping your sessions, especially if you are doing focus groups rather than interviews (see Toolkit Part 6, Chapter 12, *Should you do audio or video recording of your sessions?*) But often, written notes will be your only record of the feedback you get, especially if you are doing individual interviews.

Conducting focus groups is a challenging task, and the person who does it must devote full attention to asking the questions and managing the group interaction. But if you are doing individual interviews, it's possible for one person to take the notes as well as conduct the session. The other choice is to use a two person team, where one person takes the lead on conducting the interview and the other is the primary note taker. To help you decide which way would work best in your project, Figure 6-2-c below compares these two approaches for handling the interviewing and note-taking tasks for individual interviews.

Figure 6-2-c. When you are interviewing readers, should the interviewer take the notes or should you use a two-person team?

One approach is to have the person who conducts the interview also be responsible for taking the notes. Here are advantages and disadvantages of having the same person handle both tasks:

Interviewer only
(conducts the interview *and* takes the notes

Advantages:

- Depending on the circumstances, this approach is sometimes faster and/or more cost-effective than using two person teams.
- For some participants, being interviewed by just one person rather than a two-person team might be more comfortable.

Disadvantages:

- It can be quite challenging and tiring to take adequate notes while conducting an interview – especially if you are just learning to do feedback sessions.
- If you have to split your attention between conducting the interview and taking notes, you can't do your best at either task – even if you are experienced.
- You are on your own, with no interviewing partner to talk with about the session after it's over or work with you on summarizing highlights of the session.

Another choice is to use two-person teams:

Advantages:

- Teaming up is an excellent way to teach people how to do feedback sessions.
- It's much easier to take good notes when you have one person who is dedicated to the task of taking notes, without needing to conduct the interview as well.
- Having two people involved can enhance the quality of the feedback session itself, because one person might catch what the other misses.
- Having two people involved improves the reporting and interpretation of results from the sessions. The interviewer and note taker can talk about the session after it is finished, comparing their notes and sharing their impressions.

Disadvantages:

- Depending on the circumstances, it might take a little longer or cost a little more to use two-person teams.
- It's possible that some participants might be intimidated by a two-person team.

Source: Created for this Toolkit.

If you are doing interviews to get feedback from readers, we urge you to consider using a two-person team. As shown above in Figure 6-2-c, working together in teams is ideal for training and it makes conducting sessions easier if you are not experienced. Even professionals who are highly skilled and experienced in conducting feedback sessions often prefer to team up to do the sessions. When you work with a partner, you can focus either on conducting the session or on taking the notes (and you can trade off on these tasks if you like). Working together makes doing feedback sessions easier for both of you, and it tends to produce better results.

The disadvantages of teaming up to do the feedback sessions are generally minor. If you are using your own staff to do the sessions, there may be little or no difference in cost if you use two-person teams rather than individual interviews. And how long it takes to do the sessions will likely depend more on the setting and participants than it does on whether you use two-person teams or individual interviewers.

What about observers?

Sometimes members of the project team or others with an interest in the written material come to observe a feedback session in person. For example, you could invite those who are involved in writing, designing, or supervising the development of the written material to be observers. You could also invite representatives of the sponsoring organization or other stakeholder groups. People who observe a feedback session get a live demonstration of how hard or easy it is for readers to understand and use the written material.

There is mixed opinion about whether allowing observers is a good idea:

- Those who favor allowing observers at sessions emphasize the powerful impact of letting people watch and listen for themselves while readers give their feedback. Letting people see sessions in action is an excellent way to educate and sensitize them to the value of learning directly from readers, as well as giving them insights into ways of improving the material.
- Some think the presence of observers is too distracting, no matter how it is handled.

If you decide to allow observers, it is important to limit the number of people who come to observe, to give them strict instructions to remain silent throughout the session, and to let the participants know that they are being observed. There are several ways to handle observers, depending on the number of observers, type of session, and the site you are using:

- If you are doing focus groups, it is generally okay to allow up to two or three outsiders to sit along the outer edge of the room, in the most unobtrusive spot. The moderator introduces these observers very briefly at the start of the session.
- If you are doing individual interviews, it may be okay to allow one silent observer in the room under certain circumstances. For example, if you are interviewing informants such as nurses or social workers who are not likely to feel inhibited by the presence of an additional person, adding a silent observer would generally be okay. However, if you are interviewing people with poor reading skills, you would definitely not want to add the stress of including an extra person in the room to watch what happens in the interview.

If you need to accommodate observers at your sessions, you may want consider using a professional research facility that has rooms designed for this purpose (e.g., rooms where observers can watch through two-way mirrors).

How will you use the feedback from readers?

How will you use the feedback you get?

- How will you analyze the feedback you get from readers?
- How will you use the results?

As you plan your project, think about how you are going to share and use the results from your sessions with readers. For example, perhaps you will establish a work group to sift through the findings and help make decisions, such as identifying revisions to make, or choosing which materials are best among the ones you are evaluating.

It's very helpful to involve people with different skills and perspectives in this process of analyzing and applying the results from your feedback sessions. For help on how to analyze and apply what you learn from readers, see Toolkit Part 6, Chapter 19, *Using feedback from readers to improve written material.*

What will it cost and what is your timeline?

What is your budget and timeline?

- What is your estimated budget? What resources are available?
- Are there ways to cut costs without sacrificing quality?
- What is your timeline?

Developing and refining the project budget

When you begin planning your feedback sessions, it's helpful to have a written plan with budget and timeline. Start by noting your deadlines and estimating the total funding available for the project, since these will drive some of your decisions. Make time and budget estimates for each part of the project, noting things that have budget impact, such as which staff are available to work on the project, which tasks are to be done by contractors, and any in-kind contributions you can expect.

As you make decisions that affect the budget and timeline, you can update the estimates with actual dates and costs. In developing your written plan, be as specific as possible, to provide a good basis for discussion among team members and to help you spot anything you may have overlooked. Be sure that your time line is realistic, with extra time for unanticipated delays. If you find that the budget or timeline is too tight, scale back the project before you begin.

Budget and timeline implications of the decisions you make

Numerous decisions that you make about project design and implementation will affect the timeline and cost of your project. In many cases, a decision you make in one area, such as how many sessions to hold, affects the time and resources that will be required in other areas. To help with planning, Figure 6-2-d below has comments on the budget implications of some key decisions you will make in planning your project.

Figure 6-2-d. Cost implications of key decisions you make in planning your feedback sessions.

- **Whether you choose focus groups or individual interviews**. Either of these approaches can be quick and relatively inexpensive, or time consuming and costly – it depends on how you implement them. In particular, the costs of doing interviews or focus groups are affected by costs associated with the location, who conducts the interviews, and how you select and recruit participants. For example, if your own staff does interviews using on-site recruitment at a community-based organization, the project will be relatively fast and cost-effective. In contrast, if you hire consultants to do the recruitment and conduct the interviews at a professional research facility, the project will take longer and cost more.

- **Who conducts the feedback sessions.** Labor can be an important component of your overall budget. If you hire outside consultants to conduct your sessions, the cost will likely be higher than if your own staff are able to do it. If you are new to doing feedback sessions, it may be worthwhile to hire consultants who will take the lead on the project and provide training for your own staff as part of their work. For example, the consultants might be the primary interviewers, and your staff could get "on the job training" by serving as the note takers. By investing in training of this type, you would build your own capability to conduct future projects on your own or with more limited assistance from contractors.

- **How many interviews or focus groups you do.** Whether you do interviews or group sessions, doing a larger number of sessions takes more time and will probably cost at least a little more. Fortunately, you can get very useful feedback from a relatively small number of sessions, especially if you split them into two or three rounds so that you can get feedback at different stages of developing the material. How much longer it takes to do a larger number of sessions depends on how you schedule the sessions. For more on this topic, see the last section of Toolkit Part 6, Chapter 6, *Should you do individual interviews or focus groups?*

- **How you select, recruit, and compensate the participants.** Many decisions you make about selecting and recruiting participants will affect both your budget and your timeline. These include, for example, who does the recruitment, the requirements you set for participation, the way you locate possible participants and screen to see if they meet these requirements, whether you offer assistance with transportation or payment for child care, and how much (if anything) you pay participants. For more about this, see Toolkit Part 6, Chapter 14, *How will you select and recruit participants?*

- **Where you hold your sessions**. The location you choose for your interviews or focus groups has a big impact on costs. Professional focus group facilities offer certain advantages but they tend to be quite expensive. Many community settings may be available at no cost or a nominal charge. For more about finding a place that is affordable, see Toolkit Part 6, Chapter 13, *Choosing a location for your feedback sessions.*

- **Whether you tape and transcribe your sessions.** There are tradeoffs to consider when you make decisions about how to capture the feedback you get during your sessions with readers. For many purposes, taking written notes is sufficient, and we give tips on how to do this (see Chapter 17, *Conducting feedback interviews and taking notes*). You may want to consider supplementing the written notes by audio taping or videotaping the sessions. If you do tape the sessions, you will need to decide whether to transcribe them to produce a written transcript. Taping and transcription add to the cost of feedback sessions. For a discussion of issues to consider, see Toolkit Part 6, Chapter 12, *Should you do audio or video recording of your sessions?*

- **How much work, if any, you will do on developing and revising the material.** Some projects evaluate existing materials, so there is no need to budget for writers and designers. But if your project includes development or revision of material, you may need to budget for writers, editors, graphic designers or web designers, as well as for the cost of producing multiple copies of mockups for use in the sessions with readers. The cost of these services can vary enormously depending on the specific needs of the project, the nature of the material, and the extent to which you have resources available in house.

- **How you analyze and report the results of your sessions.** The intensity and methods used to analyze the results from sessions differ greatly depending on the nature and needs of your project. So does the type of reporting, if any, that is done.
    - Suppose for example, that you are working on revising a pamphlet for a community organization. Your plans for data analysis may be modest and informal. Perhaps you will get the project team together at a single meeting to go over the written notes from your feedback sessions and decide what revisions to make. You won't spend time and money on producing a written report because there is no need for one.
    - Or, suppose that you are working on a large-scale research or evaluation project that includes multiple rounds of interviews and focus groups. In this type of project, data analysis might be based on systematic study of written transcriptions of all sessions, and might even use specialized computer programs to help analyze the results. It would likely include a written report, at a minimum. It might include giving presentations at workgroups or conferences and writing articles for newsletters or professional journals.
    - **But this Toolkit is written for people without a research background who have limited time and resources available.** We emphasize practical advice about how to interpret the results of your feedback sessions and use them to improve your written material. We do not cover advanced topics such as how to do systematic analysis of transcripts or produce formal written reports of your findings.

Source: Created for this Toolkit.

Where can you cut costs without undermining quality?

You don't need a big budget or even a lot of time to get great value from sessions with readers. As long as you are careful with planning, design, and technique, you can learn an enormous amount from readers at relatively low cost. Throughout this Toolkit, we point out various ways that you can cut the costs of your project without undermining quality.

How will you evaluate the project?

How will you evaluate the project and document its benefits?

- How will you keep track of the practical things you learn from doing this project so that you can apply them when you do your next project?
- How will you document the benefits of getting feedback from readers?

As you plan your reader feedback projects, consider how you will keep track of what you learn along the way, so that you can apply these lessons learned to have a better, easier time with the next project. Researchers call this doing a “process evaluation.” Keeping a project diary and archive is a simple way to incorporate a process evaluation into your project:

- **Project diary.** The diary is your record of what you did, what went well, and what did not. Keep the diary short and simple to encourage people to use it as a reference for the next project. Just make informal notes from time to time about how the project actually evolved, compared to what you were expecting. Tell about problems you encountered, how you handled them, and how well it worked. Include your own advice to yourself about what to do differently next time.

- **Project archive**. Set up an archive folder, and keep it handy. Each time you deal with a project document, drop a copy of it into the archive folder. This should include such things as bids and contact information from vendors, lists of team members and their organizations, copies of important e-mails, and all of the paperwork and mockups related to the sessions themselves. If you make it a habit to accumulate copies throughout the project in your archive folder, it is easy to sort through and organize this folder at the end of the project. Take a little extra time at the end of the project to consolidate all of the electronic files related to the project and put them in the archive folder for easy future reference.

- **Consider supplementing the diary and archive with feedback from team members, vendors, and others.** With a little advance planning, you can sometimes devise easy ways to collect useful feedback from people involved in working on the project. For example, if you hire a research firm to do recruitment for you, you can ask for a brief management report that describes how the work was done and offers suggestions for improvement next time. At the end of the project, you can send team members and stakeholders a brief questionnaire that asks them to reflect on how the project was designed and conducted, and offer constructive criticism. (For help in doing a survey, see references at the end of this chapter.)

Be sure that someone takes personal responsibility for keeping the diary and archive, or it may not get done. The small investment of time and effort in keeping a project diary and archive will pay off when you start the next project. It will help you produce a complete and accurate budget and timeline with much greater ease. You will be able to locate the details you need, such as which vendors you used, the requirements you set for participation, and what proportion of your participants took you up on the offer to help them with transportation. The project diary and archive will be especially helpful to orient new staff who did not participate in the previous project.

Assessing and documenting the value of getting reader feedback

There are many benefits you gain by getting readers' reactions to written materials. When you are just starting to develop materials, reader feedback can steer you in the most promising direction. Getting feedback from readers periodically during a project can help you produce written information that is clear and compelling to the people you are trying to reach. When your written material is easy for people to understand and use, you will communicate more effectively with them. Making written material easier for people to understand and use is a vital part of improving health literacy. For more on this topic and suggested resources, see the *Quick Guide to Health Literacy* (Office of Disease Prevention and Health Promotion [ODPHP], 2002) and Toolkit Part 1.

As you plan your project, think about ways you might document its impact (Balch & Sutton, 1997). How can you gather evidence that demonstrates the benefits of improving written material? Methods for documenting the value of learning directly from readers will differ depending on the nature and scope of your project, as well as the time and resources you have available for evaluation. If you are doing large-scale research, evaluation may be an important component of your work, and you may be able to focus part of it on evaluating the feedback sessions. But you don't have to be a researcher or spend a lot of money to document the value of getting readers' reactions to written materials. There may be some simple and low-cost ways to do it.

For example, suppose that your project used reactions from readers to improve a patient education booklet about managing diabetes. Ideally, you would like to have evidence about the clinical impact, that is, data on management of blood sugar, but collecting such information requires a large budget and specialized research skills. Perhaps you could use a simple survey that asks clinicians or diabetes educators how well the revised booklet is working with their patients. For example, you could ask whether they think their patients understand the revised version better than the old one, and whether reading it seems to make their patients feel more confident about why and how to keep their blood sugar under control.

For an example of documenting the impact of improving written material, see *Creating plain language forms for seniors: a guide for the public, private, and not-for-profit sectors* (1998). This publication describes a project by the National Literacy and Health Program and the Canadian Public Health Association. This project studied the costs associated with using forms that are too difficult for people to understand and complete, and looked at the business case for improving forms. They conducted focus groups with older adults to get their reactions to existing forms and used the results to identify ways to improve forms. This report uses a number of examples from Canadian and Australian businesses and governments that document the business case for improving forms.

End notes

Suggested resources

NCI (National Cancer Institute, National Institutes of Health)

2002 *Making health communications programs work: A planner's guide*.
This 251 page paperback is an updated and greatly expanded version of the classic 1992 NCI "pink book." It provides a wealth of information about planning and implementing health communication efforts. It is written and distributed by the National Cancer Institute (NCI), which is part of the U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health (NIH). NIH publication No. 02-5145, printed September 2002. For a copy, visit the NCI website at http://www.cancer.gov/pinkbook or call NCI's Cancer Information Service at 1-800-422-6237.

Salant, Priscilla A. and Don A. Dillman

1994 *How to conduct your own survey: Leading professionals give you proven techniques for getting reliable results*. New York City: John Wiley & Sons, Inc.
If you want to use survey methods in an evaluation related to your written material, this 232 page paperback book is a great resource. Written in non-technical language for non-researchers, it gives you step-by-step guidance in planning and implementing a survey, and does a good job of explaining sampling. [If you have a research background, see *Mail and Internet surveys: The tailored design method*, second edition, by Don A. Dillman. New York City: John Wiley & Sons, Inc., 2000.]

References cited in this chapter

Balch, George I. and Sharyn M. Sutton

1997 *Keep me posted: A plea for practical evaluation.* Chapter 5, pages 61-74, in *Social Marketing: Theoretical and Practical Perspectives*. Marvin E. Goldberg, Martin Fishbein, and Susan E. Middlestadt, Editors. Mahwah, NJ: Lawrence Erlbaum Associates.

Canadian Public Health Association

1998 *Creating plain language forms for seniors: A guide for the public, private, and not-for-profit sectors*. Ottawa, Canada: Canadian Public Health Association. Visit http://www.cpha.ca or call (613) 725-3769. Canadian Public Health Association, 400-1565 Carling Avenue, Ottawa, Ontario, Canada K1Z 8R1.

NCI (National Cancer Institute, National Institutes of Health)

2002 See above under *Suggested resources.*

ODPHP (Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services)

2002. *Quick guide to health literacy*. It can be downloaded from: http://www.health.gov/communication/literacy/quickguide/.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 3

Introducing the four methods for getting feedback from readers

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

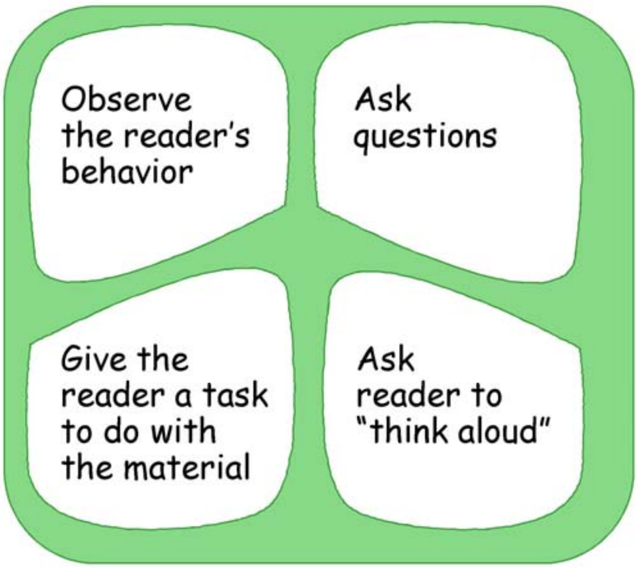
TOOLKIT Part 6, Chapter 3

Introducing the four methods for getting feedback from readers

List of figures in this chapter:

This document is the third of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introducing the four methods you can use

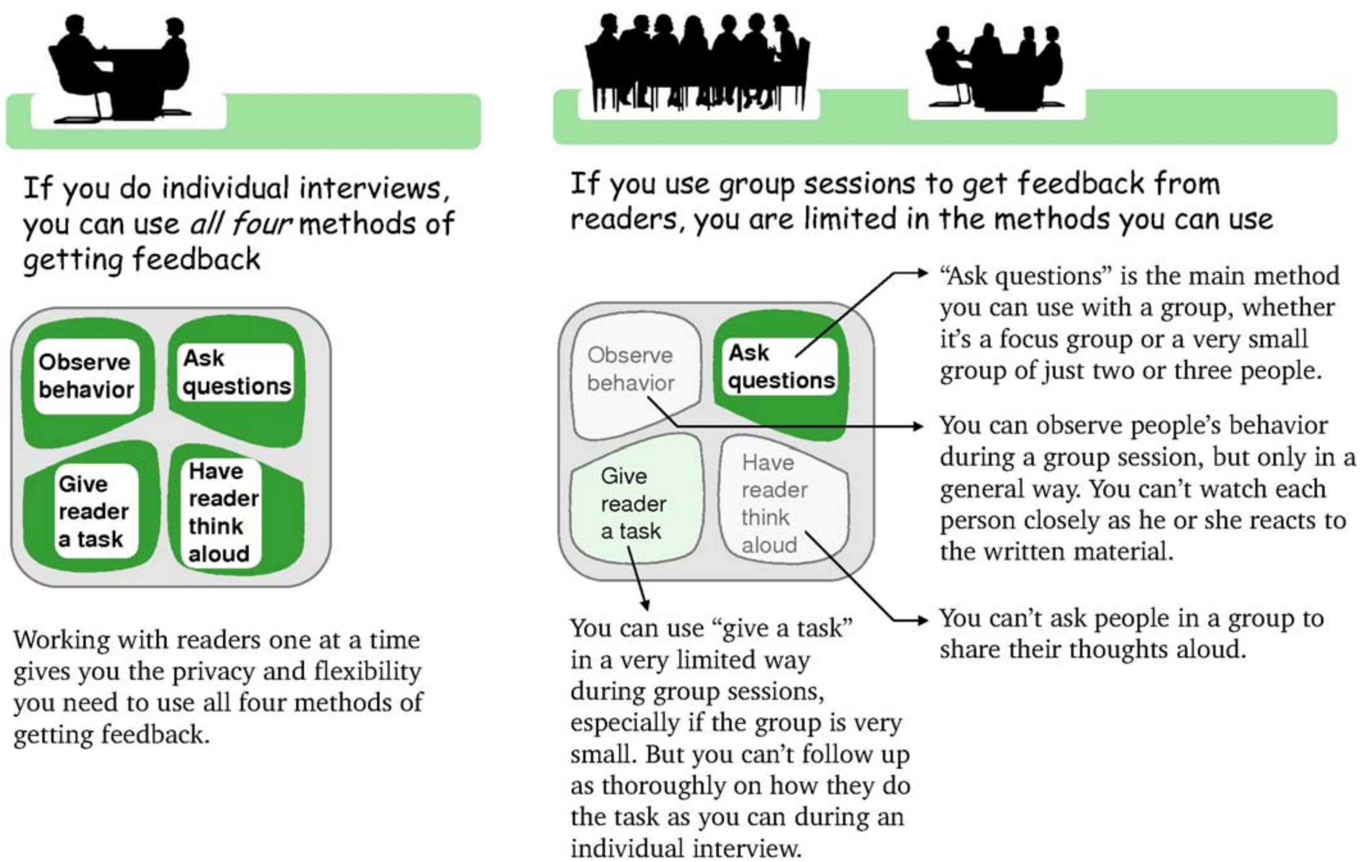


To help you visualize the process of collecting readers' reactions to written material, this chapter gives you background on the four methods you can use. This chapter introduces the four methods by describing each one and how it is used. Then, in chapters that follow, we compare these four methods, tell which ones work best for which purposes, and give you tips on how to use them in your own feedback sessions.

We emphasize using *interviews* to get feedback

Before we start describing the four methods, there's an important point to make: if you decide to work with readers in groups, you will be limited in which methods you can use. As shown below in Figure 6-3-a, you can make *full use of all four methods* if you do individual interviews. But if you use groups to collect feedback, you will need to rely mainly on asking questions.

Figure 6-3-a. Doing group sessions limits the feedback methods you can use.



Source: Created for this Toolkit.

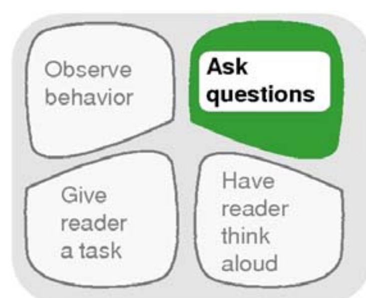
Since interviews allow you to use all four methods, the rest of this Toolkit focuses mainly on using interviews rather than group sessions to get feedback from readers. When we discuss how to ask questions of readers, what we say usually applies to group sessions as well as to interviews. But when we discuss the other three methods (*think aloud*, *give a task*, and *observe behavior*), we are focusing specifically on using these methods in individual interviews.

In addition, by focusing mainly on interviews, we hope to make this approach more familiar and provide the help that is needed to encourage its use:

- In general, interviews work better than group sessions for many feedback purposes (see Toolkit Part 6, Chapter 6, *Should you use individual interviews or focus groups?*). They are also easier to conduct, because you don't have to manage group interaction. Yet many people tend to use groups instead of interviews simply because they are accustomed to using focus groups.

- There are excellent resources available to help you plan and conduct focus groups (for suggestions, see the end of Toolkit Part 6, Chapter 6). There are also excellent resources that focus on testing the usability of websites (see, for examples, resources listed in Toolkit Part 8, *Will your written material be on a website*?). However, there are few resources that explain how to use interviews to collect feedback on written material in a printed format. Toolkit Part 6 helps fill the gap.

Method 1: **Ask questions**



In the example above, the interviewer is **asking a question** to find out if the purpose and content of the written material is immediately clear to the reader.

Asking questions is a powerful and familiar way to get feedback

Direct questioning is a flexible, powerful, and essential tool for getting readers' reactions to written material. Of the four methods we discuss, asking questions is the most obvious and familiar method, and it will be a vital part of every feedback session you do.

This chapter gives a quick overview about asking questions and a few examples. Other chapters in Toolkit Part 6 cover the topic of asking questions in detail. See especially Chapter 8, *Phrasing your questions to get the most useful feedback from readers*, Chapter 10, *Creating a written guide for conducting feedback sessions*, and Chapter 18, *Tips for effective interviewing technique*.

Some questions are prepared in advance and others are improvised

When you do sessions with readers to get their feedback, you will use a mix of "scripted" questions and "spontaneous" questions:

- **"Scripted" questions** are the ones you prepare in advance and put into the written interview guide that you use to conduct the session.

- **"Spontaneous" questions** are the ones you improvise to suit the situation when you are doing the interview.

Preparing scripted questions in advance helps you structure the feedback session and plan the most effective ways to phrase your questions. Sometimes you will ask questions exactly as they are written in the interview guide, much like using a "script." Other times you will need to use the scripted questions for reference, and adapt the wordings during the session to fit the situation.

How you phrase your questions is crucial

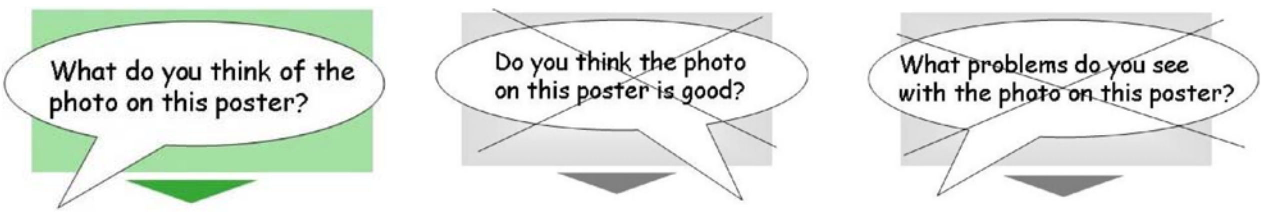
How you phrase your questions has huge impact on the meaningfulness and usefulness of the feedback you get. If you ask questions that readers can answer with a simple "yes" or "no," you won't learn much. If you phrase your questions in ways that get people to give feedback that is more specific and detailed, you will learn how well the material is working and where it needs to be improved.

To get the most productive results from feedback sessions, it's crucial to phrase your questions in ways that allow and encourage readers to say what they think without feeling pressured or inhibited. This means:

- **Asking questions that are worded in a neutral way**, rather than asking leading questions that seem to point toward a particular type of answer. Figure 6-3-b below gives examples.

- **Phrasing most of your questions in ways that allow and encourage readers to answer in their own words.** Questions that are phrased to have readers answer in their own words are called "open-ended" questions. (Questions that give people answer categories to choose from are called "closed-ended questions." For example, a question that asks people whether they agree or disagree with a statement are closed-ended questions.) In general, using open-ended questions rather than closed-ended questions for most of your questioning will help you get the most meaningful and useful feedback from readers. Figure 6-3-b below gives examples.

Figure 6-3-b. Comparing ways of phrasing questions (open-ended vs. closed-ended; neutrally worded vs. non-neutrally worded).



Neutral: This question is worded in a *neutral* way. It doesn't steer readers toward any particular type of answer.

Open-ended: By asking, "what do you think…", this wording *encourages readers to answer in their own words.*

Not neutral: This question is *not* worded in a neutral way. By including the word, "good," it may subtly steer readers toward giving a favorable response.

Not open-ended: This is a "yes-no" question. Questions that can be answered with "yes" or "no" are not open-ended. They do *not* encourage readers to respond in their own words.

Not neutral: This wording is *not* worded in a neutral way. By asking "what problems do you see," it steers readers toward searching for something that is wrong with the photo.

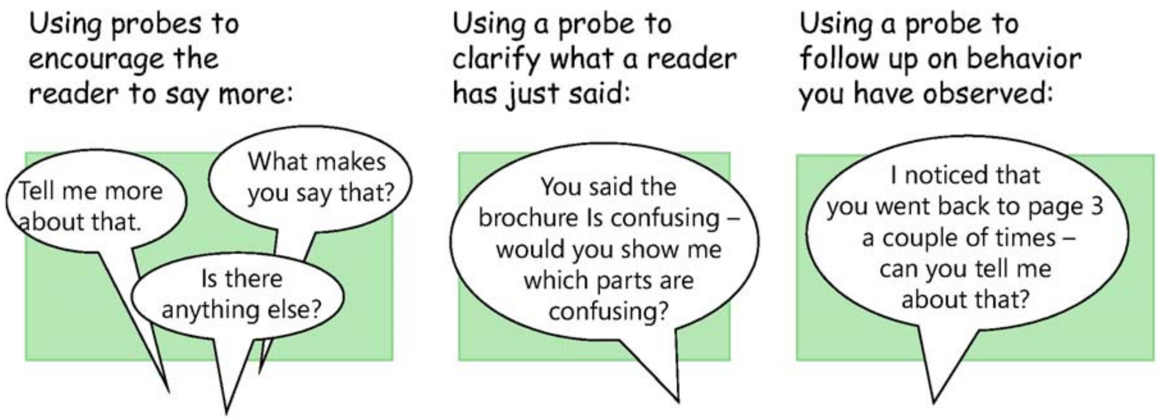
Open-ended: This question wording is open-ended and it *does* encourage readers to respond in their own words.

Source: Created as an example for this Toolkit.

Use follow-up questions to get the most meaningful feedback

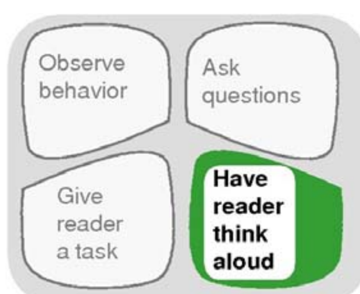
Follow-up questions are the ones you use to get a reader to say more or to make sure that you understand what a reader has said. Follow-up questions are often called "probes" because you use them to probe for a more expansive or specific answer. Probes are crucial tools for getting the most informative feedback. Figure 6-3-c below has examples of probes.

Figure 6-3-c. Using follow-up questions ("probes") to get a more informative response.



Source: Created as an example for this Toolkit.

Method 2: **Ask the reader to "think aloud"**



In the example above, the woman is sharing her reactions to the written material by "thinking aloud."

Having readers tell what they are noticing about the material

To gather the most useful feedback, you want readers to feel comfortable about talking freely and openly about their reactions to the written material. The method called *think aloud* encourages this behavior:

- **You simply ask readers to say aloud whatever comes to mind** as they are looking through the written material. Readers who are thinking aloud make comments about what is drawing their attention and give you insights into the opinions they are forming as they look at the material. The illustration above gives an example. The woman who is thinking aloud is telling the interviewer *what* has caught her attention ("Now I am looking at the baby at the bottom of this page") and *why* (it's such a cute picture").

- **You can ask questions, too**. In actual practice*, think aloud* is seldom a long, uninterrupted "stream of consciousness" monologue from the reader. Instead, it is usually a series of spontaneous comments by the reader, interspersed with occasional follow-up questions from the interviewer who is probing to get elaboration on something the reader has said.

Benefits of getting people to think aloud

As a method for collecting feedback from readers, "*think aloud*" is not well known or widely used. It's a powerful method, and we urge you to try it. When people are able and willing to think aloud, what they say can be very informative. Hearing their spontaneous comments enhances and extends the feedback you get from asking them questions, giving them tasks, and observing what they do with the material:

- *Think aloud* helps you capture people's **immediate impressions that are not influenced by a particular line of questioning** from the interviewer.

- *Think aloud* can give you **insights about things that you never thought to ask about** in your scripted questions. Listening to people's spontaneous remarks can reveal many things that you didn't anticipate or expect.

- *Think aloud* **lends accuracy to your observations of behavior** because people who are thinking aloud often tell you exactly what they are looking at and why.

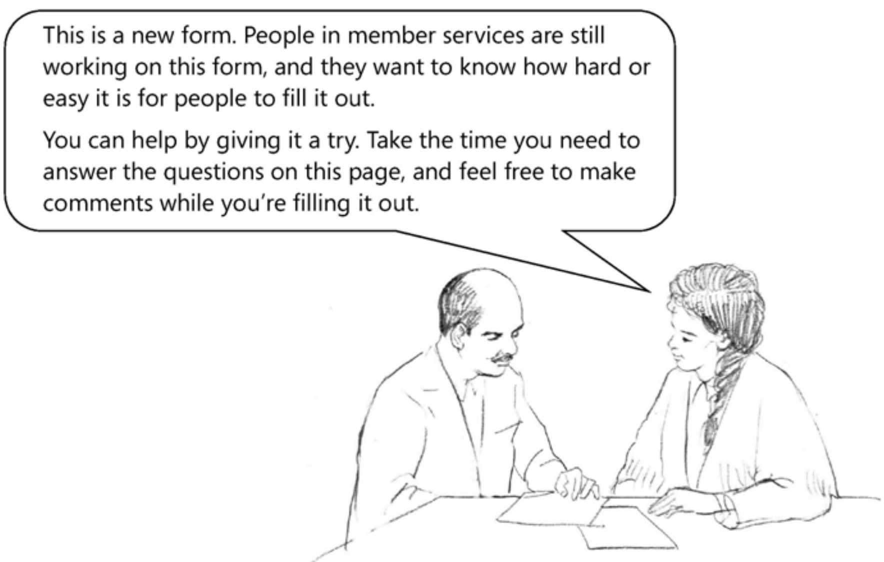
Readers need some coaching

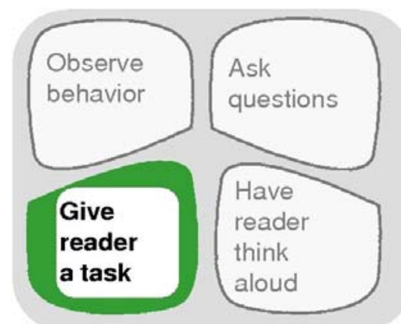
Some readers feel self conscious or inhibited when you ask them to share whatever comes to mind:

- **People need guidance and encouragement**. Since the *think aloud* process is so different from everyday life, you will need to explain, encourage, and remind people to speak up and share their thought aloud. When you ask readers to *think aloud*, it helps to give a brief demonstration that models what you want them to do. We explain how to do this in a later chapter (see Figure 6-18-b in Chapter 18, *Tips for effective interviewing technique*).

- **Sometimes it works well and sometimes it doesn't**. With coaching and encouragement, many people will get into the spirit of a *think-aloud* interview. But some may not, and others, especially those who are poor readers, may find it too hard to read and talk at the same time.

Method 3: Give the reader a task





In the example above, the interviewer is explaining a task she would like the participant to do.

"Give a task" is a method for assessing usability

This method that we call "give reader a task" is a type of "usability testing." By giving the reader a task to perform, you are testing how hard or easy it is for readers to use the written material for its intended purpose.

"give a task" (usability testing)

- Giving tasks is a very direct and powerful way to assess the usability of the material and spot places where it needs improvement.
- You give the reader something to accomplish that involves using the material. For example, the task might be to find a particular type of information or make a decision based on reading the material.
- By watching and waiting without asking any scripted questions, you will discover if people are able to do the task, how long it takes, and whether they encounter any problems.

What kinds of tasks?

When you use this method, **the "task" is something specific that you ask a reader to do that involves using the material**. The type of task you give depends on the material. Here are some examples of tasks:

- If the written material is an enrollment form, the task might be to fill it out.
- If the written material is a medicine label for a children's pain reliever, the task might be to figure out the right dose for a child who is two years old and weighs 30 pounds.
- If the written material is a chart that compares patient survey results for a group of hospitals, the task might be to figure out which hospital is doing the best on patient satisfaction and which is doing the worst.
- If the material is a detailed handbook that describes medical insurance benefits and coverage, the task might be to pretend that you have that insurance, and find out what you need to do to file a complaint about not being given care you thought was covered.

What can you learn by giving readers a task?

When you use this method, the feedback you get is *behavioral*: you watch what the reader does in performing the task. Behavioral feedback is different from the spoken feedback you get when readers answer the questions you ask or they share their reactions by thinking aloud, and it can give you unique insights into how well the material is working.

Usability is the ultimate test

If you find that readers can't perform the task you give them, or can't perform it correctly, or have a lot of problems or frustration, then it's a matter of serious concern.

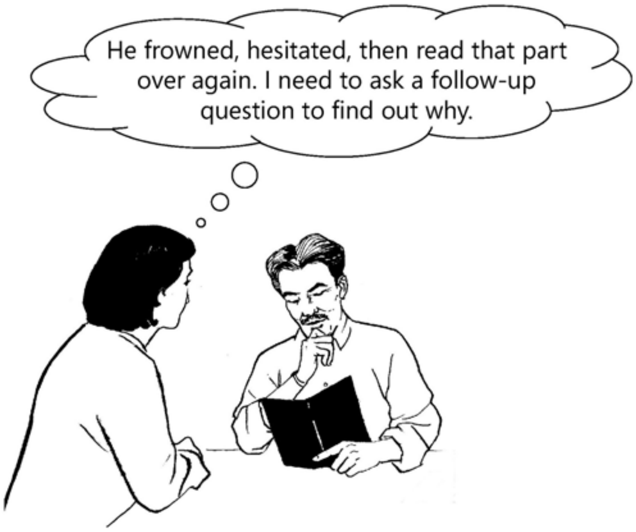
Even if written material is fine in all other respects—such as appeal, cultural appropriateness, and ease of understanding—it is *not suitable if readers can't use it for its intended purpose.*

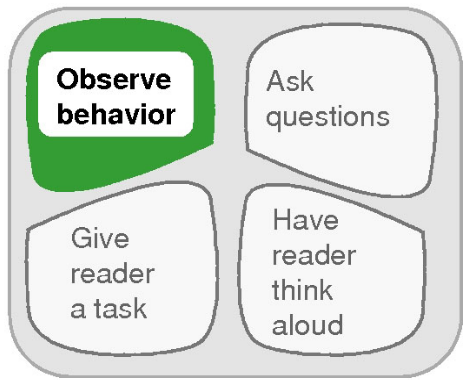
The ultimate practical test of written material is whether or not people can use it for its intended purpose, and giving them a task to perform is the best way to find out. When you give a reader a task to perform with the material – unassisted and uninterrupted by the interviewer – **you are collecting evidence about how well the material is likely to work in a real life situation**. This behavioral feedback you get from giving readers a task to perform is compelling. It can give you a unique perspective on the material that you cannot get from asking questions or having readers think aloud.

Material that appears to be clear and effective can flunk the usability test. For example, suppose that you are using feedback sessions to test a chart that compares hospitals on quality of clinical care and the ratings given by patients. You start by showing the chart to readers and getting them to share their reactions by *thinking aloud*. The comments they make about the chart are very positive. They say that they like the colors and design; they think the information in it is interesting and useful; and they say the chart looks easy to use. Then, to check on usability, you give them a task that involves using the chart to compare hospitals and identify which ones are doing the best in certain areas of performance. To your surprise, you find that some of them make mistakes in using the chart, and draw the wrong conclusions. If you had not given them the task, you would have relied solely on their positive feedback during *think aloud*, and would not have discovered that there were problems with usability of the chart.

This method of "give a task" is powerful and compelling, but it is not well known or widely used as a method of getting feedback on written material. We urge you to look for ways to incorporate tasks in your feedback sessions.

Method 4: **Observe the reader's behavior**





In the example above, the interviewer is observing the reader's behavior, and planning how she might follow up on what she has observed.

Observation is used in every interview

Observation is the last of the four methods for collecting feedback, and it's one you will use in all of your feedback sessions. As we explain in the next chapter, you won't be using it as a *main* method to get feedback. Instead, whatever the main methods you use, you will be using observation as a *secondary method* throughout the interview. Whether you are asking questions, asking the reader to think aloud, or giving the reader a task to perform, you will want to keep an eye on the reader's expressions and other body language and watch what the reader actually does with the material:

- **You can observe specific behaviors**, such as which parts readers look at, in which order, and how long they spend on each part. This helps you identify which parts of the material readers tend to skip over and which parts naturally draw their attention.

- **You can watch for differences in how readers approach the material and navigate through it.** For example, some readers may work their way slowly and methodically from beginning to end, and others will skim quickly through it or skip around from one part to another. Observing what different readers do will help you identify the typical paths that readers take through the material and see how well the material is working for each of the typical paths. Watching readers work their way through material that is long shows you the extent to which they use navigational devices such as table of contents, headings, page numbers, headers and footers.

- **You can watch for facial expressions, gestures, and other body language**. Frowns, grimaces, smiles, restless shifting, and other behaviors can be clues about how the reader is reacting to the material.

What can you learn from observing a reader's behavior?

- **Observation gives you clues and insights that can help you spot possible problems**. Observing what readers do with the material can give you insights that you might not get by using the other methods. For example, if you are watching closely, you may notice that most readers skip over the top part of a particular page. This behavior by readers is a clue that maybe there's a problem with the top of this page. For example, is there something about the layout or design that is causing people to overlook that part of the page? Are they skipping it deliberately due to lack of interest in the topic? Or are they skipping it because it uses words they don't know and it looks hard to read?

- **It helps you use the other methods more effectively**. When you are watching what readers do as they think aloud or work on a task, you will notice things to follow up on when they are finished. The illustration above gives an example. In this illustration, the interviewer has observed the reader's facial expression and behavior ("he frowned, hesitated, then read that part again") and is planning how she will follow up on this observation to find out what it means ("I need to ask a follow-up question to find out why"). If the interviewer had not been watching, she would have missed this clue about a possible problem with the material.

- **It shows you how much readers differ in their approaches to written material, which reminds you to be realistic in what you assume**. When you work on developing written material, it's tempting to assume that your intended readers will start at the beginning, notice everything, and read it from beginning to end. But after you have done feedback sessions where you watch what readers actually do with the material, you'll find that this assumption doesn't hold. Some skip around, some start in the middle or even at the end. Some skim through the whole thing, pausing only when something catches their interest. Observing a reader's behavior can help you find out whether the layout and organization are working well for the whole range of readers who have different ways of approaching and using the material.

Be cautious about drawing conclusions based on observing behavior

Observation is an important part of any interview and it can be quite revealing. Quietly watching how people react as they read the written material shows what naturally draws their attention and can give you clues about possible problems in the material:

- **It's up to you to pursue these clues to find out what they really mean and whether they can help you make improvements in the material**. The clues themselves don't tell you much about what the problem is or how you can fix it.

- **In addition, it's easy to over-interpret or misinterpret the facial expressions, gestures, and other reader behavior you observe**. For example, does spending a long time on one part of the material indicate special interest in the topic or might it mean confusion? Does a frown indicate confusion, or might it mean frustration or boredom?

When you are observing behavior during a feedback session, it can be helpful to ask a follow-up question to check directly with the reader on the meaning of the behavior you observe. The illustration at the beginning of this section shows an example, where the interviewer is thinking to herself about how she needs to ask a follow up question. Of course, you have to be selective: if you ask too many questions about behavior, you will make readers too self-conscious.

End notes

Suggested resources

Dumas, Joseph S. and Janice C. Redish
1999 *A practical guide to usability testing*. Revised edition. Portland, OR: Intellect Books.

Willis, Gordon B.
2005 *Cognitive interviewing: A tool for improving questionnaire design*. Thousand Oaks, CA: Sage Publications.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 4

Five steps for designing a reader feedback session

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 4

Five steps for designing a reader feedback session

List of figures in this chapter:

This document is the fourth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Overview of the five steps for designing a session

This chapter is the first in a series of chapters that helps you plan what to say and do during your feedback sessions with readers. In this chapter, we discuss the five steps in the planning process listed below in Figure 6-4-a:

Figure 6-4-a. Five steps for designing a reader feedback session.

How to design a feedback session:

1. Assess the material and decide what you want to learn from readers (these are your "feedback issues").
2. Decide what you will show to readers during the session (all or just part of the material, different versions to compare, etc.).
3. Decide whether to do individual interviews or group sessions.
4. Decide which method to use for each feedback issue or section of the material (the four feedback methods are: ask questions; encourage the reader to "think aloud;" give the reader a task to perform; and observe the reader's behavior).
5. Based on the decisions you have made about feedback issues and methods to use, create a written guide for conducting the session.

Source: Created for this Toolkit.

These basic steps shown in Figure 6-4-a above apply to designing any type of reader feedback session for any purpose. Usually, your purpose will be to test material you are developing or revising, and use what you learn from readers to make improvements. Sometimes you might want to use feedback sessions for other purposes, such as to evaluate materials and choose the most effective ones. But since most sessions are done with the main goal of improving materials, our discussion about designing your feedback sessions emphasizes ways to collect feedback that is the most meaningful and useful for making improvements.

Each feedback project is unique, and you will want to design a session that focuses on your particular needs. This chapter has an overview of the planning process to get you started. Chapters that follow give you the details on how to implement the five steps to design a session that meets your needs.

STEP 1: **Assess the material and decide what you want to learn from readers**

Assess the material and decide what you want to learn from readers (these are your "feedback issues")

- Generate a list of possible feedback issues, using sources such as informal feedback, expert review, results from previous testing, and assessment based on using a checklist of guidelines for writing and design.
- Based on the results of your assessment, consider whether you should make any changes to improve the material before you show it to readers.
- Prioritize the list of feedback issues by deciding which ones are most important to cover in your session.

Create a list of "feedback issues"

To design your feedback session, start by thinking about what you want to accomplish by having readers react to your written material. What are your "feedback issues" – that is, what specific types of things do you want to learn directly from readers?

"Feedback issues" are things you want to focus on when you are getting readers' reactions to your written material.

Feedback issues range from **very broad** ("do readers find this material appealing at first glance?") to **very specific** ("does this explanation make sense to readers?").

You will use your list of feedback issues to structure your sessions with readers. In the next chapter, we cover this first planning step in detail (Toolkit Part 6, Chapter 5, *Creating a list of "feedback issues" to use in testing the material).*

It's helpful to get your entire project team and representatives of your stakeholders actively involved in identifying feedback issues. Writers, graphic designers, subject matter experts, cultural informants, staff from community-based organizations, and others who are involved with the project each have their own areas of interest, experience, and expertise. This means that they will tend to have different kinds of insights about problem areas in the materials.

To generate a list of feedback issues, start by assessing the strengths and weaknesses of the material. Chapter 5 describes approaches you can take, including using the *Toolkit Guidelines for Writing and Design* as an assessment tool to evaluate the material, reviewing informal feedback you have already received, reviewing results from any previous testing, and getting opinions and advice from cultural informants and other expert reviewers.

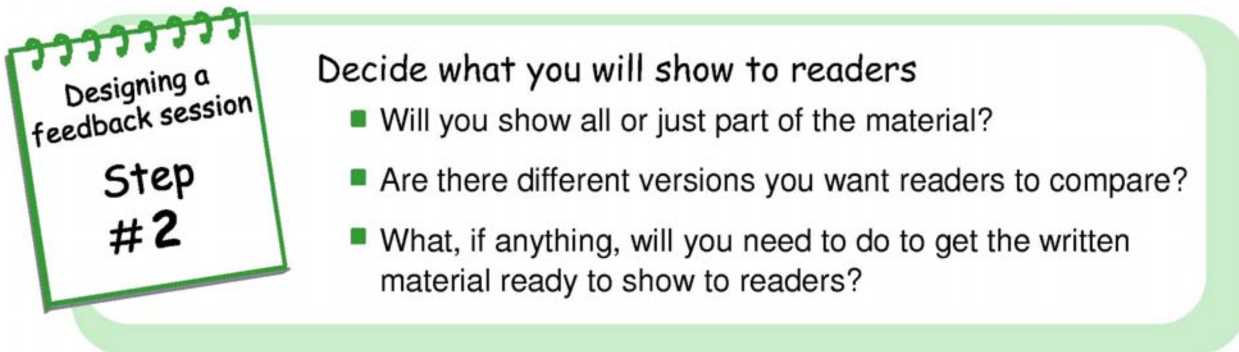
What if you identify big problems with the material?

When you are working on your list of feedback issues, you will be identifying the strengths and weaknesses of the material. If your assessment of the material reveals any significant problems, it's wise to try to fix them before you show the material to readers. That way, you can use the feedback sessions to check on how well your improvements are working and to fine-tune the rest of the material.

Decide which issues are most important to cover

Once you have a list of possible feedback issues, the next step is to examine the issues and decide which ones are most important to include in your sessions with readers. The next chapter gives tips and examples that show how to prioritize your list.

STEP 2: **Decide what to show readers during the session**



What will you show to readers?

In Step 2 of planning your session, you decide whether you will show all or just part of the material to readers, and whether you want them to compare different versions. What to show readers during the session depends on many things, including where you are in the process of developing and revising the material, what kinds of feedback you want to get, and how much time you will have.

In most situations, you will probably show the entire document, especially if the material is short. Even if you show the whole thing, you can spend more time on some parts than others. But sometimes you may prefer to show only part of the material during the session. For example:

- You may be at an early stage of development, and would like to get readers' reactions to certain parts before you go any further. Getting feedback on early versions of such things as key messages and ideas for document design can help guide the rest of your work. You can save time and money, too, if you seek feedback while there is still time to make major changes in your approach if needed.

- Your feedback issues may be concentrated in just one part of the document. By showing only part of the material, you can use the time you have available to get in-depth feedback on areas of greatest concern.

At this stage of planning, you'll also want to decide whether to have readers compare different versions of part or all of the material. Whether you use interviews or focus groups, showing different versions to readers can be a great way to get helpful feedback. People enjoy giving their preferences, and they appreciate knowing that you value their opinions. Hearing why they favor some choices and not others can be very informative.

To help you decide whether to show different versions, here are some suggestions:

- Take a look at your list of feedback issues: are there any issues for which it might be helpful to test some alternatives?
- Are there any parts of the material where team members disagree about the approach you should take? If so, consider showing the different options to readers during the session.
- Have you struggled with certain parts of the material and you're not sure how to handle them? Perhaps it would help to show readers some options during your feedback session, and find out what they think.
- Consider showing different choices for photos, illustrations, color schemes, cover designs or other features with a strong visual element. Giving people some examples makes it easier for them to share their views about the visual aspects of your material.

How will you get the material ready to show?

If the material you will be testing is already published, and it's the only thing you plan to show during the session, then there's nothing to get ready. You just need to make sure that you have enough copies available, including a few extra just in case you need them.

If you are still working on draft versions of the material, or you plan to have readers compare different versions, you will need to prepare copies of the material in advance. As much as you can, create copies of the draft versions that closely resemble the finished product. For example, if you are going to ask for feedback on color schemes or pages that rely heavily on color, make sure that the color reproduction is good. Otherwise, the feedback you get could be misleading.

At the same time, don't hesitate to show readers your "work in progress," and don't worry if it looks like a rough draft. Readers are forgiving about draft versions. When you show them material that is clearly still in progress, they know you are serious about listening to their reactions and using them to make improvements.

If you are showing different versions of the material, there are different ways to do it, depending on the material and where the variations occur. For example:

- If variations in design or text appear in many places, it will generally work best to create separate versions of the entire piece. If it's a booklet, for example, you would need to be ready to show the reader a copy of booklet A and a copy of booklet B.

- If variations in design or text are concentrated in just one small area, you can take a different approach, and use an "overlay" to make the comparison. For example, suppose that you have two versions of a paragraph. You could include paragraph A in the booklet you show to readers. You could reproduce paragraph B on a separate sheet of paper and trim the paper down to the size of the paragraph. When you are ready to have the reader compare paragraph B to paragraph A, you can place paragraph B on top of paragraph A. Using version B as an overlay to cover version A makes the comparison concrete and focuses the reader's attention on the specific part that differs.

STEP 3: **Decide whether to do individual interviews or group sessions**

Designing a feedback session

Step #3

Decide whether to do interviews or group sessions

Individual interviews:

- Provide more privacy and flexibility than group sessions and permit full use of all four methods of getting feedback. (This Toolkit is mainly about using interviews.)
- Work better than groups for assessing navigation, comprehension, doing usability testing, collecting in-depth feedback, getting reactions to material that is long or complex, and getting feedback on topics that might be sensitive or inhibiting to discuss in a group.

Group sessions (such as "focus groups"):

- Are better than interviews in situations where group discussion will enhance the usefulness of the feedback you get.
- Are limited in which methods you can use (in group sessions, you must rely mainly on the method of asking questions).

Either interviews or group sessions can work well for:

- Assessing appeal and cultural appropriateness; getting reactions to content; showing different versions of visuals or document design and asking for preferences.

As you can see from the list above, interviews work better than group sessions for many purposes, and they allow you to use all four of the methods for getting feedback from readers (ask questions, have the reader "think aloud," give the reader a task, and observe the reader's behavior).

Using groups to get feedback from readers is more familiar and popular than using interviews. Groups work well for situations where discussion among readers would make the feedback more informative. If you do groups, you are limited in the methods you can use. Asking questions is the main method for groups, because in a group situation it is hard to have readers "think aloud" or perform tasks that involve using the material.

Whether you should use individual interviews or focus groups is an important decision, and we cover it in depth in Toolkit Part 6, Chapter 6, *Should you do individual interviews or focus groups?*

Toolkit Part 6 focuses mainly on interviews

We have chosen to focus mainly on using interviews rather than group sessions in Toolkit Part 6. By emphasizing interviews and teaching the full range of feedback methods, we hope to encourage greater awareness of the interview approach and provide the help and encouragement you need to try this approach. If you are a beginner, you will find it easier to conduct individual interviews than to manage a group discussion. Also, depending on choices you make about such things as location and recruitment of participants, interviews can be a more efficient and cost-effective approach.

STEP 4: **Decide which methods to use**

Decide which methods to use for each feedback issue or section of the material

There are four methods of getting feedback from readers:

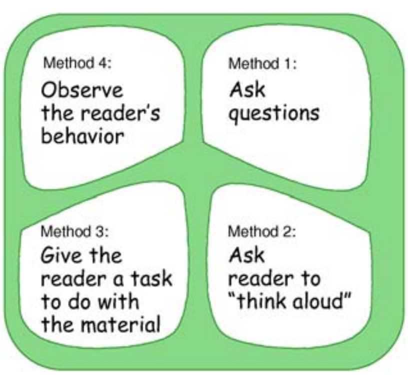
- Ask questions
- Encourage the reader to share thoughts by "thinking aloud"
- Give the reader a task to perform using the material
- Observe the reader's behavior

Which method or combination of methods will work best depends on the type of feedback you are seeking.

If you are doing interviews, you can make full use of all four methods. If you are doing group sessions, you will need to rely mainly on asking questions.

Deciding which methods to use for each feedback issue or section of the material and how you will use them is the *core activity of designing your feedback session*. It's such a big, important topic that we cover it in a series of chapters:

- **Introduction to the four methods**. In the previous chapter, we describe each of the four methods of collecting feedback, shown below:



- **How to choose among the four methods and use them in your sessions**. Toolkit Part 6, Chapter 7, *Which methods work best for which purposes*, will help you match your methods to your feedback issues. Then, for tips on developing the questions you will be asking readers, see Toolkit Part 6, Chapter 8, *Phrasing your questions to get the most useful feedback from readers.*

- **Finally, for help in creating a feedback session that focuses on your specific needs,** see Toolkit Part 6, Chapter 9, *Tips for collecting particular types of feedback from readers.* This chapter covers the main types of feedback you are likely to seek, including checking on appeal, cultural appropriateness, comprehension, ease of navigation, reactions to visuals, and usability.

STEP 5: **Create a written guide for conducting the session**

Create a written guide for conducting the session

This written guide is the final product of your planning. It reflects the decisions you have made about which feedback issues to address and how to address them.

The written guide gives step-by-step instructions for the person who is conducting the session. It tells how to explain the purpose of the session, how to present the material to the readers, and how to ask for their reactions. This written guide includes the "scripted" questions you prepare in advance.

In Steps 1 through 4 of planning your feedback session, you made decisions about what you want to learn from readers and which methods you will use to collect their feedback. Taken together, these decisions constitute the design for your session – that is, your plan for what you will say and do in the session. Now, in Step 5, you put your design into written form by creating a guide for conducting the session.

This guide is a document that gives the interviewer step-by-step instructions about what to say and do during the session. Toolkit Part 6, Chapter 10, *Creating a written guide for conducting feedback sessions*, gives you the details about the written guide and what it covers. Typically, the guide is organized into sections. It starts with an introduction that welcomes the reader and explains what will happen in the session. Then it gives the interviewer instructions about how to present the material to the reader, and how to seek feedback. Typically, the guide includes some “scripted” questions that you have prepared in advance.

Some written guides are very brief, and others are quite detailed; it depends on the material, the number of feedback issues to cover, and the methods you are using. Interviewer preferences are also important. For example, if you have limited experience in conducting feedback sessions, you may be more comfortable using a guide that has detailed instructions.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 5

Creating a list of “feedback issues” to use in testing the material

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 5

Creating a list of “feedback issues” to use in testing the material

List of figures in this chapter:

This document is the fifth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

The previous chapter outlined five steps for designing a feedback session. This chapter discusses how to implement the first step in the planning process, which is shown below.

Assess the material and decide what you want to learn from readers (these are your "feedback issues")

- Generate a list of possible feedback issues, using sources such as informal feedback, expert review, results from previous testing, and assessment based on using a checklist of guidelines for writing and design.
- Based on results of your assessment, consider whether you should make any changes to improve the material before you show it to readers.
- Prioritize the list of feedback issues by deciding which ones are most important to cover in your session.

A checklist of common feedback issues

In a feedback session, you are testing how well your written material is working for its intended readers. "Feedback issues" are the focal points of your sessions with readers. They are questions or issues you will explore during the session by getting reactions directly from readers. Getting readers' reactions to your feedback issues will help you understand how well the written material is working for them and how it might be improved.

There are many possible topics to pursue as feedback issues. To help you understand the range of things you can learn by getting feedback directly from readers, Figure 6-5-a below has a checklist of common feedback issues.

Figure 6-5-a. What you can learn from sessions with readers: A checklist of common feedback issues.

Appeal ▪ cultural appropriateness ▪ personal relevance

- Do readers find the material attractive and inviting at first glance? Does it attract and hold their attention?
- Does the material seem personally relevant to readers? Do they feel like it was written for them?
- Does the material make readers feel respected and understood? Does the material fit with readers’ cultural traditions and beliefs? Do readers find the content and visual elements of the material personally acceptable and culturally appropriate?
- Do readers react positively to the writing style and general tone of the material? Do they think it seems friendly and supportive? Does it help put them at ease and motivate them?
- Overall, do readers have a positive reaction to the material?

Organization and layout (“navigation” through the material)

- Does the way the material is organized and packaged make sense to readers? (Is it sequenced, grouped, and labeled in a way that makes sense to readers?)
- Is the text itself clear and legible enough for ease of reading (enough contrast, large enough type size, enough white space, etc.)?
- Is it easy for readers to skim through the material and see what it’s about? Is it easy for them to locate specific information?
- Is the page layout and graphic design working well for readers? (Is there a clear and obvious path for the eye to follow? Does the page layout and placement of visual elements guide readers smoothly through the material without distracting them or causing them to overlook certain parts of the material?)

Photos, illustrations, and other visual elements

- Do readers find the visual elements appealing and culturally appropriate?
- Do readers find the visual elements helpful in understanding and using the material?

Comprehension

- Is the purpose of the material immediately clear? Do readers understand what they are supposed to do with the material?
- Is it easy for readers to understand all of the material, including the headings and images as well as the text? Are there any terms or concepts that are hard for readers to understand? Are the definitions, explanations, and examples easy for readers to understand?
- Can readers understand the purpose and content of diagrams, illustrations, and other visual aids?

Content

- How much do readers already know about what's covered in the material? How do they feel about this subject matter? Do they have any misconceptions? Any strong feelings or concerns?
- Does the material meet an information need and seem potentially useful to readers? Do readers care about what it says? Does reading it seem worth the time and effort to them?
- Do readers think the material gives them information they need, at the right level of detail? Did they learn anything new from it? Does the material leave readers with any points of confusion or unanswered questions?
- Does it seem too long, too short, or about right? Is there any information they think should be dropped or added?

- Do readers find the content personally and culturally acceptable? Do they believe it and trust what it says? Do they think what it asks them to do is realistic and feasible for them?

Usability (**can** readers use it? are they **likely** to use it?)

- Are readers **able** to use the material for its intended purpose? (*A few examples:* Can readers use the material to make a decision? Can readers use the material to find answers to their questions? Can readers use the material to make healthier choices about what to eat?)

- Do readers think they actually would use the material? (*A few examples:* Can readers see themselves using the material in the way that's intended? Do they plan to do something, or something different, as a result of reading the material?)

Other topics

Other possible feedback issues

- How or where would readers expect or prefer to receive the material?

- Do readers have suggestions or preferences for how the information is packaged (size, layout, type of material, etc.)?

- Do readers have suggestions for ways to improve the material?

Source: This checklist was created for purposes of this Toolkit. It draws on the writer's and her colleagues' experiences in testing written material and also on themes and topics that are covered in various ways in source materials that include the Toolkit Guidelines for Writing and Design (Toolkit Parts 3, 4, and 5); Doak, Doak, & Root, 1996; Dumas & Redish, 1999; Root & Stableford, 1998; *The Health Literacy Style Manual* (MAXIMUS, 2005); CDCynergy; and Willis, 2005.

How to create your own list of feedback issues

To create your list of feedback issues, start by thinking about what you want to accomplish by having readers react to your written material. Usually, your goal is to find out how well the material is working and how you can improve it. So to get the most useful feedback from readers, try to identify the strengths and weaknesses of the material, so that you can emphasize any areas you think are problematic when you seek reactions from readers. To generate your list of feedback issues, try asking the questions shown below in Figure 6-5-b.

Figure 6-5-b. Questions to help you create your list of feedback issues.

What are your feedback issues?

- What issues or problems with the material have you already identified?
- Is there anything else about the material that you think might be a barrier for some readers?
- Have you made any recent edits or changes in formatting to fix problems with the material? (It's wise to get feedback to see how well they're working.)
- Are there any questions you want to ask participants before you show them the material? (Sometimes it's helpful to check on preconceptions or familiarity with topics and terms before you show the material.)
- What else would you like to learn from readers?

Source: Created for this Toolkit.

Get a broad range of input

The questions listed above in Figure 6-5-b are good questions for team discussion. Try to get your entire team involved in responding to these questions. Project planners, writers, editors, graphic designers, subject matter experts, cultural informants, translators, representatives of community-based organizations, and others who are involved with the project have different experiences to draw from and different areas of expertise. Each is likely to have unique insights about possible problem areas in the materials. If you get everyone involved, you will do a more thorough and effective job of generating your list of feedback issues.

Team members can use the questions in Figure 6-5-b as triggers for discussion. They can use the checklist in Figure 6-5-a above as a starting point for getting oriented about feedback issues and as a reference tool to help generate the list of issues for your project. The checklist is not intended to be comprehensive, but it covers most topics you might want to consider addressing in your feedback sessions with readers. Looking over the list may help you select certain areas to emphasize in your session.

When you identify feedback issues for your own sessions, some of them may be broad and general, much like the ones in Figure 6-5-a above. But many will likely be more specific, because you will be applying a general feedback issue to some specific part of your written material. For example, instead of asking, "Are the definitions, explanations, and examples easy for readers to understand?" your feedback issue might be, "Do readers understand the definition of 'preventive care' on page 12?"

Approaches to use

As suggested by the questions shown above in Figure 6-5-b, you can use several approaches to identify strengths and weaknesses in the material you will be testing. These include:

- **Reviewing informal feedback.** If you are revising or adapting existing written material, start by reviewing what you have already heard about its strengths and weaknesses. You can use this information to help guide your revisions and to identify feedback issues. For example, if your customer service staff keeps getting calls from people who are confused by a particular paragraph in a notification letter, you know that there's a problem with that paragraph, and so you would include checking on reactions to that paragraph as one of your feedback issues. Or perhaps you have heard from patient educators that their patients find your pamphlet on heart disease too gloomy, and they don't want to read it. If so, you would include checking on the content and tone of the pamphlet as a feedback issue.

- **Reviewing what you have learned in previous feedback sessions.** If you have already done some feedback sessions for this project or a similar project, go over the results.

- **Getting opinions and advice from cultural informants.** Cultural informants are people who have first-hand knowledge about the culture of your intended readers. They might be members of your intended audience, staff from an organization that serves the community of your intended readers, or others who are familiar with your intended readers. These cultural informants can help you understand your audience more fully, and they can help you spot language, concepts, images, and other aspects of the material that might be problematic for use with this audience. Ask them to help you identify feedback issues related to cultural appropriateness of the material. Later on, these same cultural informants may be able to help you with recruiting participants to your feedback sessions and finding a good location for the sessions.

- **Considering whether to check on revisions that have been made.** If you have made any significant changes to the material, it's a good idea to get feedback from readers to see how well the changes are working. You can also use readers' reactions to verify that you didn't inadvertently create any new problems when you made the changes.

- **Considering whether there are questions you need to ask participants before you show the material to them.** For example, you may want to find out how much a person already knows about the topics that are covered before you show the material. You might also want to ask about beliefs or attitudes or check on preconceptions.

- **Doing a systematic assessment based on guidelines for writing and design.** For an in-depth, systematic evaluation of the strengths and weaknesses of the material, you can use the *Toolkit Guidelines for Writing and Design* as an assessment tool. Toolkit Part 3 has the full list of guidelines and gives tips on how to use them to conduct an assessment.

    - These guidelines emphasize features that help make written material more effective for culturally and linguistically diverse audiences that include people who are less-skilled readers. The guidelines are comprehensive and detailed, and will help draw attention to aspects of the material that may not come up as part of informal feedback.

    - Applying these guidelines to the material you will be testing can help you identify areas of possible weakness to focus on during your feedback sessions.

    - Applying the guidelines might also identify improvements you will want to make even before you show the material to readers.

A sample list of feedback issues
(Arthritis Booklet Project)

To illustrate activities involved in doing sessions with readers, we created a fictional project that we call the “Arthritis Booklet Project.” Beginning in Figure 6-5-c below, we use this project as a recurring example in this Toolkit. Figure 6-5-c below begins with background on the purpose and sponsorship of this project and then shows a list of feedback issues the project team has generated. This example will help you picture what a list of feedback issues might be like.

Figure 6-5-c. Arthritis booklet project: feedback issues grouped by topic.

Project sponsors:

This project is sponsored by a coalition that includes the local arthritis association, a group of health educators, several health plans, and a state agency that deals with health promotion and prevention.

Project purpose:

To conduct feedback sessions with older adults and get their reactions to a draft version of a new booklet that encourages people with arthritis to get more exercise. Feedback sessions will consist of 15 individual interviews with men and women in their sixties and seventies who have arthritis.

Feedback issues:

The project team members and representatives from the sponsoring organizations have created a list of feedback issues they would like to cover in these interviews. This list is shown below (it uses topic headings from the Checklist of common feedback issues shown earlier in this chapter in Figure 6-5-a).

Feedback issues grouped by topic:

Appeal ▪ cultural appropriateness ▪ personal relevance

- Get first impressions of the booklet.

Photos, illustrations, and other visual elements

- Show proposed photos and ask for preferences. There are two possible photos for the cover and six possible photos to use in different places inside the booklet.

Organization and layout (“navigation” through the material)

- Check to see whether readers can easily find their way through the booklet.

- Check on whether the headings make sense to readers. Are there enough to make the booklet easy to skim? Do the headings stand out enough?

Comprehension

- Find out if the main message comes across clearly. Get reactions to this message: Do readers believe it? Do they have any questions about it? (The main message is that getting regular exercise of the right type will reduce the pain of arthritis and enhance mobility. Some people with arthritis still believe that exercise is bad if you have arthritis.)

- Check on how well people understand the guidelines on page 4 that tell what is “appropriate” exercise for people with arthritis.

Content

- Before showing the booklet, find out what the reader thinks about exercise and arthritis (in order to see if the main message in the booklet is new to the reader).

- Get reactions to proposed titles for the pamphlet (there are three versions to show them).

- Get readers' reactions to the back cover of the booklet that shows the names and logos of the sponsoring organizations. Do they recognize these organizations? Does knowing that these organizations produced the booklet have any impact on how readers feel about the booklet and its advice?

- Ask about participants' own experiences with exercise, especially any barriers to getting exercise and any problems they've had, to see whether and how well the booklet addresses possible barriers and problems.

- Check on reactions to the content. For example, did they learn anything new? Is anything missing? Is it at the right level of detail? Does it seem friendly and supportive?

Usability (**can** readers use it? are they **likely** to use it?)

- Ask readers if they plan to do anything different as a result of reading this booklet.

Other topics

- Get readers' ideas on how we should distribute this booklet. Where and how would they expect to get it?

Source: Fictional project created for use as a recurring example in this Toolkit.

Should you make improvements before you show the material to readers?

What if you identify big problems with the material?

When you are working on your list of feedback issues, you will be identifying the strengths and weaknesses of the material. If your assessment of the material reveals any significant problems, it's wise to try to fix them before you show the material to readers. That way, you can use the feedback sessions to your best advantage, by checking on how well you have fixed the problems and getting feedback to help you fine-tune the rest of the material.

For help on how to improve the material before you show it to readers, see Toolkit Parts 3, 4, and 5. These Parts present the *Toolkit Guidelines for Writing and Design* and explain how to apply them to your written material.

Some of these other Parts of the Toolkit may be helpful as well: Toolkit Part 7, *Using readability formulas: a cautionary note*; Toolkit Part 9, *Things to know if your written material is for older adults*; and Toolkit Part 10, *"Before and after" example: using this Toolkit's guidelines to revise a brochure*.

Decide which feedback issues are most important

Is your list of feedback issues really long? Often, there are too many issues to address in a feedback session, and you have to decide which ones are most important. And even if your list of feedback issues is relatively short, it's still a good idea to examine the issues and decide which ones are most important. Prioritizing your list helps you design a session that uses your time with readers in the most productive ways. When you know which issues are your top priorities, you can make sure to cover them.

Group your feedback issues according to importance

When you are ready to start prioritizing, try grouping your feedback issues into two or three categories based on importance. Your priorities may shift a bit as the project progresses:

- **At this stage, you are not trying to eliminate issues from the list; you're just deciding which seem most important.** Dividing your list of feedback issues into groups based on priority will help you make decisions about how to organize and structure your session.

- **Later, when you are figuring out how to get readers' reactions to each issue, you will revisit your priority list and you might decide to revise it.** If you are a beginner, it can be hard to know how long it will take to get feedback on a particular topic. Eventually, you will need to look at how much time is available and decide how many feedback issues you can actually cover. In part, how many you can cover will depend on factors that include the approach you take and how thoroughly you cover each issue. You may even decide to split up the set of feedback issues and cover some of them with one group of participants and the rest with another group.

- **In the end, when you are creating your written guide for conducting the sessions, you will make the final decisions about which feedback issues you can include**. Generally, it makes sense to concentrate on the key messages in the material and the feedback issues that affect these key messages.

An example of issues grouped by importance

Figure 6-5-d below gives an example of feedback issues grouped by importance.

Figure 6-5-d. Arthritis booklet project: feedback issues grouped by priority.

Earlier in this chapter, Figure 6-5-c. showed a list of feedback issues for the arthritis booklet project that was arranged by topic. Now, shown below, this list has been **rearranged so that feedback issues are grouped by priority.** This new grouping by priority reflects the Arthritis Booklet project team's views about the relative importance of each feedback issue.

Feedback issues grouped by priority:

1 Most important to include

- Get first impressions of the booklet.
- Get reactions to proposed photos. There are two choices to show for the cover and seven to show that could be used in three or four different places on the inside of the booklet.
- Find out if the main message comes across clearly. Get reactions to this message: do readers believe it? Do they have any questions about it? (The main message is that getting regular exercise of the right type will reduce the pain of arthritis and enhance mobility. Some people with arthritis still believe that exercise is bad if you have arthritis.)
- Check on how well people understand the guidelines on page 4 that tell what is meant by "appropriate exercise" for people with arthritis.
- Ask readers if they plan to do anything different as a result of reading this booklet.

2 Also important to include

- Check to see whether readers can easily find their way through the booklet.
- Check on whether the headings make sense to readers. Are there enough to make the booklet easy to skim? Do they stand out enough?
- Before showing the booklet, find out what the reader thinks about exercise and arthritis (in order to see if the main message in the booklet is new to the reader).
- Get reactions to proposed titles for the pamphlet (there are three versions to show them).
- Ask about participants’ own experiences with exercise, especially any barriers to getting exercise and any problems they’ve had, to see whether and how well the booklet addresses possible barriers and problems.
- Check on reactions to the content (Did they learn anything new? Is anything missing? Is it at the right level of detail? Does it seem friendly and supportive?)

3 Include if possible

- Get readers’ reactions to the back cover of the booklet that shows the names and logos of the sponsoring organizations. Do they recognize these organizations? Does knowing that these organizations produced the booklet have any impact on how readers feel about the booklet and its advice?
- Get readers’ ideas on how we should distribute this booklet. Where and how would they expect to get it?

Source: Fictional project created for use as a recurring example in this Toolkit. For background on this fictional project, see Figure 6-5-c earlier in this chapter.

What sequence will you use to get feedback on the issues during a session?

Once you have decided which issues are the most important to include in your sessions with readers, give some thought to how they should be arranged for use during the sessions. What sequence of topics will make the most sense to readers, and provide a smooth flow from one topic to the next? Here are some tips:

1. **Start by identifying any issues you need to cover before you show the material to readers**. This includes things you might want to find out at the beginning so that the responses won't be influenced by what the reader sees in the material. It also includes information that is helpful to know up front so that you can use it to adapt some of the questions you ask. Here are examples:

    - Do you want to ask questions that explore what the reader already knows about the topic covered in the material and any related experiences the reader has had? For example, if the material is about Medicare's procedures for appeals and grievances, you may want to ask if the person has ever made an appeal or filed a grievance.

    - Do you want to ask any questions that check on the reader's preconceptions or check on familiarity with terms and concepts that appear in the material? It can be helpful to spend a few minutes at the beginning of the interview to learn about the attitudes and assumptions the reader is bringing to the material. For example, suppose that the material is a booklet about getting screened for prostate cancer. Before you show the booklet, you may want to find out what the man you are interviewing knows about prostate cancer and its treatment, and what, if anything, his doctor has said to him about getting screened.

2. **Next, try putting the rest of the feedback issues into a sequence that follows the sequence of the material itself.** Often, it makes sense to start at the beginning and follow the sequence of the written material. For example, you might start with feedback issues that deal with first impressions, and then go on to the ones that deal with the title and cover, and so on. Try this approach of following the sequence in the material: how well does it work?

3. **Then, consider whether it makes sense to divide the material into sections.** If you divide the material into sections, you would group together the feedback issues that apply to each section.

4. **Go over the list of feedback issues that you have rearranged and mark the ones that are highest and lowest priority.** Later on when you are deciding which methods to use for each

section or feedback issue, you will want to focus mainly on your highest priority issues. If time is limited and your list of feedback issues is long, you may have to mark the lowest priority issues as "optional – ask only if time permits."

5. **Take a final look at the list you have rearranged**. Do you think this sequence will work well for conducting the session? Do you need to make any adjustments? For example, you might decide to move all of your lowest priority questions into a separate section at the end.

End notes

References cited in this chapter

CDCynergy (CD-ROM)

CDCynergy is a multimedia CD-ROM used for planning, managing, and evaluating public health communication programs. Originally developed for use within the Centers for Disease Control and Prevention, it has been adapted for widespread use by public health officials. For more information see the website: http://www.cdc.gov/healthmarketing/cdcynergy/index.htm (accessed September 8, 2006).

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 6

Should you do individual interviews or focus groups?

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 6

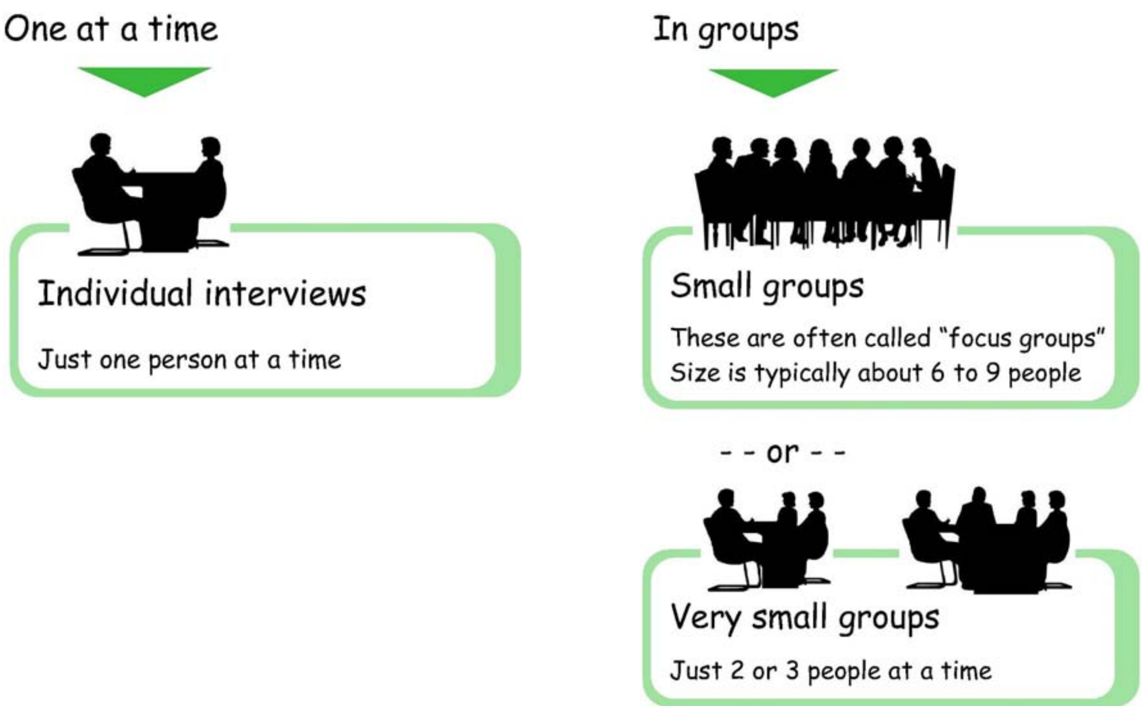
Should you do individual interviews or focus groups?

List of figures in this chapter:

This document is the sixth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Two ways to get feedback

There are two main ways of working with readers to get their reactions to written materials:



This simple difference of whether you get feedback from people one at a time or in groups affects how you work with them and the types of reactions you can get. This chapter will help you decide whether to use individual interviews or group sessions for your project:

- We discuss strengths and limitations of each approach.

- We discuss practical issues to consider and offer advice about how many interviews or groups sessions you might need to do.

About focus groups

What are "focus groups"?

Focus group discussions are a popular method for getting people to share their experiences and opinions in a group setting (Krueger & Casey, 2000; Morgan & Krueger, 1997; National Cancer Institute [NCI], 2002).

- Led by a moderator or facilitator, these guided group discussions "focus" on getting people's comments and opinions about a chosen topic. The moderator uses a written guide to ask a series of questions that encourage participants to share their views about various aspects of the topic. These are discussion groups, not decision-making groups. The goal is to bring forth the full range of viewpoints among participants, not to reach conclusions or consensus.
- A typical size is about six to nine participants, and sessions typically last about an hour and a half.
- Sessions can take place in a wide variety of settings. Focus groups held at a market research facility may use a special type of room with built-in video and audio recording equipment. It also has a one-way mirror with a small observation room on the other side that allows people to observe the discussion in a relatively unobtrusive way.

Using focus groups to get feedback on written material

Focus groups are often used to guide the development of educational materials, information campaigns, questionnaires, and other materials (NCI, 2002). At an early stage, focus groups can be very helpful for learning about the intended audience for your written material and their information needs and interests. You can use focus groups with members of your intended audience to explore their knowledge, experiences, beliefs, attitudes, and views about the topics you are covering in your material. Researchers call this doing "formative research" to guide the development of the material. This is an important application of focus groups, but we don't address it in Toolkit Part 6 because it doesn't involve the testing of written material.

Focus groups can also be used when you are ready to get readers' reactions to a partial or complete draft of the written material. Working with readers in a group session to get their feedback on written material has some unique advantages:

- **Interaction can trigger a broad range of responses within the group.** With the guidance of a skilled moderator, the interchange of group discussion can bring forth a broad range of ideas, experiences, insights, and reactions. Group discussions can work well when you want to check on first impressions, get readers' reactions to different versions of the material, and explore issues of personal relevance and cultural acceptability.

- **Being part of a group can be comfortable**. A group situation can feel more relaxing to some people because there is less pressure to answer every question or speak to every issue. In addition, hearing others speak can help encourage some people to share their own views, especially if the moderator keeps the most outspoken and opinionated people from dominating the discussion.

About individual interviews

"Interview" is a general term for a broad range of situations that involve asking and answering questions, such as job interviews, news interviews, or interviews done to collect data for a research project. In the simplest case of a "one on one" interview, only two people are involved – the interviewer and the interviewee. But there can be a team of interviewers, or a group of people being interviewed. Interviews can be formal or informal, highly structured or unstructured, scheduled or impromptu, public or private, long or short.

In this Toolkit, we use the term "interview" to mean an **individual interview** with one person that is done to get feedback on written material.

When we say, "interview" in this Toolkit, we mean **an *individual interview* done for the purpose of getting a reader's reactions to written material**. Typically, the interviewer shows written material to the person who is being interviewed, then uses various methods to solicit his or her reactions. Besides asking questions, these methods typically include observing the reader's behavior and asking the reader to share thoughts by thinking aloud. An interviewer might also use another method, which is to give the reader a task to perform that involves using the material in some way.

Working with readers one at a time to get their feedback on written material has some unique advantages:

- **What people say is not influenced by others**. Individual interviews are a private encounter, which can make it easier to put people at ease and get them to share their candid reactions without feeling inhibited or influenced by what other people say. The privacy of an interview can be helpful, too, if the written material covers sensitive topics.

- **People can talk at length.** Since the entire interview is devoted to just one person, there is plenty of time to give in-depth responses.

- **You can follow the lead of each individual**. Interviews give you the time and flexibility to follow-up on whatever the person says**.**

- **You can ask people to share their spontaneous reactions to written materials by "thinking aloud."** An individual interview provides the privacy you need to have people feel comfortable about thinking aloud.

- **You can observe individual behavior.** You can and should observe people's behavior in a focus group, but the group setting imposes practical limits on how much you can observe and on your ability to follow up directly with people on what you note about their behavior. In contrast, when you work with readers one at a time, you can monitor their body language and watch for such things as what they look at first, the order in which they read the material, when they look puzzled, and how long they spend on each part. You can also ask an occasional question that follows up on behavior you observe.

- **You can give people tasks to see how well they can use the material.** Interviews work better than groups for "usability testing" that addresses how well people can actually use the written material. Examples of tasks you might use for this purpose are asking people to look up a topic in the material, to actually fill out a form, or to find the answer to a specific question.

Picking the best approach for a particular purpose

Comparing what you can do in groups with what you can do in interviews

The chart in Figure 6-6-a below shows what you are able to do in a feedback session when you work with readers in groups compared to working with them one at a time.

Figure 6-6-a. Comparing what you can do in group sessions to what you can do in interviews.

	Group sessions	Individual interviews
Can you ask questions?	yes	yes
Can you have a group discussion that includes having participants comment on or build on what others say?	yes	no
Can you observe what readers do with the material?	limited	yes
Can you give readers tasks to see how well they can use the material? ("usability testing")	limited	yes
Can you adapt the feedback session and your line of questioning based on how each reader reacts?	limited	yes
Can each reader speak at length on many topics?	no	yes
Can you give readers privacy (avoiding the influence of what others say, and making it easier to discuss sensitive topics)?	no	yes
Can you ask readers to "think aloud?"	no	yes
Can you concentrate on a single person without needing to manage group interaction?	no	yes

Source: Created for this Toolkit; see acknowledgments.

Matching your approach to the types of feedback you want to get

Group sessions are **definitely better** for some purposes

- ***When group interaction will enhance the usefulness of the feedback you get***. Group discussion works well to bring out a range of reactions among participants. Comments made by one person may trigger reactions from others. The group interaction itself can be of interest, by revealing the diversity of people's reactions to the materials, including what engages their interest or emotions.

Individual interviews are **definitely better** for some purposes

- ***To assess navigation.*** Interviews allow you to observe how readers "navigate" through the material. You can observe which parts they actually read, how long they spend on each part, and the sequence they follow in working their way through the material.

- ***To assess comprehension***. Interviews give you the privacy and flexibility to use a variety of techniques to find out how well people can understand what they are reading.

- ***For usability testing***. In an interview, you can ask people to think aloud and give them tasks to see how well they can use the material.

- ***When* you *need in-depth feedback.*** In individual interviews, the entire interview is devoted to getting reactions from just one person. Compare a typical focus group of seven or eight people, where each person gets to speak for less than ten minutes, on average.

- ***When you want readers' reactions to lengthy or complex written materials***. Interviews offer the flexibility and time you need to follow the lead of the participant and get into the details of longer or more complicated text.

- ***When you want reactions from people who are diverse in ways that might inhibit group discussion***. Focus groups generally tend to work better when the participants are relatively homogeneous in their characteristics and experiences. For example, if your group includes people who have only a grade school education as well as people who have college degrees, it can be inhibiting for those with less education. Of course, whether diversity within a group becomes inhibiting depends on many factors (see Krueger & Casey, 2000). But if you are doing interviews, there's no need to be concerned about it, since you will be getting feedback from people one at a time.

For some purposes, depending on the circumstances, **either approach** might work well

- ***To get people's initial impressions***, including the appeal and cultural acceptability of the photographs, illustrations, color schemes, or examples included in the written materials.

- ***To have people compare several versions and give their preferences***. When you are showing people several variations of written material, you should use interviews if you want to avoid the influence of what others say. If you think that a group discussion of people's preferences and the reasons behind them may be helpful, then focus groups are a better choice. If the variations are lengthy or complex, interviews may be a better choice than focus groups.

- ***To get feedback from key informants or information intermediaries***.

The chart in Figure 6-6-b below summarizes these comparisons between group sessions and interviews.

Figure 6-6-b. Whether to use group sessions or interviews depends on the type of feedback you are seeking.

Summary chart

Whether an approach will work well depends on the purpose of your feedback sessions


	Group sessions	Individual interviews
To get people's first impressions of the material and assess its appeal	✓	✓
To have people compare several versions and give their preferences	✓	✓
To explore needs and preferences for content and level of detail	✓	✓
To find out how well the organization and layout is working for readers	☐	✓
To find out how well people understand the material . . .	☐	✓
To find out how well people can use the material for its intended purpose ("usability testing")	☐	✓
When you need in-depth feedback	☐	✓
When you want readers' reactions to lengthy or complex written material	☐	✓
When you think some participants might feel inhibited about sharing their reactions in a group setting	☐	✓
When group discussion will enhance the usefulness of the feedback you get	✓	☐

Source: Created for this Toolkit; see acknowledgments.

What about using very small groups?

In using the summary chart above, keep in mind that using very small groups of just two or three people can also be an effective way to get feedback on written material. It often works well as an alternative to a larger group discussion, especially if you are new at leading focus groups or if you are doing a conference call to get feedback from expert reviewers. When there are only two or three people giving their feedback, each can speak at greater length. If the people in the very small group have differences of opinion, there's greater opportunity to explore these differences and the reasons behind them.

If people will be using the written material together in real life, it can be helpful to interview them together to get their feedback. For example, we know that people with Medicare often rely on family members and caregivers to help them understand information about Medicare and make decisions that affect their health. To collect feedback on material about Medicare, you could consider interviewing the person with Medicare together with the person he or she relies upon for help. Using this approach reflects real-life situations in which Medicare information is used. It can give you insights into how people with Medicare work jointly with their spouses, adult children, or other helpers to interpret the information about Medicare and use it to make decisions.

Should you use a combination of focus groups and interviews?

As we've seen in this chapter, since focus groups and interviews both have unique advantages, one or the other may be your best choice for a particular purpose. Other times either approach might work just as well. In many projects, there may be a place for both focus groups and interviews. For example, if you are getting feedback at different stages of your project, or you are getting feedback from informants or information intermediaries as well as from the intended readers of the material, a combination of focus groups and interviews might work well. Figure 6-6-c below gives an example.

Figure 6-6-c. Example of a project that combines focus groups and interviews.

A managed care plan that serves Medicare enrollees expanded its coverage for eyeglasses, and the communications department prepared a flyer to inform plan members. Here is how they did it:

FIRST – two focus groups with informants

PURPOSE: to get their ideas and advice to help guide development of the material

First, to get ideas and advice, the project started with two focus groups:

- One group with customer service staff who answer help line calls from members, to get their suggestions about how to explain the new coverage as clearly as possible.

- One group with marketing representatives who work at health fairs to recruit new plan members, to get their suggestions about which features to emphasize.

Comments on the method they used: In this situation, focus groups are a good choice. They are an efficient way to get input from informants, and they allow a lively exchange of insights and recommendations among staff whose experiences may differ. Front-line staff who interact directly with plan members are great resources to call on as informants. Asking them to participate in a focus group acknowledges the value of their extensive first-hand experience with members and gives them an opportunity to be helpful and influential.

NEXT – focus groups with the intended readers

PURPOSE: to get their reactions to a **first draft**

Next, the project created mockups and did another round of focus groups:

- Using what they learned from the focus groups with customer service staff and marketing representatives, they created three versions of the flyer that differed in content and design.

- They did two focus groups with people with Medicare to get their reactions to these three versions – one with plan members and the other with non-members.

Comments on the method they used: When you want to show people several versions of materials and get their preferences, focus groups can work well as long as the materials are not long and you don't need in-depth reactions. Focus groups are a good choice in this situation: the flyer is short; and people can discuss the reasons for their preferences. If you are changing coverage in a health plan, it makes sense to get reactions from both your current members and from prospective members. It also makes sense to hold these discussions separately with each group.

FINALLY – interviews with the intended readers

PURPOSE: to get their reactions to the **final draft** of the material

Finally, they made revisions and used interviews to get people's reactions:

- To get reactions to a final draft of the flyer, the communications department held a series of individual interviews: Some of the interviews were with plan members, some were with prospective plan members, and few were with relatives who help plan members with health-related matters.

- Interviewers observed what people actually did with the flyer and gave them some tasks to find out whether they understood how the increased coverage applies to their own personal situation.

Comments on the method they used: Interviews were a good choice of method for this final check on how well the flyer was working: they allowed for behavioral observation and use of tasks to assess comprehension and ability to use the information. Doing interviews with a mix of respondents gave them an opportunity to find out how well the flyer works for people whose circumstances differ.

Source: Created as a fictional example for this Toolkit.

How many feedback sessions will you need?

There is no simple answer to the question of how many interviews or focus groups you should do. Ideally, you would keep doing interviews or focus groups until you were no longer getting new information. If there were any important subgroups within the audience of readers you are trying to reach, you would want to do sessions with representatives of each subgroup or people who can serve as key informants about the subgroups.

Realistically, there are always limits on time and resources, and besides, it is hard to know in advance how many interviews or groups it might take before reaching the point where you were learning nothing new. If you are developing new materials or doing substantial revisions of existing materials, there are three main points to keep in mind:

1 You can learn a lot by doing a relatively small number of feedback sessions

Even if you can only do a few interviews, it will be worth while to collect feedback from readers.

2 There are some fairly fast and cost-effective ways to collect feedback from readers

For help in considering the time and resources involved in doing feedback sessions, see Toolkit Part 6, Chapter 2, Figure 6-2-d, *Cost implications of key decisions you make in planning your feedback sessions*. As shown in this figure, it's not the approach you choose that determines cost and timing, it's how you implement that approach. Groups can be done quickly at relatively little expense, and so can interviews. Groups can be time consuming and costly, and so can interviews.

3 It is helpful to get feedback from readers more than once, at different stages in your project

In general, it's more cost-effective and efficient to start getting feedback from readers at an early draft stage, while there's still plenty of time to make changes to the material. For example, you could use feedback sessions at an early stage to guide your choice of a layout and visuals, then do more feedback sessions later on to check on how well people can understand and use the material. Sometimes when you make changes to fix one part of the material, you inadvertently create new problems with the material.

Things to consider

When you are deciding how many feedback sessions you will need, here are suggestions and points to consider:

- **Take into account the extent of diversity among your feedback participants**. In general, if your intended readers or informants are similar in their characteristics and circumstances, you will need fewer sessions overall. When they differ a lot in ways that are relevant to the written materials, you should plan to do more sessions.

- **If possible, think in terms of doing more than one round of feedback sessions**. Each time you alter the material and do a new set of feedback sessions, we call this doing another "round" of sessions. So the first set of interview or group sessions would be the first round of feedback sessions. And then if you revise the material and show it to readers again, we call this doing a second round of feedback sessions.

    - If you do more than one round, you will be able to get different types of feedback at different stages of your project. You will also be able to test how well your revisions are working, and make sure that by fixing one problem you haven't created new ones.

    - If your budget and timeline permit, doing three rounds can be ideal, especially if you devote the final round to usability testing (see Toolkit Part 6, Chapter 9, *Tips for collecting particular types of feedback from readers*).

- **If you are doing interviews, think in terms of doing about 5 to 15 interviews *per round* of sessions** as a rough guide. Five is probably the smallest number of interviews per round that you would want to consider. For many purposes, 8 to 12 interviews per round can be adequate.

- **When money is an issue, it is generally much better to cut the number of sessions *per round* than to cut the number of rounds**. For example, suppose that your budget will cover 18 interviews. Instead of doing one round of 18 interviews, it would be better to do two rounds of 9 interviews each, or three rounds of 6 interviews each.

- **If you are doing focus groups, it's helpful to do more than one group per round of feedback sessions**. What you learn in a group can be heavily influenced by who participates, the questions you ask, the skill of the moderator, and the group dynamic that emerges. To reduce possible bias and increase your confidence in the results, it's wise to do more than just one group (Krueger & Casey, 2000).

    - *Focus groups with intended readers*. Since focus groups tend to work best when the participants are relatively similar, consider whether there are any subgroups with important differences among the readers you are trying to reach. Then try to schedule a separate focus group discussion with people who represent each subgroup. For example, if you are doing focus groups to get readers' reactions to a chart that summarizes Medicare coverage for preventive care, you might want to do separate groups with men and women, since some of the screening tests apply to men only and some apply to women only.

- *Focus groups with informants*. Informants are people who are familiar with your intended readers. If your informants have similar types of knowledge about your intended readers, then it may be very productive to have a single group discussion. If your key informants have different types of knowledge about your intended readers, it would be best to schedule separate groups. For example, suppose you are working on a booklet that explains the Medicaid program to recent immigrants from Southeast Asia, and you want to get reactions from informants. You might want to hold separate focus groups with language interpreters, clinic staff, and leaders from the local community-based organizations.

- **If you are getting feedback on materials that are long and complex, consider doing a larger number of sessions.** In general, it takes more time to get readers' reactions to long, complex materials than to materials that are short and simple. When you have a lengthy document or a website with many pages, the reading time alone can be substantial and you want to allow plenty of time for readers to share their reactions. When you have more sessions, it's possible to split them in ways that allow you to cover more issues, such as asking different people to react to different parts of the materials.

End notes

CMS joins Toolkit writer Jeanne McGee, PhD in thanking colleagues who shared their experiences, reviewed early drafts of this and other chapters of the Toolkit, and offered many helpful ideas, examples, and suggestions for improvement. See acknowledgments at the end of Toolkit Part 1 and Toolkit Part 6, Chapter 1.

References cited in this chapter

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2000 *Focus groups: A practical guide for applied research*. 3rd edition. Thousand Oaks, CA: Sage Publications.

Morgan, David L. and Richard A. Krueger

1997 *The focus group kit*. Boxed edition. Thousand Oaks, CA: Sage Publications. This kit contains six volumes, each of which is also available separately: *The focus group guidebook* (Morgan); *Planning focus groups* (Morgan); *Developing questions for focus groups* (Krueger); *Moderating focus groups* (Krueger); *Involving community members in focus groups* (Krueger & King); and *Analyzing and reporting focus group results* (Krueger).

NCI (National Cancer Institute, National Institutes of Health)

2002 *Making health communications programs work: A planner's guide*. National Cancer Institute, U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health (NIH), Bethesda, MD. NIH publication No. 02-5145, revised December 2001, printed September 2002. For a copy, visit the NCI website at http://www.cancer.gov/pinkbook or call NCI's Cancer Information Service at 1-800-422-6237. This 251 page paperback is an updated and greatly expanded version of the classic 1992 NCI "pink book."

Suggested resources

All of the resources cited above are excellent for learning more about topics covered in this chapter.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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September 2010

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 7

Which feedback methods work best for which purposes?

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 7

Which feedback methods work best for which purposes?

List of figures in this chapter:

This document is the seventh of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

Back in Chapter 3, we introduced the four methods of getting feedback from readers (ask questions, have the reader think aloud, give the reader a task, observe the reader's behavior). Now in this chapter, we compare the four methods and discuss which ones are best for getting which types of feedback. The discussion in this chapter will help you decide which methods to use for each of the feedback issues you want to address in your sessions with readers.

In this chapter, we emphasize using interviews to get feedback, because you can make full use of all four methods if you do individual interviews. If you use groups to collect feedback, you will need to rely mainly on asking questions; the three other methods require the privacy and flexibility of working with readers one at a time.

Using a method as a "main" or "secondary" method

What is a "main method"?

When you are getting readers' reactions to a particular feedback issue, you will be using one of the four methods as your primary way of getting their reactions. We call this your "main method" for getting feedback on that issue. Depending on the material and type of feedback you seek, it may work well to use one method as your main method throughout the interview. For example, you may decide to use "ask questions" as your main method for the entire interview. Other times, it may work better to use a different main method for different parts of the interview. For example, you may want to use "think aloud" as your main method for the first part of the interview, then switch to using "give reader a task" as your main method for the rest of the interview.

Which methods are suitable to use as a "main method"?

Figure 6-7-a below summarizes how you can use each of the four methods in your interviews. As shown in this figure, the four methods are closely connected, and you are likely to be using at least three of them (*ask questions*, *think aloud*, and *observe behavior*) in every feedback interview that you do. Of the four methods, all but *observe behavior* are suitable to use as a main method.

Figure 6-7-a. Comparing how the four methods for getting feedback are used in interviews.

Method of getting feedback from readers	Are you likely to use this method in every interview you do?	Does it work well to use this method as the "**main method**" for getting feedback on an issue?
	Yes – Asking scripted and follow-up questions is a crucial part of every interview. In particular, skillful use of follow-up questions is the key to getting the most meaningful and useful feedback from readers.	Yes – Asking questions works well as a main method for many feedback purposes.
	Yes – You want participants to feel welcome to speak up any time if they have a comment. At a minimum, the instructions you give at the beginning of the interview should encourage the reader to think aloud.	Yes – but it may not work well for some readers. Readers differ in how much they say during *think aloud*.
	No – While you probably won't include tasks for the reader to perform in all of your interviews, this method is a powerful tool for checking on whether the material can be used as intended. So try to use it often.	Yes – In particular, it works well as a main method for checking on navigation issues and usability.
	Yes – In every interview, you will want to watch what the reader does with the material and pay attention to facial expressions and other body language.	Not by itself – but when you ask readers to think aloud, or you give them a task, you will be relying heavily on observation.

Source: Created for this Toolkit.

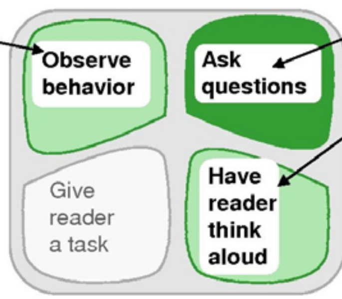
What is a "secondary" method?

The four methods of getting feedback from readers are closely connected, and you will be using them in combination. Whenever you are using one of the methods as your "main" method, you will also be using at least two of the other methods as your "secondary" methods. Figure 6-7-b below explains how this works.

Figure 6-7-b. Whenever you are using one method as your *main* method, you will also be using some of the other methods as your *secondary* methods.

When your main method is **ask questions**, you use other methods, too:

A secondary method
When you're asking questions, you will also be watching what the reader does with the material and paying attention to non-verbal behavior.

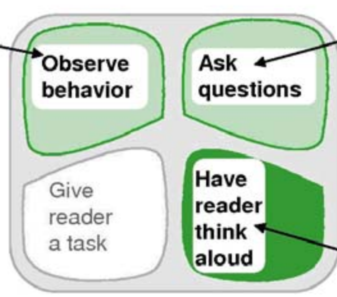


Main method

A secondary method
When you're asking questions, you still want the reader to feel free to "think aloud" by sharing spontaneous comments.

When your main method is **think aloud**, you use other methods, too:

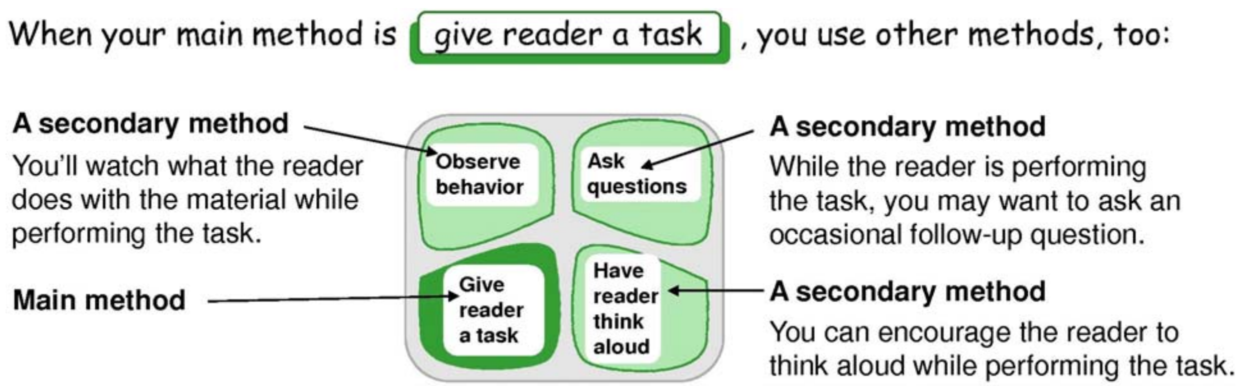
A secondary method
While you're listening to the comments a reader makes during *think aloud*, you will also be watching what the reader does with the material and paying attention to non-verbal behavior.



A secondary method
While you're listening to comments a reader makes during *think aloud*, you may want to ask an occasional follow-up question to clarify or get the reader to say more.

Main method

Figure 6-7-b, continued.



Source: Created for this Toolkit.

Which methods work best for which purposes?

When you are trying to decide which method to use to get readers' reactions to each of your feedback issues, it helps to have a sense of which methods work best as a main method for which purposes. The summary table in Figure 6-7-c below will help. It outlines the advantages, limitations, and best uses for each of the three methods you can use as a main method.

Figure 6-7-c. What are the advantages, limitations, and recommended uses for each main method?

Ask questions when used as a main method

Advantages when used as main method:

- You can address all of your feedback issues, including those that might not come up spontaneously if you were using *think aloud* or *give a task* as your main method.

- You can be systematic about covering the same issues with every reader and asking your questions in the same way.

- If you divide the material into sections and ask questions one section at a time, this allows you to:

    - Collect feedback on each section immediately, while reactions and opinions are still fresh in the reader's mind.

    - Get responses that are not influenced by what the reader will see later on in the material.

    - Ask a series of follow-up questions without interrupting the reader's natural progress through the material.

Possible drawbacks to consider

- By focusing on asking questions about specific feedback issues you have identified in advance, you may tend to steer the readers in a particular direction. If so, readers might be influenced to give a more narrow range of reactions or to give the kinds of answers they think you are expecting or wanting.

- The usefulness of the feedback you get will depend a lot on the care you take in writing and asking the questions, including how you handle asking follow-up questions.

Figure 6-7-c, continued.

Works well as a main method for these purposes:

- Asking questions is a good way to find out how well the reader understands the material or to get reactions to specific content. For example, you can ask the person to read part of the material, and then say in their own words what it's about or what they think it's telling them.
- You can ask questions to check on whether the purpose and intended audience of the material is clear to the reader, and to get reactions to your ideas for content, key messages, or design.
- When you have identified a problem, you can ask questions to get in-depth feedback to help you understand what's not working and get ideas on how to fix it.
- When you have different versions of the material, you can ask readers for their reactions and preferences.

Think aloud when used as a main method

Advantages when used as main method:

- Using *think aloud* as a main method gives readers the freedom to approach the material on their own terms, without being directed by you to look at or respond to specific parts of it. You will see what draws their interest and attention and you will be able to observe how they move from one part of the material to the next.
- Hearing spontaneous comments from readers may reveal things that you don't anticipate or expect, and would not discover if you relied only on asking the questions you prepared in advance.
- Compared to asking questions, the less-structured approach of *think aloud* may give you a better and more realistic sense of what people are likely to do with the document outside of an interview situation.
- Using this method requires very little preparation.

Figure 6-7-c, continued.

Possible drawbacks to consider

- It can be hard to interpret the meaning of behavior you observe while a reader is thinking aloud. For example, when the reader lingers over a particular part of the material, does this indicate interest or confusion? Does a sigh indicate boredom or discouragement?

- When *think aloud* works well, it can be very informative, but some readers never feel comfortable enough to do it. Others forget to do it, and need reminders. People with limited reading skills generally find it hard to read and talk at the same time.

- It's hard to get in-depth feedback when readers are thinking aloud because you need to use follow-up questions sparingly. Asking too many questions will distract readers from their spontaneous progress through the material, and commenting too much on their behavior will make them too self-conscious.

Works well as a main method for these purposes:

- Use it when you want to find out which parts of the material tend to draw readers' attention, and which parts they tend to skip. Observing undirected readers and listening to their *think-aloud* comments works well for assessing appeal and personal salience, reactions to the content, effectiveness of layout and other aspects of design

- Use it when you want to check on how well the layout and organization is working for the readers. You can observe how easy it is for readers to find their way through the material and how they use navigational devices such as table of contents, headers and footers, headings, and page numbers.

Figure 6-7-c, continued.

Give a task when used as a main method

Advantages when used as main method:

- Much like *think aloud*, *give a task* gives readers the freedom to approach the material on their own terms, without being directed by you to look at or respond to specific parts of it. Compared to asking questions, it is a less structured approach, and may give you a better and more realistic sense of what people are likely to do with the document outside of an interview situation.
- It's the best way to assess usability of the material. You will be able to observe how readers go about trying to accomplish the task. What they do in performing the task will help you see how hard or easy it is use the material as intended.
- Watching people use the material to perform a task can reveal things that you don't anticipate or expect, and would not discover if you relied only on asking the questions you prepared in advance.
- The method is very flexible. Tasks can be large and general (such as, read this booklet and then fill out the application form) or they can be small and specific (such as, fill in just the top part of this form).
- If the material is not working well and you need to convince others that revisions are needed, the behavioral evidence you collect using this method can be particularly compelling.

Possible drawbacks to consider

- It can take some time to prepare the material for use in certain types of tasks. For example it can take time to build appropriate patterns into charts or numeric examples so that there will be right and wrong answers for the task you will be asking readers to perform (for more about this, see Chapter 9, *Tips for collecting particular types of feedback from readers*).
- For some materials, such as forms to fill out and materials that help people make decisions, it is easy to devise a task for readers to perform. But for some materials, devising a task is more challenging.

Figure 6-7-c, continued.

- Often, this method works best in the final stage of developing the material. In earlier stages, when parts of the material are still in progress, it may be hard to devise tasks for readers to perform.

- It can be hard to interpret the meaning of behaviors you observe while a reader is working on a task. For example, if the reader flips back and forth through the material, does this indicate confusion, or the search for a shortcut, or a need to double-check something, or what?

- Interviewers need to be able to put readers at ease about doing the task, so that they don't feel like they are being tested or judged by how quickly or how well they perform the task.

Works well as a main method for these purposes:

- *Give a task* is a powerful method for "usability testing." Giving the reader a task to perform that requires using the material in some way shows you whether readers are able to use the material – unassisted – for its intended purpose. Besides checking on whether readers can perform the task correctly and easily, you will be able to observe what they actually do with the material to try to accomplish the task. Watching their behavior can help you determine how well the layout and organization is working for the reader and how clearly important concepts and instructions are explained. It may also reveal problems with the material that you would never discover by just asking questions or asking readers to think aloud.

- For checking on comprehension and ease of use, especially for parts of the material that include numbers, diagrams, tables, or comparison charts. You can set up tasks for which there are right and wrong answers that you have built right into the material. For example, you can create a specific pattern of results in a comparison chart, and then ask the reader to use the chart in a way that requires making certain types of comparisons for which there are right and wrong answers.

Source: Compiled and summarized for this Toolkit, drawing from the writer's field experience, the experiences and suggestions of colleagues, and the literature on cognitive interviewing and usability testing.

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September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 8

Phrasing your questions to get the most useful feedback from readers

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 8

Phrasing your questions to get the most useful feedback from readers

List of figures in this chapter:

This document is the eighth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

In earlier chapters, we introduced *ask questions* as one of four methods of collecting feedback (Chapter 3), and then compared *ask questions* to the three other methods of *think aloud*, *give a task*, and *observe behavior* (Chapter 7).

Of the four methods of getting feedback, asking questions is the one you'll use the most. You will use it often as your main method for getting feedback on a particular topic, and you will use it constantly as a secondary method, using follow-up questions to help clarify an answer or get the reader to say more.

When you ask people questions to get their reactions to written material, you want them to feel comfortable enough to say what's on their mind, including any critical comments they may have. You'd also like to be sure that you don't misinterpret what they've said. And you are hoping that what they say will be specific enough to help you spot problems in the material and perhaps get ideas on ways to fix them. To make this all happen, you need to be careful about how you phrase your questions:

- **This chapter gives you basic guidelines for question wording**. This chapter is your basic reference tool for writing the "scripted" questions you prepare in advance and put into the written guide you use to conduct your feedback sessions. It will help you create clear and effective interview questions that help put people at ease and encourage them to speak up. It will also help you use follow-up questions called "probes" to clarify what a reader has said or encourage the reader to say more.

- **Then the next chapter has many examples of scripted questions that will help you apply the basic guidelines we explain in this chapter** *(Chapter 9, Tips for collecting particular types of feedback from readers).*

Basic guidelines for effective question wording

This section discusses the general guidelines shown below.

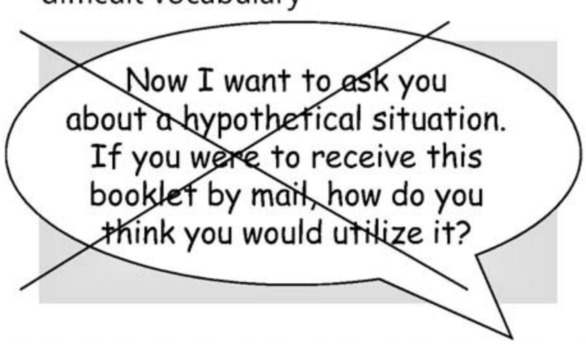
Basic guidelines for question wording

1. Make your questions sound like natural speech.
2. Phrase your questions in a neutral way.
3. Keep your questions friendly and non-intimidating.
4. Be sure that what you are asking is clear.
5. In most situations, ask questions that are open-ended, so that readers can respond in their own way, using their own words.

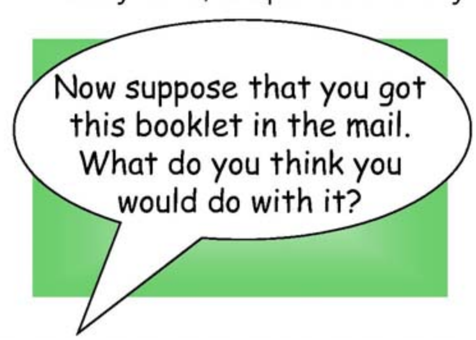
Basic guideline # 1: Make your questions sound like natural speech.

To put people at ease, the interview should sound conversational, like natural speech. Here is an example that shows the difference between conversational language and formal language:

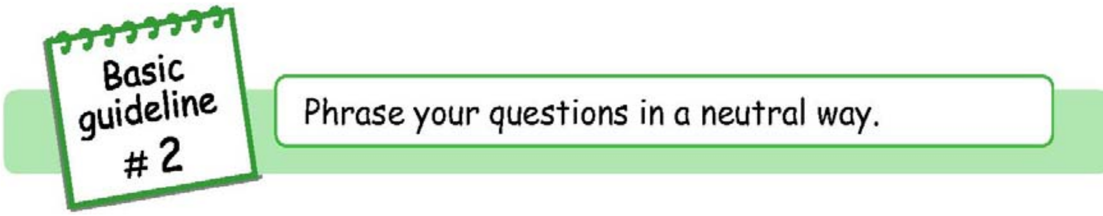
In the example below:
Wordy, formal, impersonal tone, difficult vocabulary



In the example below:
Succinct, conversational, friendly tone, simple vocabulary



As you can see from this example, questions sound more natural when the sentences are reasonably short, and they use everyday words and informal phrasing. To make your questions conversational, try speaking them aloud when you are writing them. This will help you choose words and phrases that sound as natural as spoken language. Keeping your questions conversational makes them easier for interviewers to ask, and easier for people to answer.

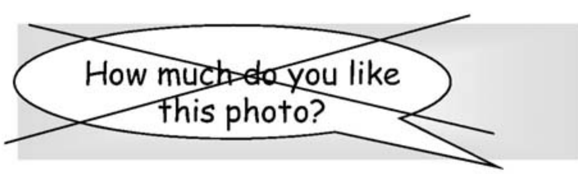


When you write interview questions, take care to avoid wording them in ways that might steer people toward particular answers or points of view. It's natural for some people to feel reticent or somewhat intimidated just by the act of participating in a reader feedback interview. The interview is probably the first one of its type that they have participated in, and they are unsure what to expect. They want to cooperate and provide what you're looking for, so if you give them cues – even subtle cues – about what you would like them to say, they may well give you what you seem to be looking for.

As shown in the example below, framing the questions in a neutral way encourages people to give you a candid response.

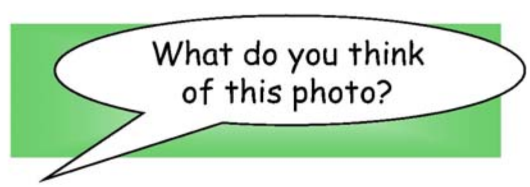
Below, the wording is **not neutral**, and it could inhibit a candid response.

This wording implies that, of course people *like* the photo. It's just a question of *how much* they like it.



Below, the wording is **neutral.**

This wording does *not* steer people toward any particular type of response.



Basic guideline # 3

Keep questions friendly and non-intimidating.

Take care to avoid making readers feel as if they're being tested

The question-answer format and inherent artificiality of a feedback session can make some readers feel as if they are being tested. Of course, it's always the material that you are testing – *not the reader* – but we have found that this distinction is easily lost on many readers. In particular, readers with low literacy skills tend to feel vulnerable during feedback sessions. Reassuring them that it's the materials you are testing, not them, may not help. It can even make things worse: You are forced to say the word "testing" aloud when you make this reassurance, and "testing" has negative connotations.

Instead of reassuring people that "it's not a test," show them by your behavior that it's not. Take care to phrase your questions in tactful ways and ask them in a friendly manner:

- Asking questions in a friendly way helps counter any tendency for people to feel as if they are being tested or judged during your feedback session.

- Phrase your questions to be tactful and non-intimidating. For example, take care to soften the wording of direct questions that might otherwise seem too blunt or might put readers on the defensive. As shown in the examples below in Figure 6-8-a, small and subtle changes in wording can help put people at ease and encourage them to speak up – especially if they have something critical to say.

Figure 6-8-a. Tactful, careful phrasing helps put readers at ease and helps keep feedback sessions from feeling like testing situations.

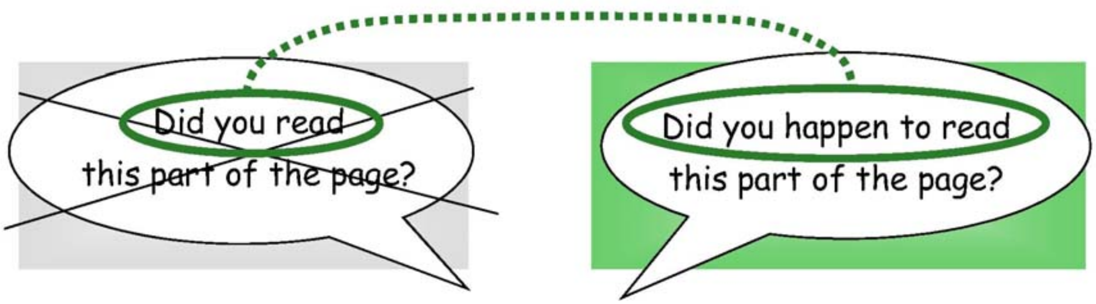
First example:

Below, the **blunt wording** may seem demanding or intimidating.

It sounds **like a test** where the right answer would be "yes."

Below, the phrase "did you happen to . . " **softens** the question.

It encourages a candid response by letting people say "no" without losing face.



Second example:

Below, the **blunt wording** makes this question sound like a **test of knowledge**. Forcing a participant to say "I don't know" to a question that sounds like a test question can make them feel bad and undermine rapport.

Below, the phrase "what do you think they mean by . . " subtly **shifts the question** from a test of knowledge to a request for insight into the writer's intentions. It **softens** the question and lets people say "I don't know" without losing face.

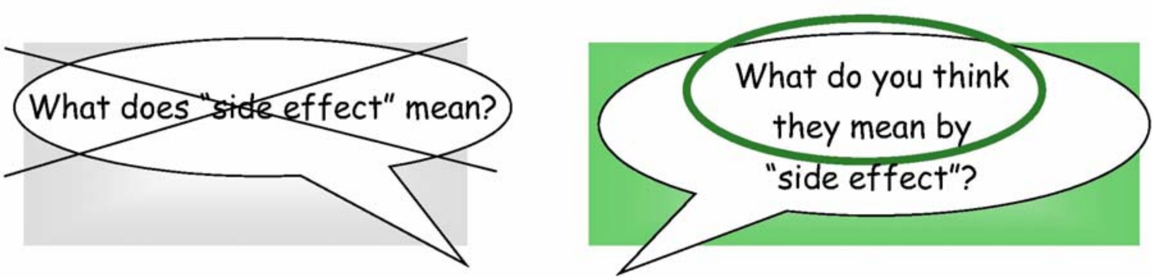


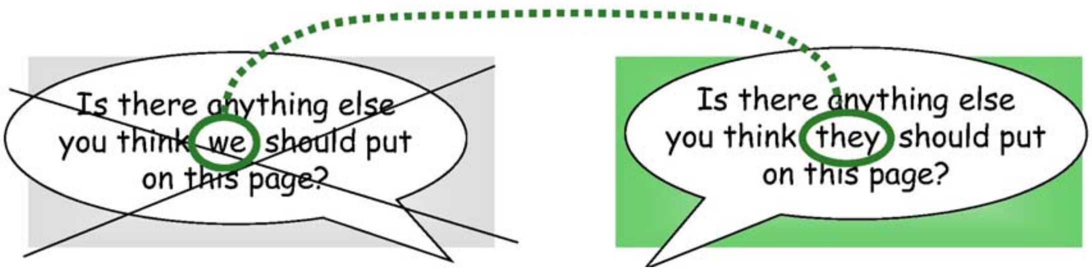
Figure 6-8-a, continued

Third example:

Below, the word "**we**" **connects the interviewer personally to the material**, and may inhibit readers who are reluctant to say critical things directly to those who are responsible for producing the material.

Below, the word "**we**" **has been replaced by "they."**

This wording change is small and subtle, but it can help readers feel more comfortable about criticizing the material.

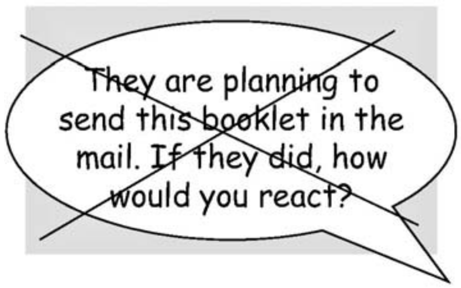


Source: These and the other dialogue examples and commentary in this chapter were created for this Toolkit.

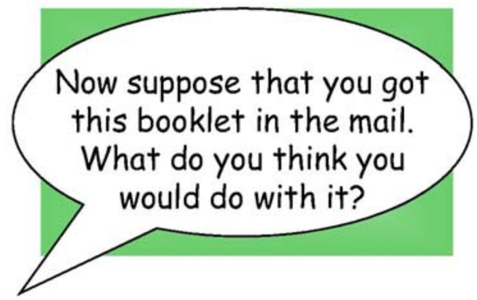
Basic guideline # 4 Be sure that what you're asking is clear.

It can make people uncomfortable if they have to struggle to figure out what a question is trying to ask. As shown below, vague or ambiguous questions put too much burden on the person being interviewed.

In the example below, the question at the end is **vague** and **ambiguous**. Is it asking for a reaction to the booklet, or a reaction to the idea of distributing the booklet by mail?



In the example below, the question wording focuses **clearly** on asking for a reaction to the booklet.



In the example above on the left side, the question wording is hard to understand. Both phrases of the question --"If they did" and "how would you react?" – are vague, and so is the connection between them. It's up to the person being interviewed to figure out what the question is asking. Here are two possible ways that people might fill in what has been left unsaid in the vague wordings:

- They might interpret the question as asking for an opinion about how the booklet should be distributed: "If they do send the booklet by mail, as they are planning to do, do I think this would be better than getting it to people in some other way?"

- Or they might interpret the question in a more personal way: "If they do as they are planning, and send the booklet by mail, *and they sent one to me,* how do I think I would react to the booklet?"

When people can't figure out what you are asking, rapport suffers and you may not get the feedback you are seeking. Sometimes people will speak up and tell you that your question isn't clear. But often they won't. They may feel inhibited because they can't figure out what the question means. They may simply guess about what you're asking, and base their answer on that guess. If they guess wrong, they will answer a question that's different than the one you thought you had asked – and you may never know it.

Tips for phrasing questions clearly

Here are some ways to help make sure your questions are clearly worded:

- **See if you can spot any ambiguities yourself**. When you finish writing a question, review it carefully. Consider possible ways it could be interpreted – or misinterpreted.

- **Get help from colleagues.** Show the draft questions to people who were not involved in writing them. Ask them to tell you in their own words what they think each question is trying to say.

- **Be ready to change the wording if it proves to be unclear when you start interviewing.** Ultimately, the best way to spot problems with your interview questions is to do a pretest with the same type of participants you will be interviewing, but this may not be practical. Instead, you can stay alert to possible ambiguities of question wording, especially during your first few interviews. If you spot any, then reword your questions to make them clear.

- **Use your Session Summary Form to identify problem questions** (see Toolkit Part 6, Chapter 11, *Creating a "Session Summary Form"*). A Session Summary Form is a form that interviewers fill out immediately after the interview. It has places to record highlights from that interview and note problems that came up during the interview. The sample form in Chapter 11 includes a place to write down any questions that didn't work well during the interview, so that interviewers can consider whether to make changes to these questions.

Basic guideline # 5

In most situations, ask questions that are **open-ended** so that readers can respond in their own way, using their own words.

Question wordings can either be open-ended or closed-ended. As shown below, questions that leave it "open" for people to give an answer in their own way are called "open-ended" questions. Questions that come with a pre-determined set of answer choices are called "closed ended" or "fixed choice" questions.

"open-ended" questions

- Do **not** have "ready made" answers to choose from, such as "yes" or "no."
- Instead, they are phrased in a broad and "open" way that encourages people to answer in their own words (such as, "tell me what you're thinking").
- When people answer in their own words, rather than choosing from a set of answers, they tend to give responses that are more specific. When answers are more specific, it's easier to spot possible problems in the material and think about ways to fix them.

"closed ended" or "fixed choice"

- "Closed-ended" questions come with "ready made" answers to choose from. They are sometimes called "fixed choice" questions.
- Examples are questions that can be answered "yes" or "no," and questions that come with rating scales such as "poor" to "excellent."
- Although closed-ended questions are very useful for some purposes, they do not encourage people to answer in their own words. Instead, they encourage people to use the "fixed choices" to respond, such as saying "yes" or "no." This type of answer doesn't tell you much about reactions to the material unless you follow up with other questions (such as asking, "Why do you say 'no"?).

Open-ended questions tend to work better in most situations

The distinction between open-ended and closed-ended questions is important, because open-ended questions tend to work much better than closed-ended questions for getting most types of readers' reactions to written material. In general, using an open-ended question will give you greater insight into how well the material is working. There are two main reasons why:

1. **Open-ended questions typically trigger more *wide-ranging* responses that reflect the participants' unique perspectives.**

    - **By leaving it up to interviewees to answer as they see fit, open-ended questions get people to reveal their own frame of reference**. Giving people free rein to answer as they wish can lead to surprises and fascinating insights that help you spot problems in written materials and give you clues about ways to fix them.

    - **In contrast, the answer choices you provide in a closed-ended question impose a particular frame of reference, and therefore tend to channel and constrain the responses you get.** For example, if you ask people a closed-ended yes/no question about whether the information in a booklet is useful to them, you are asking them to react to the booklet in terms of personal usefulness. In contrast, if you ask them an open-ended question such as "*what do you think about the information in this booklet*," they might respond in any number of ways – only one of which is in terms of personal usefulness.

2. Open-ended questions encourage responses that tend to be *longer and more detailed*.

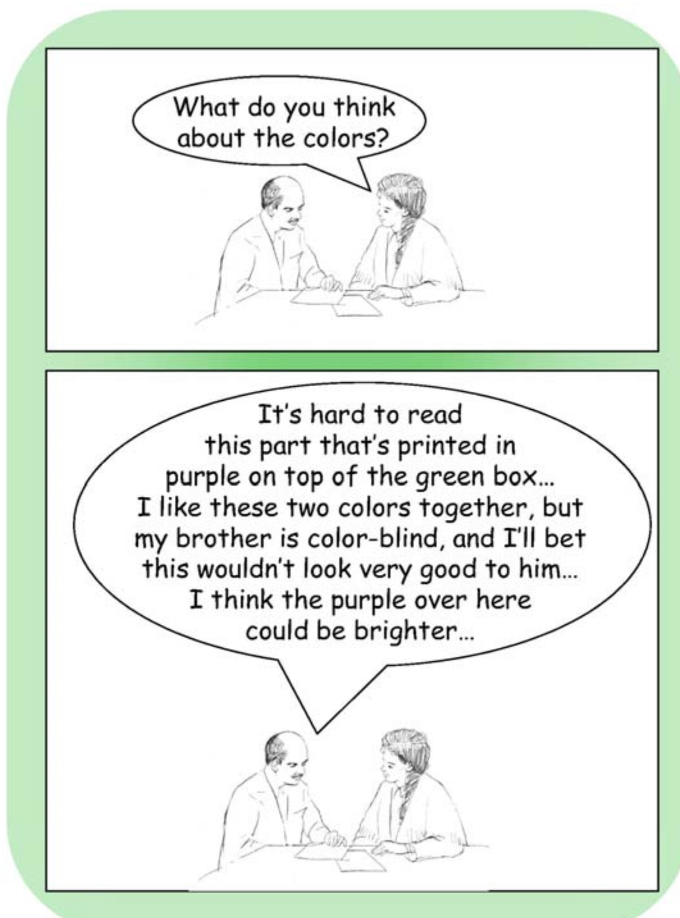
- **When you let people answer in their own way, using their own words, you reinforce your interest in hearing whatever they are thinking**. The free form of an open-ended question often triggers answers that are more expansive and therefore much more useful in spotting problems in the written materials and figuring out ways to fix them.

- **In contrast, giving people a fixed set of choices encourages them to give a short and unelaborated answer** (although, as we discuss later on, you could use follow-up questions to get them to say more).

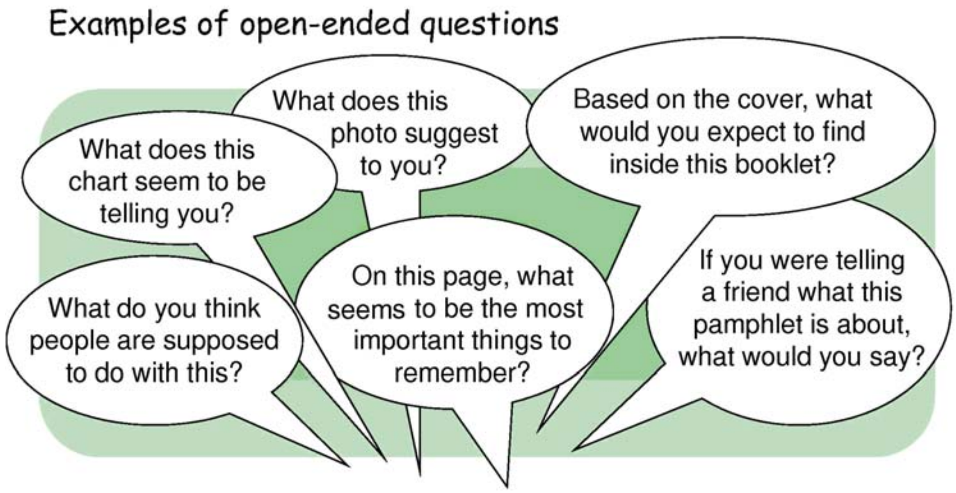
The dialogues in the example below illustrate how open-ended questioning can be more productive:

Using a closed-ended question:

Using an open-ended question:

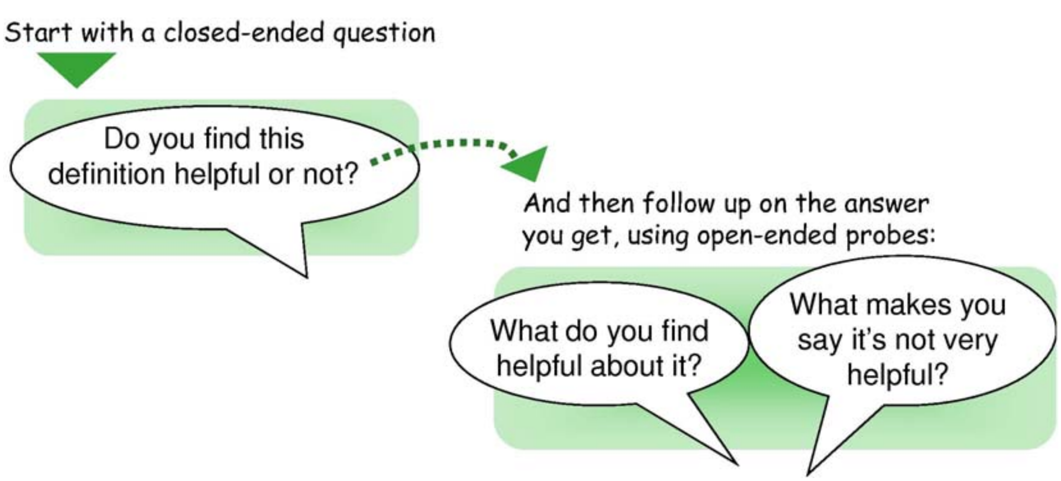


Open-ended questions are good for many purposes. For example, they are ideal for getting people to share their perceptions. To check on comprehension, you can use them to get people to tell what the material is about by using their own words. Here are some examples:



Closed-ended questions can also work well

Although open-ended questions tend to work better for most feedback purposes, there's nothing wrong with using an occasional closed-ended question in your interviews. Sometimes, a closed-ended question can work quite well, especially when you use follow-up to get a more complete answer. Here's an example:



Interview questions can be "scripted" or "unscripted"

During a feedback session, interviewers refer to a written guide that tells them how to conduct the interview (see Toolkit Part 6, Chapter 10, *Creating a written guide for conducting feedback sessions*). The written guide has step-by-step instructions for how to show the material to readers and ask for their feedback. Often, it includes a series of questions that you prepare in advance. As shown below, this Toolkit uses the term "scripted" for these questions that are spelled out in advance, much like a script. It uses the term "unscripted" for the questions the interviewer asks spontaneously, to meet a particular need that arises during the interview.

"scripted" questions (prepared in advance)

- "Scripted" questions are the questions you prepare in advance and put into the written guide you will use to conduct the session.
- Preparing questions in advance helps you structure the feedback session. It also lets you plan the most effective ways to phrase key questions.
- Sometimes you will ask your scripted questions exactly as they are written in the guide, much like using a "script." Other times you might use the scripted questions for reference, and adapt the wording as needed to fit the situation.

"unscripted" questions (improvised as needed)

- "Unscripted" or "spontaneous" questions are the ones you improvise while you are conducting the feedback session.
- You can't anticipate everything, so you create your own (unscripted) questions in response to what comes up. You can use unscripted questions to cover new topics that arise and to follow up on what readers say in response to a scripted question.

Here are some things to know about scripted and unscripted questions:

- **Interviews are a mix of scripted and unscripted questions, but the nature of the mix can vary considerably.** Some written guides are brief and mostly unstructured, with very few scripted questions. Other written guides are detailed and highly structured, and may include exact wordings for many or most of the questions to be asked.

- **Scripted questions provide structure for the interview, and specifying exact wordings in advance helps maintain quality and consistency across interviews**. Scripting in advance provides good guidance for interviewers, and often they will ask the scripted questions exactly as they are written. Sometimes, though, interviewers need the flexibility to adapt the wording of a scripted question to fit the circumstances of an interview.

- Whatever the mix of scripted and unscripted questions, **unscripted questions are always a crucial part of any interview**. Interviews evolve in ways that cannot be predicted, so interviewers need to be ready to adapt and improvise questions to fit with what the interviewee has just said.

- **Some scripted questions apply only to certain respondents, or only under certain conditions**. This means that you might not ask all of the scripted questions in every interview.

- For example, interviewers are supposed to skip scripted questions if the participant has already answered the question during think aloud or as part of their answer to a different question. If you don't skip the scripted question in this situation, the participant will think you have not been listening, and this will damage rapport.

- Some scripted questions are marked as discretionary, such as scripted questions that give alternate wordings an interviewer can try if the first wording doesn't work well.

Questions can be "regular questions" or follow-up questions called "probes"

When you work on designing a feedback session and preparing a written guide, you'll notice that questions are used in different ways for different purposes. Here are some terms that categorize questions according to the function they perform within an interview:

- **"Regular" or "main" questions are the basic questions that you ask** (as distinct from any follow-up questions that you might ask immediately after the regular question to try to get people to say more). "Regular questions" is just a convenient way to refer to the substantive questions that are the focus of your interview.

- **Follow-up questions, or "probes," are questions that press for clarification or for a more detailed or complete answer.** You use them to "follow up" on something the person has just said, to try to get him or her to say more. Researchers usually call these "probes," because they probe for an additional answer or a more elaborated answer. As we explain below, these include "**generic probes**" that are phrased in a general way (*Can you tell me more about that?*) and "**tailored probes**" with phrasing that is more specific (*Can you show me which parts are confusing?*).

Some questions need a "lead-in"

Sometimes you need to give feedback session participants some context or background before you ask a question. "Lead-ins" are statements that serve as a preface to an actual question. They are called "lead-ins" because they provide an introduction or set up a context that "leads into" a question that follows. For example:

- **A lead-in can provide a transition to a new topic**, such as, *Now let's talk about the table of contents*.

- **You can use a lead-in to provide background information or explanations that people may need in order to answer the question that comes next**. For example, a lead-in could explain that the written material is not in final format, or tell how it will be distributed (*People with arthritis will get a copy of this pamphlet at their doctor's office*).

Using probes to follow-up and get more informative feedback

Follow-up questions are a powerful tool for getting people's reactions in a feedback session. When the people you are interviewing give a very brief or ambiguous answer to a question you ask, you can follow up with a probe to try to get a more useful, meaningful response. Often, it's the answers to the follow-ups that reveal the most about how people are interpreting and reacting to the written material.

"probes" (follow-up questions)

"Probes" are follow-up questions that can be scripted or spontaneous. You can use probes for different purposes:

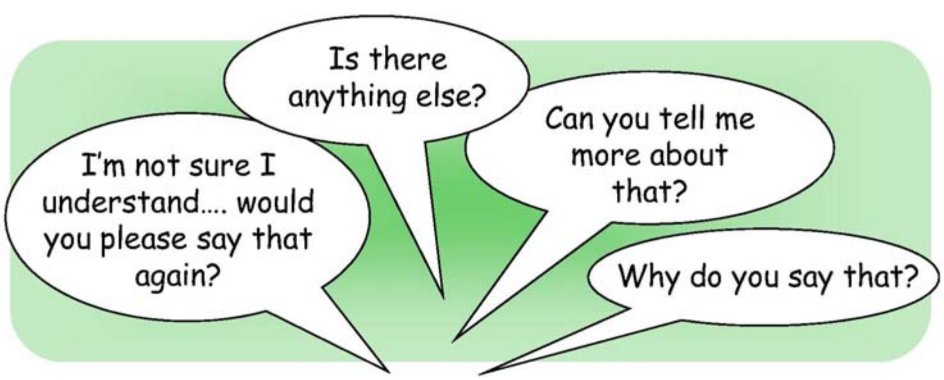
- Usually, the purpose is to get the reader to say more. Examples of neutrally worded, open-ended probes are *"tell me more about that"* and *"what makes you say that?"*
- You can also use probes to clarify what a reader has said. For example, you could ask, "*When you say the advice is 'unrealistic,' what do you mean by 'unrealistic?'*".

Probes are a crucial tool for getting the most meaningful and informative feedback. They help you get answers that are more specific, and therefore more useful for spotting problems and making improvements in the material. They also help keep you from misinterpreting what a reader has said.

Probes can be "generic" or "tailored"

There are two main types of probes:

- "**Generic probes**" are follow-ups with wording that is neutral and general enough ("generic") to fit many situations where a probe is needed. Here are some examples:



- "**Tailored probes**" (or "custom probes") are follow-up questions that are custom worded to suit a specific situation. Here is an example of a tailored or custom probe:

Using probes to make your feedback sessions more productive

Skillful use of follow-ups is one of the hallmarks of an effective interviewer. Written interview guides often include reminders to "probe for specifics," and sometimes they include suggested wording for tailored or generic probes.

The written interview guide may give some guidance, but it's generally up to the interviewer to decide when and how to use a follow-up question. Here are some tips:

- **When participants give an ambiguous answer, it's important to probe for clarity**. Otherwise, you may misinterpret what they say.

- **When participants give very brief answers, probing can help you get responses that are more meaningful and useful.**

- **When you ask a closed-ended question, you can use an open-ended *follow-up question* to get a more informative response**. For example, suppose that you show two photos as possible choices for the cover of a pamphlet. You ask, *Do you like one of these better than the other, or do you like them both the same?* The participant points to the photo she prefers. You could stop right there, because you know which photo she prefers. But you haven't learned anything about *why* she likes that one better. You will get more useful feedback if you probe, such as asking *and what is it you like better about that one?*

- **You can use follow-up questions to check on the meaning of things you observe**. For example, you could say, *I noticed that you frowned when you read that paragraph. Can you tell me about that?*

- **Keep in mind that there's a fine line between encouraging people to talk but not badgering them**. When things are working well, asking follow-up questions lets people know that you are interested in the details. It helps encourage them to give a more specific answer to your next question, which in turn reduces the need for further probing. But this does not work with all participants. You will need to use your judgment about when and how often to probe. If you probe too much, you will make readers self-conscious, and you may begin to annoy them.

Sample questions in a written interview guide

We have covered a number of different ways to categorize the types of questions you use in a reader feedback session: open-ended vs. closed-ended, scripted vs. unscripted, lead-in vs. main question vs. follow-up or probe, generic vs. tailored probe. Any given question you use could fall into several of these categories. For example, a question could be an *unscripted open-ended follow-up*, a *scripted closed-ended main question*, or an *unscripted tailored probe*. Many combinations are possible. To help you visualize how it works when you put various types of questions together, Figure 6-8-b below gives an example.

Figure 6-8-b. Excerpt from an interview guide that illustrates different types of questions.

Here is an excerpt from a written interview guide. We start by showing it to you without any explanatory notes. See if you can identify what types of questions it includes. Then look below where we repeat this excerpt from an interview guide and add comments that explain each type of question.

sample script from an interview guide

5. Now I'd like your opinion about the amount of information in this section of the booklet.

   Do you think the amount of information it gives is too much, too little, or about right?

   ☐ *Too much* → *Probes:* Which information do you think should be dropped or left out?
   Which parts tell you too much, or give you more than you really need to know?
   (Probe for a specific answer)

   ☐ *Too little* → *Probes:* What information should be added to make this section better?
   Which parts don't tell you enough?
   (Probe for a specific answer)

   ☐ *About right*

   ☐ *No opinion or no answer*

Figure 6-8-b continued.

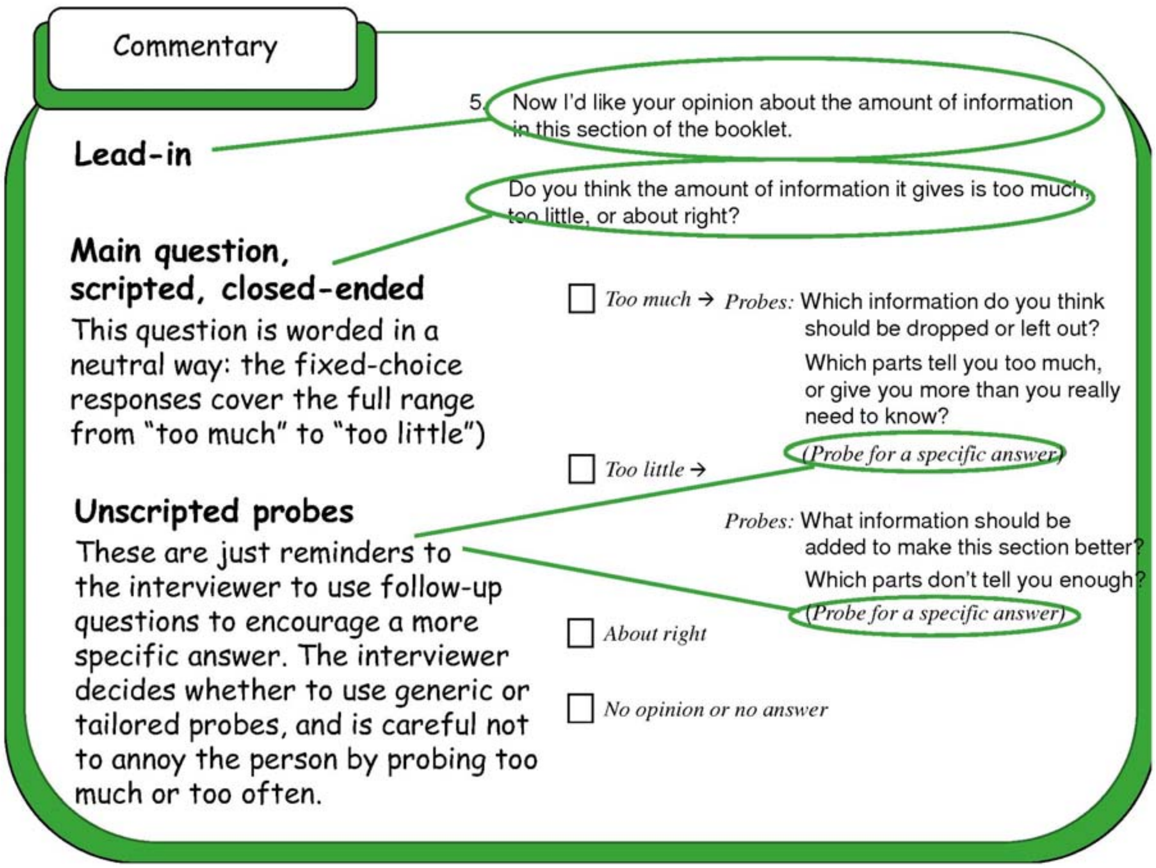
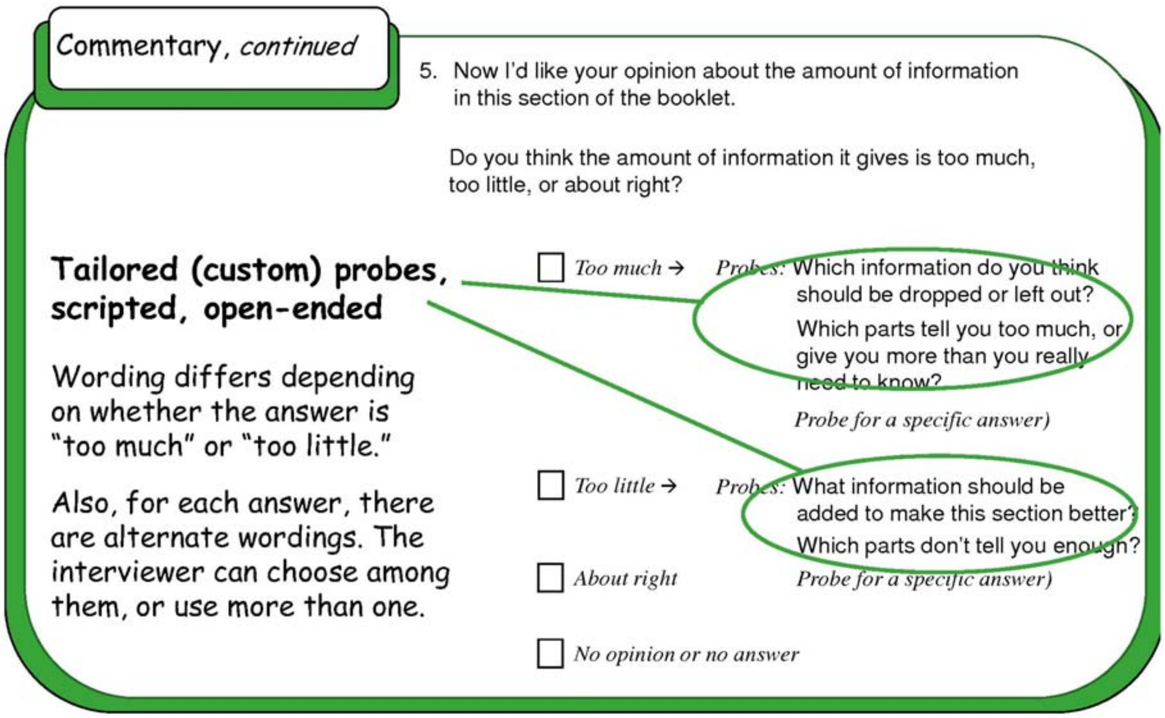


Figure 6-8-b continued.



Source: Created for this Toolkit.

End notes

For further discussion and good examples of question wording, see *A Practical Guide to Usability Testing*, especially Table 19-1 on pages 299-300 ("Neutral questions to ask, biased questions to avoid, and why the neutral questions are preferable"). This book is by Joseph S. Dumas and Janice C. Redish. Revised edition, 1999, Portland, OR: Intellect Books.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476

September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 9

Tips for collecting particular types of feedback from readers

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 9

Tips for collecting particular types of feedback from readers

List of figures in this chapter:

This document is the ninth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

What is this chapter about?

This chapter offers tips for addressing specific types of feedback issues in your sessions with readers. These tips use the same topic headings as the checklist of feedback issues shown earlier in Chapter 5 (Figure 6-5-a, *What you can learn from sessions with readers: a checklist of common feedback issues*). These topic areas are (1) appeal and cultural suitability, (2) navigation (effectiveness of the layout and organization), (3) visual elements such as photographs and illustrations, (4) comprehension, (5) content, and (6) usability.

How can you use this chapter?

This chapter is a topic-specific resource to help you collect particular types of feedback from readers. You can use it in several ways:

- **Use it to review typical feedback issues under each topic heading.** To help you get oriented, and to refresh your memory, we begin each section with a bulleted point summary of typical feedback issues for the topic area.

- **Use it to get ideas when you are designing your session**. This chapter has suggestions for approaching various topics. It offers sample questions that you can use as a starting point, and adapt to suit your needs. It also suggests some tasks you can use to collect particular types of feedback.

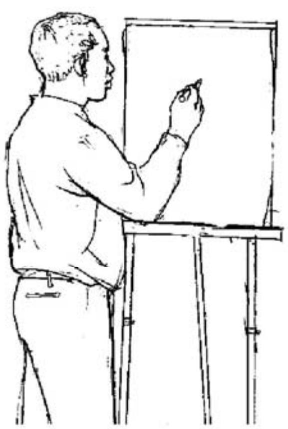
- **Use it to learn about which approaches tend to work better than others**. This chapter has suggestions about the most effective ways to get certain types of feedback, and discusses some approaches to avoid.

This chapter is organized by topic, but you will find a great deal of overlap among the topics. Many times, the sample questions we give in one section could just as easily be given in a different section. For example, some questions that assess initial appeal also assess reactions to visual elements. Some of the tasks you could use to check on comprehension also check on usability. Our goal is to offer an assortment of ideas and examples that you can use in different ways and adapt for your own purposes.

Tips for assessing appeal, cultural suitability, and personal relevance

Appeal ▪ cultural suitability ▪ personal relevance

What are common feedback issues for this topic?



- Do readers find the material attractive and inviting at first glance? Does it attract and hold their attention?
- Does the material make readers feel respected and understood? Does the material fit with the reader's cultural traditions and beliefs?
- Do readers react positively to the writing style and general tone of the material? Do they think it seems friendly and supportive?
- Do readers find the content and visual elements of the material personally acceptable and culturally appropriate?
- Does the material seem personally relevant to readers? Do they feel like it was written for them?
- Overall, do readers have a positive reaction to the material?

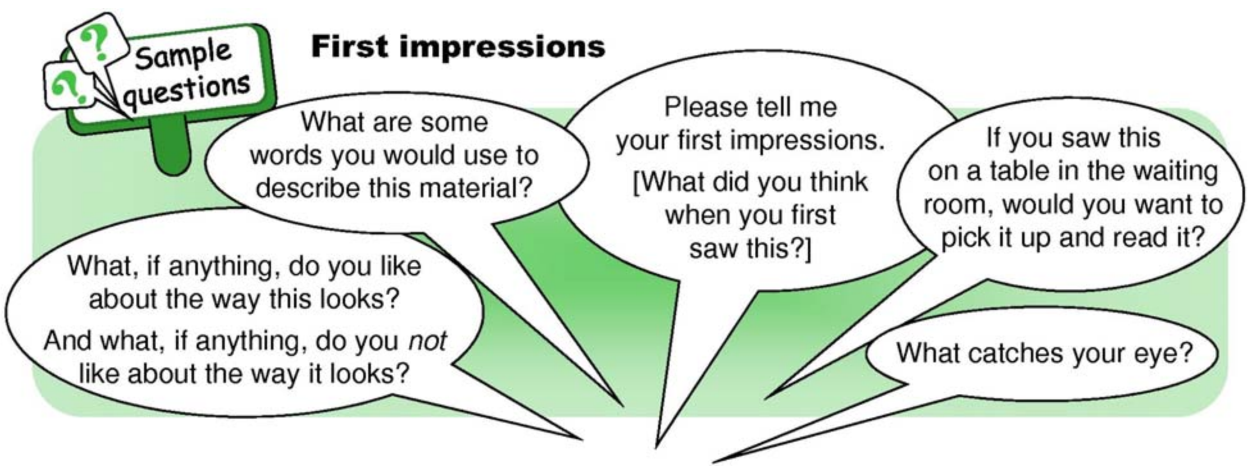
Source: Toolkit Part 6, Chapter 5, Figure 6-5-a.

Seeking feedback on initial appeal

To be clear and effective, written material needs to attract and hold readers' attention. When you are doing a feedback session, it's typical to start by getting readers' first impressions of the written material. You want to get initial reactions while they are fresh, because once people start reading, their reactions to the material can change.

Usually, you will give feedback participants instructions to "think aloud" as they go through the material. To encourage them and make clear what you mean by "thinking aloud," you can give a demonstration using a different piece of written material as your prop. A later chapter on interviewing technique gives you details on how to do this (in Chapter 18, see Figure 6-18-b, *Helping readers "think aloud" by demonstrating with an example*).

Often, readers will share their first impressions spontaneously as they *think aloud*. You can also ask questions to check on initial appeal. Here are ideas about ways to do this:



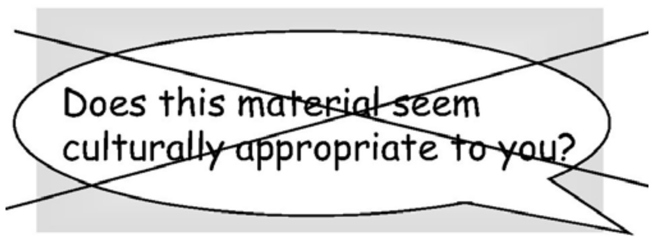
Checking on cultural suitability

To be clear and effective, written material needs to culturally suitable for its intended readers. When it is culturally suitable, readers feel that it was written for them. They feel respected and understood, because the material fits with their cultural traditions, beliefs, and values. It responds to the readers' interests and experiences, anticipating questions or concerns they might have. The tone is friendly and supportive, putting them at ease and making them feel receptive to the information.

Figure 6-9-a below offers tips on ways to check on whether readers find the written material to be culturally suitable.

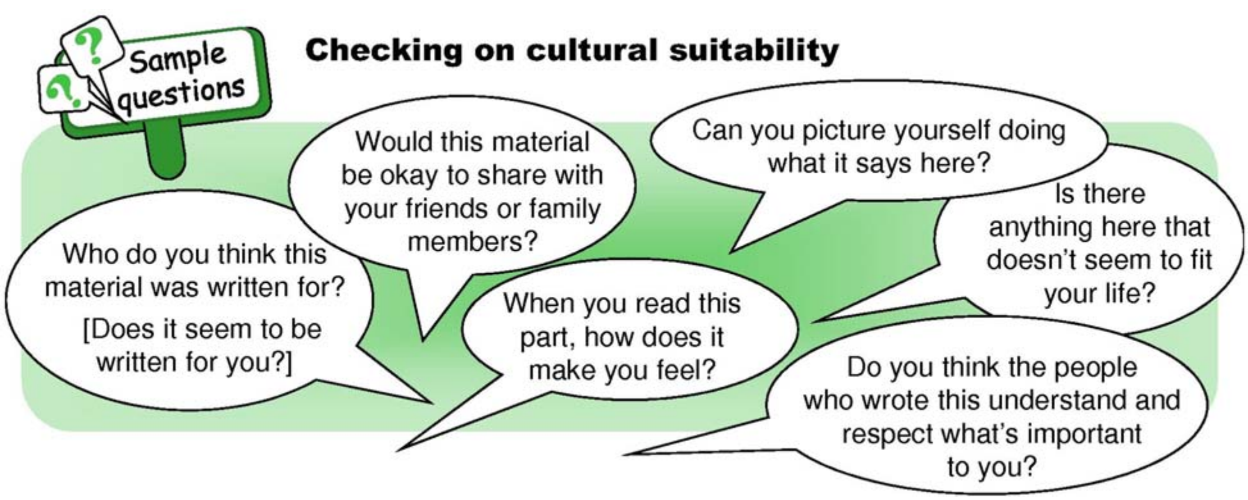
Figure 6-9-a. Checking on cultural suitability.

Asking people directly about cultural appropriateness doesn't work. When you want to find out whether written material is culturally acceptable to the intended readers, don't use the wording that's shown below:



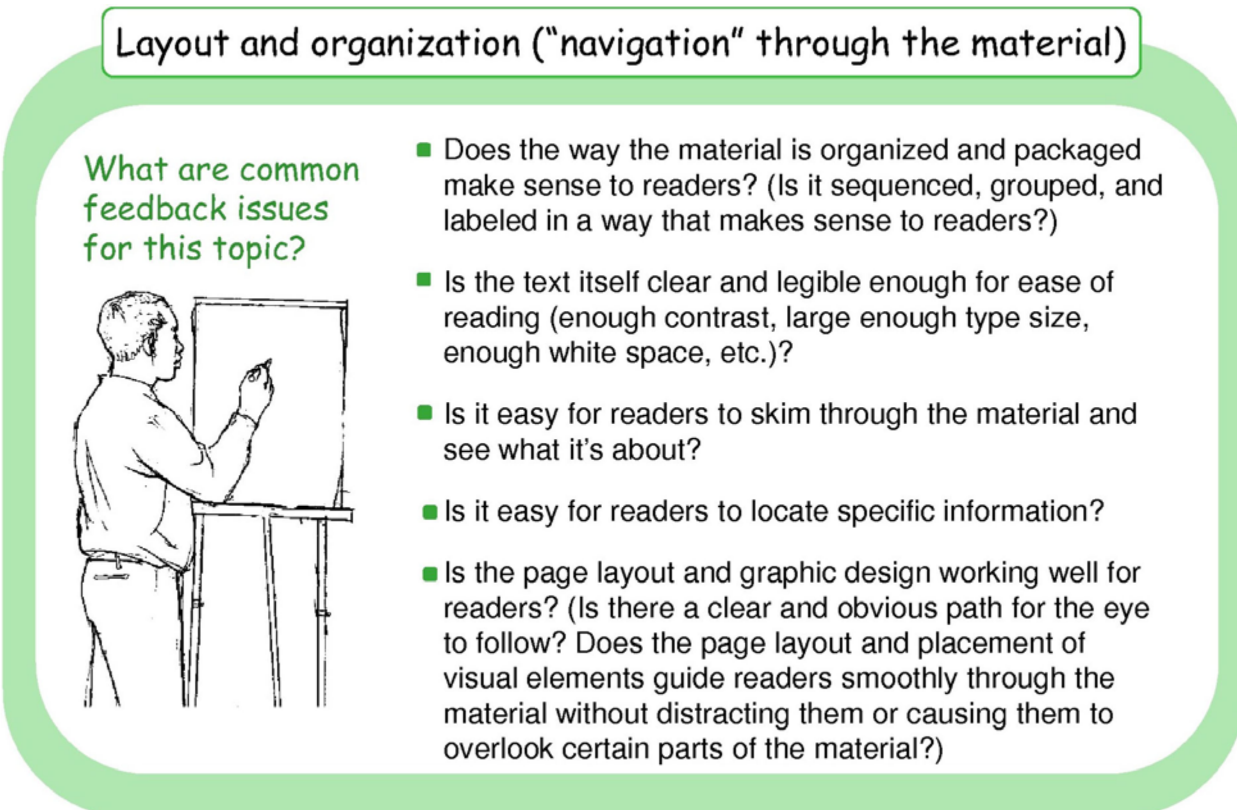
Terms like "culturally suitable" or "culturally appropriate" are professional jargon. These terms are not familiar to most readers you will be interviewing. If you use these terms in the questions you ask during a feedback session, they won't work well. Neither does the term, "culture." Although it's a more familiar word, "culture" tends to mean different things to different people.

Other approaches will work better. There are ways to get readers to talk about the cultural aspects of the material without using "culture" or "cultural" in the question wording. Here are some examples of lines of questioning you can use:



Source: Compiled and adapted for use in this Toolkit, based on the writer's personal experience with feedback sessions and suggestions from colleagues. For more about checking on cultural suitability, see discussion in Doak, Doak, & Root (1996).

Tips for assessing ease of "navigation"



Source: Toolkit Part 6, Chapter 5, Figure 6-5-a.

Written materials are a combination of text and visual elements, and both affect ease of navigation. When you do feedback sessions with readers, you can learn a lot about ease of navigation by observing what they do with the material. People have different basic styles in responding to documents. Some start at the beginning and read everything, and others skim quickly through it. Readers can move through the material in unpredictable ways, flipping from one page to the next, responding to what catches their eye or looks interesting. Even among skilled readers, those who are "skimmers" and "flippers" can miss important points, especially if the document is not designed to work well for skimming.

In other parts of this Toolkit, we discuss navigation issues in detail and give guidelines for creating an organization and overall design that will help readers understand and use the material:

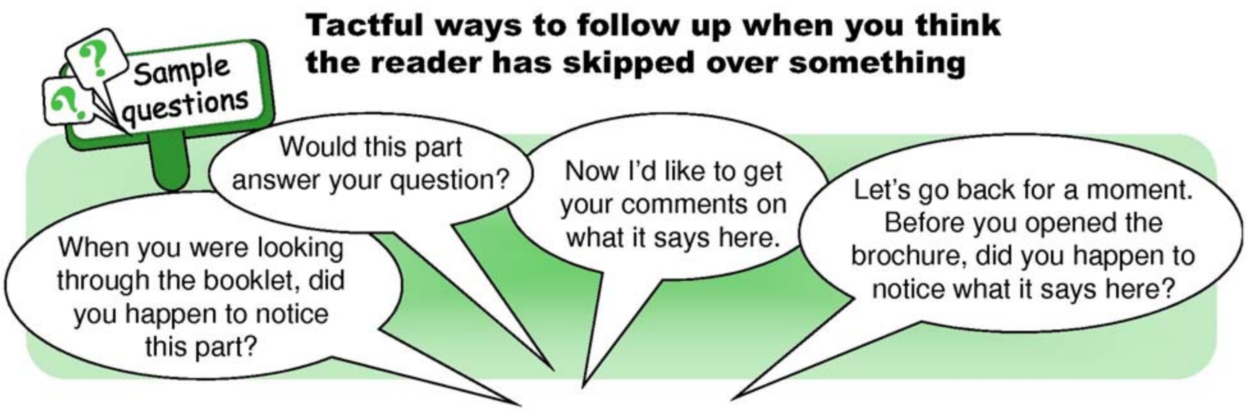
- Toolkit Part 4, *Understanding and using the "Toolkit Guidelines for Writing"*, has four chapters, one of which focuses on ways of organizing the content (Chapter 2). This chapter gives tips for sequencing, grouping, and labeling the content, emphasizing the need for plenty of headings that are clear and informative.

- Toolkit Part 5, *Understanding and using the "Toolkit Guidelines for Graphic Design"*, has eight chapters, and several of these focus heavily on issues related to navigation. Chapter 2 is about page layout and overall design. It explains the concept of "reading gravity," showing ways to create a clear path through the material that helps people notice everything on the page. Chapters 3 and 4 explain how to use contrast and navigation devices such as headings and bulleted points to help readers see how the material has been organized and make it easier for them to skim.

The Toolkit guidelines and discussion about ways to organize and "package" the written material will help you avoid some common barriers to navigation in written material. Then you can use your feedback sessions with readers to find out how well your material is working for them. When you interview readers, you can use a combination of methods to assess ease of navigation. For example, you can ask readers to share their thoughts and reactions by "thinking aloud" and then watch what they do with the material. Sometimes, the remarks they make during *think aloud* will give you clues about navigation barriers. As you watch what readers do with the material, see if you can tell which parts of the page are drawing their attention, and which parts they seem to skip over or ignore. For example, suppose that readers are tending to skip the top of one page.

If readers are skipping over part of the material, it's helpful to find out whether it's a navigation issue or something else. Is there something about the layout or design that is causing them to overlook that part of the page? Are they skipping it deliberately due to lack of interest in the topic? Or are they skipping it because it uses words they don't know and it looks hard to read?

By following up, you can often get more feedback that helps you understand what is happening and how it could be fixed. When you follow up, you need to do it carefully, so that readers won't feel that you are criticizing them for not noticing everything on the page. Below are some sample questions that show ways to follow up and find out more about what is going on:

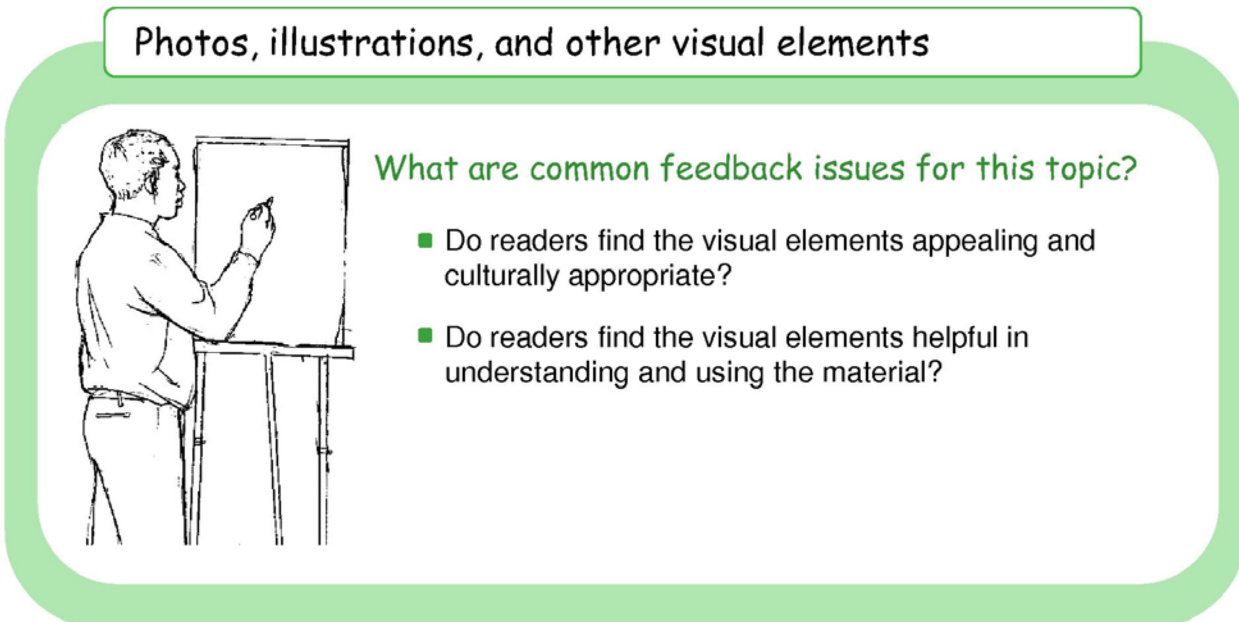


Here are some other tips for assessing ease of navigation:

- One of the most informative ways to assess ease of navigation is to give readers a task to perform that involves using the material. You can adapt the task to suit the material. For example, you could ask them to find a specific type of information and then watch how they go about doing this task. You could say, *If you wanted to know {insert topic} where would you look?* If the material is long, it probably has page numbers and a table of contents. It might also have other navigational devices such as headers or footers. When you give readers a task that involves a search for specific information, you can watch to see whether and how they use these devices.

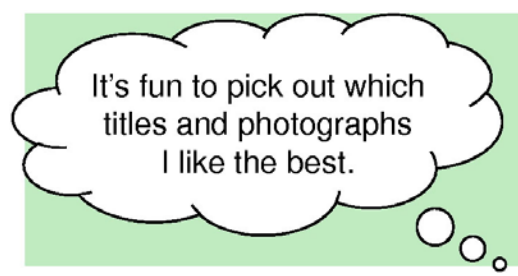
- Many people make snap judgments about the meaning and personal salience of materials based on skimming quickly through. You can use feedback sessions to find out how well the headings and other navigation devices are working for those who skim through the material. To find out whether readers are accurately interpreting the cover page, titles, and headings, you could show just these parts in isolation and then ask readers to elaborate on their impressions or expectations. For example, you could put each heading on a separate card and then show the series of cards to the reader. You could ask for a reaction to each card, such as asking, *Here's the heading for the next section. Just from looking at this heading, what do you think the next section is going to be about?*

Tips for getting reactions to visual elements



Source: Toolkit Part 6, Chapter 5, Figure 6-5-a.

During a feedback session, you can get readers' reactions to photographs, illustrations, and other visual elements such as cover designs, color schemes, and page layouts. You may want to show several versions and ask for their preferences. People enjoy looking at alternatives, and asking for their preferences signals that you value their opinions.



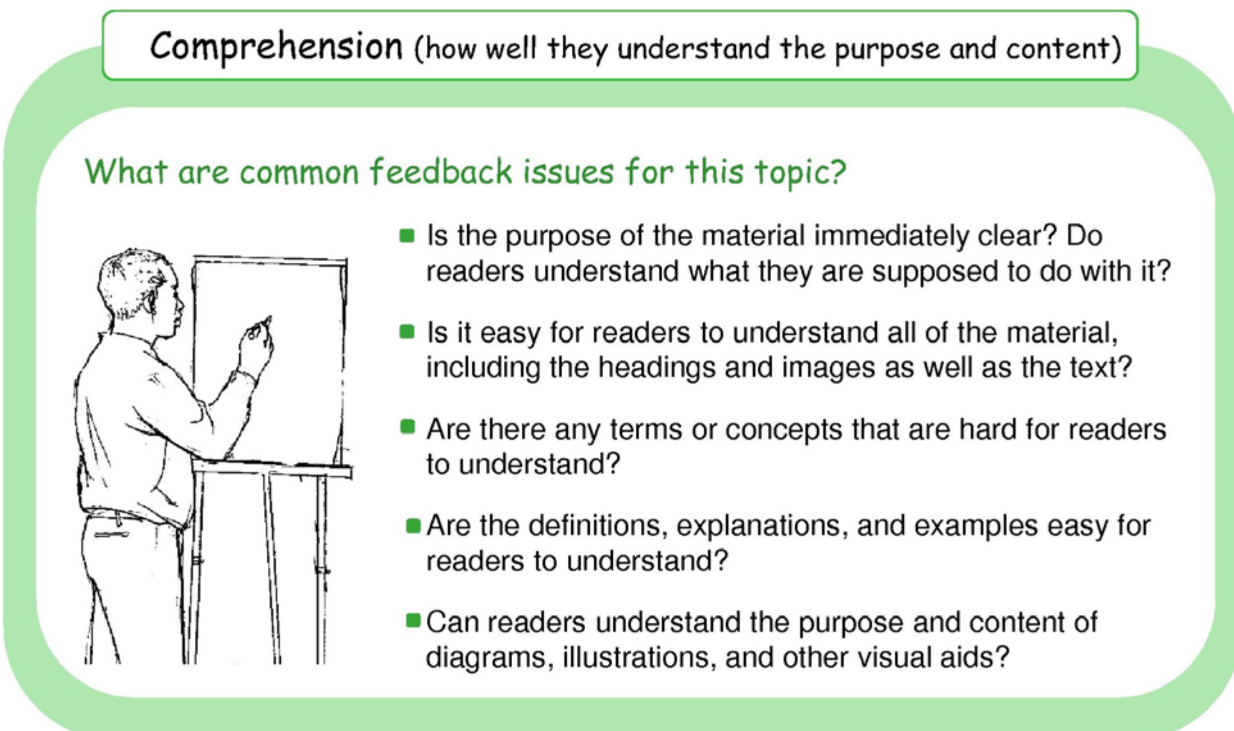
Here are some tips:

- Try to get feedback on visual elements at an early stage in developing your materials, while there is still time to make changes that respond to readers' preferences.
- If you want to get reactions to a whole group of photos, you could use a "photo sort" task. Mount each photo on a card, and then ask people to sort them into different piles that reflect their preferences. For example, there might be one pile for the ones they think are best to use in the

material, another for those that are acceptable, and a third pile for the ones they reject. If there is a small group of photos, you could ask people to put them into order of preference (rank order).

- When you ask for preferences, be sure to follow up by asking for their feedback on the images themselves. While it's helpful to know which ones they prefer, it's even more helpful to know what it is about various images that triggers their reactions. When people start talking about images, they will often give you very specific and useful feedback, such as saying *This one is good, but it should be a close-up instead*, or *I like the pose in photo A and the background in photo C*. They may single out elements that they find outdated or culturally inappropriate, such as saying, *That phone looks way out of date*, or *No teenager would ever dress like that.*

Tips for finding out how well readers understand the material



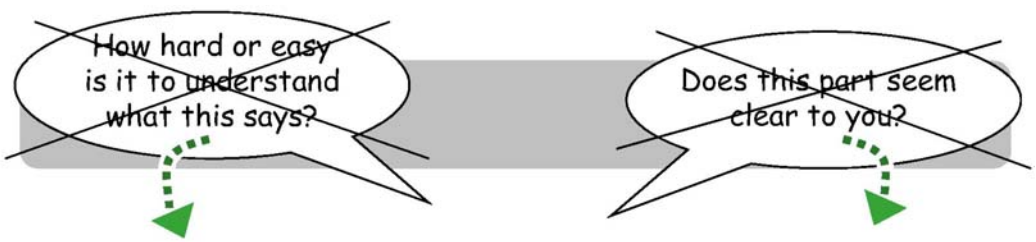
Source: Toolkit Part 6, Chapter 5, Figure 6-5-a.

Getting readers to reveal their interpretations

Checking on comprehension is generally a vital part of any feedback session. You want to make sure that readers understand the written material, and the best way to find out is to get reactions directly from them.

As shown below in Figure 6-9-b, how you check on comprehension is crucial. Asking whether readers think it is easy to understand does not work well. Instead, to get feedback that will be useful in making improvements, you need to get readers actively involved in verbalizing their interpretations.

Figure 6-9-b. Checking on comprehension: An indirect approach works best.



Usually, you won't learn much by asking questions like the ones above that ask people for their judgments about ease of understanding. Here's why:

1 You learn nothing about how people are actually interpreting what they've read

You are only getting their **opinion** about ease of understanding and you don't know what meaning they have taken from the text. Without knowing how they are interpreting the text, it's hard to spot possible problems and figure out how to fix them.

2 You can't take people's answers at face value

People can think the material is easy to understand, but be misinterpreting what it says – and *you won't know.*

In addition, this type of question puts people on the spot. It can be uncomfortable for some people to say that they are having trouble understanding what they read. If they hold back, you will miss getting feedback on what is hard to understand.

These approaches work **better** for checking on comprehension:

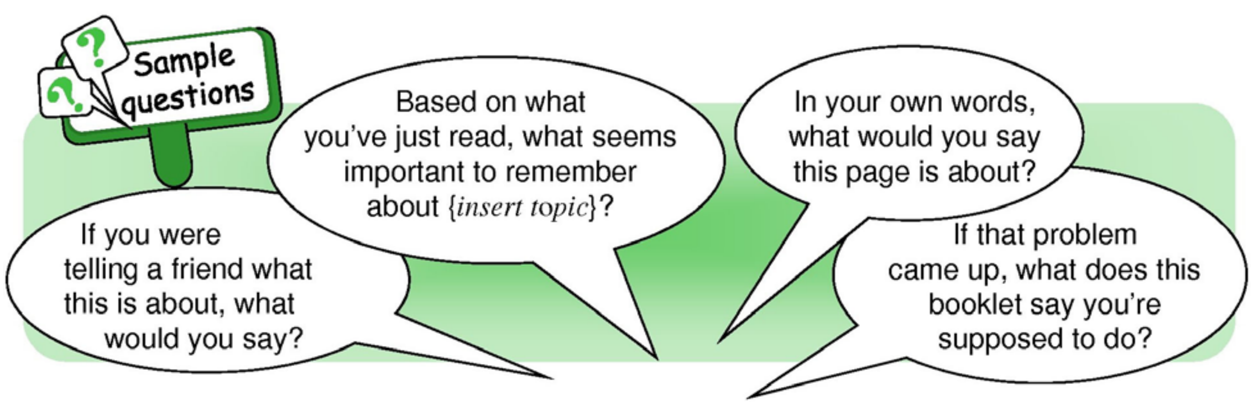
1 Have people show you (or mark) all places where they had to read something twice

You can give people a pen and ask them to mark these places while they are reading the material (see Toolkit Part 6, Chapter 18, Figure 6-18-c, *Encouraging people to mark on the document as they read*).

Or you can simply ask them to tell you: "If you ever go back and read something twice to figure out what it's saying, please let me know. When something isn't clear right away, that's a problem, and the people who are trying to improve this material want to know about the problems."

2 Ask questions that get people to tell you **in their own words** what the material says

Below are sample questions that show indirect ways of checking on comprehension. Asking questions of this type that get readers to paraphrase helps reveal which parts of the material are drawing their attention and how they are interpreting what they read.



Source: Created for this Toolkit.

As shown above in Figure 6-9-b, the best way to determine whether people understand the material is to get them to talk in their own words about what they have read. What they say will reveal how they are interpreting what they read. What they say can also help show you which parts caught their attention. In responding to your questions that ask them to explain what it says in their own words, readers will give you insights into the attitudes and assumptions they have about the topics covered in the material.

Here are a few more tips about checking comprehension:

- To get the most informative feedback, be sure to ask follow-up questions. Express interest in hearing more from them, and take care not to make them feel as if they are being tested. For help with this, see the tips on effective interviewing in Chapter 18. These tips include examples of ways to phrase your questions that will encourage people to feel comfortable about sharing whatever comes to mind.

- If people start reading again to answer the question, you can gently steer them away from re-reading. For example, you might say, *Oh, just in your own words is fine.*

- When you are checking on comprehension during a feedback session, watch for situations where readers seem to be answering your questions about the material by sharing their prior knowledge and views rather than responding to what they have read. For example, when you ask them to tell you what the booklet is saying, their response might include some details that fit with the topic but are not in the booklet. While it's helpful to hear about their prior knowledge and attitudes (and sometimes that will be your main goal), it can become hard to judge what they have read and how well they have understood it. If you are trying to check on comprehension and you sense that people are mainly telling you what they already know rather than talking about what's in the written material, try to steer them gently back to the written material.

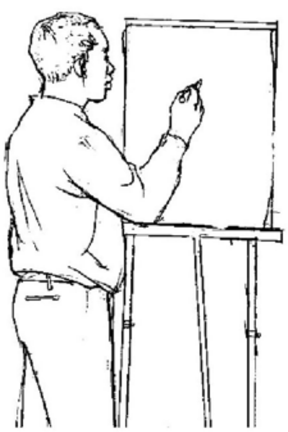
- In paraphrasing what the material is about, people will sometimes identify a concept that's confusing, a word that doesn't work well, or a sentence that makes no sense. If this happens, be sure to probe to get more details about what they found confusing. Depending on the situation and the person you are interviewing, it may be appropriate to ask their opinion about how it should be said instead.

- Often you will want to focus on specific content when you are checking on comprehension. For example, you might want to find out whether people can understand a definition or an example or a diagram. You can use questions such as, *what do these numbers for cholesterol tell you?* Or, *this word can mean different things to different people. What does it mean to you?*

Tips for finding out how well the content meets readers' interests and needs

Content – how well it meets readers' interests and needs

What are common feedback issues for this topic?

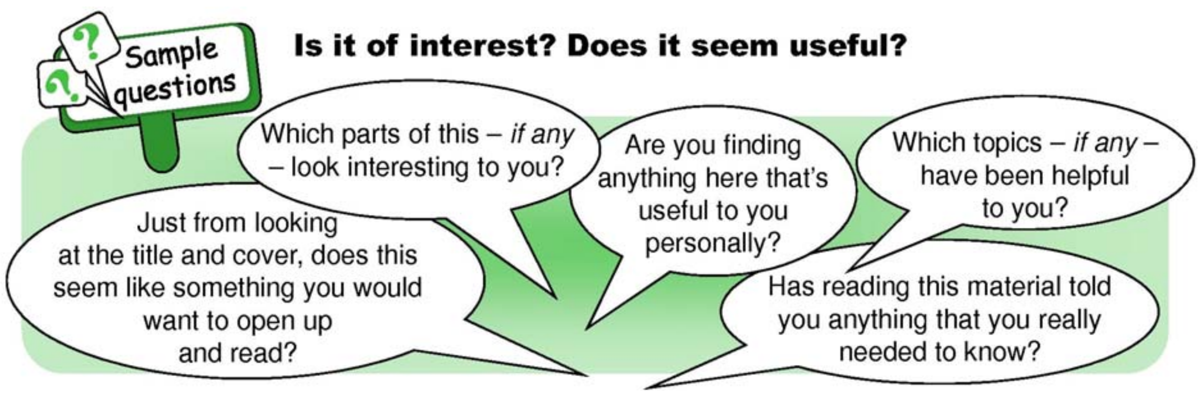


- How much do readers already know about what's covered in the material? How do they feel about the topics? Do they have any misconceptions? Any strong feelings or concerns?
- Does the material meet an information need and seem potentially useful to readers? Do readers care about what it says? Does reading it seem worth the time and effort?
- Do readers think the material gives them information they need, at the right level of detail? Did they learn anything new from it? Does the material leave readers with any points of confusion or unanswered questions?
- Does it seem too long, too short, or about right? Is there any information they think should be dropped or added?
- Do readers find the content personally and culturally acceptable? Do they believe it and trust what it says? Do they think the things it is asking them to do are realistic and feasible for them to do?

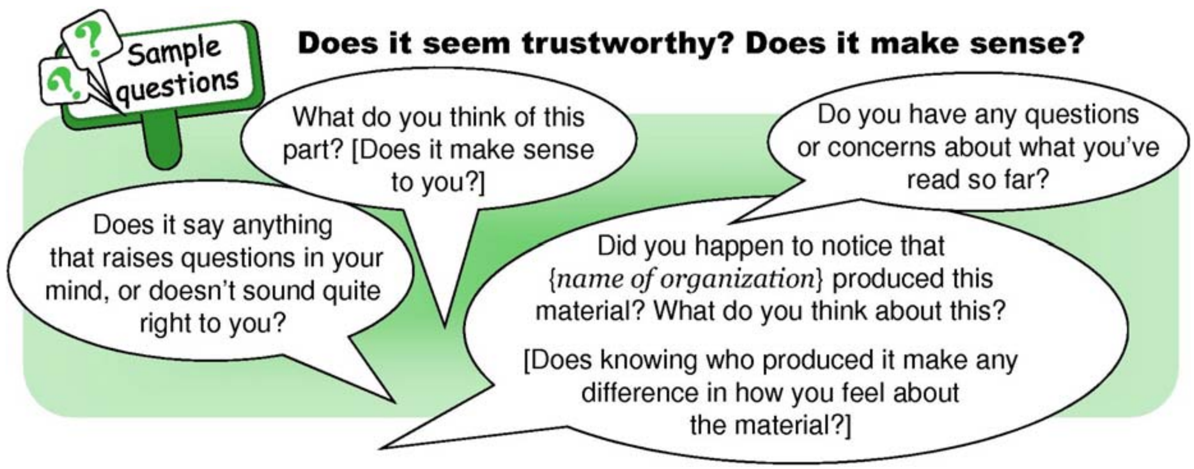
Source: Toolkit Part 6, Chapter 5, Figure 6-5-a.

Reader feedback sessions give you a perfect opportunity to find out directly from readers how well the content of the written material is meeting their interests and needs. To give you ideas about ways to do this, we show some sample questions below.

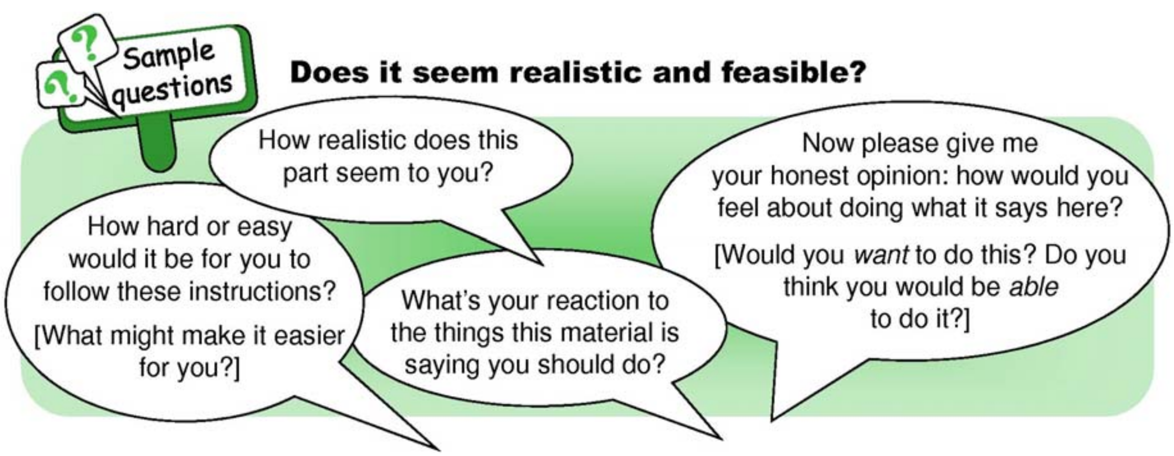
Is it of interest? Does it seem useful?



Does it seem trustworthy? Does it make sense?



Does it seem realistic and feasible?



Scripted questions from an interview guide

To give you more ideas about ways to check on readers' reactions to content, Figure 6-9-c below has samples of scripted questions from a written interview guide (see Chapter 10, *Creating a written guide for conducting feedback sessions*). The commentary for these scripted questions points out some formatting features that make the written guide easier for interviewers to use in conducting a session. You could adapt these features for questions on other topics, too.

Figure 6-9-c. A sampling of scripted questions you can use to check on readers' reactions to content of the material.

If the person answers "yes," there are several follow-up questions to find out what was surprising and how the person felt about it. The outline box groups these follow-up questions together and makes it easier for the interviewer to follow the script (and skip over them quickly if they don't apply).

Putting check boxes in your interview guide makes it easy to mark the answers. Include boxes for choices such as "don't know" and "no answer," too. And leave some extra space where it's needed, to allow for written notes about what the person says (our examples usually don't include this extra space).

Figure 6-9-c continued.

sample script from an interview guide

Did you learn anything new while you were reading this?

- ☐ *Yes* → What was new? {*Probe for a specific answer*}

  [Please **show me** which parts were about something that's new to you]
- ☐ *No*
- ☐ *Don't know or no answer*

It's often helpful to have the person show you what they are reacting to by pointing to a particular part of the material.

sample script from an interview guide

I'd like your personal opinion -- do you think it's a good idea to include {*insert description of the topic or section of the material, such as "this definition"*} in this material, or do you think it should be dropped?

- ☐ *Should **include** it* → *If needed, probe for reason:*

  [How come?] –or – [Why do you think so?] – or -- [Tell me more about that]
- ☐ *Should **drop** it* → *If needed, probe for reason:*

  [How come?] –or – [Why do you think so?] – or -- [Tell me more about that]
- ☐ *No opinion or don't know*

If the person you are interviewing doesn't give a full answer, there are many different ways to probe for a reason.

Just for illustration, this example shows three possible probes.

Since these three examples of probes are worded in a general way, you can use the same ones whether the person answers "should include it" or "should drop it."

Figure 6-9-c continued.

sample script from an interview guide

Now I'd like your opinion about the amount of information in this material. {*alternate wordings:* in this section / on this page / *etc.*}.

Do you think the amount of information it gives is too much, too little, or about right?

- ☐ *Too much* → Which information do you think should be dropped or left out?
  [Which parts tell you too much, or give you more than you really need to know?]
- ☐ *Too little* → Which parts don't tell you enough?
  [What information should be added to make this better?]
- ☐ *About right*
- ☐ *No opinion / no answer*

Alternate wordings show how you can adapt this question to focus on a specific part of the material, such as a section or a single page.

These follow-up questions are really crucial. They help you get feedback that is specific enough to guide revisions.

sample script from an interview guide

Was there anything you wanted to know about that wasn't included in this material?

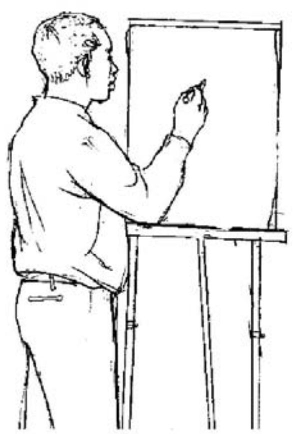
- ☐ *Yes* → [What?] –or--[What were you hoping to find that wasn't there?] {*Probe for a specific answer*}
- ☐ *No*
- ☐ *Don't know or no answer*

Source: Created for this Toolkit.

Tips for assessing usability

Usability (*can* readers use it? Do they think they *would* use it?)

What are common feedback issues for this topic?



Are readers **able** to use the material?

To check on whether readers can use the material, you focus on getting them to apply the information in the material. For example, if it's a pain medication label with dosage information, can they figure out the right amount of medicine to take?

Do readers think they **would** use the material?

Just because readers are *able* to use the information doesn't mean that they necessarily *would* use it. So it's also helpful to seek readers' feedback on anticipated use. For example, you could ask questions such as these:

- Can readers see themselves using the material in the way that's intended?
- Do they plan to do something (or something different) as a result of reading the material?

Source: Toolkit Part 6, Chapter 5, Figure 6-5-a.

Just because readers can understand the written material does not automatically mean that they can use it for its intended purpose. So when you do feedback sessions with readers, it's vital to check on usability.

Using tasks to assess usability and comprehension

Giving readers a task to do can be very helpful in assessing usability and ease of understanding. For example, if the material you are testing has numerical information or a chart with comparative information, you can devise a task that involves using the numbers or the chart. Here are two examples:

- Suppose that the material is about reading nutrition labels on packaged foods, and it includes an illustration. You can ask questions to find out whether the participant is able to understand and use the information on the label. For example, you could say, *Suppose that you ate two servings of this soup. How much salt (sodium) would you be eating in those two servings?* To come up with the right answer, the person would have to multiply the per-serving amount listed on the label by two.

- Suppose that the material has a rows-and-columns chart that compares a group of health plans based on results from surveys of patients. You could ask questions that require them to refer to the chart and use the information in it to reach an answer. For example, you could ask, *according to this chart, which health plan did the best on quality of customer service?*

When you use a task to check on usability and comprehension, there is often a "right" answer, as there is in the examples we just gave. If you ask about how much salt is in two servings of soup, there's a right answer, and if you ask which health plan did best on customer service there is a right answer. So if the participant gives a *wrong* answer, you will want to follow up to find out how the person arrived at that answer. Finding out more about how the person arrived at that wrong answer provides valuable feedback about possible problems in the text or display of numbers or symbols.

While it's obvious that you would want to follow up on any wrong answers you get, **this Toolkit urges you to follow up on *all* answers – whether they are "right" or "wrong**." The two examples in Figure 6-9-d below explain why.

Figure 6-9-d. Why probing is crucial when you give people a task to perform (they can give the "right" answer for the "wrong" reason, and vice versa).

Background on the charts and tasks

The two examples below are from projects done by the Toolkit writer.

- In each example, the material we tested was a rows-and-columns chart with symbols showing how well health plans scored on results from a consumer survey.

- In each project, we did individual interviews to find out how easy it would for people to use the information in the chart. We tested a draft version of the chart that had fictional names for the health plans and fictional results from the survey. Since the charts were for different projects, they used different symbols and contained different information.

- We arranged the symbols in the chart into a pattern and then made up questions to ask that would have a single right answer, based on that pattern. During the interview, we planned to show the chart, describe a situation, and then ask the participant to choose the best plan for that situation. When the person answered, we would then follow up by asking how he or she decided that was the best plan to choose.

As you'll see below, there were some surprises. When we set up the patterns, we didn't anticipate all of the possibilities. Both of these examples show how crucial it is to probe for reasons when you give people a task to perform – *no matter what answer they give*.

"Comfort Care" example

It's possible to give a "correct" answer without understanding how to use the chart

When we made up the names for the health plans in the comparison chart for this project, we wanted names that wouldn't sound like real health plans in the area. We considered labeling them as "Health Plan A," "Health Plan B," and so on, but we knew from another study that a few people had been confused by a chart that used this generic alphabetical approach to naming of fictional health plans. So we decided to make up names that all sounded positive. The list included names such as "QualiCare," "Secure Care," and "Comfort Care." According to the pattern of symbols we had built into the chart, the plan that was doing the best overall on all of the topics was "Comfort Care."

When asked to name the plan that was doing the best overall, one woman responded "Comfort Care." When we asked to explain how she had decided on Comfort Care, she replied, "I figured it was the best because I like that name the best. Comfort Care sounds like it would be really good -- nice and comfortable." Further questioning revealed that she did not really grasp the concept of the performance measures shown in the chart. Moreover, she could not comprehend how to extract information from the chart by looking at the intersection of a row and column.

This interview showed us how people can attach connotations to fictional names you invent. In the next group of interviews, the chart was revised and we used the names of trees ("Pine Health Plan," "Maple Health Plan"). Even then, we pre-tested the names separately to see if people had preferences that might influence reactions to our chart. Based on pre-testing results, we eliminated "Oak Health Plan" because somebody said it sounded stronger and sturdier than the others.

"Lisa vignette"

It's possible to be adept at using the chart but not give the "correct" answer

In this project, we were doing feedback sessions with women to test a draft Medicaid report. The report had two comparison charts, one for survey results about adults' care, and the other with survey results about children's care. Both charts had results for seven survey topics.

At that time, the Medicaid program required mothers and children to enroll in the same health plan. Since mothers had to choose the same health plan for themselves and their children, we needed to find out whether mothers would be able to use the comparison chart for adults' care in combination with the comparison chart for children's care when they were making their choice.

To get reactions to the two comparison charts and explore how people might use them in decision making, we did individual interviews with young women who were enrolled in the Medicaid program. To participate in our feedback sessions, they needed to have at least one child who was also covered by Medicaid.

One goal of the feedback sessions was to find out whether a woman could use both charts in combination to select the best performing health plan for herself and her children, *based on results for the survey topics she felt were most important*. To find out, we created a fictional situation featuring a mother named Lisa who needed to use the summary charts of survey results to choose a health plan for herself and her children. This "Lisa vignette" identified easy access to specialty care as a priority for the children, and finding a doctor who communicated well as a priority for Lisa's own care. The interviewer explained the vignette and then gave the participant a card. This card summarized the Lisa vignette for easy reference while using the chart.

We created a pattern of survey results for both of the charts such that there was an answer we considered to be "correct." This correct answer was "Western Health Plan." It was the only health plan that met both criteria of being (a) high scoring on doctor's communication skills for the adults' care chart and (b) high scoring on access to specialty care for the children's care chart.

We showed the comparison charts and explained the Lisa vignette to one of the feedback session participants. She chose Riverside Health Plan – a "wrong" answer. Riverside Health Plan scored well on children's care: it scored high on access to specialty care (one of our criteria) and in fact, scored best overall for children's care. However, on the adults' care chart, it scored low on doctor's communication skills and therefore did not meet our other criteria.

We asked the participant how she had decided that Riverside would be the best choice for Lisa. As she explained her reasoning and showed where she had looked at information within each chart, it became clear that the participant was adept at understanding and using the information in both charts. She had understood that she was supposed to use the two charts in combination, but once she saw the results in each chart, she deliberately disregarded the instructions about Lisa's priorities: In her view, children's care was the most important consideration, and Riverside was clearly the best plan for children. She felt that Lisa should pick the health plan that is best overall for her children, and join that one herself, since children's care is most important. Several other women in the feedback sessions chose Riverside Health Plan rather than Western Health Plan, for much the same reasons.

This example of the Lisa vignette illustrates how people can come up with a "wrong answer" that is based on sound logic and reflects solid understanding of the chart and how to use it.

Conclusions

Both examples show how it can be hard to anticipate people's reactions to a task. Instead of treating people's answers at face value as demonstrating either confusion or comprehension, it's crucial to probe for their accounts of how they reached their answer. It is through these accounts that you will learn how well the document is working and how it could be improved.

Source: These examples are based on interviews the Toolkit writer conducted in projects for clients. They are adapted for use in this Toolkit.

End notes

References cited in this chapter

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1996 *Teaching patients with low literacy skills*. Second edition. Philadelphia: Lippincott. (Now out of print, this publication is available to read and download at no charge at the following website: http://www.hsph.harvard.edu/healthliteracy/resources/doak-book/).

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 10

Creating a written guide for conducting feedback sessions

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 10

Creating a written guide for conducting feedback sessions

List of figures in this chapter:

This document is the tenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

What is covered in a written guide?

When you have decided what to say and do during your feedback sessions with readers, the next step is to create a written guide. Having a written guide for reference helps interviewers do a good job of collecting the specific types of feedback you need. What we are calling a "written guide" or an "interviewer's guide" goes by other names as well. For example, researchers sometimes call it a "protocol" or a "topic guide." Figure 6-10-a below describes the parts of a written guide.

Figure 6-10-a. What is covered in a written guide for conducting feedback sessions?

1 **Introduction** – welcome the participant, give background, explain what will happen during the session

The purpose of this introduction is to set an appropriate tone for the interview and to give people information they need to have before they begin reacting to the written material. Using the written guide for reference, the interviewer welcomes the reader, makes introductions, and explains about the session. The introductory part of the written guide generally covers these tasks:

- Welcome the participant(s). Introduce yourself and the note taker (if any).
- Explain the purpose and sponsorship of the project, and how results of the session will be used.
- Give assurances of confidentiality, as applicable. Explain about observers, if there are any. Go over permissions forms, if applicable.
- Ask if there are any questions about the session.

2 **Show the material and get reactions**

This is the main part of the written guide and it varies considerably from one project to the next.

- It tells interviewers what, if anything, they need to say about the written material before they show it to participants.

- Often, the next step is to encourage the reader to *think aloud* and share whatever comes to mind while going through the material. Later in Chapter 18 on interviewing technique, Figure 6-18-b tells how you can give readers a demonstration to show them what you mean when you ask them to *think aloud*.

- Then the guide tells the interviewer how to show the material to participants (all at once or part by part), and how to get their reactions.

    - **This part of the written guide is tailored to the material and the type of feedback that is needed**. It covers the feedback issues you identified and prioritized when you were designing your session. For more about feedback issues, including tips on how to arrange them in a sequence that will make sense for conducting the session, see Toolkit Part 6, Chapter 5, *Creating a list of feedback issues to use in testing the material*. Once you have arranged your feedback issues into this order, you will have the outline for what to cover in this part of your written guide.

    - **It has the questions you plan to ask.** This part of your written guide includes the scripted questions that have been prepared in advance. For help in preparing your questions, see Chapter 8, *Phrasing your questions to get the most useful feedback from readers*, and Chapters 9, *Tips for collecting particular types of feedback from readers*.

    - **It describes the tasks you plan to include.** This main part of the written guide also gives the instructions for presenting and explaining tasks that will be used to see how easy it is for the reader to use the written material.

3 Thank participant and close the session

This part of the guide tells interviewers how to handle the following tasks:

- Collect any additional information from the participant, if applicable. For example, you might ask the person to fill out a brief questionnaire that collects demographic information such as age and education.

- Give the person whatever payment, or other compensation has been promised. Finish any paperwork that needs to be done. For example, this paperwork might include having the participant sign a receipt for payment, or for reimbursement of travel, or childcare expenses.

- Thank the person and escort him or her out of the interview room.

4 **After session is over** – review and expand on your written notes, fill out a Session Summary Form

This last part of the guide may include reminders about what the interviewer and the note takers (if there are any) are supposed to do right after the session is over. Ideally, they will take a few minutes together after each interview to do the following tasks:

- **Review and expand on notes made during the session, clarifying and filling in anything that is missing.** The purpose is to make the notes as specific, accurate, and useful as possible, since the notes will be used to analyze results from the feedback sessions and to guide revisions in the material. For tips on taking notes, see Chapter 17, *Conducting feedback interviews and taking notes*.

- **Write down summary notes about the interview**. The purpose of these notes is to share the interviewer's and note taker's impressions about how the session went and any insights and ideas they got from it that show problems with the material or suggest how it might be improved. The quickest and easiest way to make these summary notes is to prepare a form ahead of time and then fill it out after each session. We call this the "Session Summary Form" and give a sample form in the next chapter.

Source: Created for this Toolkit.

How specific does the guide need to be?

Written guides vary in how much detail they give. Some guides are simply a brief outline of "talking points," and other guides are more detailed. Since an outline of talking points does not provide much guidance for interviewers, we recommend making your guide more specific:

- **Clear instructions**. Without being overly long and detailed, it should state clearly what interviewers are supposed to say and do during the session.

- **Scripted questions for the key issues**. To make it easy for interviewers to be consistent, the guide should include scripted questions (specific wording) for the *main questions* you want them to ask. Of course, interviewers need flexibility. Even when the guide shows scripted questions, there will be times when interviewers need to adapt the wordings of these questions in order to respond appropriately to each participant.

Benefits of making your written guide reasonably specific

It's worth the time and effort to prepare a reasonably specific guide:

- **Spelling out the details in a written guide will help you ask your questions in the most effective ways.** How you ask readers for their reactions, including the way you word your questions, has a great impact on the usefulness of the feedback you get. Preparing a written guide helps you develop a logical sequence of topics and forces you to decide how to phrase your main questions. As you work on the guide, you will be able to consider different ways of asking a question and can choose the wording you think will work best. It's much easier to figure out in advance what the most effective wordings might be. Especially when you're a beginner, it can be hard to come up with the best wordings during a session.

- **Preparing the written guide gives you a good reality check**. Writing down all of the questions and instructions will help you assess what you can reasonably accomplish in the time available. If you discover that you have too many issues and questions to include, you can identify priorities and adapt your approach.

- **Having a written guide makes it easier for interviewers to do a good job of conducting the session.** The written guide is a great tool for quality control. When interviewers have a detailed guide to follow, they can cover all of the topics in the order you have arranged and using the wordings you have prepared. If the interviewers are experienced, a detailed script helps them understand the purpose and focus of the interview, making it easier to guide the interview in the most appropriate and effective ways. If interviewers are less experienced, having a detailed script makes it easier to focus on their interaction with the reader.

- **Creating the written guide in a collaborative way taps into the creativity and expertise of your team members and stakeholders.** When you are preparing your written guide, make it a group effort. Ask others for their ideas about what to cover in the sessions with readers. Circulate a draft of the written guide to team members and other stakeholders for review and comment. Ask them to critique the tone and question wordings as well as the content. You'll find that people tend to notice different things, so the more reviewers you have, the better.

- **The written guide will be a good resource for future projects.** If you have never done a feedback session before, it can take some time to develop your first written guide. But as you gain experience doing feedback sessions, it will be quicker and easier to develop the written guide. Using your written guides from previous projects as resources will give you a head start.

How long is a written guide?

Some written guides are quite brief, and others are long. It all depends on your project and your preferences. Here are things that affect how long the guide for your sessions will need to be:

- **How much time you have during the session**. For example, a written guide for conducting a 15 minute session is likely to be much shorter than a guide for conducting a 90 minute session.

- **The length and nature of the written material you are showing.** In general, the shorter the material you are showing, the shorter the written guide. For example, if you are getting reactions to a poster or a reminder postcard, your written guide will be a lot shorter than if you are getting reactions to a 20-page booklet.

- **What you want to learn from readers.** For example, if your purpose is to get readers' preferences for photos and color scheme, your written guide will be shorter than if you are checking on how easy it is for them to understand several pages of text.

- **The methods you are using to collect feedback**. Some feedback methods require more detailed written instruction than others. For example, if interviewers will be collecting feedback by encouraging readers to think aloud and observing their behavior, the instructions in the written guide might be quite brief. But if they need to show readers different versions of the material and ask a long series of questions, the written guide would be longer.

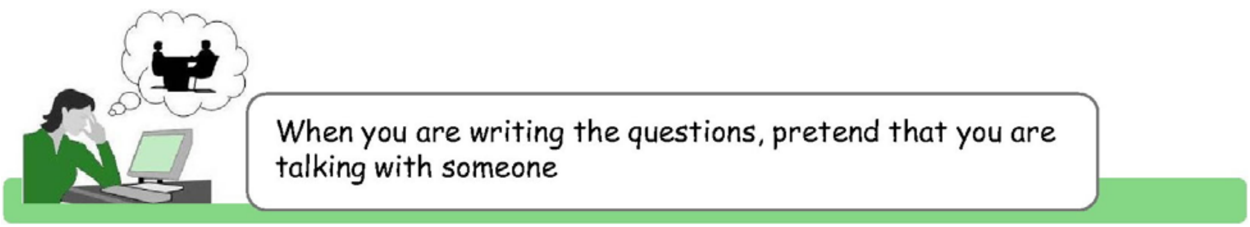
- **Experience and preferences of those who will be conducting the interview.** A guide that provides more detailed instructions can help less-experienced interviewers feel more confident.

Making the scripted parts sound natural

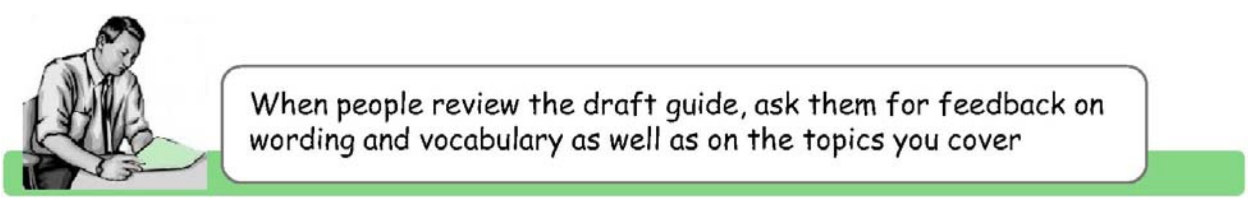
When you prepare your written guide for conducting the interview, use everyday language that sounds clear and natural. The scripted questions should sound conversational, and so should everything else in the guide that will be spoken aloud by the interviewer, including explanations and background information. It will help to review Chapter 8, *Phrasing your questions to get the most useful feedback from readers.*

When the scripted parts of your written guide sound conversational, it is easier for interviewers to conduct the session and it sets a tone that helps put participants at ease. Interviewers may not use the exact wording in every circumstance, but when they do, it will sound natural. And, when the language is clear and simple, it's easier for them to adapt the wording when they need to. Figure 6-10-b below gives tips for making the scripted parts of your guide sound conversational.

Figure 6-10-b. Tips for making the scripted parts of your written guide sound clear and natural.



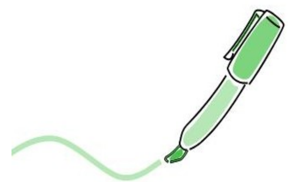
The words we use when we're speaking tend to be simpler and more informal than the ones we use when we are writing. Pretending that you are talking with someone will help you create scripted questions and other text that sounds conversational.



Often, reviewers tend to pay more attention to the *content* of the questions than to the *wordings.* So when you circulate a draft version of the written guide, ask reviewers specifically for their suggestions on how to make the vocabulary and phrasing sound more natural.

Record your draft questions and then play them back and listen for how natural they sound

Since the questions and other parts of the scripting will be spoken aloud, **_hearing_ how they sound is a better test than _reading_ them:**



- Make a recording of the scripted questions and other text you have prepared for the written guide. As you make the recording, use a highlighter to mark any question or other part of the guide that makes you pause or feel awkward when you say it. Here are examples of the types of things you might mark:
    - Places where you run out of breath trying to make it through a whole sentence.
    - Places where you stumble over a phrase.
    - Places where the vocabulary or wordings could be simplified.
- When you are finished recording, play it back. Listen critically, and mark places that you think need fixing or fine tuning.
- If a team is working together on the guide, listen to the recording together. Listen straight through without any discussion, so that each person can concentrate on listening and taking notes. Then discuss your reactions as a group.

Try using "role play" to practice doing interviews

Practicing together will help you fine tune the language as well as the content of the written guide. It will also help you prepare for conducting the actual feedback sessions.

Source: Created for this Toolkit.

Building flexibility into the guide

To get the most meaningful feedback, interviewers need to be free to follow the lead of each reader during the interview, making adaptations as needed to suit the immediate situation. Here are some ways to incorporate flexibility:

- **Build flexibility into the questions and the written instructions**. When it is really crucial to use the exact wording for a question, the guide can say so in the instructions. But often, you will want interviewers to adapt the topics or line of questioning in response to what participants say. For some topics, you may want to give some alternate wordings in the written guide.

- R**ely on interviewers to adapt the guide as needed.** Just because the written guide gives exact wordings for questions does not mean that interviewers must or will ask every single question exactly as it is written. Although the wordings are to be followed in general, interviewers need the leeway to make some adaptations, depending on the unique interaction of a given interview. It is impossible to anticipate everything that can arise during an interview. While the interview guide needs to provide structure and direction, interviewers must be trusted and empowered to adapt it when necessary.

- **Interviewer training and guidelines can address which types of departures that interviewers may need to make from scripted questions.** For example, suppose that the topic that is covered in a given question has already come up in the interview. It would be annoying to ask it again, just because it appears in the written guide. So interviewers need to feel free to skip over questions that have already been covered.

Revising the guide

Without good questions, you won't get good data from your feedback sessions. Since it takes some time and fine tuning to produce a good interview guide, you should plan to do several rounds of revision on the draft of your guide. Pretest it if you can. For example, you can use "role play" to practice doing interviews (as suggested above in Figure 6-10-b). If you are just beginning to do feedback sessions, this investment in fine tuning your scripted questions will help you collect the most meaningful and useful feedback from readers. Once you have some basic questions that work well, you will be able to adapt them quickly for use in future feedback projects.

It also makes sense to treat your written interview guide as a dynamic document, subject to further revision after the sessions are underway. If the "final" version of the written guide doesn't work well in the field, you can make some changes.

The *Session Summary Form* we describe in the next chapter will help you identify parts of the guide that may need changing. This form is a tool to make it easier for you to review and use the results from your feedback sessions. Interviewers and note takers fill out this form immediately after each session, noting highlights from the session and any problems they encountered. The last section of the sample Session Summary Form has a place for you to fill in notes about any problems you encountered with interview questions or procedures, and suggest any changes you think should be made to the guide.

Tips for formatting your written guide

Making the guide easy to use

Here are some suggestions about ways to make your written guide easy to use:

- **Make the print large enough for easy reference**. If you make the typeface (font) a little larger than you would typically use for a document, it will be easier for the interviewer to refer to the guide in an unobtrusive way. When the print is quick and easy to read at a glance, the interviewer can stay focused on the person he or she is interviewing, using the guide briefly for reference from time to time.

- **Include section headings and prominent page numbers.** Headings and page numbers are important guideposts that help orient the interviewer.

- **Use formatting to distinguish clearly between the scripted parts the interviewer will be saying aloud, and the instructions that tell the interviewer what to do.** Usually, people use different fonts (typefaces) and other features of formatting such as indentation, parentheses, or brackets, to make a clear distinction between what the interviewer is supposed to say and the instructions to the interviewer.

- **Follow interviewer's preferences about how you fasten the pages**. Some interviewers like to have the pages stapled together, and others prefer to use paper clips.

- **Include reminders and other notes to help the interviewer do a good job**. For example, if you are recording the session, add a reminder to tell the interviewer when to turn on the recording device, because it's easy to forget. It's helpful to add notes that say roughly how long the interviewer should spend on each topic.

Adapting the guide to allow for taking notes

When your written guide is complete, there are a couple of ways you can adapt the guide to make it suitable for taking notes during the session:

- You can insert some blank space after each question, to be used for taking notes.
- You can enlarge one of the margins to create some space for taking notes. Make either the left or the right margin a few inches wider, depending on which will be easier for the person who is taking notes.

Using other special formats to simplify note taking

While you will write most of your notes on a copy of the written guide, there are some other formats you can prepare in advance to simplify certain types of note taking. For example, you can create a "Mini-Pages Note Sheet" that has small-size replicas of each page. This format works well for notes about behavior observation and about visual elements. There's an example of this format in a later chapter (Chapter 17, *Conducting feedback interviews and taking notes).* It explains how the mini-pages note sheet can streamline your note taking, especially if you are using *"think aloud"* or you have a lot of photographs or other images in the material.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

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DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material
Clear and Effective

SECTION 3: Methods for testing written material
with readers

PART 6

How to collect and use feedback from readers

Chapter 11

Creating and using a "Session Summary Form"

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 11

Creating and using a “Session Summary Form”

List of figures in this chapter:

This document is the eleventh of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

What is a Session Summary Form?

A "Session Summary Form" is this Toolkit's name for a simple form that interviewers and note takers can use to review and summarize the results from each feedback session they conduct. This form doesn't replace the need to take notes during the session (see Chapter 17, *Conducting feedback sessions and taking notes*). Rather, it is a supplement to the note taking you do during the session.

Here is how it works to use a Session Summary Form:

- **You prepare the form ahead of time**. We show a sample Session Summary Form below in Figure 6-11-a. You can adapt this form or create one of your own.

- **Immediately after each interview, you fill it out**. At the end of the interview, after the participant leaves the room, the interviewer takes a few minutes to look over the notes he or she has taken during the session, filling in any places that are incomplete. Then the interviewer fills out the Session Summary Form.
  - As you will see in the sample form that follows, the Session Summary Form gives you places to fill in descriptive information (time, place, participant characteristics, etc.), highlights from the session, and your personal assessment of the interview.
  - If the interviews are being done by a two-person team of interviewer and note taker, then they discuss the interview and work together on filling out the form.

Figure 6-11-a. A sample Session Summary Form.

To help you imagine how a Session Summary Form can be customized to fit the needs of a project, the sample form we show below has been set up for use in a fictional Arthritis Booklet Project. It's a three-page form. Most parts of this sample form would apply to any project, but a few are specific to this Arthritis Booklet Project.

Keep in mind that the normal size of the pages in this sample form is 8 ½ by 11 inches. To fit on the pages of this Toolkit, we show the sample Session Summary Form slightly reduced in size.

Arthritis Booklet Project

Session Summary Form

interview # _____

When & where

Started: _____ Ended: _____ Total mins. = ________

Location:

☐ Harborview Senior Center

☐ Pelican Marsh Senior Center

Interviewer ___________ Notetaker ___________

Observers ______________________________

How were conditions for this interview?
(privacy, background noise, distractions, etc.)

☐ Good

☐ Okay *comments*: ____________________

☐ Not good ____________________

Participant

☐ Male	☐ < 60	☐ < 9th grade
☐ Female	☐ 60-64	☐ Some H.S.
	☐ 65-69	☐ H.S grad / GED
	☐ 70-74	☐ Some college
	☐ 75 +	☐ College degree+

How physically active is the participant?

☐ Very little or no stretching and/or exercise

☐ Some stretching and/or exercise

☐ Regular stretching and/or exercise

comments: ____________________

____

General impressions of this interview

General comments from interviewer and notetaker: ______________________________

____

How attentive was the participant during the interview?

☐ Very attentive

☐ Somewhat attentive

☐ Not very attentive

How interested did the person seem to be in the booklet?

☐ Very interested

☐ Somewhat interested

☐ Not very interested

How well did the person seem to understand the booklet?

☐ Very well *(most or all of it)*

☐ Fairly well *(most or all)*

☐ Not very well *(had trouble with some parts of it)*

☐ Not well at all *(had a lot of trouble understanding it)*

Participant behavior (*mark all that apply*):

☐ Asked questions

☐ Seemed comfortable about giving opinions

☐ Seemed to hold back in giving opinions

☐ Wanted direction or confirmation from interviewer

☐ Tended to read carefully

☐ Did not seem to be reading very carefully

☐ Tended to skip around

☐ Had trouble concentrating

☐ Got tired quickly

Other behavior:

____

____

____

____

interview # _____ page 2

Positive feedback:

☐ Booklet in general *(including general appeal, personal relevance):* ______________________________

____

☐ Specific terms, concepts, or topics: ______________________________

____

☐ Visual elements *(graphic design, colors, images, etc.):* ______________________________

____

☐ Content / key messages: ______________________________

____

☐ Other: ______________________________

Problems – confusion – misunderstandings – dislikes – criticisms:

☐ Booklet in general *(including general appeal, personal relevance):* ______________________________

____

☐ Specific terms, concepts, or topics: ______________________________

____

☐ Visual elements *(graphic design, colors, images, etc.):* ______________________________

____

☐ Content / key messages: ______________________________

____

☐ Other: ______________________________

interview # _____ page 3

Brief summary of feedback on key issues

First impressions of the booklet:

___

___

___

In participant's own words: what the booklet is telling them / main points:

___

___

___

In participant's own words: what is “appropriate exercise” for people with arthritis:

___

___

___

Does the participant plan to do anything different as a result of reading this booklet?

- ☐ Yes
- ☐ Maybe or not sure
- ☐ No or probably not

Comments:

___

___

Photo preference for the cover:

- ☐ Photo A
- ☐ Photo B
- ☐ Likes A & B the same
- ☐ Doesn't like either one
- ☐ Other: ___

Results of photo sort for inside pages *(fill in numbers to show rank order, cross out the ones they rejected):*

- ____ Photo C
- ____ Photo D
- ____ Photo E
- ____ Photo F
- ____ Photo G
- ____ Photo H
- ____ Photo I

Comments on interview guide and procedures

Overall, how well did the interview questions and procedures work for you in this session?

- ☐ Very well
- ☐ Fairly well
- ☐ Not very well

Did you have enough time to cover all main parts of the interview guide in this session?

- ☐ Yes
- ☐ No – but only because this interview was shorter than usual
- ☐ No – our guide is too long for the usual amount of time we have available

Questions we should consider changing or dropping:

___

___

Other comments on interview questions, topics, or procedures:

___

___

___

___

Source: This sample form (and the name for it – "Session Summary Form") has been created for use in this Toolkit. It is an adaptation of forms the Toolkit writer has used in various reader feedback projects. The Arthritis Project is a fictional project created to serve as a recurring example in this Toolkit.

Why use a Session Summary Form?

There are three big benefits to using a Session Summary Form:

1 Filling out the form gives interviewers and note takers a quick and easy way to do a thorough job of taking notes from the session

It makes sense to take a few minutes after each session to review and summarize notes, but – where to start? This form can help. It provides a systematic way to guide you through the most important aspects of the interview, and makes it quick and easy to record your impressions while they are still fresh in your mind. It also includes places to fill in the key information you will need later on for reference, such as the participant's characteristics, where the interview was done, how long it lasted, etc.

Interviewing is hard work, but this form can make it easier to do a good job of recording the results from your sessions. If you are new to conducting feedback sessions, using this form will help structure your note taking. If you are experienced, it can help streamline your work.

2 Filling out the form gives interviewers and note takers a chance to reflect on what they learned and share their first-hand impressions

This act of filling out the Session Summary Form is the beginning of data analysis. *During* the session, note taking consists of describing as accurately as possible what the person says and does. But *after* the session is over, filling out a Session Summary Form requires the interviewer and note taker to go beyond just describing what the person said or did. The Summary Form asks for themes and highlights from the interview. To identify these, you need to reflect back on the interview and decide what stood out as really important and what it meant.

It's important to make it easy for interviewers and note takers to share their own interpretations of the findings from the interview and to add any explanatory notes that will help people put the findings into context. They are the ones who were there in person with the participant. By filling out the Session Summary Form, they can share their first-hand impressions and interpretations with others on the team who were not there in person but will be using the results.

3 Having a completed Summary Form for each session provides a giant head start for those who will be analyzing and using the results

When you are ready to start interpreting and applying what you have learned in your feedback sessions, having a completed Session Summary Form for each interview will make the task much quicker and easier. You can use the feedback forms together with the notes that were taken during the session. If you did audio or video recording of the sessions, you can use those recordings as well (see Chapter 12, *Should you do audio or video recording of your sessions?*)

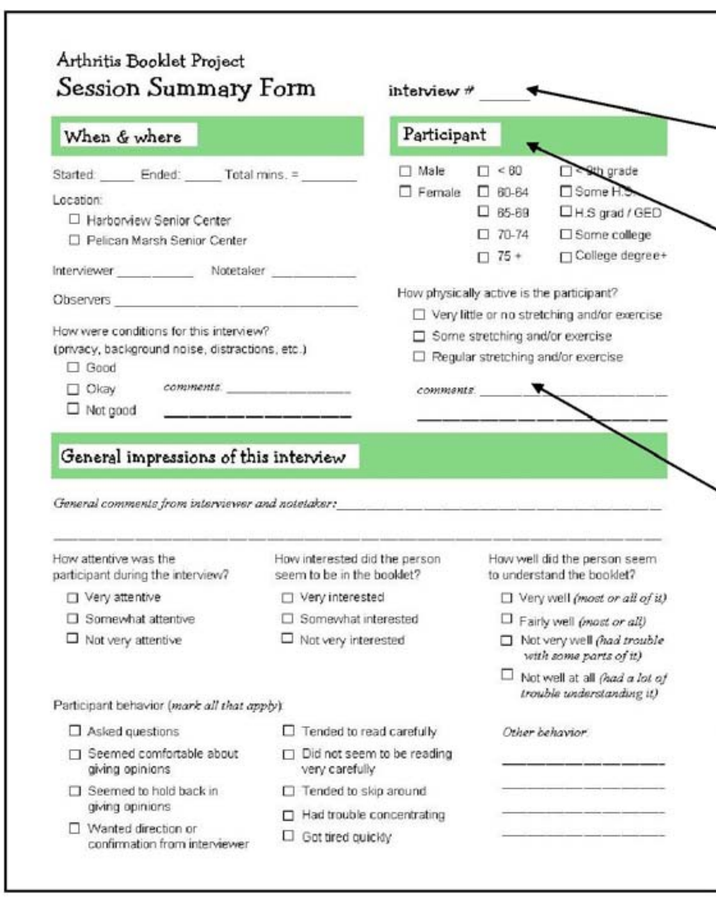
Having a full set of summary forms, in addition to whatever session notes and recordings you may have, offers several advantages:

- The summary sheets help refresh your memory about the circumstances and highlights of each interview.
- Depending on how you set up your form, and what you are doing during the session, the summary form can provide a short cut for tallying some of your results across all sessions.
- If you want to share the results with others, especially with people who were not involved in planning or conducting the feedback sessions, the summary forms are ideal. They are more convenient, more complete, and more self-explanatory than notes taken during the session. The summary forms give people a quick overview with enough detail to be vivid, and they are organized for easy skimming. Since interviewers and note takers fill them out after the session is over, the handwriting tends to be more legible than notes taken in haste during the session.
- If you want to, you can type part or all of the entries on these forms into electronic files for easier sharing and analysis. You could also create an electronic version of the form and then interviewers and note takers could fill it out by using a laptop computer.

Page-by-page commentary on the sample form

To conclude this chapter, Figure 6-11-b below provides a page-by-page commentary on the sample Session Summary Form we showed earlier in this chapter. This commentary points out certain features of the form, explaining why they are there and how they can help you.

Figure 6-11-b. Page-by-page commentary on the sample Session Summary Form.



Arthritis Booklet Project
Session Summary Form   interview # ____

When & where

Started: ____ Ended: ____ Total mins. = ______

Location:
- ☐ Harborview Senior Center
- ☐ Pelican Marsh Senior Center

Interviewer ________ Notetaker ________

Observers ________________

How were conditions for this interview? (privacy, background noise, distractions, etc.)
- ☐ Good
- ☐ Okay   *comments:* ____________
- ☐ Not good

Participant

- ☐ Male ☐ Female
- ☐ < 60 ☐ 60-64 ☐ 65-69 ☐ 70-74 ☐ 75 +
- ☐ < 9th grade ☐ Some H.S ☐ H.S grad / GED ☐ Some college ☐ College degree+

How physically active is the participant?
- ☐ Very little or no stretching and/or exercise
- ☐ Some stretching and/or exercise
- ☐ Regular stretching and/or exercise

comments: ____________

General impressions of this interview

General comments from interviewer and notetaker: ____________

How attentive was the participant during the interview?
- ☐ Very attentive
- ☐ Somewhat attentive
- ☐ Not very attentive

How interested did the person seem to be in the booklet?
- ☐ Very interested
- ☐ Somewhat interested
- ☐ Not very interested

How well did the person seem to understand the booklet?
- ☐ Very well *(most or all of it)*
- ☐ Fairly well *(most or all)*
- ☐ Not very well *(had trouble with some parts of it)*
- ☐ Not well at all *(had a lot of trouble understanding it)*

Participant behavior *(mark all that apply)*
- ☐ Asked questions
- ☐ Seemed comfortable about giving opinions
- ☐ Seemed to hold back in giving opinions
- ☐ Wanted direction or confirmation from interviewer
- ☐ Tended to read carefully
- ☐ Did not seem to be reading very carefully
- ☐ Tended to skip around
- ☐ Had trouble concentrating
- ☐ Got tired quickly

Other behavior: ____________

Answer formats make it quick and easy to fill out this page immediately after the interview. Most questions on this page have a check box format, and few have blanks to fill in.

To protect privacy, this form uses only an interview number (no names). A place for the interview number is repeated on each page.

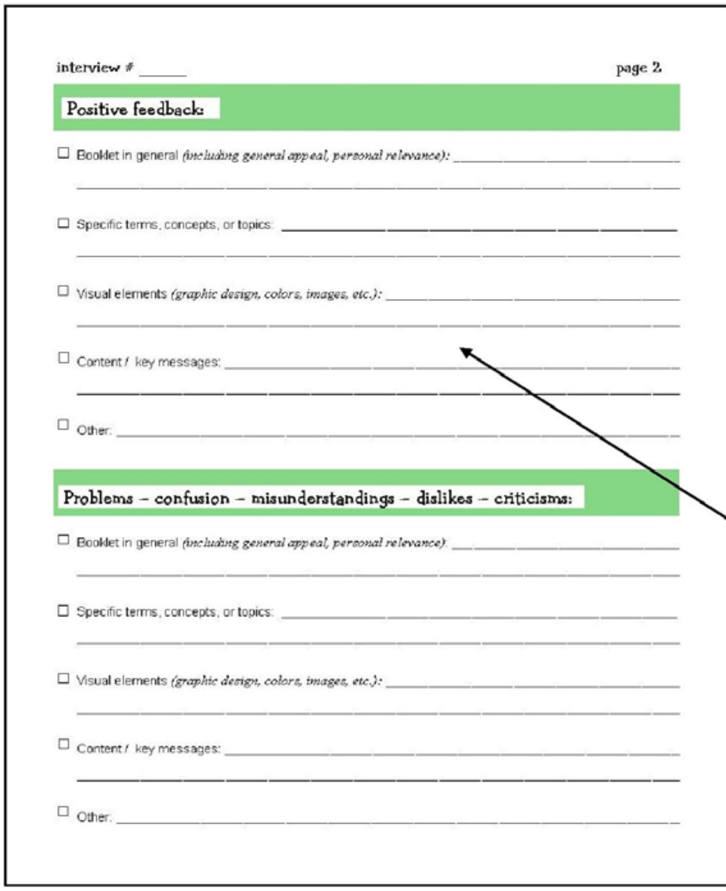
Prominent main headings throughout the form make it easier to fill out and easier to use after it has been filled out.

For easy reference, this top part is set up to describe the participant and the interview (when, where, how long it lasted).

You can adapt your form to include **a handy place to record answers to questions you ask before you show the material** to the participant. Here's an example based on the Arthritis Booklet Project.

A context for interpreting the results. This bottom part asks for impressions of the participant. Knowing how attentive and interested participants appeared and how well they seemed to understand the material can help you interpreting their reactions.

Figure 6-11-b, continued.



interview # ______ page 2

Positive feedback:

☐ Booklet in general *(including general appeal, personal relevance)*: ______

☐ Specific terms, concepts, or topics: ______

☐ Visual elements *(graphic design, colors, images, etc.)*: ______

☐ Content / key messages: ______

☐ Other: ______

Problems – confusion – misunderstandings – dislikes – criticisms:

☐ Booklet in general *(including general appeal, personal relevance)*: ______

☐ Specific terms, concepts, or topics: ______

☐ Visual elements *(graphic design, colors, images, etc.)*: ______

☐ Content / key messages: ______

☐ Other: ______

Using this page to summarize highlights from each session gives you a **big head start on organizing and using your results.**

Keeping the highlights on just one page makes this summary easier to use later on. If the interviewer and note taker happen to need more space, they can continue on the back side.

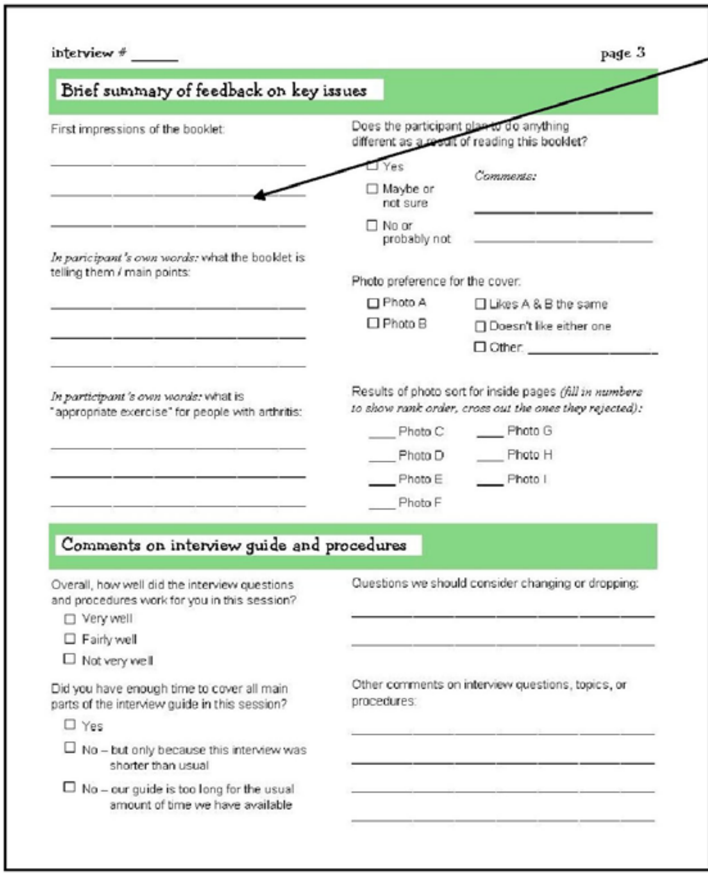
Keeping two types of feedback clearly separate lets you see at a glance what’s going on and helps you make comparisons.

The four main areas of feedback at the top of this form are repeated on the bottom. It’s only the headings that are different:

All of the **positive feedback** is summarized at the top.

All **feedback indicating possible problems** is summarized at the bottom.

Figure 6-11-b, continued.



interview # _____ page 3

Brief summary of feedback on key issues

First impressions of the booklet:

In paricipant's own words: what the booklet is telling them / main points:

In participant's own words: what is "appropriate exercise" for people with arthritis:

Does the participant plan to do anything different as a result of reading this booklet?

☐ Yes
☐ Maybe or not sure
☐ No or probably not

Comments:

Photo preference for the cover:

☐ Photo A
☐ Photo B
☐ Likes A & B the same
☐ Doesn't like either one
☐ Other ________

Results of photo sort for inside pages *(fill in numbers to show rank order, cross out the ones they rejected):*

___ Photo C
___ Photo D
___ Photo E
___ Photo F
___ Photo G
___ Photo H
___ Photo I

Comments on interview guide and procedures

Overall, how well did the interview questions and procedures work for you in this session?

☐ Very well
☐ Fairly well
☐ Not very well

Did you have enough time to cover all main parts of the interview guide in this session?

☐ Yes
☐ No – but only because this interview was shorter than usual
☐ No – our guide is too long for the usual amount of time we have available

Questions we should consider changing or dropping:

Other comments on interview questions, topics, or procedures:

A place to summarize answers to key questions. This top area has been set up in advance as a place to write down how the participant responded to three key questions included in the interview. When you start to analyze the results from your feedback sessions, it's very convenient to have these responses so readily available.

Check boxes make it easy to record and tally the results. This area has check boxes to record the participant's answers to the question on impact of reading the booklet, as well as preferences for the photos. Using check boxes here on the form makes it easy for you to tally the responses across all of your feedback sessions.

A place to evaluate the session. This last section provides a place for the interviewer and note taker to evaluate how well the session went and whether there was time to cover everything. It has space where the interviewer and note taker can tell about any changes they think are needed in the interview guide or in the procedures.

Source: Commentary written for use in this Toolkit.

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DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

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CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 12

Should you do audio or video recording of your sessions?

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 12

Should you do audio or video recording of your sessions?

List of figures in this chapter:

This document is the twelfth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

When you are planning your feedback sessions, you will need to decide what approach to use for summarizing participants' reactions to the written material. For many projects, you can do just fine by relying solely on written notes, especially if you take a few minutes to review and expand on them immediately after each session. Using a Session Summary Form to write down highlights of the interview is also very helpful (see previous chapter for details).

While you should count on taking notes to summarize results from your feedback sessions, you may want to consider supplementing your notes by recording the sessions (with participants' permission, of course). Recordings give you a more complete record of feedback than notes alone can provide, and they can be good tools for sharing the results with others and improving your interviewing skills.

If you are considering making recordings, there are important factors to consider, including how participants might feel about being recorded, as well as the added cost, especially if you produce written transcripts from the recordings you make. To help you decide whether audio or video recording makes sense for your project, this chapter discusses the potential benefits and costs, as well as other issues to consider.

Should you do audio recording of your sessions?

Figure 6-12-a below outlines the potential benefits of audio recording and factors to consider in making your decision.

Figure 6-12-a. Should you do audio recording of your sessions?

Here are several possible benefits of making audio recordings:

- **You can use the recording to improve your written notes and refresh your memory.** Having a recording makes it easy to review the session and make additions or corrections to your notes.

- **You can use the recordings to share the feedback with other people.** When you are analyzing and reporting your results, you can pull out quotations from the recordings and use them as examples, either in written form or as audio clips. Quotes from your feedback sessions can be a powerful tool for showing and convincing people about changes that need to be made in the written material. If you want to, you can create a full transcript from the recordings.

- **You can use recordings as tools for training and skill development**. Listening to recordings of feedback sessions can help people learn how to conduct feedback interviews and give them a way to practice taking notes. If you're an experienced interviewer, listening to recordings can help you hone your skills.

Here are things to consider:

- **Recording might make some participants feel uncomfortable or inhibited.** If you plan to record a session, you need to get people's permission in advance. You will probably find that most of your participants are willing to be audio taped, especially when you explain how the tape will be used. If not, you can skip the recording and just rely on written notes.

- **Audio recordings cannot capture the visual aspects of written materials.** Whether this is a serious limitation or not depends on how you plan to use the audio recordings:

    - **If you are using audio recordings for enhancing your notes or analyzing your feedback, it is often quite limiting to have only the audio part of the interview.** If you don't know what a reader is looking at, it is frustrating to listen to an audio tape of an interview and hear the reader say, *that part is really confusing*, or *I wonder why they did this?* Interviewers can help compensate for this problem by phrasing their own remarks with the audio recording in mind. For example, instead of saying, *What's confusing about* *it?,* they can say, *What's confusing about this top part of page 3?* It takes practice and finesse for interviewers to learn to embed this type of extra information routinely. Even when they do, there are inherent limits on how much you can compensate for the absence of the visual dimension in an audio recording when your purpose is getting feedback to something that is visual.

- **For training purposes and skill improvement, the absence of the visual dimension is less important.** When you are conducting a feedback session, your attention is focused on the immediate task rather than on how well you are doing. Later, when you are listening to a recording of the session, you can analyze how you conducted the interview. With audio only, you may not know what someone is looking at when they make a remark, but you will be able to hear their tone of voice and your own tone of voice. As you listen to the audio, you can assess the decisions you made in guiding the discussion, such as when you chose to ask a follow-up question and when you didn't, and get ideas about how to do better next time.

- **If equipment is readily available, it generally takes little additional time or money to do audio recording of your feedback sessions.** You can make audio recordings with a simple cassette tape recorder or a digital recoding device. If recording the sessions is important for your project and you don't have recording equipment, you can probably buy something suitable at relatively low cost. If you are doing individual interviews, a simple recorder with a decent microphone is all you need. If you are doing focus groups, the quality and placement of your recording equipment becomes more important, especially if the group is large or you hold the group in a large room with poor noise control. Professional facilities are usually already wired for high-quality audio recording.

- **It takes time to put the recordings to full use, and this may add to the expense.** While there are many benefits to having audio recordings, keep in mind that it takes some time to use them. If you are using audio recordings to enhance your written notes, you can use them selectively by listening to the recordings only when you need to, such as when you had trouble keeping up with taking notes. If you decide that a partial or full written transcript of the recordings is needed, this will add to the expense (see the section below about written transcription).

Source: Prepared for use in this Toolkit, based on personal experiences of the writer and colleagues.

Should you do video recording of your sessions?

Figure 6-12-b below outlines the potential benefits of video recording and factors to consider in making your decision.

Figure 6-12-b. Should you do video recording of your sessions?

In sessions with readers, video recording is not as widely used as audio recording. Video recording tends to be more expensive and more complicated to arrange.

Video recording is much more likely to be included in large projects done by researchers than in smaller projects done by non-researchers. Video is also more commonly used for focus groups than for individual interviews.

The potential benefits of video recording a feedback session include all of the potential benefits of audio recording that we discussed in Figure 6-12-a. These are:

- **To improve your written notes and refresh your memory**.
- **To help share the feedback with other people.** This might include using the recording to produce a written transcript.
- **As tools for training and skill improvement.**

Since video includes the visual aspects as well as the audio, it offers these additional benefits:

- **Having video can help you identify who is speaking and allow you to study non-verbal communication**. Video is especially useful for analyzing group sessions, because you can use it to check on who is saying what. Watching a video may give you insights into group dynamics and their impact on the discussion that you wouldn't be able to get from just an audio recording or written transcript.

- **Visual cues can enhance your understanding of what people say.** Reviewing a video can sometimes help you see what they are reacting to when they comment on the written material. If you have video recordings, you can extract video clips to share with others. These can be even more compelling than audio clips, because people can watch as well as listen to the feedback readers give.

Here are some things to consider:

- **Compared to audio recording, video recording is more intrusive and more likely to make people feel uncomfortable or inhibited.** The added dimension of video tends to make privacy and dignity of greater concern to participants. It is one thing to have your voice recorded, and quite another to have what you say and do captured on video. If the video camera is right nearby, it can be distracting and potentially disturbing to participants than a tape recorder. If the camera is concealed or mounted in an unobtrusive place, as it often is in a commercial facility, it will be less distracting. (Of course, whether the camera is concealed or not, you must tell the participant about it and get permission in advance to do the video recording.)

- **Although video recording includes the visual component of the sessions, it can *still* be quite hard to tell which part of the written material readers are looking at when they make a remark.** By definition, video is better than audio alone at helping you watch how readers react to written materials. However, adding video does not necessarily end the frustration of being unable to connect what readers say with what they are looking at. While video usually shows the *readers* fairly well, it is often not as good as you might assume at showing the materials themselves or the readers interacting with the materials. **This is a *significant limitation,* and there are several reasons for it:**

    - **You cannot control what the reader does with the material.** For example, if a reader lifts up a booklet from the table and holds it in front of her, or below the edge of the table, you will not be able to film what she is looking at (unless you have a very intrusive camera operator – which wouldn't be a good idea in any case).

    - **It may not be feasible to use a camera angle that can track the expressions and eye movements of a reader who is looking down at written material.**

    - **Videos are seldom shot close enough and sharp enough to reveal the details of the written materials as well as the reader interacting with the material.** Many videos are shot from a fixed camera position that captures the full scene. If you can see all of the people around the table in a focus group, or the interviewer and the reader and the materials, you are not going to be able to see the details of the materials. If the video zooms in, you may see the written material more clearly, but lose your view of the reader. Some commercial facilities provide a superior videotaping capability that is flexible enough to address these problems, but these facilities tend to be quite expensive, and they may provide much more detailed feedback than you want or need. For example, there are usability testing laboratories designed to capture keystrokes and eye movements of readers who are using websites.

  - Videos shot through a one-way mirror at a commercial facility are often rather fuzzy.

- **Extracting video clips is generally time-consuming and costly.** While video clips have high impact as examples, it can take an enormous amount of time to identify appropriate clips, mark them for extraction, and edit them for final use. This level of effort probably makes sense only for a large-scale research project.

Source: Prepared for use in this Toolkit, based on personal experiences of the writer and colleagues.

If you record your sessions, should you transcribe them?

If you record your feedback sessions, you can use the recordings to make a transcript of the session. This transcript provides a complete written record of a session that is easy to share with others and easy to use in analyzing your results. It can be useful to have a written transcription of what is said during sessions with readers, but it takes time and money to produce one:

- To help estimate costs, figure that a transcriber will spend roughly three to four times as long as the session to create the written transcript. For example, transcribing an hour-long session will take about three to four hours of transcription labor. If you have done a series of individual sessions, this can add up quickly.

- How long it takes to produce a good written transcript will vary depending on the quality of the recording, the skills of the transcriber, and the quality of the equipment used for transcription. If the voices are hard to hear, or there's a lot of background noise, transcription will take longer, because the transcriber will need to play parts of the recording over and over again.

- Transcribers who are skilled and experienced will tend to produce better transcriptions. For example, they will insert notes to let you know when the speaker was laughing or when the tone of voice was ironic or sarcastic. Without these notes from the transcriber, you would misinterpret the meaning of what was said, because you can't hear the tone of voice when you read a written transcript.

Before you make this investment in transcription, think about how you would actually use the transcript, and whether it's really necessary to have transcripts for your project. Keep in mind that for many purposes, you can put an audio or video recording to good use without transcribing it.

Weighing the tradeoffs and making your decision

For your project, does it make sense to rely solely on written notes, or should you include some type of recording as well? Audio or video recordings can't substitute for careful, thorough note taking, but they can be useful for many purposes. You will need to weigh the trade-offs of whether to record or not based on the needs of your project, the nature of your written materials and participants, and what you can afford in terms of time and resources. If you decide to make the investment in audio or video recording, be sure that you have a specific plan for how you will put your recordings to use.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 13

Choosing a location for your feedback sessions

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 13

Choosing a location for your feedback sessions

This document is the thirteenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Issues to consider when you are choosing a site

This chapter will help you choose a location that is suitable for conducting your feedback sessions with readers. It covers the issues listed on the right.

Questions to ask when you are choosing a place to conduct your feedback sessions:

- Will the site be convenient and comfortable for the participants?
- Does the site provide the type of space you need for doing the feedback sessions?
- Is the site affordable?
- If you will be recruiting participants on site for immediate participation, is the site suitable for this purpose?

Is the site comfortable and convenient for the participants?

It's very helpful to visit prospective sites in person to check on suitability. When you visit sites, think about their appropriateness and convenience from the *participants'* point of view.

Keep in mind that some settings that are familiar, comfortable, and convenient for you may be intimidating, inconvenient, or otherwise unsuitable for the participants you are trying to recruit.

Look for a site that would be suitable for the participants:

- A setting that's familiar and comfortable for them
- Located in a place that's convenient for them

Will the site put participants at ease?

When you are choosing a setting for your feedback sessions, look for a "neutral" setting that will be familiar and non-threatening to participants. Choosing a site that is familiar and comfortable can make people more willing to participate and help encourage them to share their candid opinions. There are many possible settings to consider:

- **Community centers and other local organizations.** These local settings are often good choices. Private meeting rooms suitable for use in feedback sessions are often available at little or no cost in neighborhood centers, public libraries, community education buildings, and recreation centers.

- **The workplace, schools, housing complexes, and other everyday settings.** Places where people typically spend their time can be convenient and comfortable settings for feedback sessions. For example, you might do sessions with workers in a conference room at their office building, or the break room at their factory, or the staff lounge at their school. If your project is about written material related to Medicare, there are many good settings that are comfortable for older adults, including senior centers, meeting rooms in retirement communities, and settings where older adults do volunteer work.

- **Hospitals, clinics, and dental offices** can be appropriate sites for some projects.

- **State or county government buildings** are another possibility to consider.

- **Hotel meeting rooms and professional focus group facilities** are sometimes used for feedback sessions when budgets permit. They can work well if they provide a familiar and comfortable setting for your participants. For example, a professional research facility that is located in a familiar neighborhood shopping mall and has simple rooms may put people at ease, but one in an upscale office park may be too intimidating.

Is the location convenient for participants?

If you are going to do on-site recruitment, picking a site that is convenient is not an issue, since the potential participants are already at the site (see Chapter 15, *Tips for recruiting people on site for immediate participation in a feedback interview*).

But if you are recruiting in advance to set up appointments, where you hold the feedback sessions can make a big difference in people's willingness to participate. Picking a location that people already know can make recruitment easier. When people are already familiar with a location, they are likely to feel more confident about traveling there without difficulty, and may feel more comfortable in the setting once they get there.

Here are some tips on choosing a suitable location:

Take into account where your potential participants live and work

When the people you are trying to recruit are concentrated in a small geographic area, it is much easier to pick a location they will find convenient. For example, if you are recruiting people in a small town setting, any location in town may be relatively convenient for most people. But if your potential participants reside throughout a large urban area, the location you choose is likely to be convenient for some people and inconvenient for others.

Whether you should think of convenience in terms of travel time and effort from home or from work depends on who you are recruiting and when you hold the sessions. For example, if you are picking a site for focus groups with customer service representatives who work downtown, you will want to choose a downtown location if you are holding the groups over the lunch hour on a weekday. But if you are holding the groups on Saturday afternoon, you might want to pick a location that is outside of downtown, and closer to where they live.

Take into account how your potential participants will travel to the site

To pick a convenient location, you need to know whether participants will be coming by car, bus, cab, specially equipped medical van, on foot, or other means. This will help you estimate the time and effort required for them to reach the sites you are considering.

If your participants will be driving to the site, check on the availability, convenience, and cost of parking. If you are recruiting older adults, such as people with Medicare, keep in mind that some of them may be reluctant or unwilling to drive into busy downtowns or other areas with heavy traffic.

Choosing a location that's convenient for participants

Instead of asking them to come to you, can you go to where they are?

On-site recruitment is one possibility. As we have already mentioned, one way to make participation convenient is to go directly to a place where the type of people you are seeking for the feedback sessions tend to congregate, and then recruit them on site for immediate participation (for more about this, see Chapter 15).

Another option is to conduct your sessions at a site that is very near people's homes or at a place they are already planning to be. For example, the author did some group sessions in the meeting room of a high-rise retirement residence in Minneapolis in the middle of the winter. All of the participants lived in this same building. Even if there had been a blizzard that day, it would still have been easy for them to come for the feedback session, because the meeting room was right there in their building. Another example is to schedule feedback sessions to take place immediately before and after lunchtime at the local senior center, on days when people normally show up for lunch.

The ultimate in convenience for participants is to interview people in their own homes (provided that they are willing to have an interviewer come to their home). This can be a good choice if your participants have mobility limitations.

Providing assistance and directions

You may want to offer to help participants with transportation to and from the site where you will do the interviews or focus groups. You can reimburse their travel expenses, or you can provide transportation for them, such as arranging and paying for cabs to transport them to and from the site. Providing transportation may be a necessity for some types of participants, such as people who are physically frail or who have mobility limitations that require special assistance for safe travel.

If people will be taking a bus or driving their own car to the site, be sure to send them travel directions in advance. These should include a map with the details about bus routes or how to get there by car and where to park. It's important to test the map in advance to be sure that the directions are clear, complete, and accurate.

Does the site provide the type of space you need?

When you have some sites in mind for your interviews or groups, visit them *in person* to see how well they will meet your needs. To decide whether a site is suitable, consider the size and flexibility of the space itself, the privacy it offers, and whether the setting might be noisy or have other distractions.

> Look for a site that would be suitable for conducting interviews or group sessions:
>
> - Has space you can use that is large enough and private enough
> - Has enough control over noise and other distractions

Using a commercial research facility

It is easy to conduct sessions at a commercial research facility because these facilities have been designed specifically for conducting interviews or focus groups. Typically, they include a reception and waiting area, discussion rooms and observation rooms, built-in capability for video and audio recording, good soundproofing, and convenient food or refreshment service. Facilities have staff available to handle recruitment and reminder calls, reception and check-in, refreshments, taping, and other services that leave you free to concentrate on just conducting the session itself. Since they offer tailored space and many services, commercial facilities are very convenient but also more expensive than other sites.

If you can afford a commercial facility, it can work very well for certain types of projects, such as projects that need to produce commercial quality video clips for presentations, or projects conducted at multiple locations around the country where it may be hard to develop the community contacts that you need to find alternative settings.

If you need to accommodate observers at your sessions, you may want to consider using a professional research facility that is designed for this purpose. In these facilities, the focus group room often has an adjoining observation room. Hidden behind a one-way mirror, this observation room allows a group of outsiders to observe the ongoing group discussion in a relatively unobtrusive way. Observers seated in the darkened room have a clear view into the focus group room, and microphones make it easy for them to hear what is said. The focus group participants see the reflective side of the one-way mirror. As long as the observation room is dark, participants cannot see the observers who are behind the mirror. Of course, the interviewer or focus group moderator would need to tell the participants that people are behind the mirror observing the session, but the concealment provided by the one-way mirror keeps the potential distraction of observers to a minimum. For some types of projects and participants, this one-way mirror arrangement can work well, but for others, it is problematic. You will need to weigh the tradeoffs of the value of having observers present against the potential inhibition or discomfort that it may cause some of your participants.

While professional facilities offer great convenience, they may be too expensive to consider or unavailable in the area where you plan to hold your sessions. They may offer amenities that you do not need for your project, or the location may be inconvenient. Some professional facilities may be too intimidating for certain types of respondents.

If you decide to use a commercial facility, it’s wise to visit in person to check on the ambience, choose which rooms you would want to use for your project, and have the opportunity to get acquainted with the staff and ask any questions you may have. It is much easier to size up a facility in person than over the phone.

Using community-based organizations and other facilities

If you are considering other types of sites, such as community-based organizations, government agencies, clinical settings, or residential facilities, you need to visit the potential sites in person. When you visit, talk with staff about your needs, and take a tour to determine what space would be available for you to use and whether it would meet your needs.

When you visit, be specific to help people at the site envision what will actually happen on the day of the sessions, especially if the idea of doing feedback sessions is something new for them. This will help prevent misunderstandings, and give staff a good basis for thinking creatively about how you can adapt and use their space to meet the needs of your project. Ask plenty of questions, and check out any assumptions you are making, keeping in mind that you will be a guest on their premises. For example:

- If you are recruiting by setting up appointments in advance, you will need a place to greet people and check them in as they arrive for the session. Will the community-based organization let you put up signs and a table and chairs in the waiting room?

- If you are doing same day on-site recruitment for immediate interviews, which areas will the organization let you use for approaching potential participants? Are there any ground rules that will apply? For example, if you are doing intercept interviews with people in a clinic or agency waiting room, you can agree to interrupt the interview when the person’s name is called to see the doctor or caseworker.

- Whether you recruit ahead of time or on site, you will need space that offers enough privacy for the interviews or focus groups. You may also need a table or other suitable surface to spread out the written materials for people to see. Which rooms is the organization willing to give up on the day of your sessions? Are they large enough and flexible enough to meet your needs? Is it okay to rearrange the furniture? Are there certain days of the week or times of the day that would work best for getting the space you need, or having better access to potential participants?

Is there enough privacy and noise control?

When you are conducting an interview or focus group, outside noise and other distractions can be a big problem, especially if you are taping the sessions, or you are working with older people or others who may have some hearing loss. Think about the provisions for privacy and noise control when you are evaluating possible sites for your sessions with readers. You may have some other needs as well, such as needing space that would work well for taping the sessions or accommodating observers.

Commercial facilities are generally very good on privacy and noise control, at least in their focus group rooms, and they may have built-in equipment for taping your sessions. If noise control is crucial for your project, it's worth checking on the soundproofing of the smaller interview rooms, which can vary a lot in commercial facilities. Remember, other projects may share the same space during the time you are there. If there's a market research study of TV commercials playing at loud volume in the small room next to yours, you will want something more than just a thin wall between you.

If you are doing your sessions at some other type of facility, provisions for privacy and noise control may vary considerably. An on-site visit will help you identify possible problems.

Sometimes, you may decide to sacrifice a certain amount of privacy or noise control in order to do your interviews or focus groups in a setting that makes people feel comfortable and at ease. For example, private homes can be noisy settings, but other considerations may override, such as cultural appropriateness and convenience to the participant.

Conducting an interview with children nearby can also be noisy. For example, the author and colleagues have done several projects at Medicaid eligibility offices that involved doing interviews on site with mothers accompanied by young children. We used a three-person team to recruit participants on site and conduct the interviews. One person was the interviewer; one took notes. We put a basket of toys in one corner of the interview room, and a third member of our team looked after the children while their mother was participating in the feedback session. With the children nearby, the mothers were more at ease and they could focus better on the interview. Having the children in the room was a bit noisy at times, but we felt that the mild distraction of this background noise gave us realistic circumstances for getting a busy mother's reactions to the written material we were showing to her.

Is it affordable?

In this chapter, we've mentioned a broad range of possible sites to consider for your sessions with readers. The cost for using a site is a vital consideration, and may constrain the choices you can consider.

Fortunately, many of the community-based organizations that tend to work best for putting people at ease also tend to be less expensive. Some of these sites are free or very low in cost. When community-based organizations make their space available to you, it builds good community relationships to send written thanks after the feedback sessions have been completed. You may also want to offer a donation or gift as a thank you for their time and trouble in accommodating your project. If they assist you with recruitment, you will need to discuss possible compensation.

Professional research facilities cost significantly more than other settings. As you consider possible sites, take into account that using a professional facility gives you space that is designed expressly for your purposes, and that the fee for using this space includes professional expertise and administrative services that can save you a lot of staff time and effort.

If you plan to do on-site recruitment, does the site work well for this purpose?

Your recruitment strategy can affect your choice of setting

What you look for in a setting for conducting your feedback sessions depends in part on the recruitment strategy you are using:

- If you are recruiting people in advance to come for a session later on at a scheduled time and place, any number of locations might be suitable, as long as they are comfortable and convenient for your participants and meet your needs for conducting the sessions.

- However, if you are going to recruit your participants at the site for immediate participation in a feedback session, there is more to consider. In addition to being suitable for participants and for conducting the sessions, the site must give you good access to the type of participants you want to recruit.

On-site recruitment means that you go directly to the location where you will conduct the sessions, and recruit people on the spot for immediate participation in a feedback session. If you are doing on-site recruitment, you need to find a site where the types of people you are seeking tend to congregate and linger, so that it's possible to recruit them to participate in an immediate interview.

Organizations you are working with on the project may be able to help you find an appropriate setting and get permission to use it for recruitment and interviewing on site. There are many possible settings that might work, depending on the type of participants you are seeking, the length and complexity of the interview, and the type of space you need. These include community-based organizations, government offices or agencies, schools, clinical settings, schools, health fairs, public libraries, lunch rooms or break rooms, day care centers, senior centers, retirement centers, and assisted living housing developments. For more on this topic, see the next two chapters (Chapter 14, *How will you select and recruit participants?* and Chapter 15, *Tips for recruiting people on site for immediate participation in a feedback interview*).

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 14

How will you select and recruit participants?

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 14

How will you select and recruit participants?

List of figures in this chapter:

This document is the fourteenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

This chapter covers how to set requirements for participation in your reader feedback sessions and find people who meet these requirements. In addition, this chapter will help you decide whether to schedule appointments for feedback sessions or recruit your participants on site for immediate participation in a feedback session. If you choose on-site recruitment, Chapter 15 gives practical tips on how to do it. If you decide to schedule appointments for your sessions, Chapter 16 offers advice.

The requirements you set and the process you use for recruitment may differ depending on whether you are recruiting intended readers or informants for your feedback sessions:

- **Intended readers**. These are people who represent the intended audience for the written material.

- **Informants**. These are people who are familiar enough with the intended audience and the topics covered in the written materials to give you insights and advice. Typically, they have close contacts with members of your intended audience, and are familiar with their language, culture, and traditions. Informants might include people in your own organization, as well as people from other organizations and community groups.

For one-time participation or multiple sessions?

This chapter focuses on ways of recruiting intended readers or informants to participate on a *one-time basis* in an interview or focus group. It's also possible to recruit people to be "on call" to participate periodically in sessions. **This alternative approach can save time and money in recruitment.** It works especially well for recruiting informants, but it can also be helpful when used with people who represent the intended audience of the written material.

Overview of tasks

To introduce the topics covered in this chapter, Figure 6-14-a outlines what is involved in selecting and recruiting participants for your feedback sessions.

Figure 6-14-a. Tasks involved in selecting and recruiting participants for feedback sessions.

Set requirements for participation

- **What characteristics do you seek in your participants?** How selective do you want to be? Do you need to set recruitment quotas to ensure a particular mix of participants?

Develop your recruitment strategy

- **Decide whether to set appointments or do same-day on-site recruitment**. Will you recruit people into sessions you schedule in advance, or will you recruit them on site to participate immediately?

- **Identify possible sources of participants**. What lists, settings, or other sources offer access to people who meet your requirements?

- **Decide what compensation and assistance you will offer, if any**. Will you pay in cash or offer other compensation? Will you offer help with transportation or child care?

- **Decide which methods to use for recruiting**. Will you contact people by telephone, in person, or by mail or e-mail? Will you send a letter in advance? Will you do reminders by telephone, mail, or e-mail?

- **Decide who will do the various recruitment tasks**. Which tasks will you do yourself? Will you hire a professional firm to do part or all of the recruitment? Will you get help from other organizations?

Recruit participants

- **Begin recruiting**. Develop a recruitment script, train recruiters, and begin recruiting. If you are scheduling appointments in advance, send a letter to confirm the appointment and give directions to the site.

- **Monitor progress**. Check frequently to see how well recruitment is going, and make mid-course corrections if needed.

- **Issue reminders**. To help ensure a good turnout, remind participants a day or two before the session.

Source: Created for this Toolkit.

Setting requirements for participation

What types of requirements might you set?

To get meaningful results from your feedback sessions, you need to select the participants carefully. Usually, you want to find participants who are reasonably representative of the intended audience for the written material.

Early in your planning process, start thinking about what requirements to set for participation. Later, when you are actively recruiting, you will be checking to see whether prospective participants meet the requirements you have set. Researchers call this "screening" people to see if they "qualify" as participants by meeting all of the requirements you have set.

The requirements you set depend on the material and your goals:

- **Some requirements may be based on demographic characteristics**. For example, if you want readers' reactions to a folder about prostate cancer screening that has been tailored for African Americans, your requirements might include age (such as, 50 or older), sex (male), and race (African American).

- **Other requirements may be based on people's attitudes, behaviors, experiences, or circumstances**. For example, if you want to get readers' reactions to a post card that tells about a tobacco quit line, you might decide to restrict participation to smokers who say they want to quit. If you are recruiting people to give their reactions to a website, you may want to restrict participation to people who are accustomed to using their computer to visit websites.

- **Basic reading skill is one requirement that always applies** when you show written material to people in an interview or focus group and ask for their reactions. We discuss this requirement below.

Recruiting people who can read the materials you show them

When you are recruiting people to give reactions to written materials, it's vital to be sure that the people you recruit can read. If you show written materials to a non-reader or a person with limited reading skills, it puts them in a potentially humiliating situation, as well as making it hard for you to get the reactions you need.

Even though reading skill is a requirement for participation, you will not have to screen for this skill in all situations. For example, if you are doing focus groups or interviews with people whose work requires reading skill, such as health professional, you can assume that the requirement is met.

However, if you are recruiting from any broad cross-section of people, including people with Medicare or Medicaid, it can be risky to presume that everyone you recruit will be able to read. Figure 6-14-b below has suggestions for tactful and practical ways to check on people's functional reading ability.

Figure 6-14-b. Tips for recruiting people who will be able to read the material you show them.

Asking people directly, "can you read?" is **not** a good way to screen for reading skills

In our culture, inability to read tends to be a source of shame. Many adults with limited reading ability are reluctant to admit it. If you ask them, "can you read?" you put them on the spot and may cause embarrassment or concealment (Willard; AMA, 2007; Doak, Doak & Root, 1996; Osborne, 2004).

Moreover, the question, "can you read?" is vague. Someone with very limited proficiency could interpret this question as asking, "can you read *at all* - even if only a little*?*" and answer "yes." But if you showed them your written material in a feedback session, they would struggle to read it.

Instead, make the need for reading skills very clear and give people an easy way to refuse

- **Make the reading task very clear.** When you are screening participants, explain that the interview involves reading the written material and giving their reactions. To emphasize the need for reading skills, you can mention that the interview might require reading some of the material aloud. Raising this possibility during screening allows people who feel shaky about their reading ability to know what is expected, and gives them an opportunity to say no.

- **Give the person an easy and face-saving way to say no to the interview**. After you explain and emphasize that reading is required, you can ask, "Does this sound like something you might want to do?" You will preserve people's dignity by giving them an easy way to say no without putting them on the spot to tell *why* they are saying no.

- **Keep in mind that some people with good functional reading ability may have trouble seeing the material well enough to read it**. For example, they may need reading glasses or large-print materials. You can include reminders, such as "Remember that this interview will involve a lot of reading. Be sure to bring reading glasses, if you use them."

Consider recruiting participants from local adult basic education classes

In other parts of this Toolkit, we discuss how to match the reading level of your material to the reading skills of your intended audience (see Toolkit Part 4, *Understanding and using the "Toolkit Guidelines for Writing"*). We also discuss the serious limitations of using readability formulas to assess your materials (see Toolkit Part 7, *Using readability formulas: A cautionary note*). We urge you to rely on feedback from readers as the ultimate test of whether material is easy for people to understand and use.

For most projects, knowing that the people you recruit have basic functional reading skills is enough. In some situations, though, you might want to find out whether people with a specific level of reading skill find it easy to read and understand the material. For example, the material might be written for people with *very limited* reading skills, or you might want to verify that the material is easy for people with average reading skills. If you need to interview people with a defined level of reading skill, consider contacting the adult basic education reading programs in your community. Teachers in these programs can help you identify which classes have students with the reading skills you are seeking, and they can tell you what you must do to get access to the students for recruitment purposes. (Teachers in adult basic education programs are also excellent resources for expert review of written material.)

But what if you *do* happen to recruit someone who can't read?

Careful screening of participants will usually prevent the awkward situation of recruiting someone who cannot read. But just in case this happens, we give tips on how to handle it in Chapter 18 on interviewing technique. In this chapter, see Tip #7 and *Figure 6-18-e, What should you do if the participant is unable to read the material?*

Source: Created for this Toolkit.

Special considerations apply to recruitment of focus group participants

In general, focus group discussions tend to work better when group participants have a lot in common (Krueger & Casey, 2000; Morgan & Krueger, 1997). When people sense that they have things in common with others in the group, they tend to feel more comfortable about speaking up. The group is also less likely to get sidetracked from the main topic into discussions that emphasize the differences among them.

When you set requirements for focus group participants**, be alert to differences in status, culture, circumstances, or other factors that may affect the ease and candor of group discussion**. It's often wise to keep group participants fairly similar with respect to age, sex, social characteristics, and any characteristics that you expect will strongly affect how they react to the written materials. For example, mixing people who are highly educated with people who dropped out of high school is likely to inhibit those with less education. As another example, if some participants have Type I diabetes and others have Type II diabetes, they might tend to spend more time pointing out their differences than discussing what they have in common. Mixing people who have had Type I diabetes for years with others who have recently been diagnosed with Type II diabetes runs the risk of diverting attention away from the written material as people point out the impact of the differences in their experiences with diabetes.

This same caution to recruit group participants who have a lot in common also applies when you are doing focus groups with informants. If your informants have different types of knowledge about your intended readers, it would be best to schedule separate groups so that each group is free to get into a detailed discussion of its particular experiences and insights. For example, suppose you want feedback from informants on a booklet that helps older people and their families choose a nursing home. You might want to hold separate focus groups with discharge planners, nursing home inspectors, and geriatric social workers, since each of these groups is likely to emphasize a different perspective on your topic. Another option would be to conduct individual interviews rather than focus groups.

How selective do you want to be?

As you set your requirements for participation, consider what you hope to accomplish with the feedback sessions, in order to decide how selective you want to be:

- If you are doing sessions with intended readers, your goal may be to get reactions from **people who are a reasonably representative cross-section of the intended audience for the written material**. In this case, you can simply set the requirements for participation to match the main characteristics of the intended audience.

- **In some cases, there may be good reasons to be more selective about who you recruit to your sessions**. Instead of recruiting participants who represent a broad cross-section of the intended readers, you may want to recruit **people who represent a particular subgroup** of the intended readers. Here are two examples:

    - Suppose that you have developed several versions of a poster that encourages people with Medicare to get a flu shot and tells where shots are available. You are going to get people's reactions to these posters in a focus group, and are trying to decide what requirements to set for participation in the group. One option is to recruit a cross-section of people with Medicare, but many of these people routinely get a flu shot. If you want to get the most informative feedback about a poster's ability to persuade people to get a flu shot, you would do better to recruit people with Medicare who seldom get flu shots.

    - Suppose that you are revising a pamphlet because you have heard that it's hard to understand. You may want to recruit people with limited reading skills for your sessions, even though the pamphlet is distributed to the public. By focusing your sessions on getting reactions from people who are less-skilled readers, you are likely to get more insights into what makes the pamphlet hard to understand, and what kinds of changes might help.

Should you set quotas to ensure a particular mix of participants?

As you develop your recruitment strategy, think about whether you need to use recruitment quotas:

- If you recruit **without quotas**, it means that once you start recruiting, you will take anyone who meets the basic requirements you have set for participation, until you have successfully recruited as many participants as you need. In practice, recruiting without quotas means that you will tend to recruit the people who are the *easiest to recruit* among those who meet your requirements. This may or may not be problematic, depending on the project.

- If you recruit **with quotas**, it means that you are imposing rules to ensure that you will recruit a particular mix of respondents who meet your basic requirements. For example, suppose that your goal is to recruit a racially diverse group of participants who (a) have Medicare and (b) are 65 to 75 years old. If you think it may be hard to recruit Asian-Pacific Islanders who meet these requirements of having Medicare and being 65 to 75 years old, you may want to set a quota to ensure that you include them among your interview participants.

Quotas can be flexible or exact. For example, if you are recruiting 20 participants for individual interviews, here are two common ways you could set a recruitment quota for Asian-Pacific Islanders:

- **By specifying the exact number of people to be recruited**: "Of the 20 people to be recruited, recruit 3 who are Asian or Pacific Islander."

- **By specifying an acceptable range:** "Of the 20 people to be recruited, recruit *at least* 3, but *no more than* 5, who are Asian or Pacific Islander."

You could also specify *only the minimum number* to be recruited, or *only the maximum number*, but these ways of setting quotas offer less control over the mix.

Imposing quotas can be very helpful, but it also makes recruitment more complicated and may add to the time and expense. You will want to think carefully about how important is it that you recruit a particular mix of people, and what mix you are likely to get if you don't use quotas. Does it seem likely that certain types of people will be much easier to recruit than others? If so, would this cause a problem for your project?

Since, as we noted earlier, focus group discussion tends to work better when group participants have a lot in common, you should take special care in setting recruitment quotas for any particular mix of participants within a group.

If you need to be sure certain types of people are represented in your feedback sessions, and these people are a diverse mix, it may be better to do interviews rather than groups, or to hold several groups, each with a different type of participants.

How will you find participants who meet your requirements?

Will you schedule appointments in advance, or recruit people on site for immediate interviews?

Once you have set requirements for participation in your sessions with readers, the next step is to find people who meet these requirements. The way you find participants depends in part on whether you schedule appointments in advance or wait to recruit people on site:

- **The most common approach is to schedule your sessions in advance.** When you schedule in advance, recruitment consists of screening potential participants until you fill all of your sessions with people who meet the requirements. For more on this topic, see Chapter 16, *Tips for recruiting people by telephone to set appointments for feedback sessions.*

- **If you are doing individual interviews, same-day on-site recruitment is less time-consuming and less expensive than recruiting in advance**. Same-day on-site recruitment means that you go to the setting where you will conduct the sessions and recruit people who happen to be there. This approach is often called "intercept interviewing," because recruiting is done by approaching – or "intercepting"—people who happen to be at the setting that day, to see if they meet the requirements and can spare the time to participate in a session. This approach works very well for individual interviews. Sometimes it can work for very small groups of two or three people, but it is not practical for recruiting participants for a focus group. For more about this approach, see Chapter 15, *Tips for recruiting people on site for immediate participation in a feedback interview.*

Once you have decided whether to recruit in advance or do on-site recruitment, the next step is to identify possible sources of potential participants:

- *If you are recruiting in advance*, start by looking for lists, settings, organizations, or other sources that might serve as a starting point for recruitment.

- *If you are going to do on-site recruitment*, your next step is to identify sites that might provide easy access to the type of participants you seek. (We discuss the issue of choosing sites for on-site recruitment in Chapter 13, *Choosing a location for your feedback sessions*.)

Is a list available?

If you are scheduling your sessions in advance, working from a list of possible participants can make the recruitment process much more efficient and cost effective. There are many possible sources of lists. These include organizations that are part of your project team or serving as advisors or informants. Professional research firms are another option, since most of them maintain a database used for recruitment purposes. If you are doing a project for Medicare, Medicaid, or the Children's Health Insurance Program, the government agency may give you access to lists with contact information. Of course, there will be data use agreements that tell the requirements and procedures you must follow to protect the confidentiality of the personal information in the lists.

Whatever the source of your list, be sure to ask how the list was compiled, and about the characteristics of people on the list. Also, find out whether the contact information for people is complete and up to date, and whether it is in a database format that would allow you to pre-select a subgroup of people based on age, zip code, or other characteristics. The more you know about the list, the better you can judge how well it will meet the needs of your project as a convenient shortcut for recruiting the types of participants you need.

If you are using the database maintained by a research firm, keep in mind that these databases often consist of people who have participated in previous projects done at the firm or who have responded to advertisements for volunteers to participate in studies for pay. While the resulting database is not a cross-section of the public, it may be suitable as a source of participants for your project. One advantage is that you may be able to identify a subset of people in the database who meet at least some of the requirements you have set for participation in your reader feedback sessions. For example, suppose that you need to recruit parents of young children for interviews to get their reactions to written material about the Children's Health Insurance Program. If the firm's database includes a list of parents who were in focus groups that did product testing of diapers and toddler toys, this list might be a good source for recruiting parents to your sessions.

What settings or organizations might be good sources?

If lists are unavailable or unsuitable, you will need to find other sources of potential participants:

- *If you are scheduling sessions in advance*, you will be searching for agencies or organizations that can give you direct access to potential participants or put you in touch with a suitable source, or settings that give you access to potential recruits.

- *If you are doing on-site recruitment*, you will be searching for a suitable setting that will give you access to people on the premises as well as space in which to conduct your sessions.

Keep in mind that **many projects use more than one source for recruiting their participants**. Where to look for a suitable setting or for assistance with recruitment depends on the type of participant you seek. For example, if you are doing a Medicare project, you could contact local area agencies on aging, community organizations that serve older adults, or senior housing facilities. If you are seeking young mothers with low incomes, you could try contacting Head Start, WIC (women, infants, children) programs, or other agencies and organizations that serve this group.

There are many possible settings to consider, including various types of community-based organizations, public and private agencies, and commercial research facilities. Depending on the needs of your project, settings could include community education programs, meeting rooms at a public library or community education center, conference rooms or break rooms at a worksite, schools, churches, day care centers, service organizations such as the YWCA or Goodwill, public health clinics, medical or dental offices, or hospitals.

If you have trouble finding a suitable source of potential participants, try to think creatively. Brainstorm with the project team, sponsors, and other stakeholders or informants about resources in your community that have a connection with the topics addressed in the written materials or the audience you are trying to reach. Think about places where the intended readers tend to congregate. Consider placing notices on bulletin boards or advertisements in community newspapers.

How many participants do you need to recruit?

Recruiting extra people to guard against no-shows

Another part of this Toolkit gives guidelines to help you decide how many interviews or focus groups you need to do, and discusses how many people to include in a focus group (see Chapter 6, *Should you do individual interviews or focus groups?*). When you are planning your recruitment strategy, take into account that some of the people you have scheduled for an interview or focus group may not show up. Sending confirmation letters and making reminder calls will help, but illness, bad weather, and other unpredictable events can interfere with a good turnout. It is often wise to recruit a few extra people, just to be sure that you end up with enough participants.

If you are doing focus groups, it is standard practice to over-recruit. Recruiting a few extra people – just in case – will allow you to start the group on time and ensure enough participants for a good discussion. If there are many no-shows, the group will be too small, and if people arrive late, it causes problems, too. Delaying the start of a group is undesirable, since it cuts the time short. Adding late arrivals after the group is underway is also undesirable, because it would be disruptive and force the moderator to repeat things that others have already heard.

To decide how many extras to recruit, think about the minimum number of participants that would be acceptable, and make your best guess about the number of no-shows you expect. Keep in mind that when you over recruit for a group, you must be prepared to pay everyone who shows up, including those you must turn away politely because they arrived a little late or because the group was already at maximum size.

If you are setting appointments to do individual interviews, you can recruit extra people called "floaters" who agree to stand by as possible substitutes. Floaters are people who agree to come in for a specified period of time (generally a couple of hours), and wait to see if they are needed for an interview. You promise to pay them for being on call in this manner. If someone fails to show up for an interview, you can use the floater as a substitute. You can also use the floater as a substitute if you need to cut an interview short for some reason. It's appropriate to pay floaters a bit more than a regular participant, because you are asking them to stay available on the premises for a longer period of time. When you recruit a floater, it's important to be clear about their on-call role as possible substitutes, and to assure them that they will be paid as promised, whether they participate or not.

It costs more to recruit floaters, but if your budget permits, having floaters available can be helpful in some situations. For example, if you have a tight schedule of interviewing, and it's important that you complete most or all of the scheduled interviews, consider recruiting a morning and afternoon floater for each day of interviewing. Another option is simply to schedule a few more interviews than you think you really need, rather than pay extra to have floaters available. If all people show up for their interviews, that's fine. If not, interviewers can use the extra time to debrief with one another, to review and enhance their written notes from previous interviews, or to take a longer break between interviews.

What compensation and assistance will you offer?

Cash payments and other types of compensation

It takes time and effort for people to give you their reactions to written materials in an interview or group discussion. Give them some type of compensation, if you can, to encourage them to show up and to thank them for their trouble.

Cash payment is the most common. It is hard to provide specific guidelines about how much to pay, because amounts can differ greatly by type of participant as well as length of the session. There are also regional variations, and rates tend to be higher in big cities than in smaller towns. You want to pay an amount that seems reasonable and attractive to participants, but is not excessive. For example, in some situations, feedback projects are reviewed in advance by a human subjects protection review panel that protects the interests of your participants. The panel scrutinizes the project design and materials, including the amounts you propose to pay participants. If the cash payments seem disproportionately high, the panel may consider them to be coercive, exerting undue pressure on people to participate.

To establish an appropriate amount for cash payment, consider the type of participant and what you are asking of them, and check into local practices. It can be especially helpful to get advice about payment amounts from community-based organizations.

Cash payment is inappropriate or prohibited in some situations. Generally, you cannot offer cash payment to employees who participate in sessions on company time. If your participants are government employees, check into any additional rules that may apply. Even in situations where you cannot offer cash payment, it may be possible to offer other types of compensation, such as refreshments, meals, gift certificates, or modest gifts. Check into rules that may apply and get advice about appropriate incentives from your informants or local organizations in the community.

If you are doing sessions with people who have Medicaid coverage or other income-based programs, be especially careful about compensation. In some situations, cash payments to people with Medicaid can jeopardize their continued eligibility for the Medicaid program. A gift certificate may be an acceptable alternative; check on the state government rules. To make it convenient for your participants, give gift certificates to a grocery or variety store that has many stores in the local area. Be sure to ask ahead of time if the store will buy back any certificates you don't use.

Offer help with transportation and childcare

If you can, consider offering to help with transportation. Getting to the site where sessions take place can be a major barrier to participation, especially for people with low incomes, older people, and those with health or physical limitations. Offering assistance that removes this barrier will help with recruitment and result in a better cross-section of participants who meet the requirements you have set.

If you offer help with transportation, there are several ways to do it. One is to pre-pay or reimburse the cost of bus fare, cabs, or parking. Another is to arrange and pay for the cost of cabs or specially-equipped medical vans to pick up participants, bring them to your site, and return them to their homes after the session is complete.

If you offer to help participants with childcare, the easiest way is to reimburse them for babysitting expenses. It can also work well to hold your sessions at a location that has an on-site childcare facility. Generally, it's not wise for a project to provide childcare directly: arrangements can be time-consuming and complicated, and legal liability is an important issue.

Deciding which recruitment methods to use (telephone, in person, mail, e-mail)

When you are recruiting people in advance for sessions, you can telephone them, approach them in person, or send them a letter or e-mail message. Which approach works best depends on your project and the type of people you are recruiting. You may need to use a *combination of approaches*. For example, you may decide to send a letter in advance to explain your project, and then follow-up with a telephone call. It's also possible that you will want to use one method for the initial contact with prospective recruits, and a different method to give them a reminder just before the session.

Using the telephone for recruitment

If you have names and phone numbers, telephoning is a very common way to recruit participants. If you decide to recruit by telephone, keep in mind that it can be time consuming and frustrating work. It helps to have a long list of names, with phone numbers that are up to date. Even so, getting through to some of the people on your list may require many attempts at different times of the day or evening, and on different days of the week. Some participants, such as Medicaid enrollees, can be hard to recruit by telephone because phone numbers are often out-of-date or unavailable. Some other groups can also be hard to reach by telephone, such as people who screen their calls. As we discuss below, it can sometimes help to send a letter in advance to explain about the project and alert people that you will be calling.

In-person recruitment

Recruiting people in person can work well, and it may be more culturally appropriate than telephoning for some types of participants you wish to recruit, such as people with limited English proficiency who will be interviewed in their native language.

Many sites that are suitable for same-day on-site recruitment also work well for in-person recruitment when you are setting appointments in advance. You would follow the same methods for approaching and screening people, but instead of asking them to participate in an immediate interview, you would set up appointments for a session to be held at a later date. These sessions could be held at the same site where you recruit the people in person, or at a different site.

Much like telephone recruitment, in-person recruitment can be quick and easy, or it can be time-consuming and difficult. If you can find settings where the types of people you are seeking tend to congregate, in-person recruitment can be the most cost-effective and efficient method to use. In-person recruitment can be especially efficient if you are able to do it in a group setting rather than approaching people one at a time. For example, perhaps an instructor in an adult basic education class or patient education class would allow you to make your pitch to the entire class at once. The instructor's consent helps establish the legitimacy of your project, and the dynamics of group recruitment often encourage people to participate.

Recruiting by e-mail

For some types of projects and participants, e-mail can be a very easy and efficient way to recruit participants for feedback sessions. This method might work well for recruiting professionals who are accustomed to communicating with colleagues by e-mail.

Recruiting by mail

Letters and postcards are generally used in combination with other methods for recruitment. For example, letters are sometimes used to alert people in advance that someone will be calling about possible participation in a feedback session, and they are often used to confirm appointments. Letters or postcards are also used to remind people about their appointments.

Deciding who will do the various recruitment tasks

What's involved in recruiting participants depends on whether you are making appointments in advance or recruiting on site:

- **If you are recruiting participants for sessions that you schedule in advance**, as most projects do, there are a number of tasks involved. These typically include developing a recruitment script, training the recruiters, contacting and screening potential participants, keeping records of appointments, preparing and sending confirmation letters, and making reminder phone calls a day or two before the session.

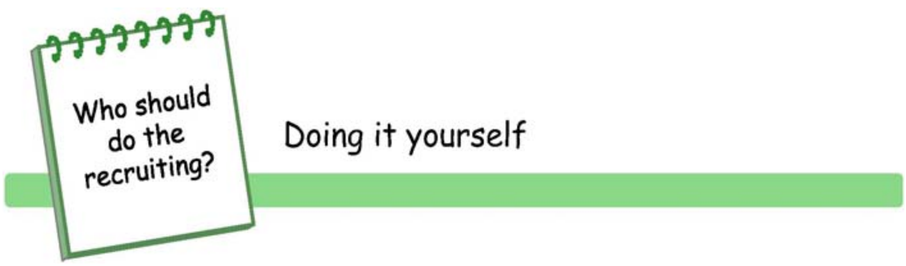
- **If you are recruiting participants on site,** the recruitment process is shorter, simpler, and can be much less expensive. You will need to arrange to use your chosen site, prepare a script, and train the recruiters and interviewers, but the other tasks related to scheduling and confirming appointments don't apply.

Do it yourself or get help from others?

There are three main ways to handle the various tasks involved in recruiting participants for a feedback session. You can do it yourself, hire a professional research firm, or enlist help from another organization, such as a community organization that has access to the type of participants you are trying to recruit.

As shown in Figure 6-14-c below, each of these approaches has advantages and disadvantages. You will need to weigh these tradeoffs as they apply to your particular project. You may want to handle some of the tasks yourself, and get help with others. Keep in mind that sometimes the people who recruit the participants are also the ones who conduct the feedback sessions, especially if you are recruiting in person at a site.

Figure 6-14-c. Should you handle recruitment yourself, hire a firm to do it, or get help from other organizations?



Advantages

Cost savings, compared to hiring a professional firm to do it.

Disadvantages

If you recruit in advance to set appointments, and you have never done this before, it's easy to underestimate the amount of time and effort it can take to make preparations, contact and screen people, confirm appointments, and make reminder calls. Do you have staff who have the necessary skills, and who will be able to make these tasks a priority during the period of active recruitment?

Comments

If you are recruiting on site for immediate participation in interviews, the same person or team of people typically handles recruitment along with interviewing and note taking. If you are handling all of these tasks yourself, rather than hiring others to do them, this is generally the most cost effective way to collect feedback from readers.

Hiring a professional research firm

Advantages

When you use experienced professionals to do the recruitment for you, the advantages include ease, convenience, and skill. You would still need to do some preparation and monitoring, of course. The firm may have a recruitment database that suits your needs, and it can provide helpful advice and a good reality check on how long it might take to recruit people.

Disadvantages

Higher cost -- possibly very much higher.

Getting help from other organizations

Advantages

Getting help with recruitment from community-based organizations may give you better access to potential participants as well as assistance from people who are familiar with the group you are recruiting from.

Disadvantages

It takes time and effort to coordinate your plans with other organizations and monitor their progress once recruitment is underway. You will need to coach them on how to handle the recruitment. Your project may not be a priority for the other organization, and you will have less control over the whole process compared to doing it yourself or hiring a firm to do it for you.

Comments

If other organizations offer to help, make sure that they can devote the necessary time and labor to doing the job, within the critical time period, and that you agree about the basic goals and process to be used in recruitment. Cost can differ greatly. If the groups that help you do not charge for their assistance, consider offering a donation as a thank you. Another possible approach is to pay a fixed amount for each person who is recruited and shows up for the session.

Source: Created for this Toolkit.

Using a recruitment script ("screener")

Whether you decide to do the recruiting yourself, hire professionals to do it for you, or get help from other organizations, you will need to prepare a recruitment script for use by those who contact prospective participants. Researchers usually call this recruitment script a "screener" because it includes the screening questions that check on whether people meet requirements for participation.

Some recruitment scripts are just a general guide about what to cover in a phone call or in-person recruitment conversation, but many give the specific wordings to be used, as suggested by the term, "script." Rather than leaving it up to recruiters to decide what to say, we strongly recommend that you develop a detailed recruitment script with specific wordings:

- **To work well, the script must be flexible and sound like natural conversation.** Even when a script includes exact wordings, the recruiters who use it will need some latitude to adapt the wording to suit a particular situation.

- **Having a good script to follow makes it much easier for people to do a good job of recruiting**, especially if they are not experienced in recruiting people to participate in interviews or focus groups. Without a script it can be hard to improvise effective wordings and to remember to cover all of the information in the right order.

- **Having a good script is an important tool for quality control**.

    - A recruitment script helps standardize the process of recruitment. It helps ensure that the people you recruit really do meet the qualifications you have set, and that they understand what is involved in agreeing to participate in a session.

    - Producing the script forces the project team to think through what needs to be said, and find the best ways to say it.

- A well-written script makes a good impression: it establishes a friendly tone, covers the basic information in a clear and simple manner, and moves from one topic to the next in a logical order. For example, you will want to find out whether people meet the requirements for participation before you invite them to participate and mention the amount of payment.

In later chapters we tell how to prepare a recruitment script for two common types of recruitment situations: a script to use when you are recruiting in person (Chapter 15), and a script to use when you are recruiting by telephone for sessions that you are scheduling in advance (Chapter 16).

Training and monitoring the recruiters

The way you handle recruitment is important, because it is your first contact with potential participants and sets the tone for your sessions with them. Be sure that the recruiters are well informed and well trained, so that they can give a clear explanation of what the project is about and let prospective participants know how much you value their time and opinions.

If you use a professional firm, they will handle the training and supervision of recruiters, but it's up to you to provide the background information about the project and a good script to follow.

If you are doing recruitment on your own or with assistance from another organization, it's important to sit down with the people who will be doing it to go over the written script and procedures they are supposed to follow:

- **Make sure that they really understand the requirements and the reasons behind them**. Otherwise, they may recruit the people who are easiest to recruit, or the people they know would especially benefit from getting the payment you are offering.

- **Make sure that they understand the importance of following the script** when they call or approach people in person to talk about the project.

- **Work with them to develop forms for keeping track of the process and results of their recruitment efforts.**

- **Once recruitment is underway, monitor it closely** to help recruiters handle any problems that come up and verify that the right mix of people is being recruited.

End notes

CMS joins Toolkit writer Jeanne McGee, PhD in thanking colleagues who shared their experiences, reviewed early drafts of this and other chapters of the Toolkit, and offered many helpful ideas, examples, and suggestions for improvement. See acknowledgments at the end of Toolkit Part 1 and Toolkit Part 6, Chapter 1.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 15

Tips for recruiting people on site for immediate participation in a feedback interview

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 15

Tips for recruiting people on site for immediate participation in a feedback interview

List of figures in this chapter:

This document is the fifteenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

Recruiting people on site is generally the **quickest, easiest, and most cost-effective way to get feedback from readers**. We encourage you to try this approach.

You will need to find a location that is suitable and get permission to do your testing there. To be suitable, the location must have space that lends itself to doing interviews and must offer easy access to potential participants who meet the requirements you have set for your feedback sessions.

Look for places where the types of people you want to interview tend to congregate naturally. Depending on your project and the material you are testing, there may be many possibilities, including clinics, senior centers, recreation centers, government offices where people sign up for health and social services, student lounges at adult basic education programs, community organizations, and other places. For more about site selection and issues to consider, see Toolkit Part 6, Chapter 13, *Choosing a location for your feedback sessions.*

This chapter explains how to approach and recruit people in person for participation in a feedback session. You can use in-person recruitment in two different ways:

- **To do same-day on-site interviews**. In this approach, you recruit people who happen to be at the site and then interview them immediately at that same location. This same-day on-site approach works well for individual interviews. It can also work for recruiting very small groups, such as groups of just two or three people, but not for focus groups. It's just not practical to try to gather a whole group of six to nine people to participate in an immediate focus group discussion.

To set appointments for interviews or focus groups. You can also use in-person recruitment for sessions that you are scheduling in advance. Since you have enough lead time to assemble a group, you can use in-person recruitment to schedule focus groups as well as interviews.

In this chapter, we focus mainly on using in-person recruiting to find participants for immediate interviewing. Usually, the person who does the recruiting also conducts the interview. When there's a two-person team of interviewer and note taker, one or the other person could do the recruitment, or they might work together.

How to recruit on site

People who do on-site recruitment need a script that tells them what to say when they approach people. We give a template for this script below in Figure 6-15-a and a sample script based on this template in Figure 6-15-b. They also need information about the site itself and some instructions. For example, the instructions might describe the arrangements that have been made, give the name and phone number of the contact person, tell interviewers where to check in at the site, and tell which types of people they should approach. Figure 6-15-b includes a sample page of instructions.

Figure 6-15-a. Template for creating a script for on-site recruitment.

1 Start by getting the person's attention

Start your script with a sentence or two that recruiters can use word for word when they approach a potential participant. Often, recruiters introduce themselves and give their affiliation as part of this initial contact.

The sample script in Figure 6-15-b uses the following words to start the dialogue with a prospective recruit: *Excuse me - if it's okay with you, I'd like to tell you about something we're doing here today. We're looking for volunteers, and I'd like to see if you might be willing to help*. Here are some things to notice about the wording of this example:

- **It is friendly, low-key, polite, and respectful:** it starts with *excuse me*, and essentially asks permission to continue (*if it's okay with you*). This allows a person who doesn't want to be bothered to refuse right at the beginning.

- **It uses the word "volunteers" to emphasize that it's up to the person to decide whether to participate or not.**

2 Give brief background on the project and its purpose

In this section of script, you tell about the sponsoring organization, the type of written material, and the purpose. Be specific, but keep it brief. If you think that some people you approach will want more details, you can include a more complete explanation to be used only if someone asks.

Here is the background section from the sample script shown later in Figure 6-15-b: *The Medical Assistance program has been working on a new form for people to use when they apply for Medical Assistance. The program wants to find out how easy it is for people to fill out this new form. So today I'm showing it to people to get their opinions.*

3 Ask screening questions to see if the person meets requirements

In this section of the script, you make sure that people meet the requirements for participation. If they don't, you thank them and move on to the next prospective participants. The requirements you set and how you need to screen for them differs from study to study.

- **When you are doing in-person recruitment, you can do some types of screening based on people's appearance**, such as screening for age, gender, or race (recognizing that it can be hard to do this accurately in some cases).

- **For other requirements, you will need to ask direct questions.** When you ask screening questions, be sure to follow whatever privacy protection rules apply.

4 Be specific about what's involved; give assurances if applicable

In this section of the script, you explain what would happen in the feedback session and how long it would take. This is where you emphasize that reading will be required, and give any assurances that are appropriate, such as telling how you will protect people's privacy.

Here is an excerpt from Figure 6-15-b, showing the wording of a direct pitch: *I'd like to have you read the instructions for this form, which might include reading some parts aloud. Then I'll ask for your reactions. I'll also ask you to fill out a few sections of the form. Medical Assistance will use your feedback to improve the instructions and the form. This interview would take about half an hour. I know that you're waiting for them to call your name, but don't worry – we would stop when your name is called. And whether you help or not, your benefits won't be affected in any way.*

Here are some things to notice about the wording of this example:

- **It screens for reading ability in an indirect, face-saving way that makes it easy for a non-reader or poor reader to say no without giving a reason**. The sentence, *I'd like to have you read the instructions for this form, which might include reading some parts aloud,* gives the clear message that reading ability is essential, but it doesn't force the person to say whether they can read. Mentioning the possibility of reading aloud is one way to emphasize the reading task.

- **It anticipates and addresses two types of concerns**. To reassure people that they will not lose their place in line if they agree to be interviewed, the recruiter promises that the interview will end when the person's name is called. To avoid exerting undue pressure to participate, the recruiter tells people that if they say no, it will not affect their Medical Assistance benefits.

5 Ask whether the person might be willing to participate

In this section of the script, you ask directly if the person is interested in participating. For example, if you are recruiting for an immediate interview, you can ask, *Does this sound like something you might be willing to do?* If you are scheduling appointments for later, you can specify a time period: *Does this sound like something you might be willing to do about two weeks from now?* Notice that the tentative phrase, *might be willing to do*, still leaves room for the person to ask questions or change their mind when they hear more.

6 Give the details (payment, etc.) and answer questions

In this section, you tell about compensation, if any, offer help with transportation, if applicable, and offer to answer any questions. Here is an example from Figure 6-15-b*: We are offering a $25 grocery store gift certificate as a thank you for your time. Do you have any questions?*

7 Begin the interview (or schedule it for later)

At this stage, the person has agreed to participate, so you either start with the interview or, if you are recruiting for sessions to be held at a later date, you can arrange an appointment. Be sure to collect contact information so that you can send a confirmation letter and make reminder phone calls.

Source: Adapted for this Toolkit from training materials the writer has used in various projects.

Example of a script for on-site recruitment

To conclude this chapter, we show a sample reference sheet and script for on-site recruitment below in Figure 6-15-b. These materials show how to apply the template described above in Figure 6-15-a.

Figure 6-15-b. Sample interviewer instructions and script for on-site recruitment.

In this fictional example, the purpose of the project is to get reactions to a revised application form for people who are applying for Medical Assistance. The project is using same-day on-site interviewing at a state agency where people go to sign up in person for Medical Assistance. The interviewers do their recruiting in the large waiting room at the agency, then take participants to a small room just off the waiting room to conduct the interview.

The recruitment materials for this project are shown below in two parts. The first is a list of recruitment reminders. This list summarizes key points from interviewer training. The second part is the actual recruitment script.

Medical Assistance Administration

Feedback sessions on the revised application form

Recruitment reminders:

- Check in with the contact person and the waiting room help desk when you arrive.

- Approach people as soon as possible after they leave the counter to begin waiting for their name to be called. This will ensure that you select people who have come to sign up for Medical Assistance (rather than accompanying someone who has), and will also allow more time for the interview.

- Try to recruit a good mix of people (males and females of different ages). Include some people who are already on Medical Assistance and some who are just signing up. Avoid approaching anyone who looks tired, upset, or ill. If people seem annoyed or suspicious when you approach them, thank them politely and leave them alone.

- Explain more about the program and the interview, as needed.

- If necessary, explain that you have been given permission to go up to people in the waiting room to tell them about the new application form project and see if they want to be interviewed. Sometimes, facilities will give you a name badge or other identifier to wear while you are on the premises.

- Once an interview is underway, listen to the loudspeaker announcements, and stop the interview immediately if the person's name is called. Ask whether he or she is willing to come back later to finish the interview (we have found that most people are). If not, thank the participant, give the gift certificate, and get a signature on the acknowledgement form to show payment has been made.

Figure 6-15-b continued.

Medical Assistance Administration

Feedback sessions on the revised application form

Recruitment script:

Start by getting the person's attention:

Excuse me - if it's okay with you, I'd like to tell you about something we're doing here today. We're looking for volunteers, and I'd like to see if you might be willing to help.

Explain the purpose of the project:

The Medical Assistance program has been working on a new form for people to use when they apply for Medical Assistance. The program wants to find out how easy it is for people to fill out this new form. So today I'm showing it to people to get their opinions.

Be specific about what you are asking the person to do, and give assurances:

I'd like to have you read the instructions for this form, which might include reading some parts aloud. Then I'll ask for your reactions. I'll also ask you to fill out a few sections of the form. Medical Assistance will use your feedback to improve the instructions and the form.

This interview would take about half an hour. I know that you're waiting for them to call your name, but don't worry – we would stop when your name is called. And whether you help or not, your benefits won't be affected in any way.

Ask about possible interest:

Does this sound like something you might be willing to do?

If "yes" or "maybe," tell about the gift certificate and offer to answer questions:

We are offering a $25 grocery store gift certificate as a thank you for your time. Do you have any questions?

Source: This fictional example is adapted from scripts used by the Toolkit writer in various projects.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 16

Tips for recruiting people by telephone to set appointments for feedback sessions

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 16

Tips for recruiting people by telephone to set appointments for feedback sessions

List of figures in this chapter:

This document is the sixteenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

This is the last in a series of three chapters about how to select and recruit participants for your feedback sessions. The previous chapters in Toolkit Part 6 covered the basics of selecting and recruiting participants (Chapter 14) and gave tips on how to recruit people in person (Chapter 15). In this chapter, we offer tips for recruiting participants by telephone.

Should you send a letter to let people know they might be called?

When you are recruiting by telephone, it can be helpful to let people know ahead of time that you will be calling. Many people are wary when a stranger calls, especially if they get frequent telemarketing calls or have heard about telephone scams. They may use caller ID to screen your call, or hang up before you have a chance to explain why you are calling.

If you have concerns about being able to get through to potential participants by phone, consider sending them a letter in advance to explain about the sessions and let them know you will be calling. Sending a letter in advance gives you an opportunity to establish the legitimacy of the project and address any concerns that you think people may have, such as wondering how you got their names.

Who should send the letter?

Who should send the letter varies by project. You might send the advance letter on your own letterhead. In other cases, it might go out from a sponsoring organization, or from the organization that supplied the information you are using to contact prospective participants.

When should you send it?

If you send an advance letter, be careful to coordinate when you send the letter and when you follow up by telephone. You don't want to start calling before the letter arrives, but you don't want to wait too long, either, or people will forget what's in the letter.

What should it say?

Letters sent in advance typically include the following kinds of information:

- **Who is sponsoring the project**. The letter can lend legitimacy to your project and encourage participation by showing people which groups are sponsoring or endorsing the project. If you are mentioning any stakeholder organizations in your letter, be sure to coordinate closely with these organizations to get their approval of the text and timing of the mailing, and give them a copy before the letters are mailed. You want them to be well informed and prepared to handle any questions they may get from people who receive the letter.

- **The purpose of the project and what is involved.** Your letter should begin with a friendly, personal pitch that states why you are writing. Give a brief but specific description of what the interview or focus group will be about and what you are asking them to do. You can say something about the voluntary nature of the project, so that people will not feel pressured to participate.

- **When and how you will be contacting them.** The letter should give an *approximate* time frame, such as, *you may get a call sometime in the next few weeks*. It's important to avoid being too specific or making any promises that you will definitely call:

    - When you write the text for your advance letter, keep in mind that you will stop making calls as soon as you find enough participants. You may want to acknowledge this directly in the letter. For example, you could use wording such as the following: *Since we only need to find a small number of people to be interviewed, it is possible that you won't be called.*

    - Instead of giving a specific time (such as, *next week*), keep your wording more general (such as, *sometime in the next few weeks*). Giving a general time frame allows the flexibility you need. You can't know ahead of time when recruiters will call a particular person or how many attempts it may take to get through.

- **The name and phone number of a person they can contact if they have questions or concerns.** If you can, give people an easy way to refuse in advance, because it will make recruitment more efficient.

    - For example, you could say, *If you have questions, or if you want us to take your name off the list so that you won't be called about an interview, please call* {name of person} *at* {phone number}.If you do give people a number to call to ask to be taken off the list, make certain that you have a good system in place to ensure that they won't be contacted.

- When people call to have their name taken off the list, getting their reasons can be helpful. Suppose, for example, you learn that people are refusing to participate because they misunderstood part of the letter or have a concern that you didn't address. You may be able to fix the problem and improve recruitment.

Creating a telephone recruitment script

Figure 6-16-a below gives you step-by-step instructions for writing a telephone recruitment script.

Figure 6-16-a. Template for creating your own telephone recruitment script.

1 Introduce yourself and tell why you are calling

The beginning of the script is crucial, because you only have a few moments to convince people that your call is worth their time and attention. Here are some suggestions:

Start your script with a carefully worded sentence or two that gives them essential information and addresses any concerns they may have. For example, you may need to say up front, *I'm not selling anything*. Keep the script conversational. Avoid bureaucratic language. Consider whether it makes sense for your project to refer to payment up front, or wait until later in the recruitment conversation. Usually, it's better to wait until you are sure they meet your requirements and they understand what would be involved if they agree to participate.

Usually, it's wise to refer immediately to the sponsoring organization or stakeholder organizations. Try to work in a brief description of organizations you mention, especially if you think people won't recognize them by name.

- Here's an example from the sample script shown later in Figure 6-16-b: *Hello. My name is __________ and I'm calling from the Bayside Alliance for Healthy Children, a non-profit group that helps children get the health care they need. We are working with Bayside City schools on a new booklet of information for families with young children.*

- If you are using a professional research firm to make the recruitment calls, the recruiter should introduce themselves as "calling on behalf of" the sponsoring or stakeholder organizations, rather than giving the name of their research company. Of course, they should also give the name of their research company if asked.

Train recruiters to be flexible and follow the lead of the potential respondent. While you want to prepare a script that is suitable for recruiters to use verbatim, the recruiters will need to adapt this script depending on how people respond. People get annoyed when a caller makes a long speech that doesn't include any natural pauses, so be sure that the script and recruiters are "interruptible."

Make sure that your script includes answers to frequently-asked questions, such as *How did you get my name?* It's helpful to prepare a separate page of answers to frequently asked questions for easy reference. You can update this page if any new questions come up after recruiting is underway.

2 Ask screening questions to see if the person meets requirements

In this section of the script, you make sure that people meet the requirements for participation. If they don't, you thank them and end the call. The requirements you set and how you need to screen for them differs from study to study.

Typically, you start the screening section with an introduction that sets up a context for asking direct questions. For example, you might say, *If it's okay with you, I'd like to ask a few questions*.

As you write your screening questions, think about what sequence makes the most sense. In general, it's best to ask the broadest screening questions first, and save any that are about potentially sensitive topics for later on. When you ask screening questions, be sure to follow whatever privacy protection rules apply.

Format the screening questions with check boxes for marking the answers. To make it easy for the recruiter, the questions should have an easy way to mark the answer and instructions that tell the recruiter what to do next depending on the answer that is given. The sample script in Figure 6-16-b illustrates one way of formatting your screening questions.

3 Be specific about what's involved; give assurances if applicable

In this section of the script, you explain what would happen in the feedback session and how long it would take. **This is where you emphasize that reading will be required**. By emphasizing that reading skills will be required, you make it easy for a non-reader or poor reader to say no without giving a reason, and avoid the awkwardness and embarrassment of pressing people to tell how well they can read. Here is how the need for reading is emphasized in the sample script from Figure 6-16-b: *Later this month, we will interview some parents to find out whether the booklet is easy to read and understand. If you are interviewed, we would ask you to read the booklet and give your reactions.* (For more on this topic, see Figure 6-14-b, *Tips for recruiting people who will be able to read the material you show them*, in Chapter 14, *How will you select and recruit participants?*)

Give any assurances that are appropriate for your project. For example, if you are addressing any sensitive issues, you could tell how you will protect people's privacy.

You may also want to tell more about the purpose of the project and how feedback will be used. For example, here is wording from the sample script in Figure 6-16-b: *and the schools would use what you say to improve the booklet before they send it out.*

4 Ask whether the person might be willing to participate

Once you know that the person meets the requirements, you can ask about interest in participating. For example, you could say, *Does this interview sound like something you might be willing to do?* This wording leaves room for the person to ask questions or change their mind when they hear more.

5 Give the details, answer questions, set the appointment

If the person might be willing to participate, you can give the details about compensation, help with transportation, etc. You should also offer to answer any questions. For example, you could say, *We are offering a $25 grocery store gift certificate as a thank you for your time. Do you have any questions?*

Then you are ready to schedule an appointment for a specific time and place. When you set up the times for appointments, **be sure to allow ample time between the interviews**. Interviewers and note takers need a few minutes after each interview to review their notes and write a brief summary of findings. They also need to take time for lunch and occasional breaks. In addition, allowing time between interviews gives the flexibility they need if people arrive late for an appointment or if an interview runs a bit longer than planned.

6 Collect contact information for follow-up

The final step is to ask for contact information: Ask for a mailing address, in order to send a confirmation letter. Ask for phone numbers and best times to reach the person, so that you will be able to make a reminder phone call a day or two before the session.

Source: Adapted for this Toolkit based on scripts and training materials used by the writer in various projects.

Example of a telephone recruitment script

Figure 6-16-b below gives an example of a telephone recruitment script. This script illustrates how to apply the template shown above in Figure 6-16-a.

Figure 6-16-b. Example of a telephone recruitment script.

In this fictional example, a community-based outreach organization, the Bayside Alliance for Healthy Children, is working with the local school district to let parents know about the Children's Health Insurance Program. Together they have completed the first draft of a new information booklet for parents and guardians. Now it's time to do interviews with parents to see whether the booklet is easy for them to understand and use.

Staff members at the Bayside Alliance are recruiting participants by telephone, using a list they got from the school district. To make it convenient for parents, interviewing will be done at the school, either during school hours or in the evening. For those who come in the evening, the project is offering to pay for babysitters. To make sure that the booklet is relevant to the participants, the project wants to interview parents or guardians of children with no health insurance coverage. Here is the recruitment script they are using:

Bayside Alliance for Healthy Children

Telephone Script for Parent-School Project

Telephone recruitment guide

When you have the right person on the line, introduce yourself and tell why you are calling:

Hello. My name is __________ and I'm calling from the Bayside Alliance for Healthy Children, a non-profit group that helps children get the health care they need. We are working with Bayside City schools on a new booklet of information for families with young children.

Later this month, we will interview some parents to find out whether the booklet is easy to read and understand. If you are interviewed, we would ask you to read the booklet and give your reactions. We would pay you for doing this and the schools would use what you say to improve the booklet before they send it out.

I'd like to ask you some questions, if I may, to find out if you meet the requirements for this project.

RECRUITERS: Answer questions and explain more about the project, as needed.

If the person volunteers to be interviewed, say "That's great, but first I need to ask you a few questions."

Ask screening questions to determine whether the person meets requirements:

1. Do you have any children in your home who go to a Bayside City elementary school?

   - ☐ Yes ---> *continue.*
   - ☐ No or refused to answer ---> *thank and end the call.*

(continued on the next page)

2. Are these elementary school-age children currently covered by health insurance?

- ☐ Yes ---> *thank and end the call:* I'm sorry – for this project, we need to talk with parents of children who are not covered by health insurance.
- ☐ No ---> *continue.*
- ☐ Refused to answer ----> *thank and end the call.*

Emphasize the reading task and check on willingness to participate:

3. Thank you for answering my questions. If you come for an interview, we would ask you to read the booklet and give us your reactions. We plan to tape record what you say to make it easy to share your comments with the people who are trying to improve the booklet. Does this interview sound like something you might be willing to do?

RECRUITERS: Offer to answer any questions they may have.

- ☐ Yes or maybe ---> *continue.*
- ☐ No or probably not ---> *thank and end the call.*

Invite to an interview. Give the details and set an appointment:

I'd like to invite you to be interviewed as part of our project. The interview will be held at your child's school, during school hours or in the evening. It will last about 45 minutes. At the end of the interview, we will pay you $25 as a thank you.

Could you come to the school for your interview on {*insert date or dates*} at {*time or times*}?"

If the appointment is in the evening, explain about child care:

Since you are coming for your interview in the evening, we can pay for a babysitter if you need one. The school has told us that parents *cannot* bring children to interviews in the evening, because no one will be there to supervise them.

(continued on the next page)

After the appointment is set, confirm contact information:

I will send you a letter that gives the details about your interview. Is your address {*read address from your calling list*}? And what are the best phone numbers to use if I need to reach you during the day or evening?

Thank and end the call:

Thank you so much. We look forward to seeing you on {*date*} at {*time*}. If you use reading glasses, please be sure to bring them to the interview.

Source: Fictional example created for this Toolkit.

Tracking responses to your calls

When you are doing telephone recruitment, recruiters will need a tracking form to record the date and time of each call you place, and the outcome of that call. You can design a paper or computerized format for this tracking form:

- For many projects, the form can be short and simple. If you are using quotas to ensure a particular mix of participants, the form will be need to be more detailed to keep track of how you are doing on each quota.

- It is helpful to include check boxes or some other easy way to record typical outcomes of calls, such as "not at this phone number," "no answer," "not home - call back at _____ on ______," "did not meet requirements," "refused to participate," and "made appointment."

- To help monitor the progress of recruitment, you may want to keep track of which requirements people did not meet. Generally, it is not a good idea to press people to say why they don't want to participate, but it can be useful to record any spontaneous reasons they share (such as "not interested," "can't come because of work schedule," or "will be out of town").

Following up on appointments you have made

Send a confirmation letter and map

Soon after you set an appointment, send a confirmation letter that gives the following information:

- **A brief recap about the project itself**, emphasizing its purpose and how the participant will be helping.
- **Details about the appointment time and place**. Don't bury the appointment details in a paragraph of text. Instead, make them very prominent for easy reference, as shown below in the sample confirmation letter in Figure 6-16-c.
- **Directions about how to reach the location**. Unless written directions are extremely simple (as they are in the example that follows), include a map. It's very important to proofread and test the written directions and map, so that you don't tell people to "turn left" when you really meant to say "turn right." Just because directions have been used before doesn't guarantee that they are accurate and easy to follow.
- **Text that emphasizes the importance of showing up, and gives contact information.** It's wise to include a name and number in your letter, so that people can call if they have questions or need to cancel the appointment.
- **Any reminders that apply**, such as a reminder about bringing reading glasses.

Professional research facilities have their own templates for confirmation letters. Some letters produced by professional facilities are excellent, but others could use some improvement. Before you use their template, review it for content, tone, and formatting. Make sure that the language is clear and simple so that it will be easy for people to understand. For example, the tone and vocabulary may seem too bureaucratic, or the print may seem too small for easy reading. Make any edits you feel are needed, and decide whether the letter should go out on your own letterhead or the facility's letterhead.

There's a sample confirmation letter in Figure 6-16-c below.

Figure 6-16-c. Example of a letter sent to confirm an appointment.

Oakfield Senior Coalition

100 Main Street
Oakfield, ND 44433
222 333-5678

Dear Janet Owens:

Recently we called and talked with you about a booklet that Oakfield Senior Coalition is working on. It tells about health care resources and recreational activities in our community for people who are 65 and older. We are interviewing people to get ideas on how to improve this booklet.

We are so pleased that you are willing to come for an interview and give us your reactions to the booklet. Here is what we agreed on for your interview:

Date: **Wednesday, December 10, 2008**

Time **2 pm to 3 pm**

Place: **Oakfield Library in meeting room A.**

The library is on the corner of Oliver Street and 4th Avenue. There is free parking in the Oliver Street ramp next to the library. Or take Bus route 16 and get off at the library stop.

This interview involves reading the booklet, **so please be sure to bring your reading glasses if you use them**. At the end of the interview, we will pay you $35 as a thank you for helping with this project.

Since we are only able to interview a small number of people, we are counting on you to keep this appointment. **If you find that you cannot keep the appointment, or if you have any questions, please call us at 333-5678**.

Source: Fictional example created for this Toolkit.

Remind people to come to the session

To help ensure a good turnout, issue a reminder shortly before the session. You can do this by phone or by sending a postcard. If you did your initial recruitment contact by e-mail, you might want to send the reminder by e-mail as well.

Monitor the progress of recruitment

Stay in close touch with recruiters to answer any questions that may come up and to monitor the progress of recruitment for your sessions. Ask for regular progress reports so that you an act quickly to make adjustments if things are not going as well as they should. To be sure that you are recruiting the right mix of participants for your project, these progress reports should include the characteristics of the people who have agreed to come for an interview or focus group.

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September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 17

Conducting feedback interviews and taking notes

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 17

Conducting feedback interviews and taking notes

List of figures in this chapter:

This document is the seventeenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

The day when you will conduct your feedback sessions has arrived. Preceding chapters have helped you make the decisions and complete the tasks that led up to this day.

The written material is ready to test, your written interview guide is ready to use, you've chosen your site and made the arrangements. Interviewers and note takers are set to begin. If you recruited in advance, participants will be coming in for their appointments. If you plan to recruit on site, all the arrangements have been made.

Now, in this chapter, we offer general tips for making things go smoothly when you are conducting your feedback interviews and give practical advice about taking notes.

Handling the interaction with readers is the major task of conducting your feedback sessions. This is a big topic, and we cover it separately in the next chapter (Chapter 18, *Tips for effective interviewing technique*).

[This chapter on conducting feedback sessions and taking notes is about interview sessions only. If you are using focus groups to collect feedback from readers, some of the discussion in this chapter will be applicable. But for in-depth discussion of how to conduct focus groups, see Krueger and Casey (2000) and Morgan and Krueger (1998) referenced in Chapter 6, *Should you do individual interviews or focus groups?*]

Tips for making things go smoothly

Since the specifics of conducting your feedback sessions differ greatly depending on the site you've chosen and how you are recruiting participants, we cover only a few general points:

- **Be sure to have a workable schedule that includes breaks between interviews and time off for meals.** Interviewing is demanding work. You need time immediately after each interview to review and expand on your notes, and you also need an occasional break. Flexibility is also important because an interview will sometimes run overtime (always ask to be sure the person doesn't mind continuing past the ending time).

    - If you are setting appointments for interviews, be sure that the recruiters have set up a workable schedule with some time off between each interview. You need this time to go over your notes, and you also need it to give flexibility in case people arrive late for their appointment.

    - If you are recruiting on site, your schedule is flexible because you have direct control over when you start recruiting for the next person to interview. Of course, there's no guarantee that when you are ready for the next person, the next person will be ready for you. In some settings, the number of people on the premises can fluctuate considerably depending on day of week or time of day. When you make your arrangements to use a site, ask about the busy times. If you can be there when it's busy, it will be easier to recruit a steady flow of participants.

- **Get there early.** Allow time to find a place to park, carry in your materials, greet staff at the site, and get organized for doing interviews. You may need some extra time to rearrange furniture in your interviewing room, test your equipment, and confer with your interviewing partner (if you have one).

- **Make sure to bring everything you need.** At a minimum, you'll need copies of the interview guide (see Chapter 10), copies of the written material, Session Summary Forms (see Chapter 11), material for taking notes during the sessions, and your paperwork related to the appointment schedule or arrangements at the site. You might also need to bring informed consent or permission forms and receipts to acknowledge payment for participation. If you will be recording the session (see Chapter 12), you will need to bring all of your recording equipment (unless you are using a facility that provides this equipment). Bring extras of such things as extension cords, batteries, and tapes. You might want to make up a checklist to help you remember everything you need to bring.

- **If you are doing your interviews in a community setting, make sure that people who work at the setting know why you are there and that you have permission**. If staff members don't know who you are and what you are doing, there can be misunderstandings. In some settings, they will give you a badge to wear.

- **Observers**. Sometimes, people who are involved in the development of the material sit in on sessions with readers. Typically, they find this experience extremely interesting and helpful. It is powerful to be right there to watch and listen as readers react to the material. If you are considering having observers, there are issues to consider, and we discuss them in Chapter 2, which covers steps in planning your session. If you do have observers at your session, talk with them before you begin your interviews to be sure that they understand their role and agree to remain silent during the sessions. Be sure that observers understand how it will affect the quality of the data if they distract participants. Identify them as observers at the beginning. Keep it brief; it's enough just to say they are part of the project and are there to observe.

Taking notes during the session

It's vital for someone to take notes on people's reactions to the written material you are testing. These notes are an important written record of the feedback you get. Often these notes will be your only record of the feedback you get, especially if you are doing individual interviews.

Sometimes you may choose to do audio or video recording of sessions, especially if you are doing focus groups rather than interviews. If you record your sessions, you won't need to take such detailed notes, but it's still wise to take at least a few. Recording sessions has both advantages and disadvantages. Having a recording makes it easy (though time consuming) to go back over your sessions or share them with others. Recordings can be great training tools. But as ways of capturing how readers react to written material, recording the interaction has some significant limitations. Even if you have recorded video as well as audio, it can be hard to know what the person was looking at when they made a particular comment. For more on this, see Chapter 12, *Should you do audio or video recording of your sessions?*

Who is taking the notes?

There are two main ways to handle note taking during an interview:

- **One way is to have the interviewer take the notes, in addition to conducting the interview.** This can be challenging, especially for beginners. It's hard to split effort between leading the interview and taking the notes.

- **The other way, pictured below, is to use a two person team.** One takes the lead on conducting the interview and the other is the primary note taker. For most situations, this is the approach we recommend.

When you work with a colleague, you can focus either on conducting the session or on taking the notes. **Teamwork allows each person to concentrate more fully on a single task.** Interviewers can stay more attentive to the reader, and note takers can keep a more complete and detailed record of the session.

The interviewer generally takes a few notes from time to time, and the note taker may ask some questions as well. They can trade off on these tasks if they like. If you happen to be using a professional focus group facility for your sessions, you can have one or more note takers working in the observation room, behind a one way mirror.

Working together makes doing feedback sessions easier for both of you, and it tends to produce better results. Taking the team approach to conducting feedback sessions gives you a partner to compare impressions with when the session is over. You can discuss what you learned from the reader during the session. The team approach is also ideal for training. You can give each other encouragement and support as well as tips to help improve your skills.

Explaining to participants why you are taking notes

When you begin the interview, you will want to give a brief explanation about why you are going to be taking notes during the session. If you are recording the session, you will also want to confirm that the participant is willing to be recorded. If you plan to record the sessions, you need to say so when you are recruiting. Even so, it's important to discuss recording with the participant before you begin, and complete the appropriate paperwork such as consent forms. Below is an example of how you might handle the explanation of note taking and recording.

sample script from an interview guide

INTERVIEWER: Explain about taking notes and taping:

While you're reading and commenting on this material, I'll be taking some notes to help me remember what you say.

I won't have time to write everything down, so, if it's okay with you, I would also like to tape this interview. That way, I can listen to it later.

I might share this recording, but only with other people who are working on this project. We would keep it confidential, and your last name would never be used.

If taping this interview is okay with you, please sign here to give me your permission.

INTERVIEWER: Have participant sign the release form.

What do you write down in the notes?

When you are taking notes during a feedback session, **most of your notes will be purely descriptive**. Your notes record the highlights of what happens during the session. Many of your notes will tell what participants say. This includes their spontaneous comments as well as the answers they give to questions you ask. Other notes tell what participants do with the material. This includes notes on behaviors you observe, such as which parts of the material they look at and how long they spend on different parts of the material.

Although most of your notes will describe what the participants say and do, occasionally you might jot down your personal impressions. Sometimes, instead of just describing what participants have said or done, you will make notes that reflect your own assessment about what was said or done. For example, you might write a general comment such as, *Seems to be having trouble reading that part*. If you are the interviewer, you might write down notes that serve as reminders, such as making a note of a follow-up question you want to ask.

How can you make note taking more efficient and effective?

Don’t worry about trying to take comprehensive or detailed notes during your feedback sessions, because it’s just not physically or mentally possible. You will need to be selective about what you write down (especially if you are both interviewer and note taker). You’ll also need to be flexible, because people don’t give their feedback in an organized way.

It’s okay to ask a participant to repeat something they have just said. By asking them to repeat it, you show that you are treating what they say as important. It’s also okay to take a little time to pause and write your notes. People are generally patient.

Here are some tips on ways to make it easier to take good notes:

- **Take care in where you sit and how you hold your note taking materials.** Give yourself a clear view of the person and the written material, and try to keep the notes from becoming a physical barrier between you and the participant. Try not to lose eye contact because you get so engrossed in taking notes.

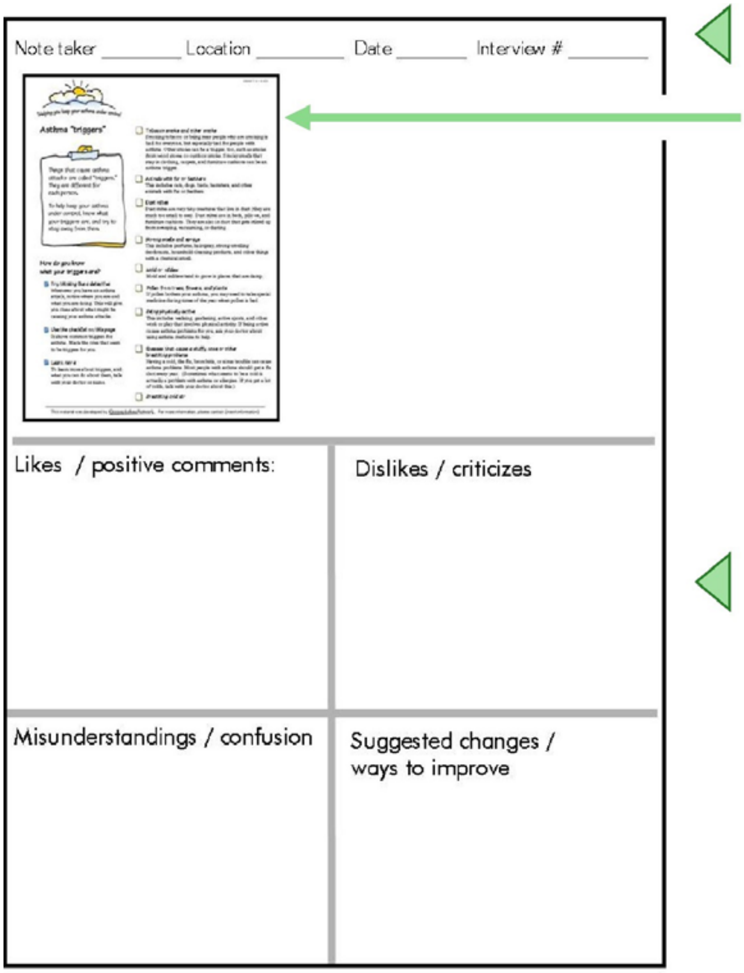
- **Find your own style or way of taking notes that works best for you**. Usually, the note taker will have a copy of the written interview guide that has been adapted for use in taking notes. There are two main options: leave extra space for note taking under each question, or print the guide with an extra wide margin for taking notes. Choose the way you prefer. Some people who are left-handed like to print the note taking version of the guide with an extra-wide margin on the left side. Some people like clipboards, and others don’t. When they are writing notes in haste, some people like pencils, some like pens. Some like the pages stapled together, others want them clipped. You may need to experiment a bit to discover what works best for you.

- **Focus on jotting down key phrases that capture the main points.** Remember, you will be taking some time right after the interview to make additions and corrections to your notes. The key phrases will jog your memory.

- **Figure out some good abbreviations to use as shortcuts for note taking.** Setting up some simple abbreviations will help streamline your note taking. Many note takers use the letter *R* for *respondent* to refer to the feedback participant. You can use the letter *P* for *probe* to mark answers that were given in response to an interviewer’s probe. Think about the subject matter of the material and invent some abbreviations for the words that might come up frequently in your note taking. For example, if the material is about diabetes and exercise, you could use the letter *D* for *diabetes* and *E* for *exercise.* Work with your interviewing partners to devise some note taking shortcuts of this type. And then later, when you go over your notes, you can fill in the places where you did shortcut abbreviations that are not going to be self explanatory to others who will see your notes.

- **Prepare and use special forms to expedite note taking**. Figure 6-17-a below shows an example of a form we call the “mini-page note taking sheet.”

Figure 6-17-a. Example of a mini-page note taking sheet.



These **blanks at the top** make it quick and easy to label your notes

To make note taking more efficient, include a **reduced-size version of the written material** on your note taking sheet. We call this a "mini-page."

- Write your notes in the blank area to the right of the mini-page.
- To link your notes to a particular part of the mini-page, you can use arrows or you can circle parts of the mini-page and draw lines back to your written notes.

Dividing the note taking page into **sections** like these four sections helps you **categorize and label the type of feedback** you are getting *as you take your notes.*

- Putting notes under headings **speeds up note taking**.
- Putting notes under headings also **reduces ambiguity.** Later, when you are using your notes to analyze the feedback you got, you will know for sure whether a comment was positive or negative.

Source: This example shows a note taking sheet that was used by the Toolkit writer and her partner, Mark Evers (McGee & Evers Consulting, Inc.), in a project for the State of Oregon. The mini-page is an early version of a piece on asthma triggers. The piece was revised based on results from testing and is now part of the Oregon Asthma Resource Bank at http://www.oregon.gov/DHS/ph/asthma/resourcebank. The note taking sheet is used in this Toolkit with permission from the State of Oregon; commentary added by the writer.

The mini-pages note taking sheet is a helpful, versatile tool for note taking. It works well for recording what people say and do during a period of *think aloud* and making notes about their reactions to photos and other visual elements. Mini-pages note sheets also work well for capturing a sequence of navigation through the material. For example, suppose that you want to keep track of which part of the material the person looked at first, second, third, and so on, together with comments they made about each part. To record this sequence, you can write a number right on top of the mini page to mark the spot where they looked. If there's a comment, you can write the comment down below the picture, and link it to the number with a line.

It's easy to make a mini-page note taking sheet for your own project:

- **Start by doing the basic layout of the form**, leaving a place where you can insert each mini-page. Figure 6-17-a above gives one example of a simple layout. You can create one of your own to suit the needs of your project and the written material.

- **Insert the mini pages into the form**. You can do this mechanically, by photocopying each page in reduced size, and then cutting and pasting it onto the form. Or, if you have the skills, you can create an electronic version by scanning or other means.

What to do when the session is over

Review and expand on your written notes

When the session is over, take a few minutes to go over your notes. It's best to do this right away, while the interview is still fresh in your mind.

- **Make corrections.** When you're writing notes in a hurry, it's easy to make mistakes. When you finish a session, it's crucial to look over your notes and make any corrections that are needed.

- **Make additions**. Also, take the time to expand on the notes you just took. This includes spelling out abbreviations and filling in places where notes are incomplete. You'll probably find many places where the notes trail off because you couldn't keep up with the pace of the interview. When you are reviewing and improving on your notes, try using a pen that writes in a different color. This will show what you wrote down during the session and what you added later on.

It's worth the effort to review and improve on your notes. When notes are clear and complete, it's easier to analyze the feedback from your sessions and use it to improve the written material. Check to see that all of the paperwork related to a particular interview has been labeled with an identification number so that you can keep it grouped together without using people's names.

Fill out a "Session Summary Form"

A "Session Summary Form" is this Toolkit's name for a simple form that you can use to summarize the results from each feedback session (see Chapter 11, *Creating and using a Session Summary Form*). You use this form to supplement the notes that are taken during the session. You prepare the form ahead of time, adapting it to meet the needs of your feedback sessions. There's an example of a Session Summary Form in Chapter 11.

A Session Summary Form gives you a quick and easy way to describe the participant, how the session went, and consolidate the highlights of your results in an organized way. When you are filling it out, you draw on the notes taken during the session and you add your impressions and interpretations. Using the Session Summary Form in addition to regular note taking gives you a more thorough written record of your results. Having a completed Session Summary Form for each session provides a giant head start for those who will be analyzing and using the results from the feedback sessions. The structure of the form makes it easy to skim the key points from each session and to compare results across sessions.

If you are working with a partner to conduct feedback sessions and take notes, you can work together on filling out the Session Summary Form. Filling it out together gives you a chance to compare your impressions and interpretations and reflect on what you have learned (researchers call this "debriefing"). Before you start discussing a feedback session, make sure there's enough privacy. You don't want to talk about a participant or interview where anyone might overhear you.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 18

Tips for effective interviewing technique

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 18

Tips for effective interviewing technique

List of figures in this chapter:

This document is the eighteenth of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Summary list of tips for effective interviewing

To help make your feedback sessions enjoyable and productive, this chapter offers practical tips on interviewing technique. We discuss the tips summarized below in Figure 6-18-a.

Figure 6-18-a. Summary list of tips for effective interviewing.

Tips for effective interviewing

1. Get ready to see the material from the reader's point of view.
2. Have reasonable expectations for your interviews and yourself.
3. Put your interview participants at ease.
4. Encourage participants to speak up and say what's on their mind, and keep your own opinions to yourself.
5. Wait patiently and listen attentively.
6. For the most useful feedback, follow up on what people say.
7. Have a plan for what to do if the participant can't read.
8. Be ready to handle common problems that come up.
9. Wait until the end to offer information or help with problems.
10 Work on improving your skills and technique.

Source: Created for this Toolkit, based on the writer's personal experiences, suggestions from colleagues, and themes reflected in the literature.

Get ready to see the material from the reader's point of view

Get ready to see the material from the reader's point of view

- Get ready to enjoy learning from the people you interview.
- Be prepared for some surprises and new insights, because the reader's point of view is likely different from your own.

If you have never done feedback interviews, you have a treat in store. You will be amazed at how interesting, informative, and satisfying it is to talk directly with readers and hear them tell you in their own words about their reactions to the written material.

When you go into an interview, remind yourself that you are there to learn as much as you can about the reader's perspective on the material (for more about this, see Toolkit Part 2, *Using a reader-centered approach to develop and test written material*). Don't be surprised to learn that readers see the material differently than you. Sometimes the people you interview will be confused by something that seems clear to you. They might reject a photo or a color scheme because it has negative cultural connotations you didn't know about. They might misinterpret a table or diagram.

Getting feedback like this can be humbling for those who developed the material, but it's exactly what you need to spot problems in the material and figure out ways to fix them. You will get positive feedback from readers, too, that identifies the strengths of the material. When you use the feedback from readers to make improvements, you can build on these strengths.

Have reasonable expectations for your interviews and yourself

Keep your expectations reasonable

- Have reasonable expectations for your interviews and yourself.
- Let your natural curiosity take over.

Have reasonable expectations for your interviews

You will learn a lot by doing feedback sessions, but don't expect to learn a lot from *every single interview*. When you do a series of feedback sessions, there will typically be a couple of interviews that stand out as exceptionally productive, giving you many new insights. A few might be unproductive. The rest will fall between these extremes. Interviews are dynamic and unpredictable. You won't know until the end how much you have learned from a reader you are interviewing, so be careful not to pre-judge how informative an interview will be.

Have reasonable expectations for yourself

When you are the interviewer, you are the tool for collecting feedback. It takes time and practice to develop and refine interviewing skills, so go easy on yourself if you are a beginner:

- It's fine to tell the people you interview, *I'm new at this*. You will find that most feedback participants are patient and eager to do their part to help make the interview go smoothly.

- Stay focused on learning from the participant, rather than thinking about yourself and how you are doing as an interviewer. Just let your natural curiosity take over.

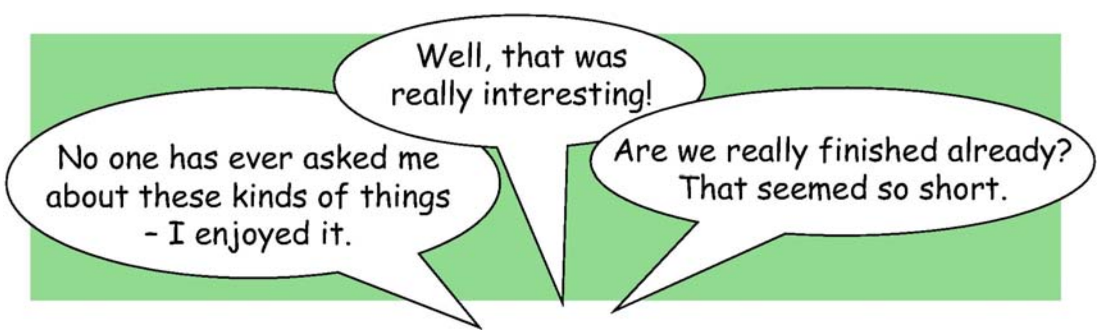
Put participants at ease

Put your interview participants at ease

- Greet people in a friendly way, showing respect and appreciation.
- Tell them what to expect during the interview and address questions or concerns they may have.
- Be attuned and responsive to the participant's cultural expectations about being interviewed.

Getting feedback from readers is a human interaction, not a mechanical task. The people you interview are giving you their time and attention, and you want them to feel appreciated and respected as individuals.

Putting your participants at ease will make your feedback interviews more productive, because it will encourage participants to speak up and be candid in reacting to the material. When participants feel at ease, they enjoy the experience of sharing their reactions and opinions and being helpful to your project. At the end of the interview, you will probably hear comments such as the ones shown below:



Here are tips on how to put your interview participants at ease:

- **Greet them in a friendly way and make them feel comfortable**. Smile and thank the person for coming to help. Show respect and appreciation.

- **Let them know what to expect.** Most people you interview have probably never been in a feedback session and don't know what to expect. So they sit there, ready to do whatever you ask them to do with the written material, ready to answer the questions you ask. The more comfortable you can make them feel, the more likely they are to open up and tell you what's really on their mind, rather than feeling guarded or uncomfortable about what to say.

- **Anticipate and address questions or concerns they may have.** People who are unfamiliar with reader feedback sessions will generally have two types of concerns:

    - **They may feel inhibited about being too critical**. They may associate you personally with the material they are looking at, and may be concerned about hurting your feelings if they say something negative. You will need to convince them that (a) they won't hurt your feelings, no matter what they say; (b) the material is still being developed and it needs improvement; and (c) criticism of the material is especially helpful for figuring out how to improve it. Later in this chapter, Figure 6-18-d gives tips on how to encourage people to be candid.

    - **They may feel like they are being tested.** When you ask questions about the material or have readers use it to perform tasks, readers may begin to feel as if they are being tested. You are well aware that it's the material you are testing, not the participant. But this distinction can easily be lost on a participant who has never been asked to give feedback on written material. You will need to watch for signs that a reader is feeling inhibited or intimidated, and take action to put the person at ease.

- **Adapt your interviewing approach to suit the participant.** For example, to put some people at ease and establish good rapport, you may need to take a slower pace or devote a little extra time to informal conversation. As you gain experience in conducting feedback sessions, you will become more skilled at recognizing a particular participant's expectations about a comfortable interviewing style and adapting your approach accordingly.

- **Ask if they have any questions**. When you conduct a session, you will be using a written interview guide for reference (see Chapter 10, *Creating a written guide for conducting feedback sessions*). This guide typically has a list of points you need to cover during the introduction to the session. When you have finished your explanation, be sure to ask if the person has any questions.

Encourage participants to say what's on their mind and keep your own opinions to yourself

Encourage participants to speak up and say what's on their mind, and keep your own opinions to yourself

- Use words and body language to convince people that you are receptive to whatever they say, including comments that are negative or critical.
- Let them know it's okay if they have *no opinion* or can't give any reason for an opinion they express.
- Stay friendly but neutral (don't agree or disagree with what they say; don't give your own opinions).

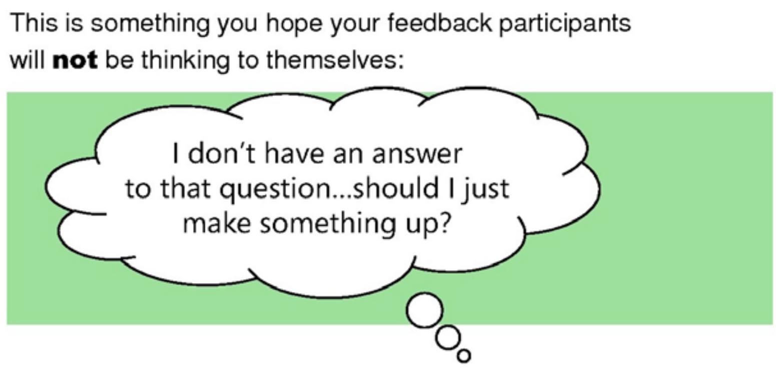
In this book, we emphasize how the way you word your questions can influence the way that people answer. Chapter 8, *Phrasing your questions to get the most useful feedback from readers*, covers this topic in depth, giving guidelines and examples of the most effective ways to ask questions.

While question wording is crucial, so is the way you ask your well-phrased questions, not to mention how you respond to the answers you get. To encourage participants to give their full and honest feedback, you will need to be **friendly yet neutral**. If you seem to be reinforcing a particular type of answer or point of view, you might inhibit people from being candid or steer them toward a particular type of answer.

So when you are interviewing people, let people know through your body language and your words that whatever they think and say is fine with you. Here are tips:

- **Be aware of your facial expressions and other body language, and do your best to keep them neutral.** Nodding your head, raising an eyebrow, and other expressions and gestures can subtly signal approval or disapproval to the people you are interviewing – regardless of the words you use.

- **Let people know it's okay if they have no opinion.** To avoid the kind of situation shown below, you may need to say something explicit, such as *If you don't have an opinion about this, that's fine, so feel free to just say so.*



- **Let people know it's okay if they are not able to give a reason for an opinion they express.** People can often tell you whether they like something or not – such as a color scheme or overall look, but may not be able to say anymore about their preference other than just to state it. Be cautious about probing too much if you are asking for preferences that involve matters of personal taste.

- **Keep your own opinions to yourself.** You have your own opinions, of course, but it's important to set them aside during a feedback session. Stay neutral and take special care to come across as receptive and non-defensive. If participants sense that you are disagreeing with or dismissing what they say, it will undermine your purpose – which is to see the material through your reader's eyes.

Helping people feel comfortable about "thinking aloud"

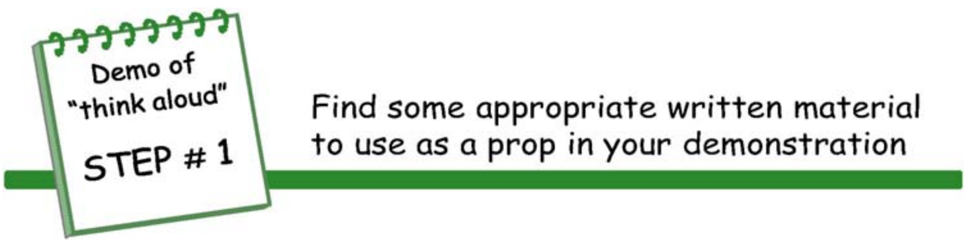
When you are getting feedback from readers, it can be very informative to have them share their reactions by "thinking aloud" as they read the material (see Chapter 3, *Introducing four methods of getting feedback from readers*). It's typical to invite readers to "think aloud" at the beginning of a feedback session.

For many participants, the idea of verbalizing their thoughts as you sit listening will seem a bit unusual, and they will need guidance and encouragement. To put people at ease and get good results from using the *think aloud* method, it helps to explain what it actually means to share your thoughts aloud. One option is to give the participant a chance to practice first, using a different piece of written material that's familiar. For example, you could give them a restaurant menu and ask them to share their thoughts aloud about how they decide what to order.

An easier way, and one we think works better, is to have the interviewer give a brief demonstration. Giving a demonstration is a direct way of coaching participants on what you'd like them to do. Figure 6-18-b below gives an example.

Figure 6-18-b. Helping readers "think aloud" by demonstrating with an example.

To help interview participants feel comfortable about sharing their thoughts aloud, try modeling how it works. You will need to adapt your approach to suit your project and its participants. Be careful not to make your demonstration too long and detailed. The goal is to help people understand the task and feel comfortable about sharing thoughts aloud, not to create a burdensome expectation for continuous, elaborate commentary. Here are tips on how to do it:



You will need a prop to use in your demonstration because you don't want your demonstration to prejudice how readers respond to the material you will be showing them. Select something that is appropriate for the participants. Ideally, **it should differ in content from the material you are testing, but be similar in other respects**. For your prop, try to find a piece of written material that is similar in size, format, level of reading skills required, and general appearance.

- For example, if the material you are testing is a simple black and white patient instruction sheet, you would not want to use a slick full-color magazine as your prop for a demonstration of think aloud. The contrast between the two documents would be too great, and seeing the full color spread first might bias the responses you get to the instruction sheet.

- If you are getting reactions to material that has some unusual physical feature, such as an unusual size or folding scheme, it helps to model with something that also has this characteristic. For example, suppose that you are doing feedback sessions to get readers' reactions to a community health resource guide that will be distributed as a newspaper supplement. You could use a booklet of television listings from the Sunday newspaper for the think-aloud demonstration, because this is a close match.

Demo of "think aloud"
STEP # 2

Explain that you want the person to share their thoughts by "thinking aloud"

sample script from an interview guide

INTERVIEWER: Explain about "think aloud":

I'm very interested in hearing your thoughts and opinions, and would like you to share them with me by **thinking aloud**.

Whatever you are thinking to yourself as you read the material, just say it out loud. This lets me know right away about things you're noticing and reacting to -- while it's still fresh in your mind.

Once you've shared a thought aloud, just keep right on reading. And then later, when you're finished reading, we'll talk about your reactions.

Demo of "think aloud"
STEP # 3

Use your prop to give the person a demonstration of "think aloud"

Model the type of commentary you want to encourage by giving your own *think aloud* comments on the material you have selected to serve as your prop.

- As shown below in the sample dialogue for a demonstration, the *think aloud* commentary you model should **include some details and explain some reasons why**.
- **Try to include a realistic example of forming and then correcting a mistaken impression, or changing your mind about how to interpret something in the material.** This will signal to the participant that you are interested in the details of whatever he or she is thinking, and that the process they follow and comments they make don't need to be consistent or orderly.

What the interviewer does:

The interviewer puts a booklet of weekly television listings from the Sunday newspaper on the table where both the interviewer and participant can see it.

The cover has a large photograph of the cast in a new show.

What the interviewer says:

To show you what I mean when I ask you to share your thoughts aloud, I'm going to use these TV listings as an example.

Here are my own thoughts aloud as I look through these listings:

I'm looking at the picture on the cover now, and wondering who those people are. Looks pretty interesting. Oh no— it's not interesting –it says they're in a new science fiction show that starts this week, and I don't like science fiction.

What the interviewer does:

The interviewer starts flipping through the pages.

What the interviewer says:

Well, the main thing I like on TV is the movies.

So now I'm looking for whether there's a list somewhere that shows all of the movies for the whole week.

There doesn't seem to be one. Maybe there's some kind of contents page that will tell me.

What the interviewer does:

The interviewer turns back to the beginning of the TV listings, and then points at a particular spot on one page.

What the interviewer says:

Oh there it is – this says movies are on page 22.

Funny I didn't notice that before. I guess I was looking at that picture on the other page instead.

Source: Created for use in this Toolkit, based on the writer's personal experiences and on suggestions from colleagues, including Elizabeth Hoy, Holly Smith Mirenda, Penny Lane, Mark Evers, and Roger Levine.

Expect a range of reactions from people when you ask them to "think aloud"

While it helps to provide this type of demonstration, keep in mind that the *think aloud* method of collecting feedback works well with some people and not with others. It does not work well for people who find it difficult to split their attention between the task of reading and the task of verbalizing the thoughts they are having about the material. This includes people who have limited reading skills and people who need to concentrate heavily on what they read.

You should also expect a wide range of reactions and individual variations in how much people say during *think aloud*. Some people will offer a detailed commentary as they go through the material, and others will make only a brief comment or two. Some readers never feel comfortable enough to share their thoughts aloud. Others who feel comfortable about thinking aloud may get absorbed in reading and forget to do it. They will need an occasional reminder from you.

Encouraging participants to mark on the document

Another good way to help people feel comfortable about sharing their reactions to written material is to empower them to write directly on it while they are reading. See below for suggestions.

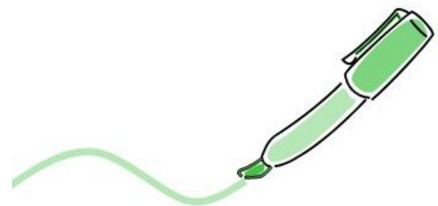


Figure 6-18-c. Encouraging participants to mark the document as they read.

Participants in a feedback session take their cues from you. Unless you give them specific permission and encouragement, they will probably be reluctant to write on the material you show them. For some people, writing on the document can be a very useful way to give you their feedback. The sample script below suggests ways to encourage them to mark the material.

sample script from an interview guide

INTERVIEWER: Give the person a colored marker pen:

Here's a pen for you. While you're reading this leaflet, please use it to mark things that you notice:

- You can mark or circle things that are not clear.
- In particular, I'd like you to mark any part where you **stop and go back** to read something again to figure out what it's trying to say.
- You can also use the pen to mark words or other parts that you think might be confusing to some people – even if you understand them yourself.
- If you think there's a better way to say something, feel free to write down the words you think the writers should use.
- And you can also use the pen to mark parts that you like or think are really good.

I'm interested in hearing what you think about the way something looks, or the words, or anything else – it's all helpful!

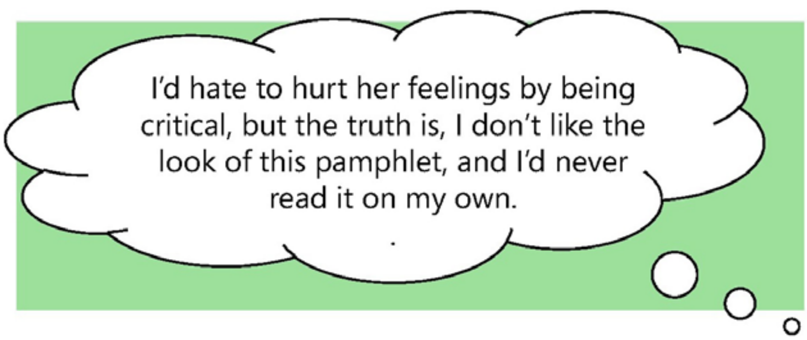
Source: Created for this Toolkit, based on the writer's personal experiences and on suggestions from colleagues, including Elizabeth Hoy, Holly Smith Mirenda, and Penny Lane.

Encouraging people who seem reluctant to be critical

People are sometimes wary about criticizing the written material you show them in a feedback session. Figure 6-18-d below gives examples and tips on how to encourage people to be candid, yet do it in a neutral way.

Figure 6-18-d. How can you stay neutral when you are encouraging people to be candid?

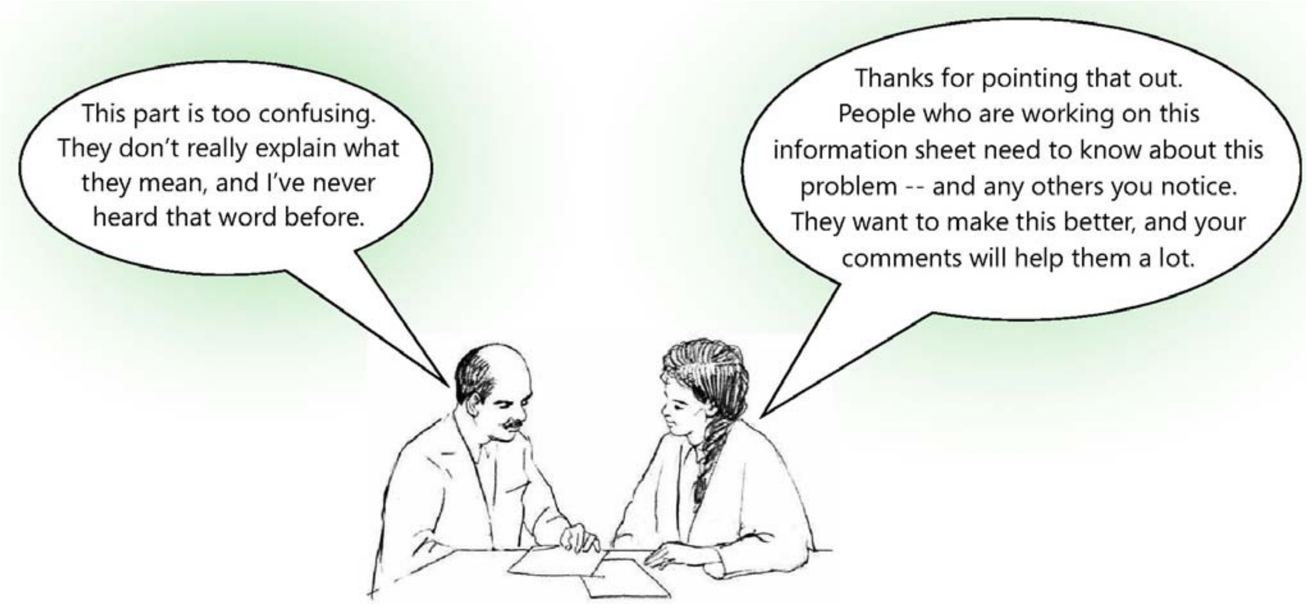
As shown in the example below, feedback participants sometimes hold back on being candid.



Participants might be holding back because they think the interviewer might take the criticism personally (as in the example above: "I'd hate to hurt her feelings"). They also might be waiting to see whether the interviewer really means it when he or she says to share what's on their mind.

To help people feel more comfortable about being candid, you will need to convince them that you won't take criticism personally and that you really do want them to be candid. In some situations, it can help a lot to say something receptive and encouraging the first time a participant offers any criticism, such as "you're giving great feedback," or "your comments are so helpful."

When you encourage participants to be candid, you can do it in a *neutral way* by reinforcing the *act of giving of feedback* – as opposed to reinforcing the specific feedback that was given. Here's an example:



In the example above, the interviewer does a number of things to reassure and encourage the participant:

- **Without agreeing or disagreeing with his specific critique, she strongly reinforces him for giving criticism.** She does this by explicitly thanking him and telling him that his comments will help the developers of the material a lot.

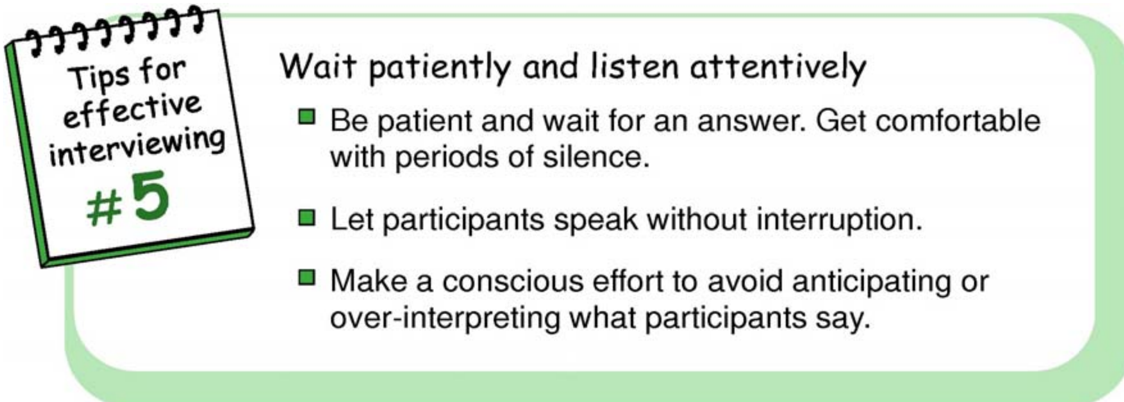
- **She distances herself from the material**. To help him understand that she won't take criticism of the material personally, she distances herself from the developers of the materials by saying *People who are working on this information sheet*.

- **She explains why criticism is needed and appropriate.** The interviewer explains that feedback will be used to improve the material. She does this by saying that the developers need to know about problems with the material and want to make it better.

- **She invites further criticism**. By including the phrase *and any others you notice*, she invites him to identify other problems with the material.

Source: Created for this Toolkit.

Wait patiently and listen attentively



This tip urges you to wait patiently for people to talk and listen carefully to what they say:

- **Be comfortable about having some periods of silence from time to time during your interviews.** Sometimes people need to collect their thoughts before they answer a question you ask. Don’t rush them. By waiting patiently, you can avoid a lot of common problems of interviewing, such as saying “okay” repeatedly when it isn’t appropriate.

- **When people do speak, let them talk without interrupting them.** Cutting off what a person is saying is rude and it may cause you to miss something important. Interruptions distract people from what they are thinking. When you interrupt the participant, you signal that you are not interested in what they were trying to say, or feel it’s not important. Interruptions by an interviewer tend to inhibit people from saying what’s really on their mind, especially if the interruptions are frequent. People tend to get discouraged and give you briefer answers that are much less informative.

- **Listen intently to what they say.** When you listen carefully, your understanding will improve, you will feel more relaxed, and you’ll be less inclined to interrupt.

    - When you are a beginner, it can be hard to concentrate on listening attentively. You may be thinking ahead to the next question you need to ask, or distracted by taking notes to capture what the person says. To help focus on active listening, get into the mindset of “I’m talking with a person who is very interesting and I really want to know what they’re thinking.” People will pick up on your interest and offer more.

- Listen when they tell their stories. By listening, you show respect, build rapport, and may learn something that's helpful. Sometimes a story that seems like an unrelated tangent turns out to be quite relevant to the material and your feedback issues. Of course, if the interview turns into one story after another, you will need to politely direct the person's attention back to the material.

- **As you listen, make a conscious effort to avoid anticipating what they are going to say.** If you distract yourself by trying to second-guess a response, you may miss what they actually say. If you are expecting to hear a particular response, you may misinterpret what they actually say to fit with your expectations.

- **It's okay to ask a participant to repeat something they have just said.** By asking them to repeat it, you show that you are treating what they say as important. It's also okay to take a little time to pause and write your notes. Again, most participants will be patient with you.

Follow up on what people say

To get the most meaningful and useful feedback, follow up on what people say

- Ask follow-up questions for clarification and to encourage people to say more.
- Have people show you which parts of the material they are reacting to.
- Let people tell you in their own words what they mean (be very cautious about paraphrasing).

When you are seeking feedback from readers, it's important to go slow in drawing conclusions from what they say. To get the most useful feedback, it helps to hear the reasoning behind people's answers. Use follow-up questions to get them to share more details in their own words. In Chapter 8, *Phrasing your questions to get the most useful feedback from readers*, we describe follow-up questions as indispensable tools in a feedback session. Often, it is people's answers to your follow-up questions that will give you the greatest insights into problems with the material you are testing. The more you know about how readers are reacting to the material, the easier it will be to use their feedback to make improvements.

You can use follow-up questions to clarify an answer or verify that you have understood. You can also use them to encourage people to give a more specific response or to expand on what they have said. By asking some follow-up questions early in the interview, you signal to participants that you are genuinely interested in hearing more. They may respond by giving more elaborated answers to subsequent questions.

While you want to encourage people to share their thoughts and opinions, you need to be judicious in using follow-up questions. You want to probe enough but not too much: Watch for signals that you are probing too much and need to back off. For example, you may begin to hear a bit of irritation in the person's voice, or the person may end each response by adding, "And that's all I have to say about that." When you are learning to interview, it can be helpful to listen to recorded interviews and pay attention to how the probing was done and how the person responded.

Be cautious about paraphrasing

In general, resist the impulse to paraphrase what readers tell you. Remember that your goal is to get them to engage with the material and share their personal reactions. It's best to let them speak for themselves and tell you what they mean. Once in a while, it might be necessary and helpful to paraphrase something a participant has said. But don't fall into a habit of re-stating in your own words something your participant has just said: **Frequent paraphrasing by an interviewer can undermine rapport by making respondents feel inhibited, inadequate, or frustrated:**

- If you paraphrase and get their meaning wrong, they may decide to let it pass – in which case, you will have misinterpreted their feedback.
- When you paraphrase, they may take your restatement of their words as a cue about how you want them to be responding, and it will lead them in a particular direction.
- If you persist in paraphrasing, you will give them the impression that their own words aren't as good as yours. This may inhibit them from sharing their reactions to the written material.

Have a plan for what to do if the participant can't read

Tips for effective interviewing #7

Have a plan for what to do if the participant can't read

- Be tactful and kind.
- If you can, focus on getting reactions to visual elements rather than text. Consider other options, too, such as reading short passages aloud.
- End the interview early if it seems appropriate.

Since the purpose of feedback sessions is to get people's reactions to written material, ability to read the material is always a requirement for participation. Figure 6-18-e below gives tips on what to do if you discover after a session is underway that the person you are interviewing is unable to read the material.

Figure 6-18-e. What should you do if the participant is unable to read the material?

1 Be alert for signs that a person might be having trouble reading the material

Having trouble reading is a cause for shame in our society, and people with low literacy skills become adept at concealing their inability to read (Willard; AMA 2007; Doak, Doak, & Root, 1996; Osborne, 2005). Sometimes, people with marginal reading skills will make a socially acceptable excuse such as saying that they forgot their reading glasses. They might give the same vague answer to your questions, no matter what you ask about, such as saying repeatedly *it's good* or *it looks okay to me*. If you ask them to read a particular section of the material, they might go through it more quickly than you were expecting because they weren't really reading it. Any of these behaviors could indicate low literacy skills, *or not*. In general, be alert for any indications that the person might be having trouble reading, and be ready to change your approach accordingly.

2 If the participant has trouble reading, be kind and respectful, and adapt your approach.

This is an awkward situation. You tried to prevent it, by stressing that reading would be required during the session (see Chapter 14, Figure 6-14-b, *Tips for recruiting people who will be able to read the material you show them*). But somehow it happened.

Once you realize that the person is having difficulty reading, you will need to decide whether to continue by adapting the interview, or simply end the interview. Take into account the type of materials you are showing, the issues you are addressing in the materials, and the participant.

- If you can, try adapting the interview. Think about which questions in your interview require the least reading, and focus on those. Plan to skip any parts of the interview that require reading large amounts of text.

- But trust your instincts, and don't hesitate to end the interview early if that seems best. If you do end the interview early, be sure to pay the person the full amount of any compensation that has been promised. (For tips on graceful ways to end the interview, see pages 246-247.)

3 As much as you can, focus the interview on getting reactions to visual elements.

People with low literacy skills can easily give their reactions to visual elements that don't require any reading. So if the material contains any photos, illustrations, or other images, focus on those. If you do not have scripted questions planned for these visuals, you can improvise an open-ended question, such as *Take a look at this photo* {while pointing to a specific photo}. *What's your reaction?* Then probe the answer for details, as appropriate. You can also ask for reactions to the color scheme or other visuals.

4 Skip the text-related feedback issues or adapt your approach to adjust for poor reading skills.

Depending on the material you are testing and the literacy skills of the participant, it may be possible to get reactions to parts of the material that have limited amounts of text. If so, you can skip questions that require reading a large amount of text (trying not to draw attention to the fact that you are skipping them) and then get reactions to titles, headings, etc.

If the amount of text to be read is small, it may work to read it aloud for the person. If you choose this approach, just go smoothly into reading aloud, in a respectful, matter-of fact way that helps preserve the person's dignity and does not explicitly acknowledge that the person can't read. For example, you could say something such as, *Here, let's take a look at this part* {pointing to it}*... It says* {begin reading it aloud}.

5 Is this an isolated incident or does it indicate a problem with recruitment of participants?

If you are doing a series of feedback interviews, it's not uncommon to encounter an occasional participant who lacks sufficient reading skills to participate fully in an interview. But if this situation comes up frequently, check to see if there is a problem with your recruitment procedures. Review the requirements you have set and check on how the screening is working. Sometimes, especially if another organization is helping you with recruitment, those who talk with potential participants do not appreciate the importance of screening for ability to read. Even when you supply a script that addresses the need to read during the feedback session, it's possible that recruiters are not following it closely.

Source: Created for this Toolkit.

Be ready to deal with common problems that come up

Be ready to deal with common problems that come up.

- Learn techniques to use when interaction with participants is challenging, such as when people are very talkative and get off the topic.
- Trust your instincts, and don't hesitate to end an interview early if it seems appropriate.

When you are conducting a feedback session, you'll want to be aware of and ready to handle typical problems that may come up. For example, sometimes people are too talkative and keep straying away from the topic. There are several approaches that you can try to help regain control of the interview. Whether and how well they may work depends on the person you are interviewing and other factors.

- **One way is to stop eye contact so that you are not reinforcing the person.** You can look down at your interview guide. Sometimes people will pick up on this subtle signal and realize that they have been off on a tangent and not responding to what you asked.

- **Another way is to say something directly to get the person to refocus.** For example, it may work to appeal to their willingness to help you do a good job. You will want to be polite and friendly, but specific about what you want to do. For example, you might say: *What you're saying is so interesting, but I'm getting a little concerned about time. I have so many topics to cover with you, and I feel like we may run out of time before I finish. So I wonder if you would be willing to answer this next question I have* – and then go immediately into asking the question.

It doesn't happen often in feedback sessions, but it's always possible that your participant will react emotionally to the content of the material you are testing, especially if you are testing material that discusses such topics as terminal illness or medical error. For example, the author has conducted a couple of interviews that unexpectedly touched on a memory or topic that was very sensitive for the participant, and the participant started to cry. If this happens in one of your interviews, be patient, apologetic, and respectful. If you happen to be recording the interview, stop the recording immediately. Skip over the topic that caused the emotional response, and ask the person if they would like to stop the session. Take your lead from the person about what to do next.

There are numerous resources on interviewing that include suggestions for handling challenging situations that may arise. Some are textbooks or reference manuals for researchers (for example, Arksey & Knight, 1999; Patton, 2002; Rubin & Rubin, 2005). Others are applied guides for conducting focus groups or interviews. *A Practical Guide to Usability Testing* (Dumas & Redish, 1999) is an excellent resource for this topic of interview dynamics and for many other topics as well. You will find that many of the tips on how to moderate a focus group apply just as well to handling the interviewing in a feedback session. For discussion that includes a wealth of practical tips and examples, see Krueger & Casey (2000) and *The Focus Group Kit* (Morgan & Krueger, 1998; see Volume Four, *Moderating Focus Groups*).

It's always okay to end an interview early

You need to trust your instincts and feel free to terminate an interview early if something doesn't feel right. Perhaps the interview seems to be too stressful for the participant or you sense that the person is not feeling well or is having trouble focusing on the interaction. Whatever the circumstances or reason, if you should find yourself feeling uncomfortable, it's best to end the interview.

Here are some tips on graceful ways to end the interview early:

- If you choose to end an interview early, your demeanor is important. State in a firm and friendly way that you have now finished everything you need to cover and the interview is over. Then, without a pause, go on immediately into the wrap-up section of the interview guide. Smile and thank the person for coming and for participating in the interview and then take care of any final paperwork that you need to do, such as having the person fill out a demographic questionnaire or sign a receipt acknowledging payment for the session.

- You don't need to give a reason or say anything that draws attention to the fact that you are ending the interview early. In the unlikely event that someone presses you to give a reason, it's diplomatic to give a vague response that avoids any reference to the interview and how it went. For example, you could say, *There was a scheduling problem today, and I don't have as much time right now as I thought I would.*

- If you decide to end a session early (or cancel it altogether), always pay the person as if they had completed full participation. It's the kind and respectful thing to do; it doesn't really matter why the session didn't work out as planned.

Wait until the end to give information or help with problems

Wait until the interview is over to give information, correct a misconception, or offer help with a problem.

- Resist the temptation to "set people straight" or do problem solving during an interview. Remember that your role is to collect feedback on the material.
- If appropriate, be ready to give people resources and referral information at the end of the interview.

When you are conducting a feedback session, there are times when it can be tempting to interrupt the regular flow of the session to offer some personal assistance to the participant. For example, suppose that the participant says something that you know is based on inaccurate information, and you would like to help out by setting the person straight. Or perhaps the person describes a problem she is having, and you know an easy way to fix it. Or maybe the participant has asked you directly for advice or help, because you are the interviewer and he figures you're an expert on the topic of the written material.

Whatever the reason you are tempted to stop and help out, it's best to wait until the interview is over. If you interrupt the interview to correct a misconception that is related to the material, you run the risk of influencing how the person responds to the material during the rest of the interview. This could defeat the whole purpose of the interview—which is to find out what is working well in the material and what is not. If you pause to do problem solving or share resource and referral information, you will interrupt the natural flow of the interview and you might get sidetracked for so long that you can't complete the full interview. So here are some tips on how to handle situations of this type:

- **Be prepared.** If the topic of the written material is likely to trigger questions or a need for assistance among feedback participants, bring resource and referral information with you. Share it with participants at the end of the interview.

- **If the person asks you directly for help or advice, postpone the discussion politely**. You will have to adapt your wording to fit the situation. Here are examples of possible ways to postpone the discussion: *Let's go back and talk about that at the end. I have information I can give you that might be helpful.* Or, *That's an important question. I'd like to answer it later, after we finish the interview. Here – let me make a note of it so that I don't forget.*

- **Use good judgment about what type of advice or assistance you offer and how you offer it**. Even if you are knowledgeable enough to respond, it may be more appropriate for you to refer the participant to a community agency or other source of help.

Work on improving your skills and technique

Work on improving your interviewing skills

- Find your own interviewing style.
- Work on identifying and controlling your personal vocal and body mannerisms.
- Be attentive to verbal and non-verbal cues from the person you are interviewing.
- Ask interviewing partners for feedback and advice.
- Review audiotapes and videotapes of your interviews for insights into how you can improve.

To do a good job of conducting feedback sessions, it's important to be yourself. There's no "right" or "ideal" personality type for interviewing, so it doesn't matter whether you are naturally outgoing or quiet, as long as you have strong interpersonal skills. With practice and experience, you will develop and refine your own distinctive interviewing style. Just as you have your own personality and style of interviewing, so does the person you are interviewing have a distinctive way of reacting. Some are naturally outgoing and others are quiet. Some are highly attuned to social subtleties and they will respond to subtle non-verbal cures from you. Others will not notice if you turn your attention away or down toward the interviewer guide. Sometimes it's a good fit between you and the person you are interviewing, and other times it's not as good. One of your jobs in developing skills as an interviewer is to widen the band of comfort and self-confidence you have with different types of respondents.

Work on identifying and controlling your personal vocal and body mannerisms

When you are conducting feedback sessions, it's easy to develop vocal and body mannerisms and be unaware of them. To improve your interviewing technique, make an effort to identify and control your personal mannerisms. Here are some tips:

- **Watch for ways in which you use words in repetitive ways.** If you listen to tape recordings of interviews you have conducted, you might be surprised to hear yourself say words such as *ummm*, *uh, okay,* or *all right* over and over again. These habits of speech clutter your interviews and they can sometimes give inappropriate cues to the person you are interviewing (such as saying *okay* repeatedly). Try to identify your own personal mannerisms and then make an effort to keep them under control when you are conducting an interview.

- **Watch for the nuances of your taken-for-granted vocabulary.** For example, you might have the habit of referring to your friends as *you guys*, but some people you interview might find this form of address too familiar.

- **Pay attention to your personal body language and how it might influence the person you are interviewing.** Do you nod your head over and over? You might intend a nod to be a neutral acknowledgment of something the person has said, but the person might think your nod is indicating your approval. Do you tend to fidget a lot? If so, make an effort to keep your body quieter and more relaxed, to help put the participant at ease.

Ask interviewing partners for feedback on your style

If you are learning how to be an interviewer, it's helpful to get coaching and suggestions for improvement from others. And even if you are a seasoned interviewer, there's always room for improvement in your technique. So take advantage of any opportunities you have to get comments on your interviewing technique from others. If you conducted your interviews in two-person teams, ask your partner for feedback and suggestions on how you conducted the interview. After each session, ask for honest feedback and discuss ways to improve. *Was there anytime when you wished I had done something differently? Anything you noticed that might help me improve my style?*

It's generally easier to analyze someone else's performance than to assess your own. This means that you and your partner could help each other a lot by sharing your impressions and suggestions for improvement. Help each other learn and improve by giving specific suggestions to help the interviewer perform better next time. And the better you are at conducting reader feedback sessions, the more meaningful your results will be.

Using recorded sessions as tools for improvement

When you are conducting a feedback session, your attention is focused on the immediate task rather than on how well you are doing as an interviewer. Later, when you listen to a recording or review a written transcript of a session you conducted, you can get insights into your interviewing strengths and weaknesses, and use them to improve next time. You can also learn a lot by listening to recordings or reviewing transcripts of interviews that were done by other people.

- Listening to a recording is especially helpful because it lets you hear tone of voice, both for the interviewer and the participant. Try stopping the recording periodically and pondering what you think the interviewer should say next. Then start the recording again and analyze what actually happened.

- Reviewing the transcript is helpful because it makes it easy to glance back and forth through the session, analyzing the decisions the interviewer made in guiding the discussion, including decisions about when and how to probe.

If you are just learning how to do feedback sessions, try to listen to a recording of your first interview or two before you do any more. If you can, get help from an experienced interviewer as you review the recording.

End notes

CMS joins Toolkit writer Jeanne McGee, PhD in thanking colleagues who shared their experiences, reviewed early drafts of this and other chapters of the Toolkit, and offered many helpful ideas, examples, and suggestions for improvement. See acknowledgments at the end of Toolkit Part 1 and Toolkit Part 6, Chapter 1.

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CMS Product No. 11476
September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 3: Methods for testing written material with readers

PART 6

How to collect and use feedback from readers

Chapter 19

Using feedback from readers to improve written material

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 6, Chapter 19

Using feedback from readers to improve written material

This document is the last of 19 chapters in Part 6 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

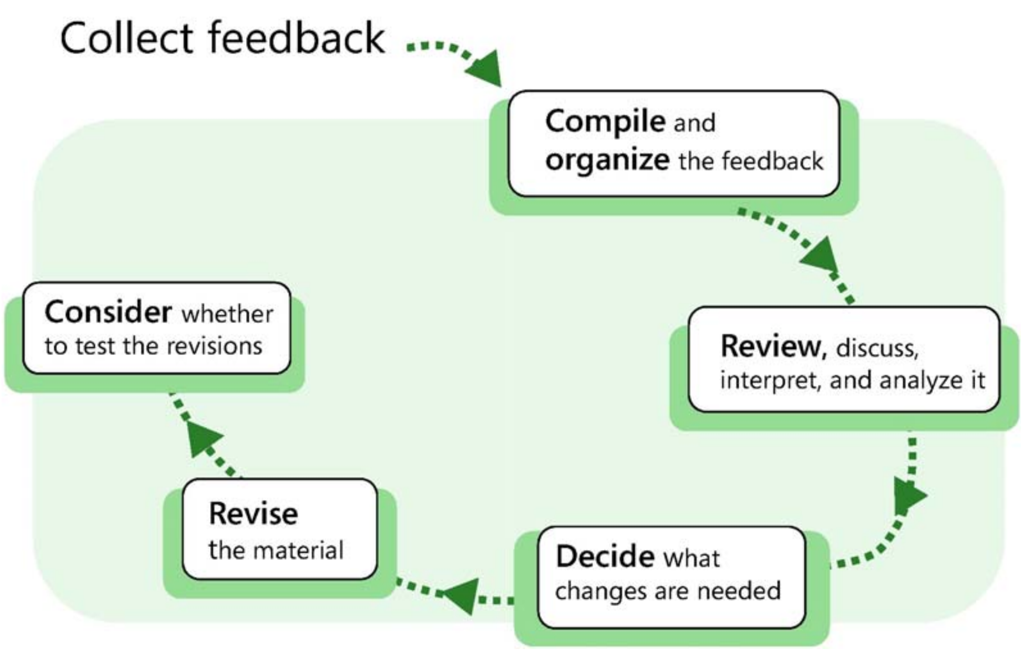
Let's say that you have finished collecting feedback on a draft of your written material:

- **You have tested the material with readers.** You did a series of feedback interviews, and now you have a big stack of Session Summary Forms and notes taken during the sessions.

- **You have collected feedback from other sources, too.** Although this Toolkit Part 6 focuses on ways of collecting feedback directly from readers, the members of the project team and representatives from stakeholder organizations are another important source of feedback. You might get their suggestions in a variety of ways, including meetings, phone calls, and e-mails. Perhaps you have sought feedback from some other sources too, such as subject matter experts, specialists in plain language communication, and people who are familiar with the culture and information needs of your intended readers.

What next? How can you put all of this feedback to use?

The diagram below shows steps involved in organizing, interpreting, and applying the feedback you get from readers and other sources to make improvements to your written material.



An art and an adventure

Every project is different, and so it's hard to give much specific guidance about how to interpret and use the feedback you have collected from readers and other sources. In this final chapter of Toolkit Part 6, we offer practical advice about getting organized and a few general suggestions to help you get started in analyzing, interpreting, and using the feedback you have collected.

Having feedback directly from readers lets you see the written material from their point of view. Reader feedback is fascinating and informative, and a useful tool for making your written material clear and effective. Using this feedback to improve written material is an art, and there's no right or best way to go about it. It takes trial and error, creativity, and a willingness to entertain some different points of view. Your project is unique. Sifting through the feedback you have collected, figuring out what it means, and deciding what changes to make will be your own adventure.

Tips for compiling and organizing the feedback

Before you bring people together to discuss the feedback and make decisions about revising the material, it's helpful to get the feedback organized in ways that will make it easier for people to absorb and analyze. Here are suggestions:

1. **As much as you can, try to group together all of the feedback on a given topic or section of the material.** Having it all in one place makes it easier to refer to and discuss. You don't need to spend a lot of time on this, and you don't need to start from scratch by creating a special summary document. Instead, try using "cut and paste" to group things together. You can do this electronically, or you can do it by making photocopies that you literally will cut apart and paste together in a different arrangement.

2. **If any of the feedback can be tabulated, do this in advance.** If you have used any rating scales, sorting tasks, or other methods of collecting feedback that involve numeric scoring, compile and summarize the results before you share them with reviewers.

3. **Try to point out areas of agreement and disagreement among those who gave feedback**. As you compile and organize the feedback, be alert to areas where feedback tends to be similar and consistent, and areas where there are differences of opinion. These patterns of response can give you insights into strengths and weaknesses of the material and the types of changes that might be needed. For example, feedback might be consistently positive about the photographs you are using, but there might be mixed reactions to the way the material is organized.

4. **Consider whether it is important to keep track of who gave which kinds of feedback.** Especially if there are strong disagreements, it can be useful to see if there are any patterns to the disagreements. For example, you may find that only older readers have trouble reading certain parts of a document due to the size of the font, and find that certain illustrations are hard to understand.

5. **Try to share at least some of the feedback in advance.** Members of the team who are going to discuss the reader feedback may appreciate some lead time to become familiar with the issues that came up in the sessions. Sharing results in advance can help make your in-person meetings more productive.

Interpreting and using the feedback you collected

To help you interpret and use the feedback you collected, this last section offers some general suggestions and things to consider.

Try for a mix of people

When you are analyzing and interpreting the feedback you collected from readers and other sources, it helps to assemble a group of people with diverse backgrounds and perspectives. If possible, include interviewers and note takers who conducted the feedback sessions. They can share their impressions and answer questions that come up. You might want to include writers, editors, and graphic designers who will be implementing revisions to the material. There are many ways to get people involved in this process. You could hold big meetings, a series of small meetings, conference calls, or use e-mail. Who participates and how they participate depends on many factors, including scope of the project, timetable and resources, and who has responsibility for making the final decisions about which changes to make.

Be prepared to interpret meaning and judge what's most important

When you collect feedback from readers and others, you can expect to get differences of opinion and conflicting advice. Once in a while, feedback is strong, consistent, and it's clear what you should do with it. For example, if readers find a photo culturally unsuitable, it will have to be replaced. If subject matter experts find a clinical error, you will have to correct it.

But usually, interpreting the feedback is a messy process. When you are analyzing the feedback you collected, it can help to act like a detective. You have collected tidbits of evidence or clues about possible problems in the material and suggestions for ways to improve it. These clues require interpretation, and you can't necessarily treat them at face value. For example, readers and reviewers might suggest that you emphasize text in ways that violate sound principles of design. They might tell you to put a box around it, make it all really big and bold, or use all capital letters. You can use their feedback as indicating that there's a problem, but reject their advice about how to fix it and find a more effective way to emphasize the block of text.

As you sift through the feedback you have collected, you will need to weigh all of the evidence to reach a conclusion about how to use it. Some feedback is clearly more consequential than other feedback. If reader feedback consistently identifies barriers in navigation or misunderstandings of key content, you will need to address these problems. But if people differ in matters of taste, such as differing in their opinions about a color scheme, this feedback is much less consequential.

Often, feedback from readers will help you spot problems but may not give you much guidance about how to fix them. To help figure out ways to address the problems you identify in testing material with readers, the other parts of this Toolkit will be helpful, especially the detailed guidelines for writing and design in Toolkit Parts 3, 4, and 5. When it's time to do triage on possible changes, be guided by what is most important to help readers understand and use the material (see Toolkit Part 2).

Recognize that a change you make to one part of the document can ripple through the rest of it

Revising material is an iterative process with a considerable component of trial and error and occasional nice surprises. Sometimes, when you fix one part of a document, the changes you make will fix other problems as well. For example, if you strengthen the introduction, people may be able to understand what follows better – even if you don't change anything but the introduction. Other times, you might make a change that improves the document in one area but inadvertently creates a new problem in a different part of the document. If you make extensive changes in your material, it's wise to test the material with readers again. Getting another round of feedback will let you know how well your revisions are working and verify that you haven't created any new problems.

What you learn will carry over into future projects

Using feedback from readers to improve your written material will make the material more effective for the intended readers. Besides making this positive contribution to improving health literacy, working with readers to collect and use their feedback will help you become more skilled at producing written material that is easier for people to understand and use.

If you are not able to respond to all of the good suggestions you get, don't be discouraged. Whatever you have learned from readers is a benefit. The insights and the skills you develop and refine by learning directly from readers will carry over into your other projects. The more you watch, listen, and learn from readers, the more you will be able to see the written material from their point of view. This will change the way you look at information materials and sharpen your skills in writing and design. In future projects, you will be able to produce suitable materials in a more efficient and cost effective way.

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DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material Clear and Effective

SECTION 4: Special topics for writing and design

PART 7

Using readability formulas: A cautionary note

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 7

Using readability formulas: A cautionary note

Introduction

Reasons for caution

Recommendations

Instructions for using readability formulas

List of figures:

This document is Part 7 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, PhD, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Background on the Toolkit

This document, Toolkit Part 7, is part of the *Toolkit for Making Written Material Clear and Effective*. To provide context for this document, we begin with background on the Toolkit as a whole.

The Toolkit is an 11-part health literacy resource (see Toolkit Part 1). It's a detailed and comprehensive set of tools to help you make written material easier for people to understand and use. This Toolkit is from the Centers for Medicare & Medicaid Services (CMS) and it is oriented toward the programs administered by CMS. These programs include Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). In this Toolkit, we focus on material in printed formats that is written for people with Medicare or Medicaid and the parents or guardians of children with coverage through CHIP. These "CMS audiences" are culturally, linguistically, and demographically diverse, and they include significant numbers of people with low literacy skills. Much of the discussion in the Toolkit also applies to material that is written for those who work with or assist members of CMS audiences, such as material written for family members of people with Medicare, outreach workers, agency staff, community organizations, and care providers.

To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing in Toolkit Part 4 and 46 guidelines for graphic design in Toolkit Part 5. For background on this Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material*. For the full list of guidelines for writing and design, and a discussion about how to use them, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*.

What are "readability formulas"?

The topic of Toolkit Part 7 is readability formulas. These are formulas that are used to measure difficulty of the vocabulary and sentences in written materials. There are several dozen readability formulas, including the Fry formula, SMOG, and Flesch tests (Flesch-Kincaid and Flesch Reading Ease). Though the formulas vary, they estimate difficulty based on what is easy to count at the level of individual words and sentences, such as the length of words and sentences. Results from these formulas are often given as a grade level, such as "fourth grade" or "12th grade."

To illustrate how word choices and sentence length can affect ease of reading, Figure 7-a shows similar content written at three different grade levels. See if you can guess the grade levels. Notice the variations from version to version in vocabulary and sentence length.

Figure 7-a. What grade level do you think it is?

Paragraph A

It makes good sense that premature births and newborn illnesses are decreased by early pregnancy care. The doctor is actively involved in testing the pregnant woman for pregnancy-induced diabetes and a host of other problems that would not be detected by the patient alone. We know that these problems cause premature births and illnesses in newborns. It certainly makes sense that earlier detection and treatment of these problems by the doctor results in healthier babies.

Paragraph B

If you are pregnant or think you may be pregnant, call for an appointment right away. Getting care early in your pregnancy will help you have a healthy pregnancy and a healthy baby. Your PCP (or an OB-GYN doctor you choose from our network) will give you certain tests to make sure everything is going well. If there are any problems, it's good to find them early. That way, you have the best chance for a healthy baby.

Paragraph C

If you are pregnant or think you might be, go to the doctor as soon as you can. If you start your care early, things will go better for you and your baby. Your own doctor or a childbirth doctor from our list will give you a first exam. Tests every month or so will let you know if all is going well. If there is a problem, you'll know it right away. Then we can do what is needed. Early care is the best way to have a healthy child. Your baby counts on you.

Answer: Approximate grade levels are:

A. 12th grade.

B. 8th grade.

C. 4th grade.

Source: Exercise 9 in *Write It Easy-to-Read* (Root & Stableford, 1998). Used with permission of Sue Stableford, Health Literacy Center, University of New England, Biddeford, Maine.

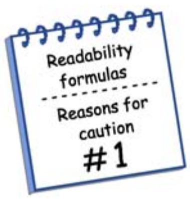
Using readability formulas in meaningful ways

To use readability formulas in meaningful ways, you need to keep in mind what they actually measure and be aware of concerns and cautions raised by specialists in the field. In this document, we summarize reasons for caution in using readability formulas and offer recommendations for using them. We also give step-by-step instructions for scoring material by hand using methods we recommend (the Fry Method and the SMOG). If you use a computerized readability formula to do machine scoring of a document, you will need to prepare the text first for more accurate scoring. We include tips on how to do this.

Why be cautious about using readability formulas?

Sections that follow discuss the cautions that are listed below in Figure 7-b.

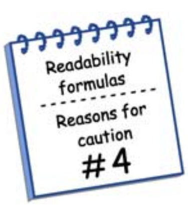
Figure 7-b. Reasons for caution in using readability formulas.



Readability formulas ignore most factors that contribute to ease of reading and comprehension, including the active role of the reader. Relying on a grade level score can mislead you into thinking that your materials are clear and effective when they are not.

Grade level scores for the same text can differ considerably depending on the formula you choose and how you use it.

Grade level scores are less precise than they sound and it is tempting to over-interpret what they mean.



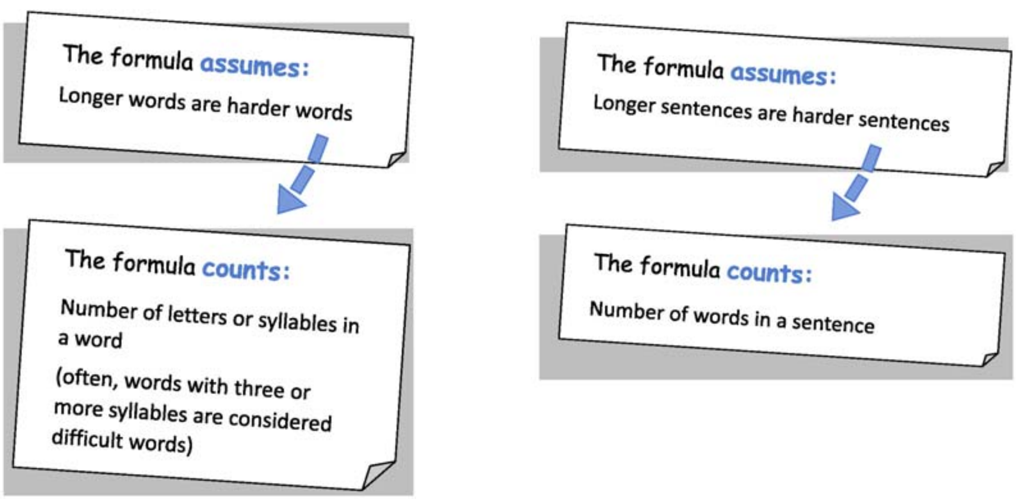
Imposing a grade level requirement has the potential to do harm. To make text score at a lower grade level, you have to shorten words and sentences. Sometimes this improves ease of reading, but it can also lead to edits that reduce the ease of reading. For example, writers might remove familiar words just because they are long. Overall, the need to meet a grade level requirement can lead writers to produce text that is choppy and lacks cohesion.

Source: Created for this Toolkit. This list of cautions and the discussion of each caution reflect themes in the references and resources listed at the end of this document, as well as suggestions from subject matter experts listed in the acknowledgments. They also draw on discussion in the precursor to this Toolkit titled *Writing and Designing Print Materials for Beneficiaries: A Guide for State Medicaid Agencies*, which was published in 1999 by the Health Care Financing Administration (HCFA, known today as CMS); now out of print.

Readability formulas ignore most factors that contribute to ease of reading and comprehension

Readability formulas ignore most factors that contribute to ease of reading and comprehension, including the active role of the reader. Relying on a grade level score can mislead you into thinking that your materials are clear and effective when they are not.

To estimate difficulty of text, readability formulas count what is easy to count at the level of individual words and sentences. Typically, they use length of the word or sentence as the indicator of difficulty.



Although the details of measurement vary by formula, readability formulas typically assess text only at the level of individual words and sentences, in a purely mechanical way. They measure certain attributes of words and sentences in isolation, ignoring other important attributes at the sentence level and beyond, including how the sentences are connected into paragraphs.

For example:

- Longer sentences are often harder, but length is not the only thing that can make a sentence hard to read. Syntax and cohesion can matter just as much or more than sentence length (for more about cohesion, see Toolkit Guideline 3.5 and the example in Figure 4-3-g), both in Toolkit Part 4, Chapter 3).

- Short sentences may be easy sentences in isolation, but sound choppy and lack cohesion when put together in a paragraph. For an example of the impact of variations in sentence length within a paragraph, see Figure 4-3-b in Toolkit Part 4, Chapter 3, *Guidelines for Writing Style*.

Most important, by focusing narrowly on individual words and sentences, the formulas ignore everything else that contributes to ease of reading and comprehension, including the active role of the reader. As shown below in Figure 7-c, a readability formula that counts syllables and length of sentences can't take into account the knowledge, life experience, literacy skills, and active search for meaning that individuals bring to the task of reading.

Figure 7-c. Readability formulas ignore the active role of the reader.

You can use the same readability formula to measure ***any text*** *for* ***any reader*** *for* ***any purpose.***

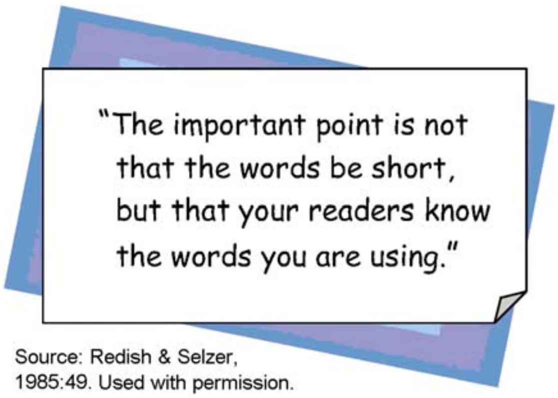
The formulas focus narrowly on counting attributes of individual words and sentences. This generic approach to measuring difficulty of a text implies that readers process information in a uniform and passive way, word by word, sentence by sentence.

But people are not passive text-processing machines.

We all approach reading in an ***active way***. We search for meaning and we bring our attitudes, interests, knowledge, and experiences to bear on what we read.

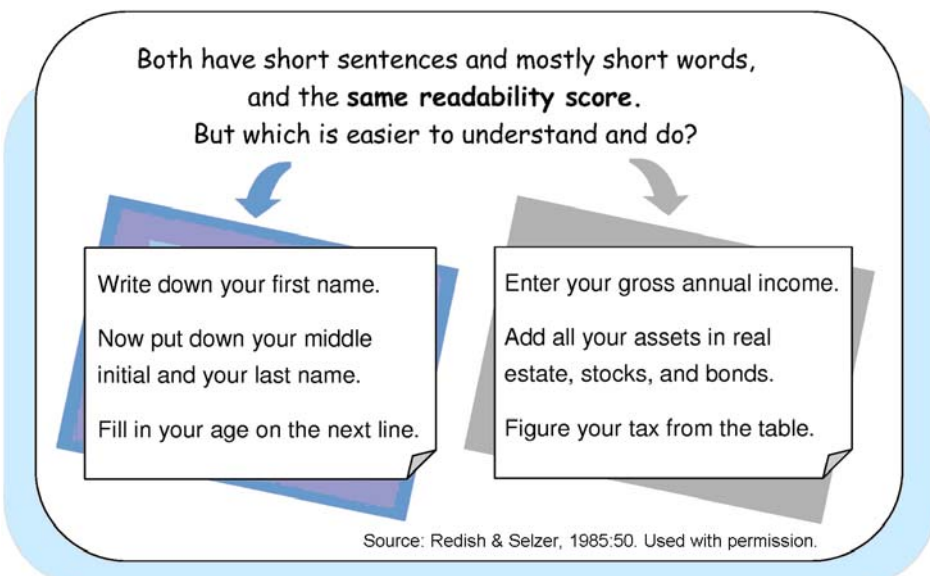
Source: The text only (not the illustrations or formatting) is adapted with permission from "The Place of Readability Formulas in Technical Communication" (Redish & Selzer, 1985:48-50).

Thinking about the active role of the reader helps put readability formulas in perspective. While the formulas typically assume that longer words are less familiar and harder to read than shorter ones, there are many exceptions to this rule.



Source: Redish & Selzer, 1985:49. Used with permission.

For example, the reader's familiarity with the subject matter counts for a lot. Ginny Redish and Jack Selzer use the example shown below to illustrate the point that not all content with the same readability score is equally easy to understand (1985:49).



Source: Redish & Selzer, 1985:50. Used with permission.

As shown in Figure 7-d below, a grade level score does not tell you whether the material will attract and hold people's attention. Nor does it tell you whether the intended readers will find the material culturally appropriate, or be able to understand and use what it says.

Figure 7-d. Readability formulas alone can't tell you whether written materials are clear and effective.

Even if the reading grade level is suitable, written material can still fall short or be unsuitable in other ways:

To the reader, it might look like it's going to be hard to read

EXAMPLES: hard to skim; an overpowering "wall of text;" hard to read due to small print or poor contrast; the layout looks too busy or confusing or complicated

It might be too hard to follow or understand

EXAMPLES: it uses words the reader doesn't know; it's poorly organized; doesn't explain things well or lacks cohesion; the design is distracting rather than helpful

The reader might not be able to focus on it

EXAMPLES: the reader is in a hurry or distracted; the reader's literacy skills and concentration are suffering due to stress

It might not attract and hold the reader's interest

EXAMPLES: The reader doesn't notice it; the reader notices but doesn't find it interesting or appealing at first glance; the reader begins reading it and then loses interest

Its purpose or usefulness might be unclear or unappealing to the reader

EXAMPLES: the reader can't figure out what it's for or how to use it; sees no benefits from reading it; finds the action it calls for too difficult or unrealistic

It might be culturally unsuitable for the reader

EXAMPLES: the reader can't relate to it; doesn't feel respected and understood; feels put off or is offended by it

Source: Created for this Toolkit. This figure summarizes many of the topics that are addressed in the Toolkit Guidelines for Writing and Design. For details, see Toolkit Parts 3, 4, and 5.

We've put a reader at the center of Figure 7-d to emphasize that it's the *reader* who decides what's worth reading (Redish, 1993). It's also the *reader*—not a grade level score—who decides whether material is easy to understand and use (see Toolkit Part 2, *Using a reader-centered approach to develop and test written material*).

Besides emphasizing that the reader is the ultimate judge, Figure 7-d reminds us that difficulty of the words and sentences is only one of many, many factors that contribute to making materials clear and effective. This means that **using a grade level score as a sole criterion or summary indicator can**

mislead you into thinking that your materials are suitable and effective when they are not. Keeping individual words and sentences easy enough for your readers is *necessary but not sufficient* for ensuring that they can understand and use the material.

The guidelines for writing in this book do include one guideline on reading grade level (Guideline 3.8 in Toolkit Part 4, Chapter 3, *Guidelines for writing style*). But they also include 25 *other* guidelines on writing as well as 46 guidelines on graphic design (for the full list, see Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design"*). Collectively, these guidelines address other factors that affect ease of reading and use, including all of the issues listed above in Figure 7-d.

Grade level scores tend to be unreliable

Grade level scores for the same text can differ considerably depending on the formula you choose and how you use it.

Various studies have identified technical weaknesses of readability formulas (see the literature review by Redish, 2000) and experts have referred to the "inherent unreliability" of the formulas (Schriver, 2000).

One issue is the wide range of variation in scores for the same text (Hochhauser, 1999). There are many readability formulas and they take different approaches to estimating the difficulty of text. Formulas vary in which attributes of words and sentences they take into account and how they measure them. Given these differences among formulas, it's reasonable to expect that using different formulas on the same text might produce slightly different results. But sometimes the differences are large enough to be disconcerting. Depending on which method you use and how you use it, scores for the same text can differ by two, three, or more grade levels.

There are some systematic differences among formulas. For example, literacy specialists warn that Flesch-Kincaid scores tend to underestimate actual reading grade level because they are often several grade levels below results obtained using other measures (Root & Stableford, 1998; Audrey Riffenburgh, Personal communication, 1999).

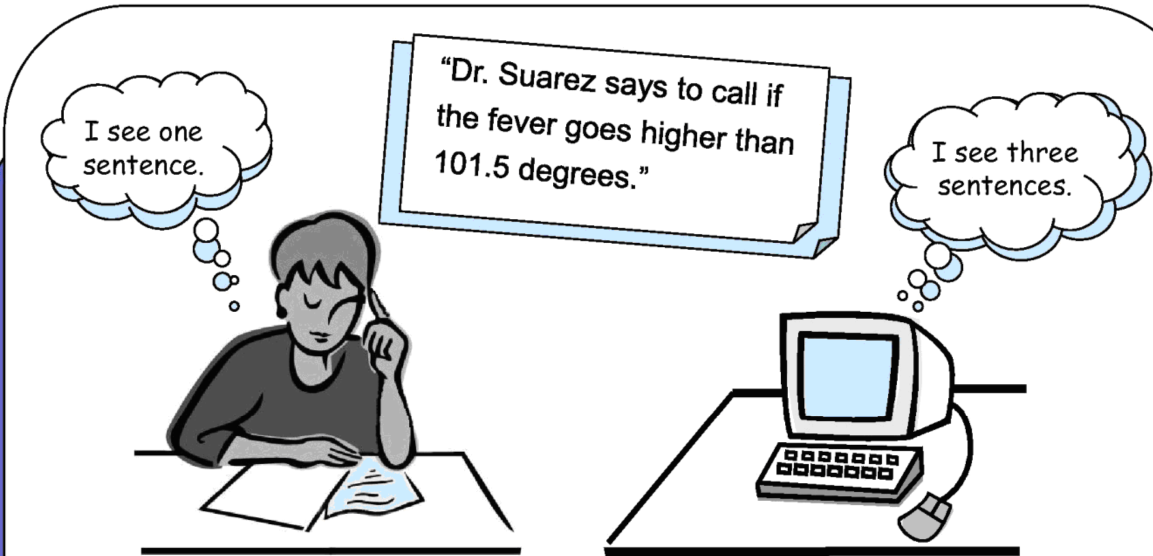
[NOTE: The Flesch-Kincaid is included in many versions of well-known word-processing packages such as *Microsoft Word* and *WordPerfect*, and it produces a grade level score. Be careful not to confuse the

Flesch-Kincaid with the other Flesch test, which is called the Flesch Reading Ease formula. The Flesch Reading Ease Scale (also known as the Flesch Index or Readability Score) is a score from 0 to 100 that you interpret by referring to a chart. For this formula, *higher* scores mean *easier* to read. For example, a score of 70 to 80 means “fairly easy” and approximately seventh grade reading level.]

In addition to the wide range of grade levels for the same text, there are problems of unreliable measurement related to scoring by computer: Some computerized assessments using the *same* formula produce *different* scores for the same text (Riffenburgh, 2005). In addition, as we explain below, if you use a computerized formula, you need to prepare your text first to avoid misleading results.

Preparing text for more accurate machine scoring

It’s important to prepare documents before you score them with a computerized readability formula. Otherwise, your results could be off by a considerable margin.



To the computer, every period means the end of a sentence -- even if it marks an abbreviation or the decimal point in a number. When the computer counts more sentences than there really are, as it does in this example, it will underestimate the actual grade level of the material.

Source: Created for this Toolkit.

To score a document, a computerized readability formula will typically analyze (1) word length as measured by the average number of syllables per word and (2) sentence length as measured by the average number of words per sentence. The program specifies how to do this and the computer follows instructions in a totally mechanical way:

- As shown in the picture above, embedded punctuation confuses the computer when it is **counting the number of sentences.** Most readability programs tell the computer to sense the end of a sentence by looking for the type of punctuation that normally marks the end of a sentence, such as a period, question mark, or exclamation point. Sometimes this punctuation falls within a sentence, rather than at the end, but the computer can’t distinguish this.

- **Titles, headings, and bulleted lists also mislead the computer.** There is usually no punctuation to help computers distinguish ordinary sentences from titles, headings, and bulleted lists. If the computer keeps searching for punctuation such as a period or question mark or exclamation point, it will include the text from headings as part of the first sentence that follows the heading. Obviously, the counts of sentence length can be miscalculated.

To help the computer do its calculations correctly, **it’s essential to prepare the text first by removing things that will confuse and mislead the computer:**

- Since the computer interprets any period as the end of a sentence, you need to remove embedded punctuation such as periods that are used for abbreviations.

- You also need to remove text that is not in full sentences, such as titles, headings, and bulleted points that are not full sentences.

Check your program documentation for information and specific instructions. If you score a document both by hand and by computer, be sure to use the same sample of text for both methods in order to make meaningful comparisons of the results.

Grade level scores are less precise than they sound and prone to misinterpretation

Grade level scores are less precise than they sound and it is tempting to over-interpret what they mean.

Measurement is imprecise

Most readability formulas produce a grade level score, such as “5th grade.” Some add a decimal, such as “5.3 grade.” Scores of this type are not nearly as precise as they sound, for several reasons:

- **Scores can vary greatly for the same text**. As we saw in the previous section, grade level scores for the same piece can differ by formula, and computer programs that use the same formula can yield different results.

- **Scores have a margin of error**. Grade level scores are approximations.

- **Scores can differ depending on which part of a document is scored**. Sometimes readability scores are based on scoring the entire document. Other times, especially for long documents, the scores are based on scoring samples drawn from the document. Usually, scores are based on the average score across three samples. You could get different scores for the same document if they are based on different samples, especially if there are big variations in the text within the document. (Later on, we give instructions for using the Fry method and the SMOG to score written material by hand. The instructions for drawing samples suggest ways to select passages that are representative of the material as a whole.)

The name “readability” implies more than is actually being measured

Besides measurement imprecision, another concern is that grade level scores are prone to misinterpretation. It’s easy to interpret a grade level score in a way that goes well beyond what has actually been measured by the readability formula (that is, the average length of its words and sentences). For example, you might think from the name, “readability formulas,” that the formulas measure reading ease or comprehension – but they do not. As shown in Figure 7-e below, readability scores are not measures of comprehension, even though they are often interpreted that way.

Figure 7-e. What does a readability score actually mean?

If a booklet has a readability score of "6th grade," what does this score mean?

Does it mean that people need to have at least six years of schooling to read and understand the booklet?	Does it mean that people with a 6th grade education will be able to read and understand the booklet?	Does it mean that words and sentences in the booklet are roughly the same average length as words and sentences in textbooks for sixth graders?
no – not necessarily	no – not necessarily	yes

Why not?

- **Because readability formulas don't measure how well people understand material.** Readability formulas measure the difficulty of individual words and sentences (based on length), which is only one of many factors that affect comprehension and usability of written material (see Figures 7-c and 7-d).
- **Because years of education is only a crude indicator of reading skills.** Some people who have completed 6th grade struggle to read at all, while others may be able to read at the high school or college level. In general, adults tend to read several grade levels *below* the highest grade in school that they completed (see references at end of document)
- **Because reading skills can change over time.** For example, certain literacy skills can decline substantially in later life (see Toolkit Part 9, *Things to know if your written material is for older adults*).

Source: Compiled and formatted for this Toolkit, based on common themes in the literature and the writer's personal communication with experts in the field.

Imposing a grade level requirement has the potential to do harm

Imposing a grade level requirement has the potential to do harm. To make text score at a lower grade level, you have to shorten words and sentences. Sometimes this improves ease of reading, but it can also lead to edits that reduce the ease of reading. For example, writers might remove familiar words just because they are long. Overall, the need to meet a grade level standard can lead writers to produce text that is choppy and lacks cohesion.

It's easy to infer from the name, "readability formulas," that the formulas measure reading ease or comprehension – which, as we've just discussed, they do not. Nonetheless, the formulas are often used as standards to be met, such as "write it at the sixth grade level."

When readability scores are used as a standard, it's with good intentions: the purpose is to help ensure that the material is not too difficult for its intended readers. While it's crucial to have a good match between the reading skills of your intended readers and the difficulty of the material (see Guideline 3.8 in Toolkit Part 4, Chapter 3, *Guidelines for Writing Style*), an appropriate reading grade level does not *by itself* ensure this good match. And, in fact, applying a grade level standard has the potential to do harm, because using grade level standards based on readability formulas can lead writers to produce text that is actually *less* readable even though it scores at a lower grade level.

If you must meet a standard of "sixth grade level," and your material scores at 8th grade level, what can you do? It can be tempting to "write to the test" by dividing sentences and substituting shorter words. Edits of this type will improve a grade level score, but at the possible price of making the text choppy and harder to read. As shown below, substituting shorter words and chopping sentences into shorter ones is not necessarily a service to your readers.

Substituting shorter words for longer ones and chopping long sentences into shorter ones will make your text score at a lower grade level. But depending on the material and the edits, changes of this type can be a disservice to your readers:

- **Sometimes a longer word is a familiar word**, so there's no reason to change it.
- **Sometimes readers need to know the longer word.** Teaching its meaning may require you to repeat the longer word several times. Repeating the long word will inflate the grade level score for the material, but repeating it will help your reader understand and use the new word.
- **Breaking up a longer sentence may reduce its cohesion,** putting a *new burden* on your readers to supply the connections you just removed. *(For more about this, see Guideline 3.5 in Toolkit Part 4, Chapter 3, Guidelines for writing style.)*

We've just seen that heavy reliance on grade level standards can encourage "writing to the test," which ends up making the material harder to read. Heavy reliance on grade level standards can also be problematic in other ways:

- **Using a grade level score as an overall indicator may give you a false sense of confidence and cause you to miss problems** with the material that make it hard for readers to understand and use. As shown earlier in Figure 7-d, even when a reading grade level is appropriate for the intended readers, there are still many ways in which written material can miss the mark.

- **Using grade level scores as a standard may encourage people to treat grade level scores at face value, rather than as rough approximations**. As already noted, there are many measurement issues associated with use of readability formulas. Given that scores can vary greatly and be unreliable, it makes sense to interpret all readability scores with caution.

Recommendations for using readability formulas

Responding to the concerns raised in the preceding sections, this section offers the recommendations for using readability formulas shown below in Figure 7-f.

Figure 7-f. Recommendations for using readability formulas.

Use readability formulas only as tools for occasional limited use -- *not* as ways to measure overall suitability of documents.

Use scores from readability formulas as a check on difficulty of words and sentences – *not* as indicators of comprehension, *not* as summary assessments of reading ease or usability, and *not* as a guide to writing. If material is too difficult for the intended readers, a readability score might help you convince others that revisions are essential. In general, make writing clearly and cohesively in “plain language” your general goal for *any* written material for *any* audience. Rely on feedback from your intended readers as the ultimate test of whether materials are clear and effective (see Toolkit Part 6, *How to collect and use feedback from readers*).

Pick your readability formula and method carefully (this Toolkit recommends scoring written material by hand using the Fry method or the SMOG).

Scoring by hand tends to be more reliable than computer scoring. Also, working directly with the text makes you more aware of your writing habits and helps you spot ways to improve. If you use a computerized readability formula, prepare the text first to avoid misleading results. This includes removing embedded punctuation and text that is not in full sentences.

Interpret a score from a readability formula as indicating a *general range of difficulty* rather than a specific grade level.

Using readability formulas
Recommendation
4

Report scores from readability formulas in ways that acknowledge the narrow scope and limitations of readability formulas.

When reporting a readability score, tell which formula and method you used, what it measures, and include other information to help people make a meaningful interpretation of the score. Tell whether the material has been tested with the intended readers. Consider listing the words that were counted as "difficult" by the formula (those with 3+ syllables) to help others judge whether they are likely to be familiar to the intended readers.

Source: Created for this Toolkit. These recommendations and the discussion of each recommendation reflect themes in the references and resources listed at the end of this document, as well as suggestions from subject matter experts listed in the acknowledgments. They also draw on discussion in the precursor to this Toolkit titled *Writing and Designing Print Materials for Beneficiaries: A Guide for State Medicaid Agencies*, which was published in 1999 by the Health Care Financing Administration (HCFA, known today as CMS); now out of print.

Do not use readability formulas to assess overall suitability

Using readability formulas
Recommendation
1

Use readability formulas only as tools for occasional limited use -- ***not*** for measuring overall suitability of material.

Use scores from readability formulas as a check on difficulty of words and sentences – *not* as indicators of comprehension, *not* as summary assessments of reading ease or usability, and *not* as a guide to writing.

- If material is too difficult for the intended readers, a readability score might help you convince others that revisions are essential.
- In general, make writing clearly and cohesively in "plain language" your general goal for *any* written material for *any* audience.
- Rely on feedback from your intended readers as the ultimate test of whether materials are clear and effective (see Toolkit Part 6, *How to collect and use feedback from readers*).

Readability formulas can be a tool for occasional limited use if you keep in mind what they measure and take care to avoid over-interpreting the results. You can use them as a quick screen for difficulty. If material is difficult, readability scores can help convince people that revisions are needed.

Based on the cautions we have discussed, here is what this Toolkit recommends:

- **Use readability formulas as a tool for identifying long words and long sentences that may be too difficult for your intended readers.** Later in this chapter, we show you how to score text by hand using the Fry method or the SMOG. When you score text by hand, you will be marking it in ways that highlight the longer words and sentences. These markings will make you more conscious of your word choices and sentence structures and may help you see new ways to simplify the material.

- ***Don't*** **use a score for reading grade level as your only indicator of difficulty or as a measure of comprehension.** Keeping in mind that readability formulas only measure the length of individual words and sentences, *don't* use them as a summary indicator or as your sole or final standard for judging suitability of materials.

- **Don't try to make written material easier to read simply by shortening sentences and substituting short words for long ones**. "Writing to the test" in this way will improve the score but may make the material choppy and harder to read.

- **When you need to reduce the reading difficulty of your materials,** use **readability formulas in combination with all the other Toolkit guidelines.** Treat readability formulas as only one tool among many that can help you see ways to make materials easy for people to understand and use. Use the formulas as a screen for complexity of words and sentences, but use the *other* guidelines in this Toolkit to help simplify the material (see Toolkit Part 4, *Understanding and using the "Toolkit Guidelines for Writing"*).

- **Make writing clearly and cohesively in plain language a general goal for *any* material.** Low health literacy is a widespread problem with serious consequences (see Toolkit Part 1 for resources on health literacy). Since so many health-related written materials are too difficult for their intended readers, it's crucial to make your materials as clear and simple and cohesive as you can. As a general goal, try to get the reading grade level of your materials as low as you can without losing important content or distorting the meaning, and without sounding condescending to the reader. This goal applies to materials you create for *any* audience: highly-skilled readers appreciate materials that are clear and simple just as much as less-skilled readers. There's no need to worry about talking down to highly skilled readers because you adjust the ways in which you write in plain language based on the literacy skills of your intended audience. For example, if you are writing in plain language for clinicians, you will use vocabulary that is more difficult than if you are writing in plain language for the public. For more on this topic, see Toolkit Part 4, Chapter 3, *Guidelines for Writing Style*.

- **Rely on feedback from your intended readers as the ultimate test of whether materials are easy to understand and use**. An appropriate reading grade level helps to make print material easy to read, but it doesn't guarantee that people will understand what they read, or put it to use. Achieving a good match between the reading level of your material and the reading skills of your intended audience is not final evidence that materials are easy to understand. The real test of success is whether your readers find your materials easy to understand and use. To find out, you'll need to get feedback directly from them. For step-by-step help, see Toolkit Part 6, *How to collect and use feedback from readers*.

Pick your formula and method carefully

Using readability formulas
Recommendation
2

Pick your readability formula and method carefully. This Toolkit recommends scoring written material by hand using the Fry method or the SMOG. Scoring by hand tends to be more reliable, and working directly with the text makes you more aware of your writing habits and helps you spot ways to improve.

If you use a readability formula, this Toolkit recommends scoring your material by hand, using the Fry method or the SMOG.

Why do the scoring by hand instead of by computer?

If you want to score text by computer, programs to do it are readily available. Grade level scoring options are built into word processing programs, and there are stand-alone reading level assessment programs for the computer. Although computerized readability programs are readily available, this book recommends against using them. There are several reasons why we favor hand scoring over machine scoring:

- **Problems of measurement and unreliability in the computerized programs make computerized scoring less credible** (see reasons for caution #2 above).

- **Scoring by hand gives you insights that computer scoring cannot, because scoring by hand gets you directly involved with the text**. When you score text by hand, you mark it up in ways that draw your attention to the longer words and longer sentences. Over time, scoring text by hand will improve your assessment and writing skills. Hand scoring will give you insights into the impact of words and sentence structure on ease of reading, and these insights will influence the way you write. In contrast, when you score text by computer, it's like a black box: you feed in the text and out pops a grade level number. With machine scoring, you lose all connection between characteristics of the text and the resulting score.

- **Using the computer to do a reading level assessment is not always a time saver**. Some people prefer to score by machine because it seems faster and easier than scoring by hand. But machine scoring is not really as easy as just pushing a button:

    - **If the document is not already in a computer file, you would have to key it in**. You can hand score any material, whether it's in a computer file or not.

    - **In any case, you have to prepare documents for machine scoring**. Unless you prepare the document first, machine scored results may be off by a considerable margin (for how to prepare text for computer scoring, see page 11). Moreover, once you learn methods for hand scoring, using a readability formula by hand takes very little time.

Why use the Fry method or the SMOG?

- The **Fry method** is good for general use across the full range of reading levels, and experts recommend it as a good method for low literacy materials (Doak, Doak, & Root, 1996; Root & Stableford, 1998).

- The **SMOG** (Statistical Measure of Gobbledygook) is used routinely by some organizations (CSAP Technical Bulletin: *You can prepare easy-to-read materials*, 1994). The SMOG is an efficient screening tool if you want to do a quick assessment of numerous documents, but it does not discriminate well at lower grade levels (sixth or below). *Write It Easy-to-Read* (Root & Stableford, 1998) advises against using the SMOG if you are developing low literacy materials.

The Fry method and the SMOG are not copyrighted, and there's nothing to buy. The chart below in Figure 7-g compares these two methods, and later sections give you instructions and examples that show how to use them.

Figure 7-g. The Fry Method and the SMOG at a glance.

	Fry method (scored by hand)	**SMOG** (scored by hand)
How does it work?	It estimates difficulty based on **length of words and sentences**. Using three samples of exactly 100 words each, you calculate the average number of sentences and syllables per 100 words. Then you read the grade level from the Fry graph.	It estimates difficulty based on the **length of words.** You pick a sample of 30 sentences, and count the number of words with three or more syllables in these sentences. Then you read the grade level from the SMOG chart.
Do you need to prepare the text first?	Yes. Since the formula is based on sentences, you need to ignore titles, headings, most types of bulleted points, and any other non-sentence text when you use it.	Yes. Since the formula is based on sentences, you need to ignore titles, headings, most types of bulleted points, and any other non-sentence text when you use it.
How much text do you need?	You need enough text to supply three 100-word passages consisting of sentences. (While it's better to average across three samples, if the material is short, you can score a single 100-word passage.)	You need enough text to supply 30 consecutive sentences, either in a single block of text or in three samples of 10 sentences each.
Does it work well at lower grade levels?	Yes.	No (experts say it works best at the 7^{th} grade level or higher).
How long does it take?	Only about ten minutes or so to score three 100-word samples, once you've had a little practice.	If you have 30 sentences, it's quite fast (faster than the Fry), because you simply circle the longer words, count them, and look up the results on the chart.

Source: Compiled and formatted for this Toolkit.

Interpret reading grade level scores broadly as indicating a general range of difficulty

Using readability formulas
Recommendation # 3

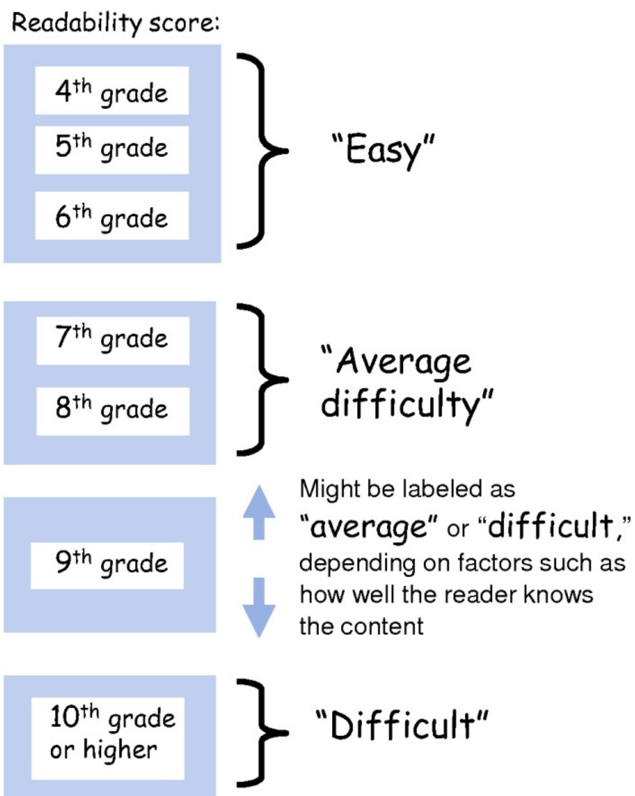
Interpret a score from a readability formula as indicating a *general range of difficulty* rather than a specific grade level.

As we noted earlier in this chapter, the grade level scores from readability formulas are not nearly as precise as they sound (see reasons for caution #3). Given this lack of precision, together with the other concerns discussed in this chapter, it seems prudent to interpret scores as reflecting a general range of difficulty rather than a specific grade level.

While there's no consensus in the field about what the ranges should be, the ones shown below in Figure 7-h are commonly used (for more on this topic, see Doak, Doak, & Root, 1996). Ultimately, any cut points for ranges of difficulty are arbitrary, since the scores are imprecise and the difficulty of text depends on so many factors in addition to length of words and sentences (see Figure 7-d earlier in this chapter).

Figure 7-h. Interpreting scores from readability formulas as ranges of difficulty.

Interpret scores from readability formulas as reflecting a general **range of difficulty** rather than a specific grade level



NOTE:

Since there is no widely agreed-upon standard for interpreting readability scores as a range of difficulty, this chart shows cut points and labels that are frequently used.

In using this chart, keep in mind that readability formulas only measure attributes of text at the level of individual words and sentences. As shown in Figure 7-d, many other factors also affect whether materials are "easy," of "average difficulty," or "difficult" for people to understand and use.

For more on cautions and recommendations about using readability formulas, see discussion in this document (Toolkit Part 7).

Source: Compiled and formatted for this Toolkit.

Using these ranges of difficulty

If you are developing materials for the public, it makes sense to aim for "average difficulty," at a minimum, and lower than that for materials you wish to describe as "easy to read." The suggested ranges in Figure 7-h lump together all grade levels above grade 9 as being "difficult." While this is a very broad range, if you are developing written materials for less-skilled readers, making finer distinctions than this at the higher end is not necessary. If material scores above grade 9 or so, you know that the words and sentences are likely to be too hard for about half of the public (Institute of Medicine [IOM], 2004; National Center for Education Statistics [NCES], 2006; Rudd, Kaphingst, Colton, Gregoire, & Hyde, 2004; Doak, Doak, & Root, 1996). For more on matching the reading grade level to the reading skills of your intended audience, see the discussion of health literacy in Toolkit Part 1. Of course, reactions from your readers are the ultimate test of whether materials are easy for people to understand and use.

Report grade level scores in ways that acknowledge their narrow scope and limitations

Using readability formulas
Recommendation # 4

Report scores from readability formulas in ways that acknowledge the narrow scope and limitations of readability formulas.

When reporting a readability score, tell which formula and method you used, what it measures, and include other information to help people make a meaningful interpretation of the score.

- Tell whether the material has been tested with the intended readers.
- Consider listing the words that were counted as "difficult" by the formula (those with 3+ syllables) to help others judge whether they are likely to be familiar to the intended readers.

Since many people are unaware of what a readability formula actually measures, they may tend to over interpret scores from these formulas. Whenever you report scores from a readability formula, take the opportunity to add an explanation that acknowledges the narrow scope and limitations of the formulas. Recommendation 4 above makes specific suggestions about what you might report. In Figure 7-i below, we illustrate these suggestions with an example from a website.

Figure 7-i. Example of reporting the scores from readability formulas.

Oregon Asthma Resource Bank

http://www.oregon.gov/DHS/ph/asthma/resourcebank

Helping you keep your asthma under control

The text that follows is an excerpt of text from the website for the Oregon Asthma Resource Bank. This excerpt is from a section that explains how the documents in the Resource Bank were developed and tested.

What readability formula did we use?

To assess the difficulty of words and sentences in the Oregon Asthma Resource Bank materials, we used the Fry method. Like readability formulas in general, the Fry method assumes that longer words tend to be harder words, and longer sentences tend to be harder sentences. It estimates the difficulty of material based on counting the number of syllables and sentences in samples of text from the document.

Since difficulty of words and sentences can vary in different parts of a document, scoring is based on drawing three 100-word samples and calculating the average score across these samples. For most documents in the resource bank, we were able to draw three samples. For the shorter materials, the Fry scoring is based on only two 100-word samples. Scoring was done only for materials written in English.

Overall, how did the materials score?

The materials scored as “easy” to “average” in difficulty of words and sentences (the Fry readability scores ranged from 4th to 7th grade depending on the material).

What are the individual scores?

Below we report scores separately for each piece of material. Since grade level scores are not nearly as precise as they sound, we report these individual scores in the following way: If the Fry grade level score falls in the range of 4th to 6th grade, we interpret this as meaning that the material uses “easy” words and sentences. If the Fry grade level score falls in the range of 7th to 8th grade, we interpret this as meaning that the material uses words and sentences that are of “average” difficulty.

"Difficult" words. Readability formulas assume that longer words are harder words. Specifically, words with three or more syllables are typically considered to be "difficult" words. What really matters, of course, is not the length of the words but whether the intended readers will know and understand the words that are used. So to help you judge the difficulty of the vocabulary in our resource bank materials, we show you the Fry score for each piece of material together with a list of words with three or more syllables that were in the samples of text that we scored.

Asthma Action Plan:

- Difficulty of words and sentences: Easy (4th to 6th grade).
- Words with three or more syllables in text sample that was scored: *medicine* (appeared twice), *normally*, *physically*, *tobacco.*

Patient Questionnaire

- Difficulty of words and sentences: Easy (4th to 6th grade).
- Words with three or more syllables in text sample that was scored: *appointment*, *emergency*, *everyday*, *hospital*, *inhalers*, *medicine* (appeared twice), *medicines*, *overall*, *overnight*, *pharmacist*, *usually* (appeared twice).

What is asthma and what can you do about it?

- Difficulty of words and sentences: Easy (4th to 6th grade).
- Words with three or more syllables in text sample that was scored: *irritated*, *medicine* (appeared four times), *regular*, *serious*, *whenever*.

Why do you need two different types of asthma medicine?

- Difficulty of words and sentences: Average (7th to 8th grade).
- Words with three or more syllables in text sample that was scored: *easier, irritated*, *medicine* (appeared 12 times), *relaxing, usually*.

What to do when you have an asthma attack

- Difficulty of words and sentences: Average (7th to 8th grade).
- Words with three or more syllables in text sample that was scored: *easier*, *emergencies*, *emergency* (appeared three times), *medicine* (appeared four times), *medical* (appeared twice), *relaxing*, *serious*, *whenever*, *911* (appeared twice).

What things cause asthma attacks for you? (asthma triggers)

- Difficulty of words and sentences: Average (7th to 8th grade).

- Words with three or more syllables in text sample that was scored: *actually*, *allergies*, *animals*, *activity*, *bronchitis*, *detective*, *different*, *furniture*, *gardening*, *medicine* (appeared twice), *physical*, *tobacco*, *whenever*.

Warning signs of possible problems with asthma

- Difficulty of words and sentences: Average (7th to 8th grade).
- Words with three or more syllables in text sample that was scored: *activity*, *exercise*, *medicine* (appeared twice), *physical*, *possible* (appeared twice), *sensitive*, *usual*.

Things to know about interpreting readability scores

Readability scores are not measures of comprehension, even though they are sometimes interpreted that way. Readability scores reflect only one of many factors that affect ease of reading and usability of the materials. A readability formula provides a way to screen for difficulty of words and sentences, but it can't take into account the life experience, literacy skills, and active search for meaning that people bring to the task of reading.

Like any readability formula, the Fry method focuses narrowly on what is easy to count at the level of individual words and sentences and ignores everything else. Counts of syllables and sentences cannot tell you whether the layout is effective, or whether the writing is clear, cohesive, and well organized. These counts cannot tell you whether readers find the information appealing, easy to understand, and easy to use.

Direct feedback from the intended users is the ultimate test. Since readability formulas only measure the length of words and sentences, it is not appropriate to use the results as a summary indicator or final standard for judging suitability of materials. To assess how well the materials in the Oregon Asthma Resource Bank were working, we conducted two rounds of interviews with consumers to get their reactions to draft versions of the materials. We used the results from this testing to improve the materials.

Source: Used with permission from the State of Oregon. For more about the Oregon Asthma Resource Bank, visit http://www.oregon.gov/DHS/ph/asthma/resourcebank/.

Instructions for using the Fry method

We give you step-by-step instructions for using the Fry method in Figure 7-j below. And then in Figure 7-k, we give an example that shows how to use the Fry method on actual text.

Figure 7-j. Instructions for using the Fry method by hand to score text.

1 Pick three samples of text, each with *exactly* 100 words

Choose samples that are representative:

- Pick three representative 100-word samples from the piece you are testing (or just one if the piece is very short).
- Try to choose text that includes important content.
- If the piece is long, consider choosing samples from near the beginning, middle, and end.

Choose samples composed of sentences:

- Do not include non-sentence text such as headings, titles, bullet points (unless the bullet points are full sentences).
- Start each sample with the first word of a sentence. Ignore paragraph breaks.

Use these rules for counting the words:

- A *word* is defined as a group of letters or symbols with space on either side.
- Count each of these as ***one word***:
  - Acronyms, such as *PCP*
  - Symbols, such as *&*
  - Hyphenated words, such as *100-word*
  - Dates, such as *2006*

2 Count the number of sentences in each sample (round the last sentence to the nearest tenth)

Since the last word in a 100-word sample is seldom the last word in a sentence, you will usually need to calculate a fraction for the length of the last sentence.

Example:

If the 100^{th} word in a sample falls 5 words into a 15-word sentence, it is .3 of a sentence.

(5/15 = .33. Rounded to the nearest tenth. .33 = .3)

3 Count the number of syllables in each sample

Count syllables the easy way. For each word, make a checkmark above each syllable *except* the first one:

He selected his PCP in 2006. It's a 12-minute drive to her medical office.

Why leave the checkmark off the first syllable?

- It makes it easier to spot the longer words in your text.
- It makes it faster to count checkmarks. (Later on, the worksheet adjusts for the first syllables you didn't mark by adding 100 syllables to each 100-word sample.)

How to count the syllables:

- Count one syllable for each letter or number in an acronym or symbol.
- ***Examples:*** *PCP* = three syllables. *2006* = four syllables. *12-minute* = four syllables (considered a single word because it's hyphenated, it has one syllable for each number in *12*, plus two syllables for *minute).*
- If you're not sure about how many syllables, try counting the syllables on your fingers as you say the word aloud.

4 Calculate the **average** number of sentences and words.

If you are using a single sample of 100 words, skip this step.

Use this worksheet to record your counts for each sample and compute the averages. (This worksheet assumes that your checkmarks skip the first syllable in each word.)

	Number of sentences (to the nearest tenth)	Number of syllables: Number of **checkmarks** you made	Number of syllables: Unmarked first syllables of each word	
First sample			100	
Second sample			100	
Third sample			100	
Totals		+	300	=

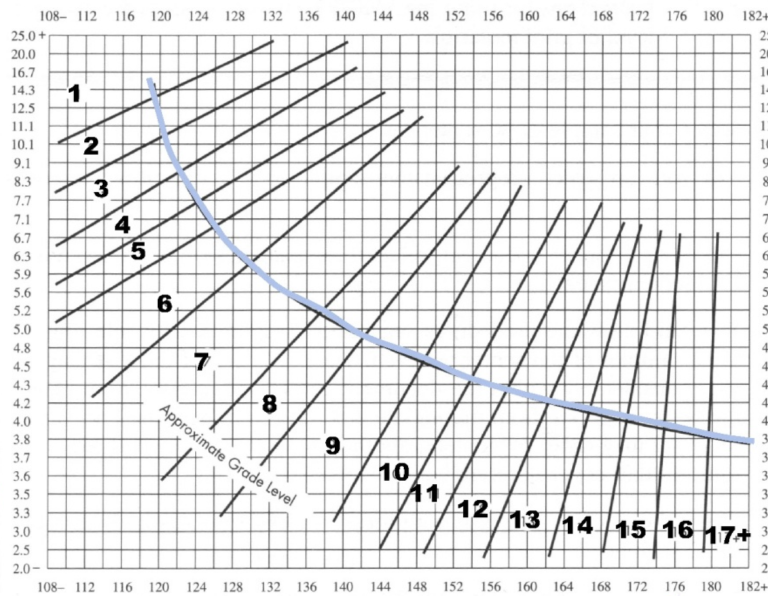
Divide by 3 → **average number of sentences**

Divide by 3 → **average number of syllables**

5 Use the Fry graph to estimate a grade level

Find the spot on this graph where your average number of sentences intersects with your average number of syllables.

This spot falls within a band that is labeled with the grade level.
Grade levels are approximate; the blue curved line marks the area where the grade level estimates are most accurate. See Figure 7-h on page 23 for recommendations on how to interpret your grade level estimate.



↑ average number of **sentences** per 100 words

average number of **syllables** per 100 words →

Source: Adapted and formatted for this Toolkit, based on instructions from sources which include the precursor to the Toolkit titled *Writing and Designing Print Materials for Beneficiaries: A Guide for State Medicaid Agencies* (HCFA, 1999); Doak, Doak, & Root (1996); and suggestions of colleagues.

Example using the Fry method

Figure 7-k. An example that applies the Fry method to a sample of text.

EXAMPLE --using the Fry method

Step 1: Pick a sample of exactly 100 words

1

Ask a family member or friend to go with you when you see your doctor. This person can help by listening, taking notes, and asking questions. Later, you can both talk about what the doctor had to say. If you can't find someone to go with you when you see the doctor, ask your doctor if he or she will talk with a friend or family member over the phone. Many patients have trouble remembering what they talk about with their doctor. Ask if you can take notes or make a tape recording. Review these notes or listen to the ~~tape later.~~

100

In the source for this text, there is a paragraph break here. We ignored it for purposes of the Fry. We also omitted headings that were in the source.

FRY method, step 2: **Count number of sentences to the nearest tenth**

Ask a family member or friend to go with you when you see your doctor. This person can help by listening, taking notes, and asking questions. Later, you can both talk about what the doctor had to say. If you can't find someone to go with you when you see the doctor, ask your doctor if he or she will talk with a friend or family member over the phone. Many patients have trouble remembering what they talk about with their doctor. Ask if you can take notes or make a tape recording. Review these notes or listen to the ~~tape later.~~

There are 6.8 sentences in this sample.

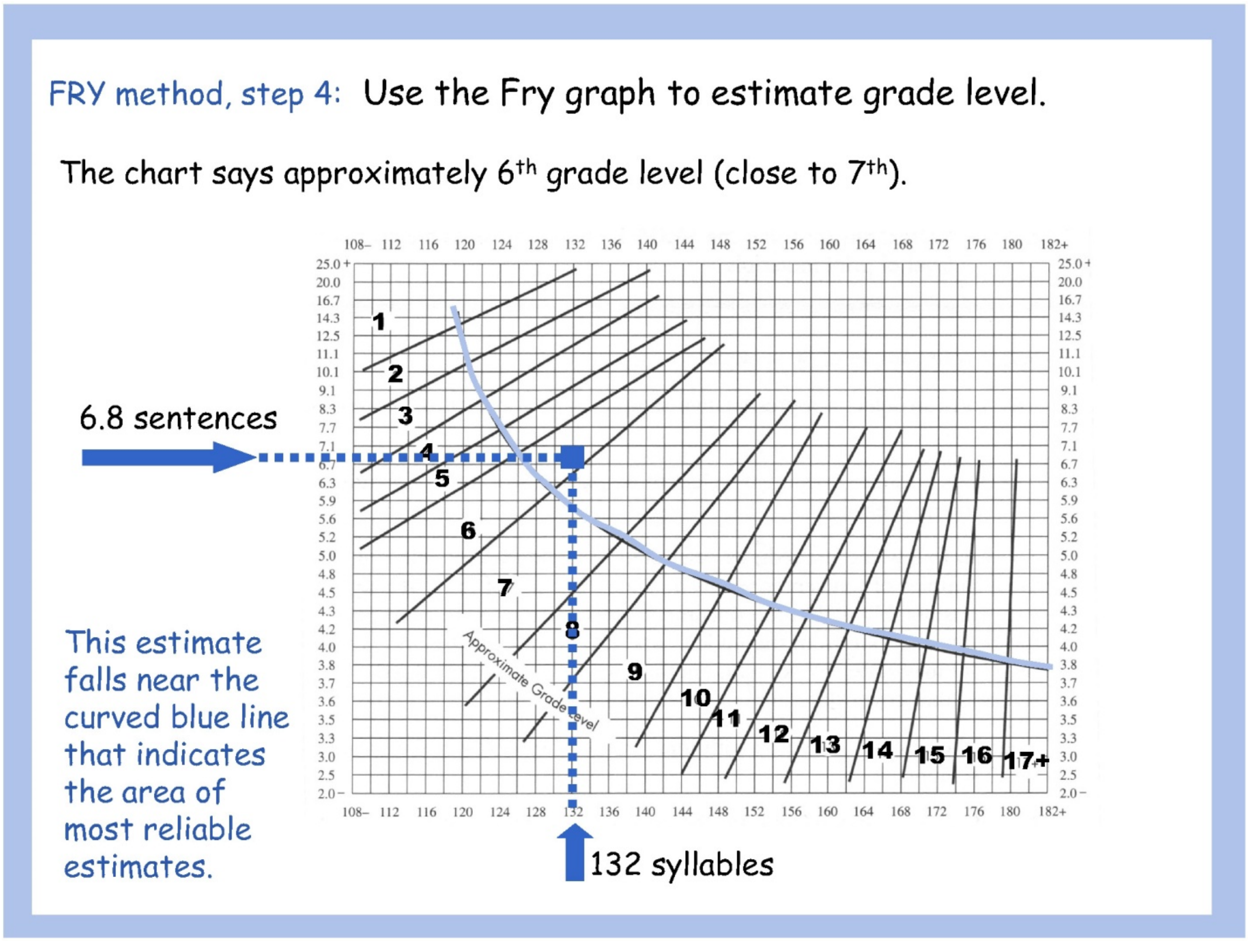
This 100-word sample includes seven of the nine words in the last sentence (7/9).

7/9 =.77 = .8 of a sentence to the nearest tenth.

FRY method, step 3: **Count number of syllables**

Ask a family member or friend to go with you when you see your doctor. This person can help by listening, taking notes, and asking questions. Later, you can both talk about what the doctor had to say. If you can't find someone to go with you when you see the doctor, ask your doctor if he or she will talk with a friend or family member over the phone. Many patients have trouble remembering what they talk about with their doctor. Ask if you can take notes or make a tape recording. Review these notes or listen to the ~~tape later.~~

There 132 syllables in this sample.
(100 unmarked first syllables + 32 checkmarked syllables.)



Source: This example of hand scoring was prepared for use in this Toolkit. The sample of text is an excerpt from a booklet titled *Taking Time: Support for People with Cancer* produced by the National Cancer Institute (NIH Publication No. 09-2059, revised July 2009, reprinted September 2009, Bethesda, MD; visit http://www.nci.nih.gov/cancertopics/takingtime.)

Instructions for using the SMOG

Figure 7-l. Instructions for using the SMOG to score text.

1 Pick a sample of 30 sentences

Choose a single block of 30 sentences in a row, or combine 3 blocks of 10 sentences each:

- If the document is not very long, choose a single block of 30 consecutive sentences.
- If it's a longer document, choose three separate blocks of 10 consecutive sentences each.

Choose full sentences that are representative:

- Do not include non-sentence text such as headings, titles, bullet points (unless the bullet points are full sentences).
- Look for text that represents the range of content, and try to include at least parts of the most important text.
- If the piece is long, consider choosing 10-sentence samples from near the beginning, middle, and end.

2 Count the number of words with 3 or more syllables

Count the words with three or more syllables the easy way – by circling each one:

When you use the SMOG for estimating reading grade level, you don't have to calculate the average number of sentences.

To decide which words have three or more syllables, use the same rules as the Fry method for counting syllables:

- Count one syllable for each letter or number in an acronym or symbol.
- ***Examples:*** *PCP* = three syllables. *2006* = four syllables. *12-minute* = four syllables (considered a single word because it's hyphenated, it has one syllable for each number in *12*, plus two syllables for *minute)*.
- If you're not sure about how many syllables, try counting the syllables on your fingers as you say the word aloud.

3 Use this SMOG table to estimate reading grade level

words with 3+ syllables	approximate grade level
0 - 2	4th grade
3 - 6	5th grade
7 - 12	6th grade

NOTE: the Fry method is better than the SMOG for use with materials at these lower grade levels.

words with 3+ syllables	approximate grade level
13 - 20	7th grade
21 - 30	8th grade
31 - 42	9th grade
43 - 56	10th grade
57 - 72	11th grade
73 - 90	12th grade
91 - 110	13th grade
111 - 132	14th grade
133 - 156	15th grade
157 - 182	16th grade
183 or more	17th grade or higher

Source: The SMOG formula was developed by Harold C. McGraw, Office of Educational Research, Baltimore County Schools, Towson, Maryland. Instructions and numbers in this table are adapted from *Clear & Simple* (National Cancer Institute, 1994:17). The formatting and note about the Fry method were added for purposes of this Toolkit.

End notes

Acknowledgements

In developing this part of Toolkit, the writer has drawn on published work and personal discussions with many colleagues who have shared their insights on the uses and misuses of readability formulas and best ways to judge the suitability of written materials. In particular, thanks to Ginny Redish, Sue Stableford, Audrey Riffenburgh, Joanne Locke, Len and Ceci Doak, Helen Osborne, and Mark Hochhauser.

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476
September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 4: Special topics for writing and design

PART 8

Will your written material be on a website?

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 8

Will your written material be on a website?

List of figures:

This document is Part 8 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, PhD, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

Background on the Toolkit

This document, Toolkit Part 8, is part of the *Toolkit for Making Written Material Clear and Effective*. To provide context, we begin by describing the Toolkit as a whole.

What is the Toolkit?

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource (see Toolkit Part 1). It's a detailed and comprehensive set of tools to help you make written material easier for people to understand and use. This Toolkit is from the Centers for Medicare & Medicaid Services (CMS), and it is oriented toward the programs administered by CMS. These programs include Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). In this Toolkit, we focus on material in printed formats that is written for people with Medicare or Medicaid and the parents or guardians of children with coverage through CHIP. These "CMS audiences" are culturally, linguistically, and demographically diverse, and they include significant numbers of people with low literacy skills. Much of the discussion in the Toolkit also applies to material that is written for those who work with or assist members of CMS audiences. To give just a few examples, this includes material written for family members of people with Medicare, outreach workers, agency staff, community organizations, and care providers.

The Toolkit focuses on written material in printed formats

The *Toolkit for Making Written Material Clear and Effective* and its detailed guidelines for writing, design, and translation are all oriented toward written materials that people read in a printed format, typically on paper. You can also read written material on a website. In fact, the distinction between printed material and website material is not always clear. When you visit a website, you can read what's on the computer screen while you are online (and that's what websites are generally designed for), or you might print what you see on the screen and then read the printed version. Sometimes material on a website has been designed specifically to be printed and read in printed format, but often it has not.

What if your written material will be on a website?

Even though you might print what you see on a website, the differences between written material that you read in a printed format and material on a website are profound. Websites have multimedia capability, search tools, and other features that have no counterpart in written material that is printed on paper. These and other differences between printed and website materials have a great impact on writing and design.

In this part of the Toolkit, we cover these topics:

- We start by looking at how printed materials differ from websites and then discuss what these differences imply for using the guidelines and advice in this Toolkit. You will find that some of the Toolkit Guidelines for Writing and Design apply whether you are writing for a website or writing for a printed format. But many of our print-oriented guidelines would need adaptation if your written material will be on a website. In addition, there are many topics unique to websites that are beyond the scope of this Toolkit.

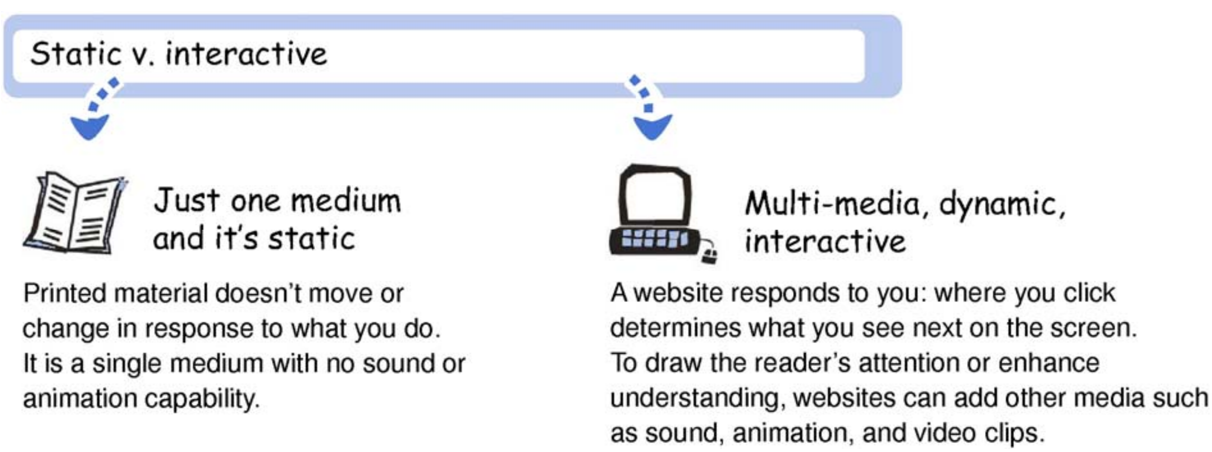
- We suggest some excellent resources for website writing and design.

- We offer tips on how to format material that you will distribute by website for people to download and use in printed form.

Printed materials and websites – how do they differ?

As shown below in Figure 8-a, reading something that is printed on paper is quite different from reading something on a website while you are online.

Figure 8-a. Printed materials and websites – how do they differ?



Getting access and having the skills it requires

Access to printed material is generally good; the skills required to use it are familiar to most people

Printed material and the basic navigation skills required to use it are generally familiar to people of all ages (though some people are non-readers and others differ greatly in their basic reading and navigation skills). In printed material, navigation tools include titles, headings, page numbers, table of contents, index.

Website access varies; knowledge and skills needed to use websites are not familiar to some people

To find your way through cyberspace, you need to know about such things as browser windows, URLs, scrolling, downloading, text links, graphic links, search engines, search functions, and pull-down menus. In general, older adults and people without easy computer access are more likely to lack these skills.

Variation in size, shape, etc.

Much variation in types of printed material

Printed material comes in many shapes and sizes. There are many types of paper and many ways to fold, bind, package, and deliver it.

It's basically one "screen image" at a time

Web pages themselves vary enormously, but the total reading space and format is inherently constrained: you read the material on a computer monitor, one "screen image" at a time.

How it looks to different readers

The material looks the same for every reader

Once printed, each piece of the printed material looks the same.

How the material looks on a screen can vary

The color and layout of the material may look different from one reader to the next depending on their computer equipment.

Sharpness of the text and images

Text and images can be printed very sharp

Resolution is excellent. Small text and fine details can be printed very sharp and readable.

Screen resolution is limited (but print size is adjustable)

A "page" on a computer screen can only hold so much and still have the text be sharp enough to be readable. Resolution can differ depending on computer equipment, and users can adjust the size of text on their computer screen.

Boundaries and sequence of topics

Boundaries are clear and fixed; the *writer* controls the sequence

When material is printed on paper, there is a beginning and end to it. You can see all parts of the material and know how they are all connected. The sequence of topics is predetermined and presented in the same way to all readers (though each can choose to read it any way they wish).

Boundaries are fuzzy and expansive; the *user* controls the overall sequence

In cyberspace, it can be hard to know how parts are connected and where any given material begins and ends. You see only one page at a time on a website. There is no fixed sequence of pages, and you may not see them all. You control the overall sequence of topics you see by selecting pages and deciding how to use each page (which parts to read, which links to follow, etc.)

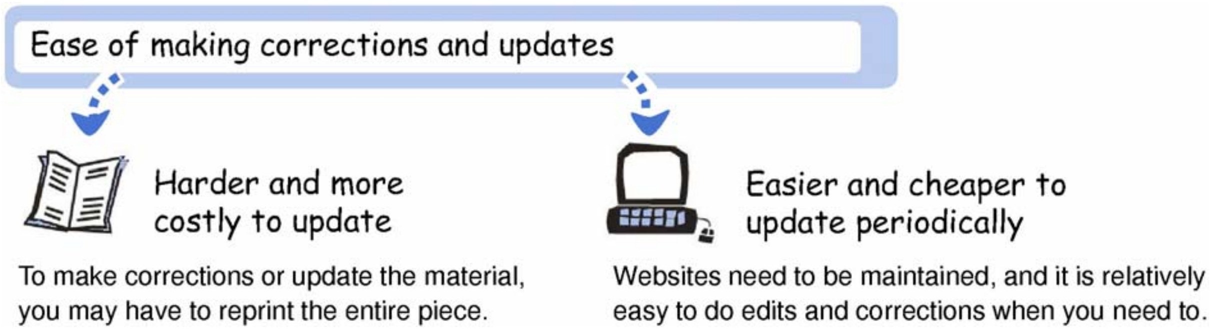
Ease of skimming and searching

Though printed materials vary, they are often hard to skim and slow to search

If you want to search for something, you have to do it manually. How long this may take and how successful you will be depends on how the material is written and formatted. If it has dense blocks of text and few headings, it will be long and slow to skim.

Though websites vary, they are designed for easy skimming and searching

Searches in cyberspace are very fast and efficient (though the process and results may be frustrating at times). Search engines can help you find websites of interest, and then the websites often have their own search functions and other features to help you locate information quickly. The writing style for websites tends to be much briefer than for printed material. There is usually less text and it is usually easy to skim.



Source: Created for this Toolkit; based in part on recommendations from Mary Hunter and Lise Rybowski.

Do the "Toolkit Guidelines for Writing and Design" apply to websites?

As shown in Figure 8-a above, printed materials and websites differ in a number of crucial ways. Websites have multimedia capability and a host of powerful electronic search tools and other features that have no counterpart in written material that is printed on paper. Compared to a static printed format, the interactive capability of the computer offers a reader incredible flexibility and control over what is viewed and how it appears. As shown in Figure 8-a, printed and website materials differ in other ways as well, including the size and shape of the material, the amount of text that can be seen at a given time, and the resolution of the type and visuals.

The differences between printed and website materials and the navigational skills required to use them have great impact on writing and design. Since we are focusing on printed material in this Toolkit, all of our guidelines for writing and design are oriented toward printed material. Typically, this means material that is printed on paper.

You will find that some of the Toolkit Guidelines do apply to website material, but many do not:

- **Some of the Toolkit guidelines for printed material apply to website material that people read on a computer screen while they are online.** For example, a number of the guidelines that deal with choosing content, making material culturally appropriate, writing style, and ways of engaging and supporting your readers are just as applicable to website materials as they are to printed materials (see Toolkit Part 4, *Understanding and using the "Toolkit Guidelines for Writing"*).

- **Other guidelines are either not applicable to websites or would require significant adaptation for website use**. For example, some of the Toolkit guidelines that address ways of organizing and presenting information would need to be adapted for website use because of the constraint on space and resolution available on screen at any given time.

- **In addition, the Toolkit Guidelines do not cover any of the writing and design issues that are *unique* to websites.** For example, guidelines in this book do not address any of the web-specific layout and navigation issues.

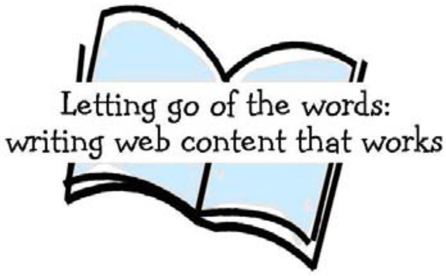
Suggested resources for website writing and design

Since the Toolkit is oriented toward material that people read in a printed format, providing detailed website guidelines is beyond the scope of this Toolkit. Below we suggest some excellent resources. Full references for all of these resources are at the end of this document.

Resources for website writing and design

This website presents the *Research-Based Web Design & Usability Guidelines* developed by the U.S. Department of Health and Human Services (HHS), in partnership with the U.S. General Services Administration. The purpose of this government website is to help you create websites that are “usable and useful.” The http://www.usability.gov website gives 209 guidelines about how to create websites that are “user centered.” It includes an extensive discussion of usability testing and its role in creating and modifying websites. If you want a printed copy of the guidelines, the website tells how you can order it.

Steve Krug is a usability consultant (see http://www.sensible.com/) who has written this humorous and insightful book on how to design websites that are usable. The book offers many tips and examples of how to design websites that are reader centered – easy to use and understand. It explains how to make web design conform to how people read (actually, scan) web pages, and how to make the websites attractive and easy to navigate.

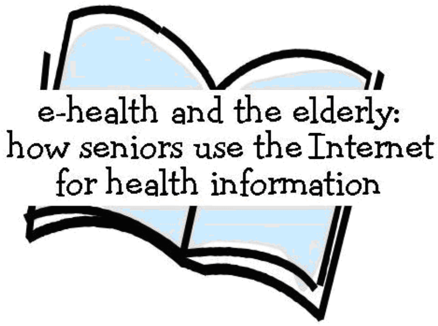


Ginny Redish is a writing consultant (see http://www.redish.net/) who specializes in easy-to-read material and designs websites. This book gives practical advice about how to create, test, and revise website content. It provides numerous examples from actual websites, giving "before-and-after" illustrations about how they can be improved.

This checklist was prepared by the National Institute on Aging (NIA) and National Library of Medicine (NLM). It provides a basic set of guidelines about design elements in websites that can make websites more accessible to all adults This checklist can be downloaded from http://www.nih.gov/icd/od/ocpl/resources/wag/documents/checklist.pdf.

Studies of how older readers and people with low literacy skills use the Internet

The full title of this article by Christina Zarcadoolas, Mercedes Blanco, John Boyer, and Andrew Pleasant is *Unweaving the Web: An Exploratory Study of Low-Literate Adults' Navigation Skills on the World Wide Web.* This research paper discusses the barriers that low-literate adults face when they use the Web. The authors examine both the way in which web content is written and presented, and what websites assume its users know about navigation. They give a preliminary set of guidelines that can help developers of websites.



This report from the Kaiser Family Foundation was written by Victoria Rideout, Tricia Neuman, Michelle Kitchman, and Mollyann Brodie. It gives results from a national survey of Americans aged 50 and older conducted in 2005. Among adults age 65 and older, a majority have never used computers or gone online. The report discusses the implications of these and other findings for those who rely on the Internet and computers as a way of reaching older adults.

http://www.pewinternet.org/

This project studies the effects of the Internet on Americans – their families, how they work, and where and how they live. It is a non-profit organization located at 1615 L Street, NW, Suite 700, Washington, DC 20036, and supported by Pew Charitable Trusts. The project produces several reports each year, based on survey data, online surveys, and occasional in-depth interviews.

Are you using a website to distribute documents for users to download and print?

Using websites as a distribution method for material that will be printed on paper

Websites are sometimes used to distribute documents that are intended to be used in a printed format (printed on paper). Instead of using a professional printer with a printing press or other large-scale commercial printing equipment, you create an electronic file and leave it up to others to do the printing. Typically, this means that the document is posted to a website in PDF format. PDF stands for *Portable Document Format.* PDF preserves the formatting of the document, including fonts. People who want to read the document can download the PDF file and print it on their own printer. No matter what printer they use, the document will look like the original (though replicating color may be an exception, depending on how it is printed).

Using a website to distribute PDF documents has implications for cost, access, and other issues:

- **Web distribution is only effective for those users who have access to computers and the skills required to retrieve and print the document** (Zarcadoolas, Blanco, Boyer, & Pleasant, 2002; Rideout, Neuman, Kitchman, & Brodie, 2005). Although Internet access is improving among most groups, there are still many people who lack computer access or the skills that are required to find, download, and print a document (Pew Internet & American Life Project). In particular, access to the Internet tends to be lower among older adults and people with low literacy skills.

- **Website distribution offers cost savings to producers.** When people produce written material and then use a website to distribute it, they save on printing and distribution. If the downloadable PDF is the only way to get the document, they save all of these costs. But sometimes the document has been printed on a press, and the PDF is offered as an alternative way to get the document.

- **Website distribution can enhance convenience for the user**. For users who have the access and skills, it can be faster and easier to retrieve the document from a website than to buy it at a store or place a phone or mail order. Of course, users bear the costs associated with printing the document they retrieve.

- **Using website distribution can enhance the visibility of a document**, bringing it to the attention of a larger group of potential readers.

- **Website distribution offers ease of updating.** It is relatively easy and inexpensive to edit a PDF document. In contrast, to update or correct a document that is printed on a press, you generally have to reprint the entire document.

Will people have the access and skills to retrieve and print the material?

If you are thinking about using a website to distribute a PDF of your written material, take into account the Internet access and skills of the users. What counts is the access and skills of those who will be retrieving and printing the PDF, and these people may be different from the intended readers:

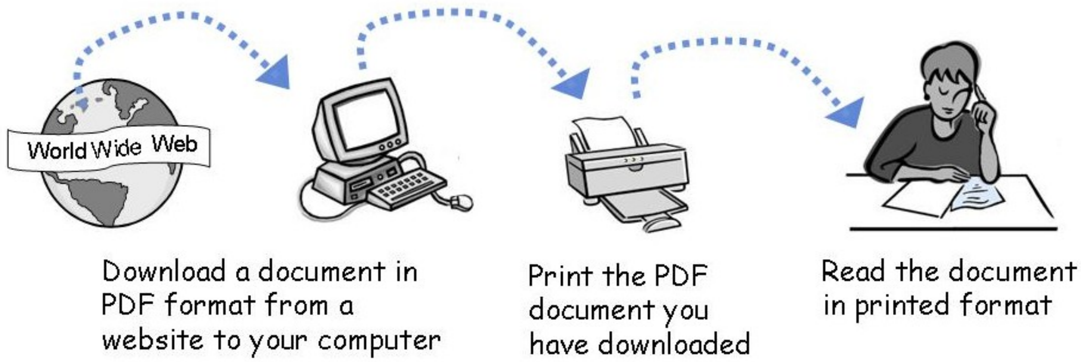
- For example, it would not be appropriate to use a website as the only way to distribute material *directly* to people who tend to lack the equipment and skills to deal with PDFs.

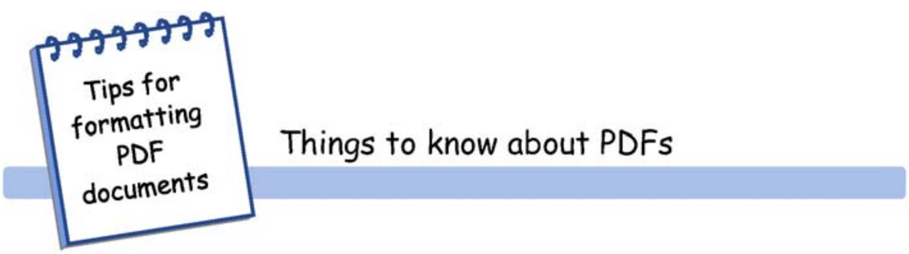
- But sometimes websites are used to distribute written material to health professionals, community organizations, or others who will print it and then give it to the intended readers. In this situation, what counts is the computer access and skills of the one who will be downloading and printing the material, not the access and skills of the ultimate readers.

Tips for formatting documents that are distributed on websites for use in printed format

If you decide to use PDFs to distribute your written material on a website, see Figure 8-b below. It gives tips on how to format these documents to make them easier for readers to use.

Figure 8-b. Tips for formatting PDF documents to make them easier to use.





The discussion and tips in this Figure assume that the documents you distribute on a website will be in PDF (portable document format). PDFs preserve the original formatting of your document. This is a huge advantage.

- To use a document in PDF format, you need some software called *Adobe Acrobat Reader*. This software is free and easy to download from http://www.adobe.com/products/acrobat/. Once a person has downloaded the free *Acrobat Reader* to their computer, they can use your PDF document.

- The *Adobe Acrobat Reader* software has *Reader* in its name because it lets people read (use) a document in PDF format. To *create* a PDF, you need other software. You can use software called *Adobe Acrobat* to create PDFs. It offers many options for how the PDF is created, including security features you can add.

What should you assume about how your PDFs will be printed and used?

It's possible to print PDFs professionally. However, many users of PDFs will be printing them on the ordinary small printer attached to their personal computer. To create PDFs that will be easy for people to print and use, it is realistic to make the following assumptions:

- **The PDF will be printed on ordinary 8 ½ by 11 inch paper**. It's not reasonable to assume that users of PDFs will have ready access to printers that handle oversize paper. Most people who use the material will not have the combination of equipment, skills, and inclination that it takes to print a PDF in some unusual way or on some special kind of paper. This means that you should not design your PDF with the expectation that people will print it on cardstock, do special trimming and folding to create a wallet-sized card, or have an extra-wide stapler handy to staple the spine of a booklet.

- **Even if you create it in color, people will often use a black and white version of the PDF**. They may print it in black and white or they might make photocopies in black and white. Some will print it in color, but then they might photocopy it in black and white.

- **The PDF will typically be printed one-sided rather than double-sided.** To do the initial printing of a PDF as two-sided printing requires extra effort and a bit of know-how. It's safe to assume that many people won't make the effort. If they want a double-sided version of the PDF, the easy way is to photocopy it. If they have an original in color and they photocopy it as double-sided, this typically means that it will be converted from a single-sided color document into a double-sided black and white document.

How to make your PDFs easier for people to use

A PDF that you print yourself is *not* the same as a commercially-printed document. Even though a PDF preserves the original formatting, this formatting is preserved on a page-by-page basis. When a lengthy document is printed professionally, the end result is not a stack of 8 ½ by 11 inch sheets of ordinary paper printed on one side. Besides the printing itself, there is trimming, collating, binding, and a host of other possible services involved (for a good resource on printing, see Kenly & Beach, 2004).

So, to help your readers, format your PDFs based on the assumptions we listed above. This means:

- **Design them for use as single-sided 8 ½ by 11 inch sheets.** If you have designed a layout that relies heavily on a "facing pages" format, consider whether it will work well as single-sided sheets. If not, consider making changes to accommodate how people are likely to be using the material. If you want, you could offer two formats: one for single-sided printing and the other for double-sided. Creating a document that is optimized for double-sided printing means that you insert blank sheets as needed to make all of the pages fall properly as either right or left handed pages. Often this means inserting a blank sheet at the end of some sections to force the next section to start on a right-handed page.

- **It's fine to use color in your PDF, but design the PDF so that it will also work well in black and white.** Check to see how well a version that is printed in color holds up when the material is photocopied. Since many people will end up with a version in black and white, be careful not to rely on color coding or the use of color as a navigation device. For some documents, you may want to provide two versions of PDFs, one in color and one in black and white that is optimized for photocopying or printing in black and white.

Label your PDF clearly. Clear labeling of PDFs helps users and it helps you, too:

- **Put a date on the PDF**. Since PDFs are easy to update, it helps to put the date in a prominent place.

- **Include information about the website in the document itself**. Later on, people who downloaded and printed the document might wonder where they got it.

- **Include a suggested citation, copyright information, and identify any restrictions on use**. Figuring out how to properly cite a website document can be bewildering. Help people out by including a suggested citation in the document itself. Also, be specific about the ways in which people are (or are not) allowed to use the document. If you say they need permission for certain types of use, tell them how to get permission and give them contact information.

Source: Created for this Toolkit.

End notes

Thanks to Lise Rybowski, Mary Hunter, and Mark Evers for their contributions to this Toolkit Part 8.

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Pew Internet & American Life Project

This project is non-profit research center that studies and reports the effects of the Internet on Americans – their families, how they work, and where and how they live. It is located at 1615 L Street, NW, Suite 700, Washington, DC 20036, and supported by Pew Charitable Trusts. Visit http://www.pewinternet.org/.

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Usability.gov

This website is the primary government resource on usability and accessibility, including the latest usability research and training opportunities. It includes an online version of *Research-Based Web Design & Usability Guidelines*, developed by the U.S. Department of Health and Human Services (HHS) in partnership with the U.S. General Services Administration. http://www.usability.gov.

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To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476
September 2010

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

CMS CENTERS for MEDICARE & MEDICAID SERVICES

TOOLKIT for Making Written Material
Clear and Effective

SECTION 4: Special topics for writing and design

PART 9

Things to know if your written material is for older adults

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 9

Things to know if your written material is for older adults

List of figures:

This document is Part 9 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction[1]

If you are developing written material for people with Medicare or other audiences that include older adults, it's important to be aware of certain changes that come with age and take them into account as you write and design the material.

In this Toolkit document, we discuss how changes in vision and in the way the brain functions can affect the ability of older adults to understand and use written information. We focus on typical age-related cognitive changes such as declines in the speed of processing information and in the number of pieces of information that can be held in memory at any given moment (we do not address more extreme changes in cognitive functioning caused by diseases such as Alzheimer's.) We discuss the impact of such changes on older adults' literacy skills and offer tips on ways to make written material easier for older adults.

For convenience, we use the term "older adults" to mean people who are 65 or older. This category of "older adults" includes 37 million individuals. They are a highly diverse group in every way, including culture, language, education, socioeconomic status, and health status. We have to make generalizations about older adults in order to discuss age-related changes that can affect literacy skills. But in making these generalizations, we note that:

- **Age-related changes – both physical and mental – proceed at different paces that can vary greatly from one person to the next**. The category of people who are "65 and older" encompasses a large age range that spans several decades. On average, the vision and cognition of people in their sixties can differ considerably from those of people in their eighties or nineties.

- **There is much diversity among older adults in terms of literacy skills,** despite the tendency for older adults *as a subgroup* to have a greater problem with literacy skills. Older adults differ in their information-seeking tendencies, media preferences, and ability to read and understand written material.

- **For any individual, literacy skills vary by context**. For example, it is easier to read and understand written material when it's about a familiar topic. It's harder to concentrate on reading and absorb new information when you are worried or concerned.

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[1] Thanks to Beth Stevens, Mathematica Policy Research, and Elizabeth Hoy for their substantial contributions to this document (please see acknowledgments at the end).

By focusing on changes that are linked to the aging process, we identify new literacy challenges that can emerge for individuals as they grow older. For each person, the impact of any declines they may experience in cognitive skills or vision is *added to the impact of any other literacy challenges they may already have*, such as poor readings skills.

How aging can affect literacy skills

According to research in the field of psychology and cognitive aging, some cognitive skills or thought-processing abilities tend to decline in later life, and these can make it harder for older adults to understand and use written material (see left side of Figure 9-a below). But not all literacy skills decline with age. As shown on the right side below, there are cognitive skills that readers tend to retain as they grow older, and these can help pick up the slack as other skills decline (Stevens, 2003).

Figure 9-a. The impact of aging on literacy skills: Some things change but others do not.

Some things that affect literacy **tend to change** in later life

- Older readers tend to experience changes in vision that can affect ease of reading.
- Older readers tend to process information more slowly than they did when they were younger.
- Older readers tend to have less "working memory," which makes it harder for them to do several things at the same time.
- Older readers find it harder to focus their attention and deal with distractions.
- Older readers tend to have more difficulty reading between the lines and coming to a conclusion.
- Older readers tend to be less flexible in their thought processes.

Other things that affect literacy **don't change much** in later life

- Older readers have an extensive base of knowledge and life experience that helps them interpret information, make decisions, and solve problems.
- Older readers tend to have the same ability to process spoken language as they did when they were younger.
- Older readers tend to keep the same ability to recognize and interpret pictures and other images as they age.

Source: Adapted with permission from lists developed by Elizabeth Hoy (personal communication, 2005) and Beth Stevens (2003).

A number of recent publications provide research findings concerning aging and how it relates to cognitive decline and changes in perception. For discussion and evidence about how these age-related changes affect health literacy, health safety, and the quality of life for older people, see the following resources: Baker, Gazmararian, Sudano, & Patterson (2000); Murphy, Davis, Jackson, Decker, & Long (1993); and the articles in the edited books by Craik & Salthouse (1992, 2000); Park, Morrell, & Shifren (1999); and Park & Schwartz (2000). For two excellent summary discussions see Dubow (2004) and Stevens (2003). The discussion and suggestions that follow in this document are based on material in these articles and books.

Changes in vision

Many people experience changes in their vision as they grow older. These age-related changes can affect such things as perception of contrast, colors, and sharpness of detail, making it harder for older people to read written material, especially if the text is in small type. Reading under conditions of good lighting and using aids such as reading glasses, bifocals, or trifocals can help, but the way the material itself is designed and the paper it is printed on have great impact as well. In a later section, we give tips for formatting your written material to make it easier for older eyes.

Declines in cognitive processes

As shown in Figure 9-a above, there are several types of cognitive skills that tend to decline with advancing age. These cognitive declines can affect older adults' ability to understand and use the information they read in written material:

- **Slower processing of information.** It takes older adults longer to recall information and longer to complete tasks that require locating and using information. Slower processing of information can make it harder for older adults to do things such as locate specific types of information in a document or make comparisons.

- **Lessened capacity to do several things at the same time.** Research shows that older adults have less working memory than younger adults. "Working memory" is the capacity of the mind at any given moment to manipulate different types of information. With less working memory available, older adults cannot hold as many pieces of information in their minds at the same time. This diminished capacity to do several tasks simultaneously makes it harder for older adults to read and understand written material that imposes a heavy cognitive demand, such as material that is dense and complex, long sentences with multiple clauses, and complicated diagrams.

- **Lessened ability to focus attention and deal with distractions**. Increased age often means increased difficulty in focusing on specific information and eliminating distractions.

- **Greater difficulty drawing inferences**. Age also affects the capacity of older adults to draw conclusions by reasoning from evidence. The older you get, the more difficult it can be to read between the lines and come to a conclusion based on the information at hand.

- **Less flexibility in thought processes**. Older adults show less ability to change their judgments when they are given additional information that might otherwise alter their opinion. Moreover, older adults are less able to engage in "divergent thinking," which is the ability to generate alternative explanations or solutions to a problem.

How serious are these cognitive declines?

The cognitive declines we have outlined above are generalizations about what tends to happen for people who are 65 and older. At this point, you may be wondering just when these cognitive declines take place and how severe they tend to be. The Seattle Longitudinal Study, one of the most comprehensive studies of adult intellectual development and decline, provides some answers (Schaie, 2005). Begun in 1956, this ongoing study has data on over 6,000 people. Findings suggest that:

- **Cognitive decline is not consequential for many older adults until later in old age.** In general, it is not until the age of 80 or above that the average older adult falls below the middle range of performance of younger adults.

- **Different cognitive skills decline at different rates**. Evidence from Seattle Longitudinal Study suggests that:
  - "**Verbal memory**" peaks in a person's sixties and declines in his or her eighties.
  - "**Verbal ability**" (the ability to understand ideas expressed in words) plateaus between ages 40 to 60 and declines last of all the cognitive skills, but it declines more steeply than other abilities in one's seventies and eighties.
  - In contrast, "**number skills**" (the ability to understand numerical relationships and work with figures) peaks as early as the late thirties but only severely declines in one's eighties.

Individuals vary in the development and rate of decline in cognitive functioning. Influential factors include heredity, the presence of chronic diseases (such as cardiovascular disease), education, occupation, and the extent of a person's ongoing participation in activities such as reading that provide mental stimulation.

Cognitive skills that remain in later life

While cognitive capacity in older adults is limited in some ways, Figure 9-a shows that many skills that affect literacy do not decline with age. These include, for example, the ability to process spoken language and the ability to recognize complex pictures. Other cognitive skills tend to remain strong in later life. For example, older adults are as accurate as younger adults in deciding whether two concepts are related or whether they share particular aspects of meaning.

The lifelong experience of older adults is an important source of strength in cognitive functioning. Since knowledge tends to be retained across the life span, older adults have an extensive base of knowledge and life experience to draw upon. How people use their knowledge and life experience, including how quickly and easily they can access and process it, may tend to change with age. Figure 9-b below provides an example. It compares the decision-making processes of older adults to those of younger people.

Figure 9-b. Older people are different in the way they make decisions.

Research on making medical treatment decisions, playing chess, or solving international political problems all shows that the decision-making process of older adults differs in that:

- Older adults tend to review much less information than younger adults.
- They tend to eliminate choices or possibilities more quickly than younger adults.
- They are less likely to analyze information while making a decision. Instead, they are more likely to make decisions using a set rule (such as "always buy the cheapest").
- They tend to use references to prior life experience rather than objective data to make their decision.

While processes used by older adults to make decisions *differ* from those of younger adults, they are *not necessarily inferior.*

- Experience allows the decision maker to zero in on the best options and more quickly discard irrelevant ones. Over time, experienced decision makers come to recognize characteristics of a problem situation that lead them to reach effective solutions with less analysis than younger decision makers need.
- Younger adults might tend to waste their energy generating excessive numbers of options that do not ultimately yield better decisions.

Source: *How Seniors Learn* by Beth Stevens (2003); adapted with permission for use in this Toolkit.

How can you help older readers?

To make written material easier for older readers, use **both** of these strategies:

Write and design it in ways that **help compensate for declines** in vision and cognitive processing that make reading and understanding more challenging for older adults.

Write and design it in ways that **build on cognitive strengths** of older adults that tend to remain unchanged in later life.

As shown above, there are two main ways that you can adapt your writing and design to make written material easier for older adults to understand and use: one is to help make up for age-related declines in literacy skills and the other is to build on the cognitive strengths that older readers retain. The tips we give below use both of these strategies.

A reader-centered approach

To help make written material easier for older readers, try applying the reader-centered approach outlined in Toolkit Part 2, *Using a reader-centered approach to develop and test written material.* This approach focuses on creating "low barrier" material by avoiding or removing barriers that might keep your readers from noticing, understanding, and using the material. It also emphasizes the importance of testing the material with the intended readers.

When you take a reader-centered approach, you do your best to see the material from the reader's point of view. Start by thinking about ways in which you differ from older readers who have experienced declines in their vision and cognitive skills. You will understand that **many things about the written material that are not barriers for you might be significant barriers for older readers**:

- Knowing which cognitive skills tend to decline with age helps you identify certain aspects of writing and design that are likely to pose barriers for older readers. These barriers include, for example, small print, long and complex sentences, and comparison tables with rows and columns.

- Knowing which cognitive strengths tend to be retained in later life will help you figure out ways to give older readers a little extra help. For example, you can adapt your explanations and examples to fit with older readers' life experiences.

Below we outline some specific tips for helping older readers. Not all of your older readers will need the extra help we suggest that you give them, but for many of them it will be essential. Most of these tips are covered in more detail elsewhere in this Toolkit because they are included in the *Toolkit Guidelines for Writing and Design* (see Toolkit Parts 3, 4, and 5).

> Most ways of making written material more suitable for older adults make it easier for other readers too, especially those with low literacy skills.

Some of our advice for helping older readers applies mainly to this age group of readers, such as using larger size type to help make text more readable to older eyes. But most of it, such as the need to be concrete and explicit, is similar to advice we give throughout the Toolkit about ways to make written material easier for people with low literacy skills to understand and use.

Helping older readers who have vision limitations

The list in Figure 9-c below gives tips on ways to make the print in your written material easier for people to read if they have vision limitations. While the formatting we suggest below is crucial for written material that will be used by people with vision limitations, it makes text more appealing and more legible for any reader (as we explain below, font size is a possible exception.)

Figure 9-c. Ways to make written material easier for people who have vision limitations.

1. **Choose highly readable fonts (typefaces).**
   For details about typefaces and what makes them easy to read, see Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast* (Guidelines 6.1, 6.2, and 6.3).

2. **Make the type large enough for easy reading by older adults.**
   As you make adaptations in font size to help older adults, keep in mind that for people with good vision, oversize type can make written material harder to read. In addition, differences in lettering style of a typeface can affect ease of reading as much or more than point size. For more about this, see Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast* (Guideline 6.4).

3. **For maximum contrast and ease of reading, use black ink for the text and print it on plain, non-glossy white (or nearly white) paper.**
   This means no text on shaded or patterned backgrounds, because any background other than white reduces contrast and interferes with ease of reading. It's important to avoid glossy paper because glare from glossy paper can be especially hard on older eyes. See Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast* (Guidelines 6.7 and 6.8).

4. **To make text easier to read, take care in how you format it.**
   To help make text easier to read, (a) left-justify it (line it up against the left side); (b) add just a little extra space between the lines of text; and (c) keep lines of text to an appropriate length that is not too short and not too long. See Toolkit Part 5, Chapter 3, *Guidelines for fonts (typefaces), size of print, and contrast* (Guidelines 6.9, 6.10, and 6.11).

5. **Create a clean, uncluttered layout that has plenty of white space.**
   Your layout should have a clear and obvious path that guides the reader through the material without diverting or distracting them. See Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout* (Guideline 5.3).

6. **Choose a color scheme that provides adequate contrast and takes into account age-related changes in color perception.**
   See Toolkit Part 5, Chapter 5, *Guidelines for use of color* (Guideline 8.4). (The need for good contrast also applies to written material that is done in black and white.)

Source: Adapted from Toolkit Part 5.

Helping older readers who have experienced declines in cognitive skills

Written material can work well for older adults:

- It can be organized and formatted in user-friendly ways that reduce the cognitive burden on older adults.
- Older adults can read it at their own pace.
- Older adults can review it to refresh their memory.

Source: Adapted with permission from Stevens, 2003.

As noted above, giving information to older readers in a written format gives them the option to read it as slowly and as often as they wish. Of course, the more user-friendly you can make the information, the better it will work for them. The sections that follow give specific tips that can help compensate for decline in the cognitive skills of older readers. Many of these tips focus on ways of reducing the cognitive burden that the written material imposes on them. Others suggest ways to tap into cognitive strengths that older readers tend to retain in later life.

Tips for reducing the cognitive demand of your written material

As we've noted, older readers find it harder to focus their attention and concentrate on the relevant details. A decline in working memory reduces the amount of mental work space available, which makes it harder to handle multiple types of information at the same time. It can take more time and effort for older readers to recall and use information they already know, interpret and absorb new information, make comparisons and judgments, draw inferences, and make decisions.

When you think about the cumulative effect of such cognitive changes, it's easy to see how older readers could be overwhelmed by written material, especially if it is long, dense, or complex. To make written material usable for them, you need to minimize the cognitive burden that the material imposes on them.

Minimizing cognitive burden includes such things as:

- Making decisions about content, organization, writing, and design that help make the material less taxing on the reader's working memory and speed of information processing.
- Trying to anticipate possible problem spots and avoid doing things that might slow down, confuse, or mislead older readers.

Reducing cognitive burden on readers is a major theme of the Toolkit. It's an important goal for material that will be used by older readers, but it's also crucial for readers with lower literacy skills. In one way or another, most of the *Toolkit Guidelines for Writing and Design* are about reducing cognitive burden and offering support to readers. The list of tips that follows in Figure 9-d refers to some of these guidelines. Other parts of the Toolkit give you detailed guidance on how to apply these guidelines to your written material.

Figure 9-d. Strategies for writing and design that help reduce cognitive burden on older adults and other readers.

Be selective about *what and how much* information you include in the written material.

- Focus on what matters most to your readers and is culturally appropriate for them.
- Limit the total amount of information and emphasize main points that people really need to know.
- If you condense the material, don't drop the explanations, examples, and summaries that help readers understand the information.

In Toolkit Part 4, see Chapter 1, *Guidelines for content of your written material* (Guidelines 1.2, 1.3, and 1.6) and Chapter 3, *Guidelines for writing style* (Guidelines 3.4 and 3.7).

Write clearly, concisely, and cohesively, using words that are familiar to your readers.

- Use the active voice and write with a friendly and supportive tone. Be direct, explicit, and concrete.
- Write in ways that help readers understand the meaning of the material. Give the context first, and incorporate definitions and explanations into the text. Use technical terms and acronyms only if readers really need to know them. Don't make readers struggle to figure out something that is implied but not stated in the text. Instead, create cohesion by developing ideas in a logical progression that makes connections between ideas explicit.
- Remember that shorter is not always better: a short terse sentence can be ambiguous and confusing. A long sentence with simple conjunctions might be much easier to understand.

Also, remember that repetition can be good. Readers need some time to understand and absorb new information, so help them by repeating the main points.

In Toolkit Part 4, see Chapter 3, *Guidelines for writing style*, and Chapter 4, *Guidelines for engaging, motivating, and supporting your readers*.

Make the material seem clear, appealing, and easy to read at first glance.

- Make the purpose and usefulness of the material immediately obvious.
- Create uncluttered pages with generous margins, plenty of white space, and something to catch the reader's eye but not confuse it.
- Create a tidy sense of order and predictability by keeping the layout consistent from page to page in its style and structure.

In Toolkit Part 4, see Chapter 1, *Guidelines for content of your written material*. In Toolkit Part 5, see Chapter 2, *Guidelines for overall design and page layout*.

Break the material up, spread it out, and make it easy to skim.

- Group the material into meaningful "chunks" of reasonable size and organize it in a way that makes sense to the readers.
- Use plenty of prominent and informative headings to help show how the material is organized and signal what is next.
- Make the text highly legible and use contrast and other devices to emphasize key points. When the words themselves are easy to see and the main points stand out, readers are free to focus on interpreting the meaning of what they read. (For more about font choice, type size, and contrast, see Figure 9-c above.)
- Use devices such as bulleted lists, step-by-step instructions, captions next to pictures, and summaries of key points.

In Toolkit Part 4, see Chapter 2, *Guidelines for organization (sequencing, grouping, and labeling),* and Chapter 4, *Guidelines for engaging, motivating, and supporting your readers.* In Toolkit Part 5, see Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text.*

Integrate all of the information into one continuous flow that minimizes distractions and detours.

- Place headings, text and images in a way that guides readers smoothly through all of the material without diverting or distracting them in ways that could cause them to overlook something or lose their train of thought. There should be a clear and obvious path for the eye to follow through each page. This path should fit with a reader's natural and deeply ingrained way of progressing through a printed page, which is called "reading gravity" (see Guideline 5.3 and Figures 5-2-c and 5-2-d in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*).

- Avoid using design features such as sidebars that detour readers from the main text or layouts that send them to a different part of the material, such as sending them to the end to find a worksheet (see Figure 5-2-e in Toolkit Part 5, Chapter 2).

- Make it easy for readers to locate information. For example, make phone numbers and resources prominent and repeat the same information *wherever readers need it*, rather than sending them somewhere else to find it.

In Toolkit Part 4, see Chapter 3, *Guidelines for writing style*. In Toolkit Part 5, see Chapter 2, *Guidelines for overall design and page layout*).

Build on the cognitive strengths of older adults that tend to remain unchanged in later life.

- Tap into the life experiences and knowledge base of older adults. Capitalize on the cognitive strengths of older adults by use of stories, explanations, analogies, and examples that refer to their life experiences and knowledge base.

- Help make written material culturally appropriate for older readers by taking into account generational differences.

- Use pictures and diagrams. Since people retain the ability to process visual information in later life, including clear and simple illustrations and diagrams in your material can be helpful to older readers. To reinforce key points and avoid distracting your readers, choose visuals that relate directly to the topic of your material. Be cautious about using symbols, icons, cartoons, or caricatures, because they may confuse your readers.

In Toolkit Part 4, see Chapter 1, *Guidelines for content of your written material*, and Chapter 3, *Guidelines for writing style*. In Toolkit Part 5, see Chapter 6, *Guidelines for use of photographs, illustrations, and clip art*.

Offer extra support for older readers.

- Consider coaching older readers explicitly on how to use the material. For example, you could suggest that since there is so much information in it, it will be helpful to read it twice. If it's reference material, tell them to keep it and explain why.

- If there is a decision to be made, present it clearly and coach readers on things they should consider and possible tradeoffs they must make. Give them basic information (what, when, why). If possible, break the decision-making process into a series of steps.

- Consider supplementing the written material. As we noted earlier in Figure 9-a, older adults tend to have the same ability to process spoken language as they did when they were younger. In addition to (or instead of) written material, you could consider alternative ways to communicate the information, such as in-person presentations and discussion, telephone help lines, and video and audio recordings.

Test the material with older adults.

It can be hard to anticipate all the ways in which written material might unintentionally confuse or mislead. Check on how well your material is working by getting feedback directly from your intended readers.

For help on methods of testing written material, see Toolkit Part 6, *How to collect and use feedback from readers*).

Source: Adapted from Toolkit Parts 4 and 5, with suggestions and additional points from Beth Stevens and Elizabeth Hoy.

End notes

Acknowledgements

Thanks to Beth Stevens, Mathematica Policy Research, and Elizabeth Hoy for their many contributions and helpful suggestions for this document, Toolkit Part 9. Much of the discussion about cognitive decline in later life is an adaptation of text in *How Seniors Learn*, an issue brief written by Beth Stevens for the Center for Medicare Education. For more discussion on this topic, and more citations to the literature, please see the issue brief. It is available at on the Internet at http://www.mathematica-mpr.com/PDFs/howseniors.pdf.

Thanks also to Mark Evers, Carol Cronin, and Joyce Dubow for sharing insights on this topic.

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TOOLKIT for Making Written Material Clear and Effective

SECTION 4: Special topics for writing and design

PART 10

"Before and after" example: Using this Toolkit's guidelines to revise a brochure

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 10

"Before and after" example: Using this Toolkit's guidelines to revise a brochure

List of figures:

This document is Part 10 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

Background on the Toolkit

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). For background on the Toolkit, see Toolkit Part 1, *About the Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material*.

In earlier parts of this Toolkit, we offer a detailed set of guidelines for writing and design (the full list is in Toolkit Part 3, *Summary List of the "Toolkit Guidelines for Writing and Design*"). The Toolkit discusses each guideline, one at a time, telling why it is important, how you can apply it to your own materials, and giving examples (see Toolkit Part 4, *Understanding and using the "Toolkit Guidelines for Writing"* and Toolkit Part 5, *Understanding and using the "Toolkit Guidelines for Graphic Design"*).

When you go through the guidelines one-by-one, as we do in other parts of the Toolkit, it can be hard to envision the *combined impact* of applying them to a written piece. This Toolkit Part 10 may help. It has a "before and after" example that uses selected guidelines to analyze and improve a brochure for a state-operated tobacco quit line.

About this makeover example

We are grateful to the *Tobacco Prevention and Education Program* at the Oregon Department of Human Services for supplying the Oregon Tobacco Quit Line brochure and allowing us to use it as a "makeover" example in this Toolkit. (For further acknowledgments, see the end of this document.)

Here is some background about the brochure:

- **The purpose of this brochure is to inform Oregonians about the quit line and encourage them to use it.** This particular brochure is the general brochure for the Quit Line. It was written for a diverse audience of Oregon residents that includes people with low literacy skills. In addition to this general brochure, the State of Oregon uses other means and materials to publicize the quit line, including brochures written for specific subgroups such as teen smokers.

- **The brochure is a standard size tri-fold, designed to fit in a literature rack.** The brochure is printed on both sides of a sheet of paper that is approximately 8 ½ by 11 inches. It has three narrow panels on each side. When folded, it measures 3 ¾ by 8 ½ inches. Since it's important that the brochure fit in a literature rack, we needed to maintain the tri-fold design and size in our makeover. (For discussion of the navigation challenges of tri-fold brochures, see Figure 5-2-f in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.)

Here are some things to keep in mind about the way we show the Quit Line brochure:

- **In this book, the brochure (including the size of the print) looks smaller than it really is.** The pages of this Toolkit are not large enough for us to reproduce the brochure in actual size. When you examine such things as size of print, please bear in mind that the pages we reproduce are smaller than the actual brochure.

- **The brochure is printed in orange and black, but we can only show it in shades of gray.** Since this part of the Toolkit is designed to be printed using black with an accent color of green, we are not able to show you the orange and black color scheme of the original brochure. Instead, we show it in shades of gray and describe the color scheme in words.

- **Although we can't show the original brochure in color, we do show the revised version in color.** We do this in order to illustrate how you might use an accent color. For this purpose, we use black with green (because these are the colors of this part of the Toolkit).

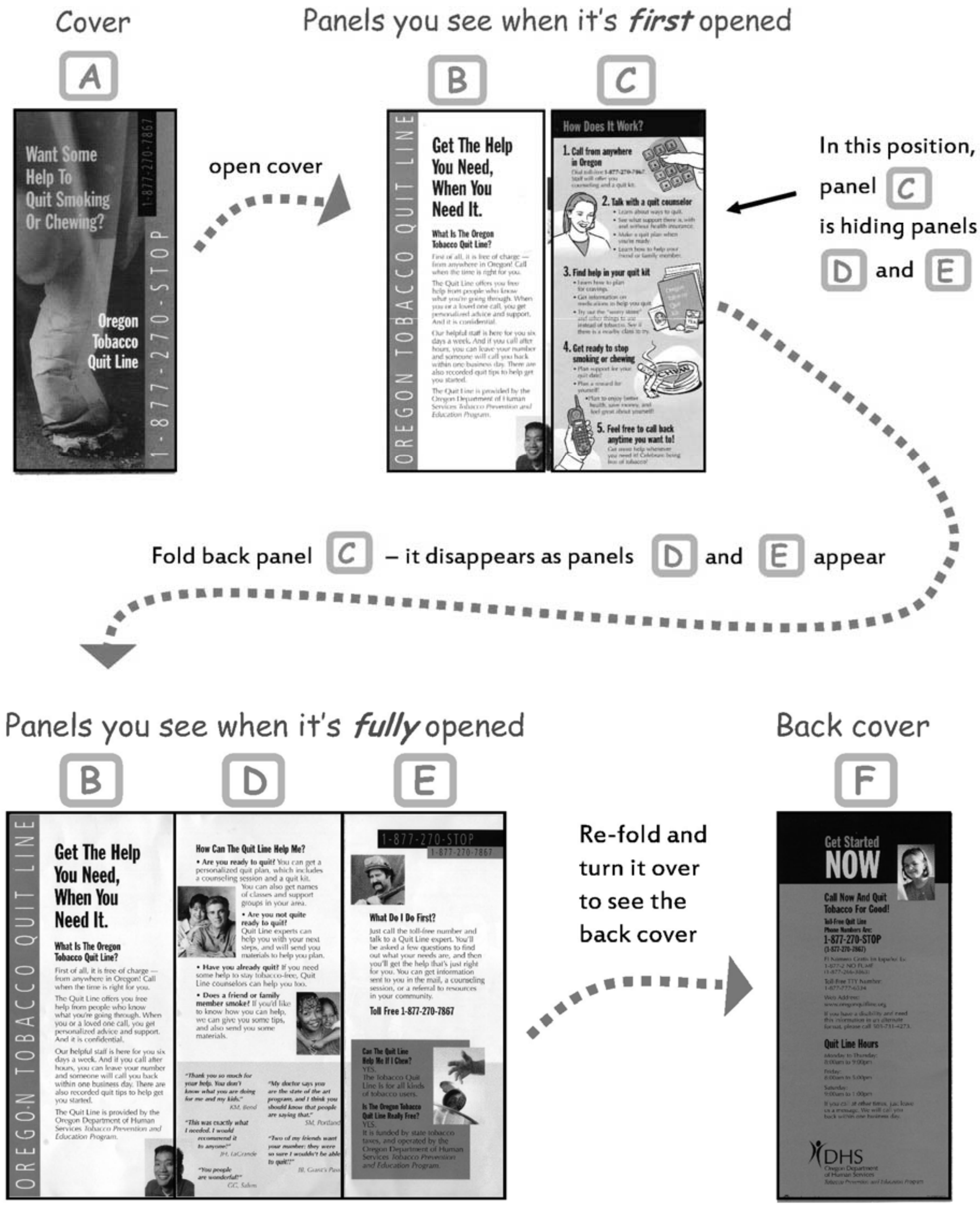
Panel-by-panel commentary on the *original* brochure

Figure 10-a below shows the brochure that we used as our starting point (for convenience, we sometimes call this the "BEFORE" version).

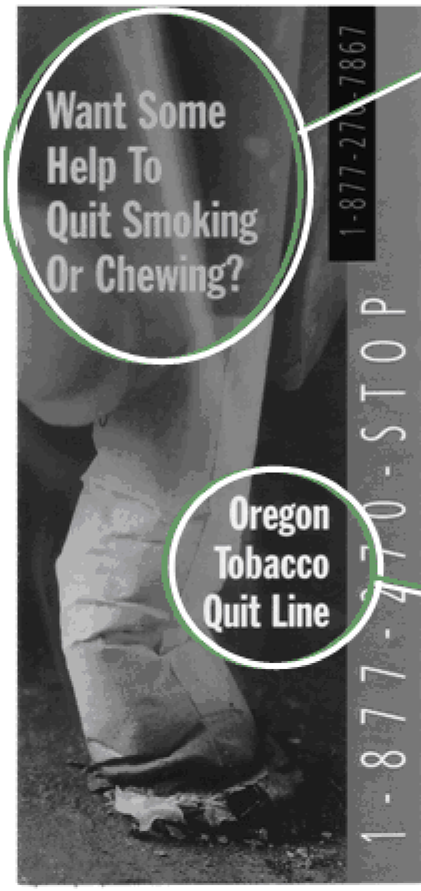
- **First, an overview**. Figure 10-a below starts by showing you the panels of the brochure in miniature size. This will give you a general sense of how it looks and show you how it opens. For easy reference, we've labeled the panels of the brochure with letters from "A" to "F."

- **Then a panel-by-panel commentary on the brochure**. The commentary in Figure 10-a includes many references to specific guidelines that are part of the "*Toolkit Guidelines for Writing and Design*." For easy reference, all Toolkit guidelines it mentions are included in a later section of this document that begins on page 29.

Figure 10-a. The **original** Quit Line brochure (shown first in miniature, and then followed by a panel-by-panel commentary).



A Original cover



Main title text is fine, but formatting makes it hard to read

- The title text is informative and has a friendly tone. It gives readers a clear signal about the purpose of the brochure.
- Contrast is weak between the light orange title text and the background photo in a duotone of orange and gray.
- Printing the title on top of the photo makes it harder to read. Also, capitalizing all words of the title makes it harder to read.

See Toolkit Guidelines 5.2, 6.5, 6.6, 6.7, and 6.8.

The subtitle stands out best

Printed in white, this subtitle pops out because it has the greatest contrast on the page. Since it is more prominent than the main title, it may draw attention first, and could cause some readers to overlook the main title.

See Toolkit Guidelines 5.3 and 6.7.

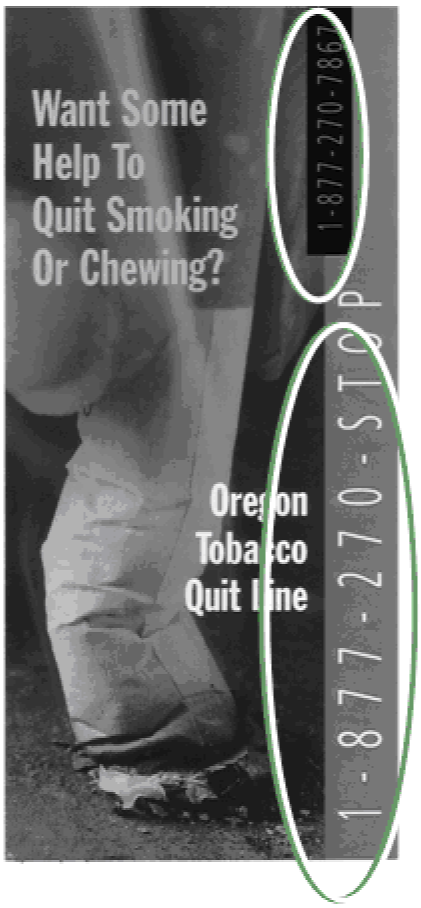
What the cover photo is showing is unclear at first glance

This photo is an extreme close-up of fingers stubbing out a cigarette. You have to study it for a moment to figure this out (especially if the cover text is not there to give you clues).

Photos that are unclear at first glance have less impact and tend to distract and confuse readers.

See Toolkit Guidelines 9.1 and 9.2.

A Original cover, *continued:*



Printing the numbers sideways makes them hard to read

When text is printed sideways, readers have to make an extra effort to read it. If they don't make this effort, then the text is essentially decorative rather than functional.

See Toolkit Guideline 6.8.

Formatting the numbers in such different ways obscures the connection between them

The small phone number at the top is in light orange type on a black background.

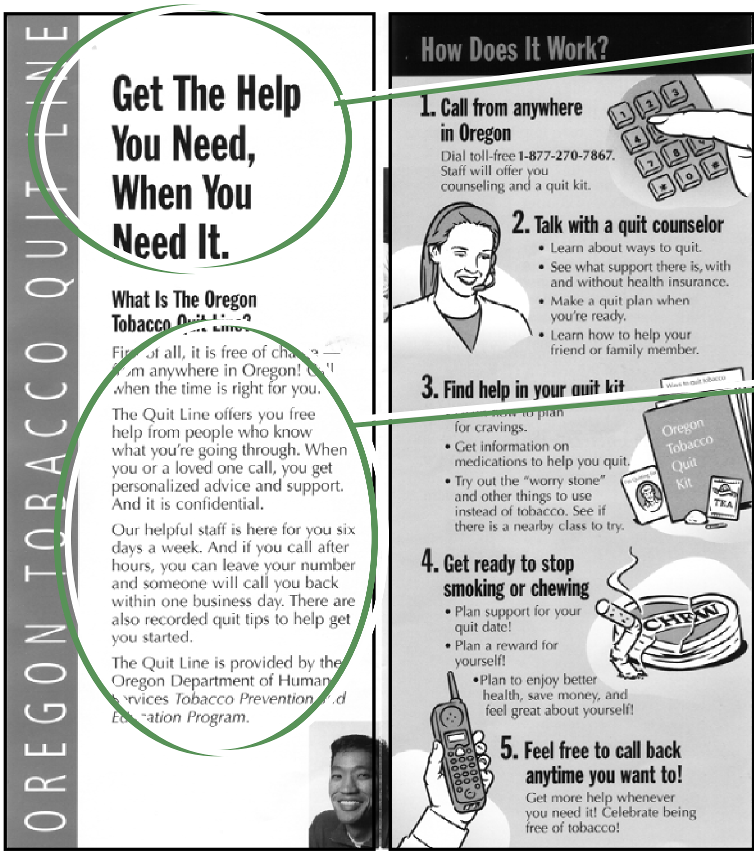
The large phone number is in white on a medium orange solid background (this combination shows up better here in black and white than it does in color).

These are actually two versions of the same phone number, one in all numbers, the other with the word "Stop." But separating them and formatting them in such different ways breaks the link between them. This might make a reader pause to ponder why there are two numbers. It's best to avoid doing anything that might distract your readers.

See Toolkit Guidelines 6.7 and 6.8.

Original – here are the panels you see when you first open the brochure

B C



Size, contrast, and the surrounding white space help make this title in the upper left corner an entry point into this two-page spread. Capitalizing only the first word of the title would make it easier to read.

It is hard for this block of unbroken text that follows the main heading to compete with the strong visual interest on the right hand side. Readers may skip over this text and go straight to panel C.

See Toolkit Guidelines 2.1, 5.3, and 6.5.

There's a lot going on here – where do you look first?

The illustrations and photograph break up the text and add appeal. Did they draw your eye first? What did you look at next?

Readers of text written in English typically start at the top left corner and work their way back and forth across the page until they reach the bottom right corner. This is called "**reading gravity;**" see Figures 5-2-c and 5-2-d in Toolkit Part 5, Chapter 2 (page layout). Keeping your layout consistent with reading gravity helps readers notice everything on the page.

Original – here are the panels you see when you first open the brochure, *continued:*

Poor contrast makes the text in panel C harder to read

The heading at the top "How does it work?" is printed in orange against a black background. Contrast is so weak that you hardly notice it. The rest of panel C is printed against a light orange shaded background:

- This colored background does two things that are helpful: it sets panel C apart from panel B, and it draws attention (though the images do this well enough on their own).
- However, these advantages are outweighed by the problem it causes: the shading reduces the contrast considerably, making the text harder read. Compare, for example, how easy it is to read the regular text on panel B compared to panel C.

See Toolkit Guidelines 6.7, 6.8, and 8.2.

The step-by-step approach on panel C is helpful and appealing

- Breaking a process down into a series of steps makes it seem more manageable and helps people understand what they need to do.
- Headings for each step are prominent and informative. The brief text and bulleted points make it easy for readers to pick up the main points.
- The combination of good headings, brief text, and bulleted points increases the appeal of this panel and makes it easy to skim (much easier to skim than panel B on the left side).

See Toolkit Guidelines 2.1, 2.2, 2.3, 2.4, 7.1, 7.2, and 7.3.

The step-by-step guidance on panel C disappears when people open the brochure all the way

Panel C is the one that folds back. This panel is not a good place to put crucial information or points that should remain visible for easy reference as people go through the brochure.

See Toolkit Part 5, Chapter 2, Figure 5-2-f, "Why it is tricky to design a tri-fold for ease of navigation".

Original – here are the panels you see when you first open the brochure, *continued:*

This image is hard to understand at first glance

Could you tell immediately that this image is part of a finger pushing a key on the phone?

Images of body parts in isolation or that are cropped (trimmed) in odd ways can be confusing and unappealing to readers. The keypad is also shown in isolation from the telephone. Showing it out of context makes it harder to recognize at a quick glance.

See Toolkit Guideline 9.1.

The position of this photo is problematic

This photo is printed across the fold and so it is half-hidden until the brochure is fully opened. Printing images or text across a fold in this way is distracting and reduces their impact.

Also, notice the visual impact of placing the smiling man right next to the illustration of the hand holding a phone:

- The two images are not in good proportion to each other (the hand is as big as the man's head) and the styles are quite different (photo v. line drawing). These differences distract from the impact of both images.
- So does placing them so close together. (And if you glance very quickly, it might seem that a hand is coming out of the man's shoulder.)

See Toolkit Guidelines 9.1, 9.2 and 9.7.

Original – here are the panels you see when the brochure is **fully** opened

Text is simple and supportive

This text is friendly and informative. It invites people to call, whatever their stage of readiness to quit. Writing style is clear and simple, direct and specific.

See Toolkit Guidelines 1.3, 3.1, 3.2, 3.3, 3.5, 3.8, 4.1, and 4.3.

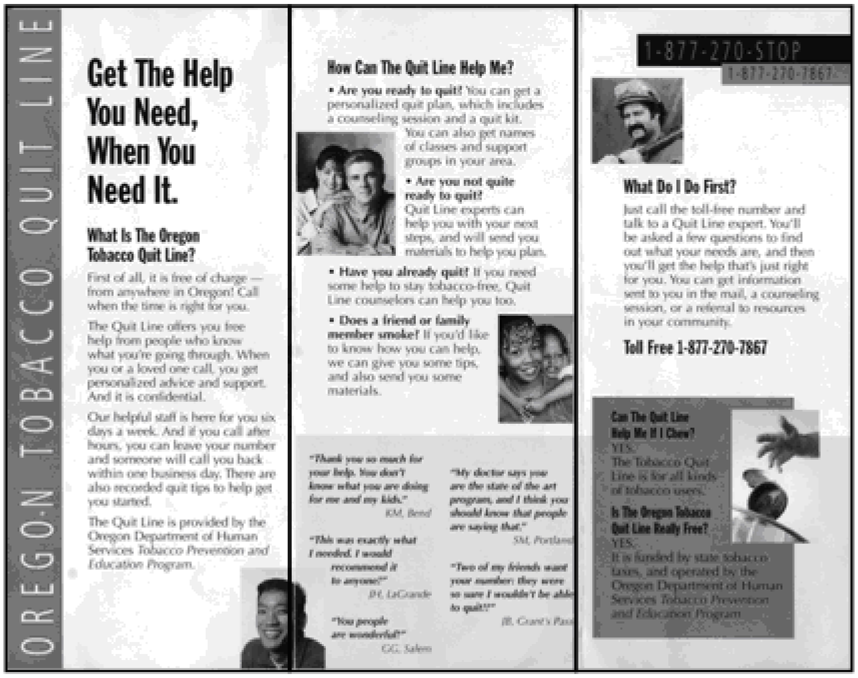
Uses testimonial quotations to reassure; uses Q&A to address possible questions

Upbeat quotations help reassure readers about the Quit Line. The message they convey is, "Other people have had good experiences – I will, too!" The Q&A anticipates two questions readers may have and repeats the answers here for emphasis.

See Toolkit Guidelines 1.2, 3.1, and 4.2.

Original – fully opened, *continued:*

B D E



OREGON TOBACCO QUIT LINE

Get The Help You Need, When You Need It.

What Is The Oregon Tobacco Quit Line?

First of all, it is free of charge — from anywhere in Oregon! Call when the time is right for you.

The Quit Line offers you free help from people who know what you're going through. When you or a loved one call, you get personalized advice and support. And it is confidential.

Our helpful staff is here for you six days a week. And if you call after hours, you can leave your number and someone will call you back within one business day. There are also recorded quit tips to help get you started.

The Quit Line is provided by the Oregon Department of Human Services *Tobacco Prevention and Education Program.*

How Can The Quit Line Help Me?

- **Are you ready to quit?** You can get a personalized quit plan, which includes a counseling session and a quit kit. You can also get names of classes and support groups in your area.
- **Are you not quite ready to quit?** Quit Line experts can help you with your next steps, and will send you materials to help you plan.
- **Have you already quit?** If you need some help to stay tobacco-free, Quit Line counselors can help you too.
- **Does a friend or family member smoke?** If you'd like to know how you can help, we can give you some tips, and also send you some materials.

"Thank you so much for your help. You don't know what you are doing for me and my kids." KM, Bend

"This was exactly what I needed. I would recommend it to anyone!" JH, LaGrande

"You people are wonderful!" GG, Salem

"My doctor says you are the state of the art program, and I think you should know that people are saying that." SM, Portland

"Two of my friends want your number; they were so sure I wouldn't be able to quit!" JB, Grant's Pass

1-877-270-STOP
1-877-270-7867

What Do I Do First?

Just call the toll-free number and talk to a Quit Line expert. You'll be asked a few questions to find out what your needs are, and then you'll get the help that's just right for you. You can get information sent to you in the mail, a counseling session, or a referral to resources in your community.

Toll Free 1-877-270-7867

Can The Quit Line Help Me If I Chew?
YES.
The Tobacco Quit Line is for all kinds of tobacco users.

Is The Oregon Tobacco Quit Line Really Free?
YES.
It is funded by state tobacco taxes, and operated by the Oregon Department of Human Services *Tobacco Prevention and Education Program.*

The faces and quotations help signal that the Quit Line is for *all* Oregonians

- Besides adding warmth and visual interest, the faces reflect diversity of age, gender, and race. Including a couple and a mother-daughter in the images may help reinforce that message that quitting benefits your family, too, and that the Quit Line assists people who want to support a loved one who is trying to quit.
- The testimonial quotations are from people who live in a variety of urban and rural locations throughout the state of Oregon.

See Toolkit Guideline 9.3.

The poses have a weak connection to the subject matter of the brochure

Since images have such strong impact, it’s helpful to choose images that relate closely to the topics you cover and help reinforce main points. The images on these panels simply show people smiling into the camera.

See Toolkit Guidelines 9.1 and 9.4.

Original – fully opened, *continued:*

This text is hard to read

This text is printed on a bright orange background. This adds color to the layout, but at the expense of reducing the contrast significantly. Poor contrast makes the words hard to read, and people often skip over text that is hard to read.

See Toolkit Guideline 6.7.

This image is hard to understand at first glance

Can you tell immediately that this image shows someone throwing away a can of chewing tobacco?

This image looks awkward (a hand cut off at the wrist floating above the rest of the image) and is hard to interpret (that curve is apparently the edge of a wastebasket).

Including an image that's not clear reduces the impact of the image. It also slows readers down and may distract them from the main messages.

See Toolkit Guidelines 9.1 and 9.2.

Checking on suitability of images

When you choose images for written material, it can be hard to tell how readers will interpret and relate to them. For example, in this brochure, is the young mother's hairstyle too extreme? Is that man who is carrying something across his shoulders a construction worker or a soldier? Do readers find the pose of the couple appealing? To check on the cultural appropriateness of images, it's important to get feedback directly from your intended readers.

See Toolkit Guidelines 9.1, 9.2, 9.3, 9.4, 9.7 and 9.8.

F Original back cover

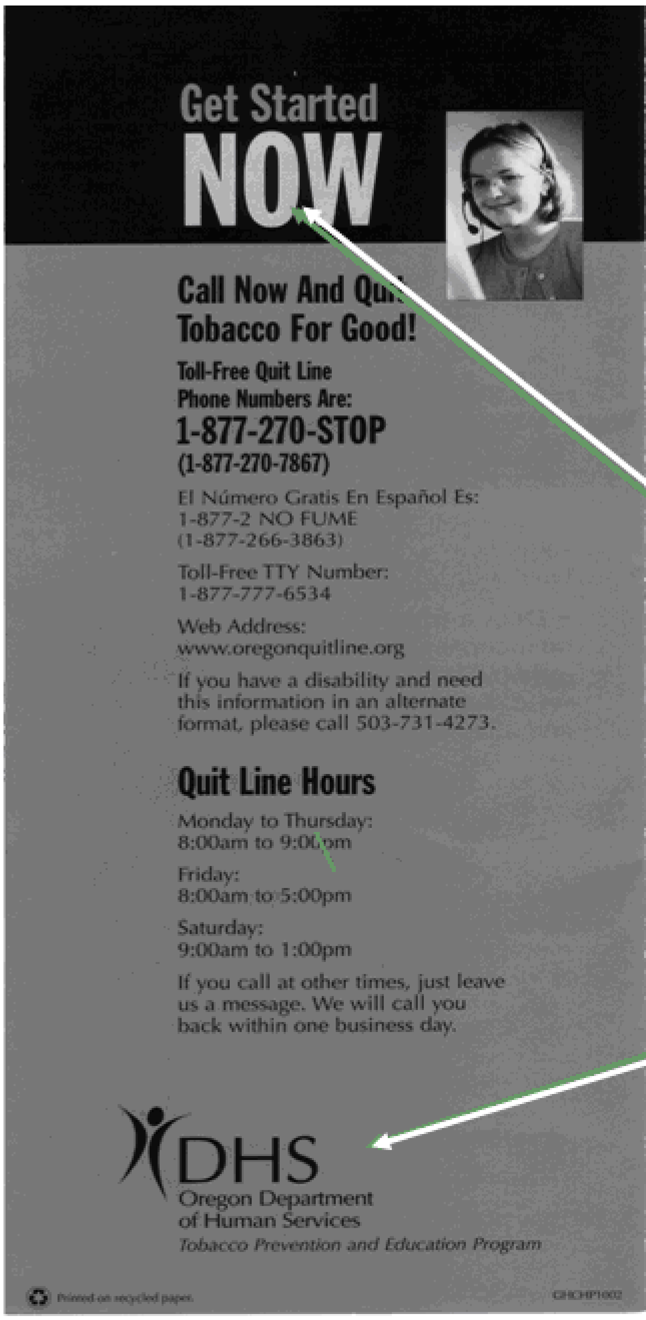


Photo adds visual interest and a friendly touch

By showing an operator with a headset, this photo reinforces the content of the brochure. It helps that she looks pleasant and approachable.

This word pops out

Other than the photo, it's the word "NOW" that stands out the most on this page.

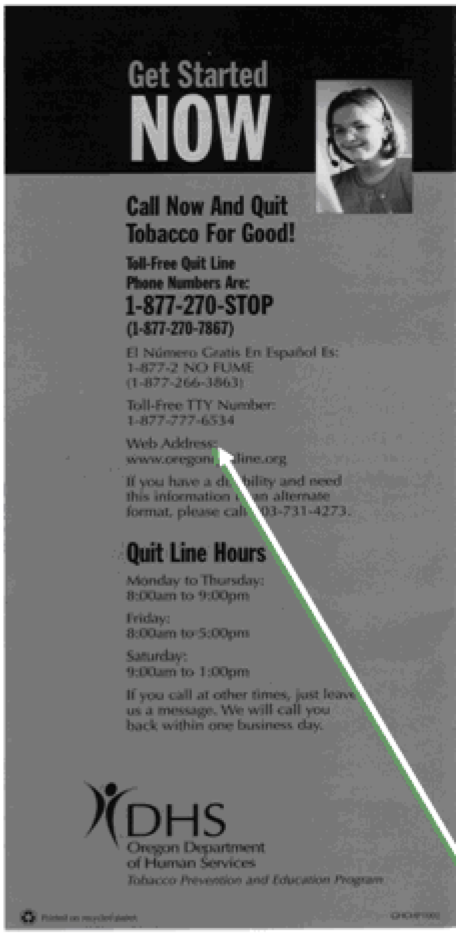
Since high contrast draws readers' attention, it's best to use it to reinforce the most important points. Does putting so much emphasis on "NOW" de-emphasize other important information on this page?

Good place for the logo

The back cover is a good place to put acknowledgments and contact information for the organization that issued the brochure. It's also the place to put a publication number and date.

See Toolkit Guidelines 1.7, 7.1, 7.2, 9.1, and 9.4.

F Original back cover, *continued:*



The orange and black color scheme is intense

With the medium orange background and band of black at the top, color tends to dominates this page and distract from the content. To some readers, this combination may suggest Halloween.

Important information is buried here on the back cover

The back cover of a brochure is not in a prominent position, and readers sometimes overlook it. This means that the back cover is not a good place to put vital information or to put answers to questions that may come up when people begin reading the brochure.

- The back cover is the *only place* in the brochure that shows the alternate numbers for Spanish speakers and the TTY number for people with hearing limitations.
- The back cover is also the *only place* on the brochure that gives the Quit Line hours.

Poor contrast makes everything on this page hard to read

The text is black on a bright orange background. Printing text on a shaded background reduces the contrast and makes it hard to read. Much of the print is relatively small, which makes it even harder to read.

Lack of headings or other emphasis makes the block of numbers hard to skim

Because there are no headings or text emphasis to draw attention to key words such as "Spanish" and "TTY," people who don't happen to read through the whole block of numbers may miss this information.

See Toolkit Guidelines 2.2, 2.3, 2.4, 5.3, 6.4, 6.7, 7.1, 7.2, 8.1, 8.2, and 8.3.

Source: Oregon Tobacco Quit Line brochure. Used with permission from the State of Oregon. Commentary added for use in this Toolkit.

Changes to be made in revising the brochure

There are many strengths to build on

As you can see from the panel-by-panel commentary in Figure 10-a above, there are numerous strengths to build on in revising the Quit Line brochure. These include:

- Content that was chosen based on knowledge of the intended readers
- Content that focuses on main messages
- Content that anticipates and answers questions the reader may have
- Clear and simple text that addresses the reader directly and has a friendly and supportive tone
- Use of devices that are helpful to readers, such as bulleted points and step-by-step explanations
- Use of images to help break up the text and add visual interest
- Sensitivity to issues of cultural appropriateness in choice of images

Improvements focused on two main areas

The commentary in Figure 10-a also suggests two main areas where improvements could be made. One involves how the material is organized, and the other involves making the text more readable by improving contrast.

1 Reorganize the content to create a tighter, smoother, and more logical flow of information

Before:

In the original brochure, a lot of the information about who should call the Quit Line, how to call, what happens when you call, and who sponsors the Quit Line is scattered and repeated in different places in the brochure. Some of the most important content is placed in the least prominent positions. For example, the step-by-step sequence is on panel C, which disappears from view when the brochure is fully opened. The calling hours and information for Spanish speakers and people with disabilities are on the back cover.

After:

As part of revising the brochure, we streamlined the content by reducing repetition and concentrating discussion of a given topic in just one place. We changed the way the content is grouped, labeled, and sequenced so that there is now one straight path through each panel of the brochure. Content that was set apart from the main text in the original brochure (such as the quotations and the sidebar on chewing tobacco) are now fully integrated into a single flow of text. We consolidated all of the information on hours and phone numbers into the step-by-step instructions and formatted this section to stand out clearly. To make the material easier to skim, we added more headings and more text emphasis (such as using boldface for the first sentence in a series of bulleted points).

2 Put all text on a white background to make it more readable

Before:

As shown in Figure 10-a, a good deal of the text in the original brochure is either printed in black on top of a shaded background (light orange or bright orange) or printed in light-colored text on top of a darker background. Both of these ways of printing text reduce the contrast and make it harder to read.

After:

To improve ease of reading, all text in the revised brochure is printed on a white background.

3 A few other changes, too

As you will see in Figure 10-b below, which shows the revised brochure, we made some other changes as well:

- **Changes in design**. We made a major change in the cover design. We also added a number of new design elements, including the spiral pad to emphasize the Quit Line hours and numbers, and the callouts on the back cover to emphasize the testimonial quotations.

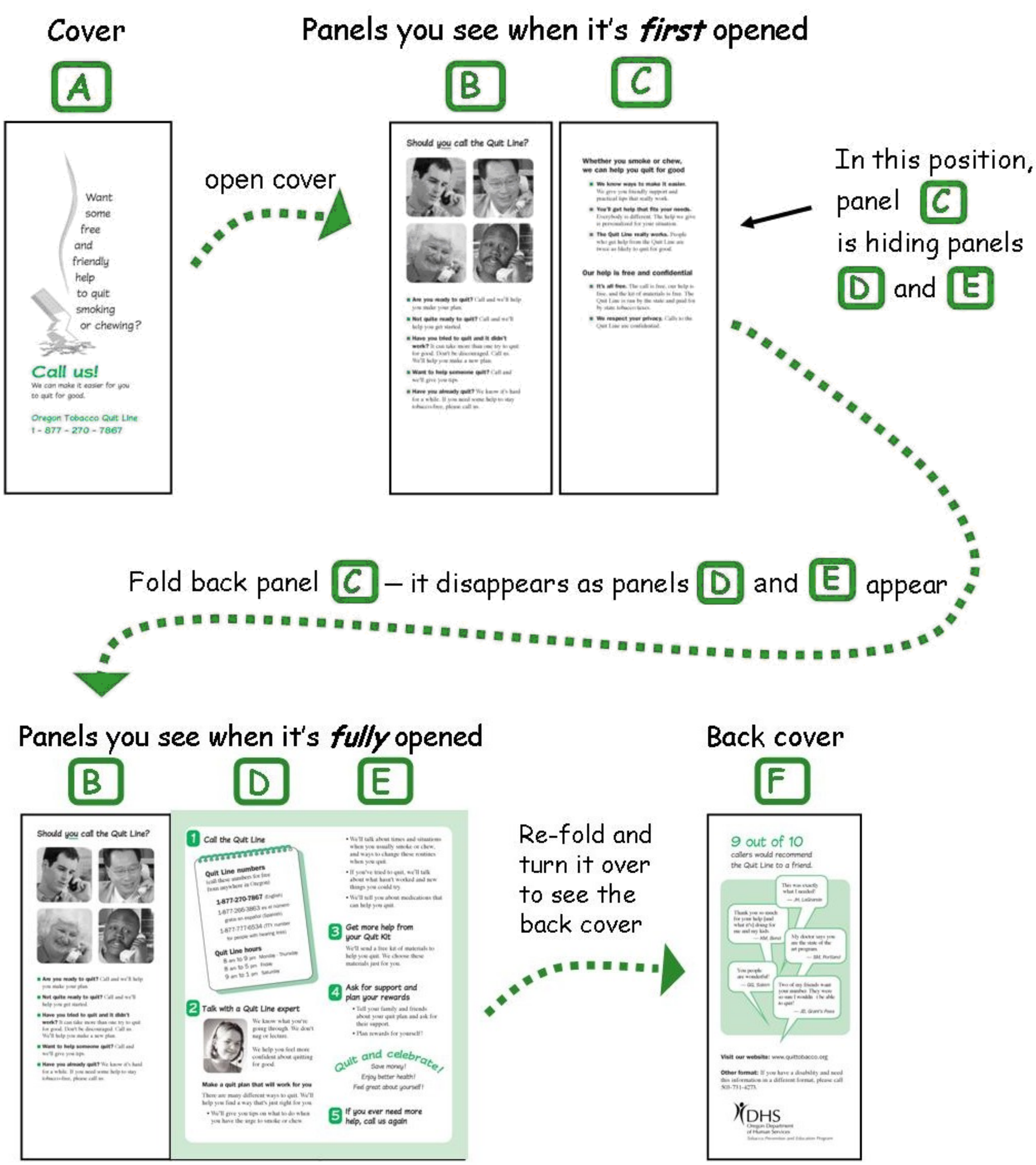
- **Changes in content.** Working with staff members at the State of Oregon *Tobacco Prevention and Education Program,* we took advantage of this makeover opportunity to add some clarifications and updates to the content. These included the following edits:

  - Rewriting the description of what happens when people call the Quit Line to focus more on the personalized response and less on the Quit Kit.
  - Dropping the words "counselor" and "counseling" from the text.
  - Clarifying that *all* services provided by the Quit Line are free (not just the call).
  - Deleting the text that invited callers to leave a message if they call after hours (this practice had not worked well).

Figure 10-b below shows the revised Quit Line brochure. This figure includes a panel-by-panel commentary that explains the reasons for the changes and refers to specific Toolkit guidelines (the guidelines it mentions are listed in a later section of this document that begins on page 29).

Panel-by-panel commentary on the *revised* brochure

Figure 10-b. The **revised** Quit Line brochure (shown first in miniature, and then followed by a panel-by-panel commentary).



A REVISED cover

First impression: clean, friendly, uncluttered

A simple cover design with a few visual and color accents to lend interest.

See Toolkit Guidelines 1.1 and 5.2.

Sparing use of color as an accent to emphasize the most important information

Instead of using color to decorate, this cover uses color to help guide readers and emphasize key messages. The splash of colored text at the bottom of the cover helps draws the eye downward through all of the text, and it highlights the invitation to call.

See Toolkit Guidelines 5.3, 7.4, and 8.2.

Only one phone number

For a clean and simple look, the cover shows only the numeric version of the Quit Line phone number (not the 1-877-270-STOP version), and it spreads the numbers out for easy reading and emphasis.

- The all-numbers version is easiest to dial; hunting on the dialing keypad for the numbers that correspond to letters of a word slows people down.
- Moreover, changing the number from 1-877-270-7867 to 1-877-270-STOP does not simplify it enough to make it easy to remember.

See Toolkit Guidelines 3.7, 7.2, and 7.4.

A REVISED cover, *continued:*

Guided by feedback from readers, the cover text was revised to be more supportive in tone and to address possible barriers

Focus group research by the State of Oregon showed why some tobacco users were reluctant to call:

- **Concerns about cost**. They understood that a call to the Quit Line was toll-free, but figured there might be a charge for Quit Line services.
- **Concerns about being scolded**. Some thought the help from the Quit Line might be accompanied by criticism for using tobacco.
- **Skeptical that anything could help**. Some people with a history of unsuccessful attempts to quit saw little point to making a call.

To help address these concerns and encourage people to call the Quit Line:

- We **added the key words "free" and "friendly"** to the original title (which was "Want some help to quit smoking or chewing?").
- We also added **a new tag line**: "We can make it easier for you to quit for good." (Note that we used the word "easier" rather than "easy.")

Besides reinforcing important messages, these additions to the text help establish a friendly and supportive tone before readers even open the brochure.

See Toolkit Guidelines 1.2, 3.1, 3.3, 4.1, and 4.6.

A friendly yet readable font

For the cover text and main headings on the inside, we chose a font ("Wastrel") that looks friendly and approachable but is also highly readable. Unlike many decorative fonts, Wastrel comes in multiple weights and styles. The "expanded" style is used to accent the words, "Call us!"

See Toolkit Guidelines 6.2, 6.3, 6.4, 6.5, and 6.6.

A REVISED cover, *continued:*

The title is spread out across multiple lines and curved to follow the plume of smoke

This treatment of the title draws the eye and helps guide it down toward the rest of the text on the cover. *See Toolkit Guideline 5.3.*

However, in putting just a word or two on each line, this effect sacrifices some ease of reading. For discussion of appropriate line length, see *Toolkit Guideline 6.11*. This guideline advises against making lines of text either too short or too long.

The image of the cigarette being crushed

This clip art of a crushed cigarette has appeared in previous Quit Line material, and many Oregonians connect this image with the Quit Line. To capitalize on this recognition, we put the image on the cover of the brochure.

It is challenging to find appropriate images to convey tobacco cessation, and using this image raises a couple of concerns:

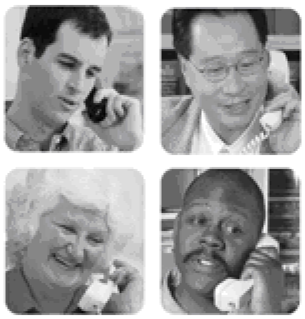
- Might it trigger a desire to smoke rather than a desire to quit?
- Does it emphasize cigarettes too much? Even though chewing tobacco is also mentioned in the title ("smoking or chewing"), the impact of the image might outweigh the words.

These concerns about the particular image that was chosen could be explored by getting feedback from the intended readers. *See Toolkit Part 6, How to collect and use feedback from readers. See also Toolkit Guidelines 9.1, 9.3, and 9.8.*

REVISED Panels B & C (these are the panels you see when you first open the brochure)

B

Should you call the Quit Line?



- **Are you ready to quit?** Call and we'll help you make your plan.
- **Not quite ready to quit?** Call and we'll help you get started.
- **Have you tried to quit and it didn't work?** It can take more than one try to quit for good. Don't be discouraged. Call us. We'll help you make a new plan.
- **Want to help someone quit?** Call and we'll give you tips.
- **Have you already quit?** We know it's hard for a while. If you need some help to stay tobacco-free, please call us.

C

Whether you smoke or chew, we can help you quit for good

- **We know ways to make it easier.** We give you friendly support and practical tips that really work.
- **You'll get help that fits your needs.** Everybody is different. The help we give is personalized for your situation.
- **The Quit Line really works.** People who get help from the Quit Line are twice as likely to quit for good.

Our help is free and confidential

- **It's all free.** The call is free, our help is free, and the kit of materials is free. The Quit Line is run by the state and paid for by state tobacco taxes.
- **We respect your privacy.** Calls to the Quit Line are confidential.

A clean look, with lots of white space

The tidy layout and large amount of white space on these two pages gives an open and easy feel, and encourages people to keep reading. The style is clear and consistent throughout the brochure.

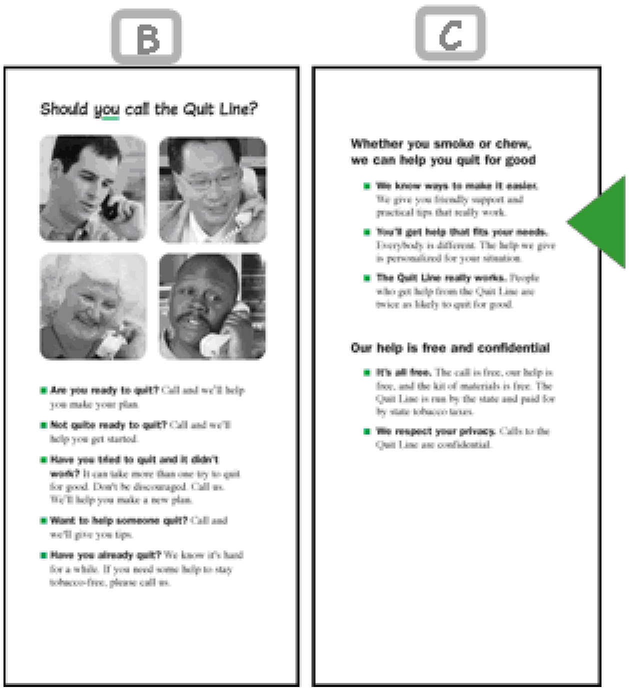
See Toolkit Guidelines 5.2, 5.3, and 5.4.

To enhance impact and minimize distraction, the photos are grouped and placed at the beginning

This block of photos is in the upper left corner, the spot where readers tend to look first as they enter a new page. Putting the photos in this top left-hand corner helps encourage readers to look at the photos first and then read the text that follows. *For more on this topic see the discussion of "reading gravity" in Toolkit Part 5, Chapter 2, Guideline 5.3 and Figure 5-2-c.*

In contrast, if the photos were at the bottom of the panel instead, they might draw the reader's eye immediately to the bottom of the panel. When readers start by looking at the bottom of the panel, they are less likely to notice and read the text that appears immediately above. *There is an illustration of this same brochure with the photos moved to the bottom in Toolkit Part 5, Chapter 2, Figure 5-2-d.*

REVISED Panels B & C (the panels you see when you first open the brochure), *continued:*



Easy to skim – headings and key sentences are prominent and informative

In this two-panel layout, someone who reads only the bolded text will pick up all of the main points.

See Toolkit Guidelines 7.1 and 7.2.

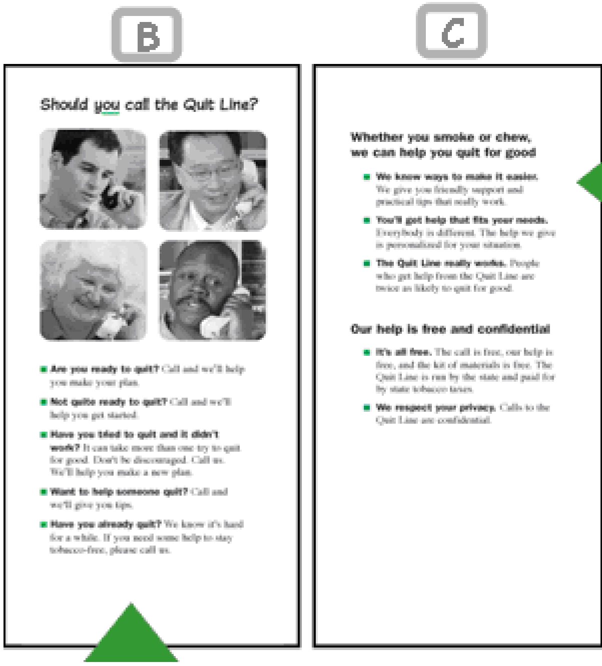
Bulleted points are formatted for easy skimming

These bulleted points follow the Toolkit's guidelines for formatting bulleted points *(see Toolkit Guideline 7.3 and Toolkit Part 5, Chapter 4, Figure 5-4-c).*

This formatting makes the material easier to skim and helps reveal its underlying organization to the reader. Features include:

- Indenting the block of bulleted points under each heading
- Ample line space between each bulleted point
- Extra line space before the main headings to help signal the start of a new section of bulleted points

REVISED Panels B & C (the panels you see when you first open the brochure), *continued:*



These faces reflect diversity, add visual interest, and reinforce the topic

These poses reflect the subject matter of the brochure. All of the people are talking on the phone, as if they were calling the Quit Line. (But one concern: do some of the phones look too dated?)

These photos show a range of facial expressions that seem plausible for someone calling a Quit Line. In selecting these photos, we avoided poses with gloomy looks or huge smiles into the camera.

To help convey the message that the Quit Line is for all Oregonians, the photos reflect a mix of age, race, and gender. Are these good photos for this purpose? To find out, you could get feedback from readers.

See Toolkit Guidelines 9.1, 9.2, 9.3, and 9.4. See also Toolkit Part 6, How to collect and use feedback from readers.

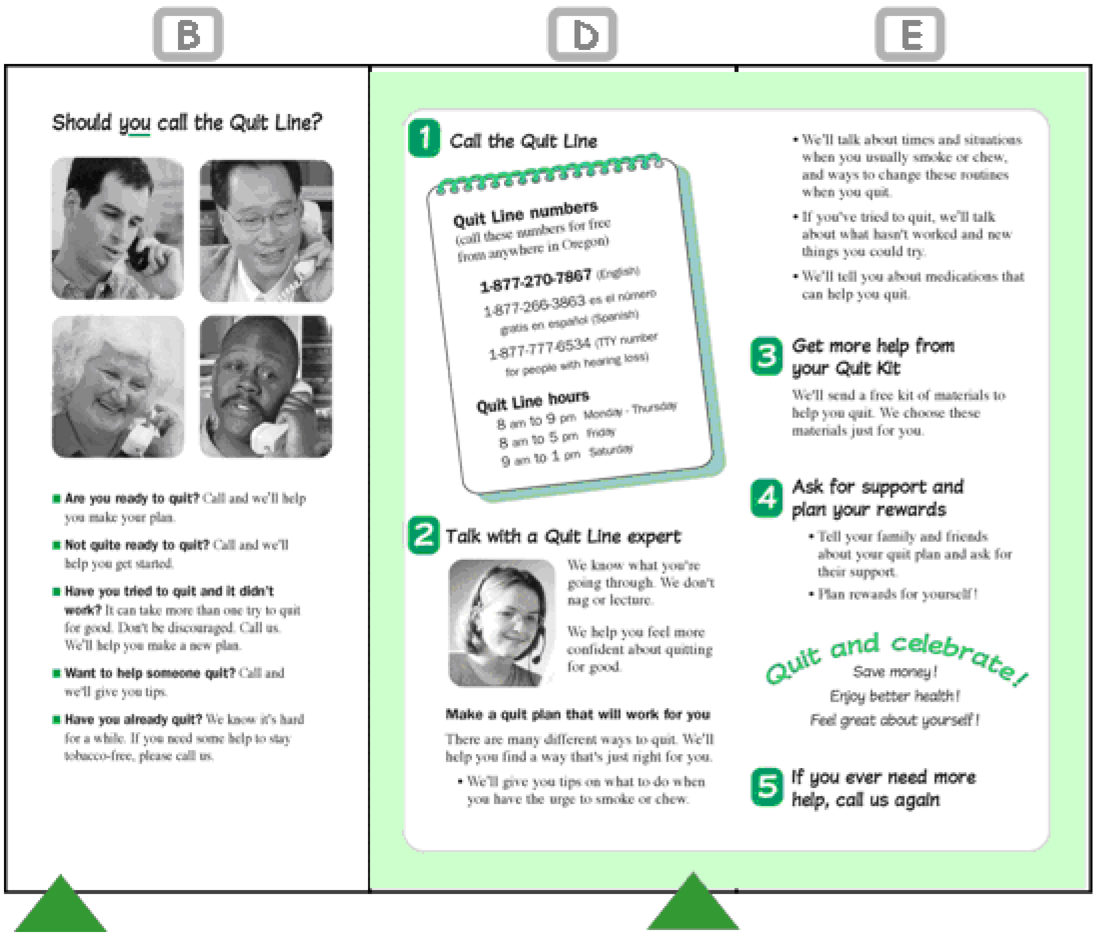
Panel C states important messages in a clear and simple way

In a tri-fold brochure such as this, panel C is the panel that "disappears" when the brochure is fully opened. It's a good place to put information that readers should see at an early stage but won't need for reference after they have fully opened the brochure.

The content for this panel is based on research findings that identified cost, confidentiality, and individualized assistance as issues for potential users of the Quit Line. To encourage people to read this panel before they flip open the brochure, the text that addresses these issues is very brief and formatted for ease of skimming.

See Toolkit Guidelines 6.9 and 7.3.

REVISED Panels B & D & E
(the panels you see when the brochure is fully opened)



The photos and messages on this panel stay visible and help reinforce the content of panels D & E

This panel fits well with the step-by-step instructions on panels D & E because it emphasizes that the Quit Line is welcoming to all types of callers and can help people in a variety of circumstances.

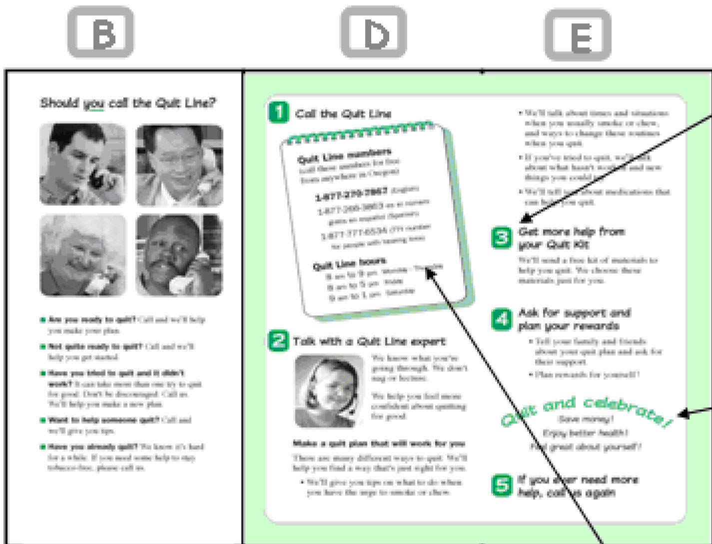
See Toolkit Guidelines 4.1 and 4.3.

Panels D and E are the core part of this brochure

All information about how to use the Quit Line is grouped together in one place, on panels D and E. The green border sets off this part of the brochure, which includes a spiral pad that shows Quit Line phone numbers and hours – **all in one place for easy reference.**

See Toolkit Guidelines 2.2, 2.5, 7.1, and 7.4.

REVISED Panels B & D & E (the panels you see when the brochure is fully opened), *continued:*



Numbers and headings

The large and bright green numbering and large main headings make this step-by-step guide easy to follow.

See Toolkit Guidelines 2.5, 7.2, and 7.4.

Curved text in green

This text draws attention to the rewards that come with quitting. It also helps unify the overall design by repeating one of the main design elements in the brochure (use of rounded corners and curved edges).

See Toolkit Guidelines 5.4 and 7.4.

Text is brief throughout

Limiting the amount of text and focusing on just the main points encourages people to read the whole thing.

See Toolkit Guidelines 1.6 and 3.2.

All text is easy to read

The green shading is only around the outer edge, and all text is printed on a white background. Black text on a white background provides maximum contrast and makes the text easy to read.

See Toolkit Guidelines 6.7 and 6.8.

The text anticipates and addresses questions readers may have

For example, the text under numbered point 2 tells people a little about what to expect when they call and it also mentions medications.

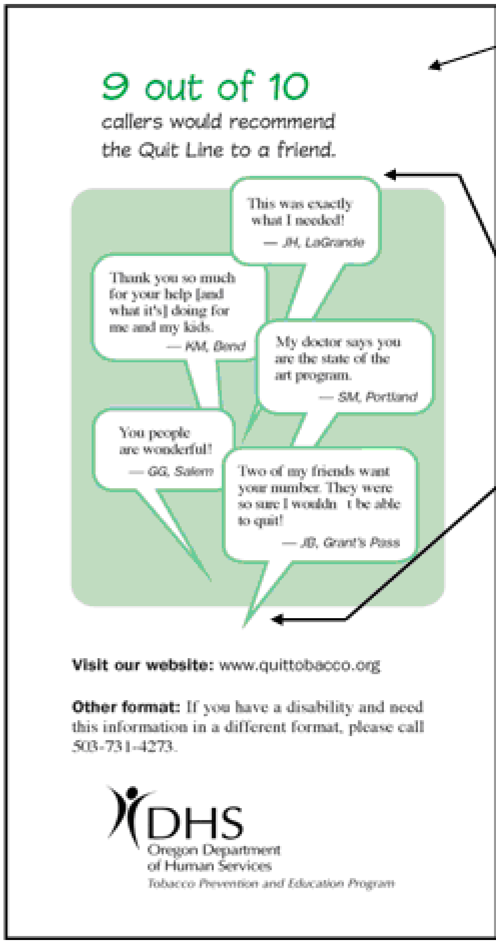
See Toolkit Guidelines 1.2 and 1.3.

Phone numbers and hours stand out

This spiral pad of phone numbers and hours is designed for easy reference. It has prominent headings to help readers skim and find what they are looking for. It is tilted slightly to draw more attention without interfering with ease of use.

See Toolkit Guidelines 7.2 and 7.4.

F REVISED back cover



Color-enhanced heading

Oversize type and color accent help lure readers to notice this title as well as the call out quotations. The title itself is informative; it conveys the main message even for those who don't read the quotes.

See Toolkit Guidelines 2.3, 2.4, 5.3, 7.4, and 8.2.

Visual interest

Extending two of the callouts beyond the boundary of the colored block adds visual appeal to this design. So does the slight overlap of the callouts.

See Toolkit Guidelines 5.2, 5.4, and 7.4.

Green background

It's bright enough for good contrast, but soft enough to keep from overwhelming the text or looking harsh. It adds contrast that draws attention to the callouts.

See Toolkit Guidelines 5.4 and 8.2.

Repetition of similar design elements adds unity

Repeating the design element of rounded corners on this panel and other panels helps foster unity of design. The font used for the color-accented heading on this panel also has a rounded quality.

See Toolkit Guidelines 5.4 and 8.2.

F REVISED back cover, *continued:*

Appropriate content for the back cover

In revising the brochure, we moved the testimonial quotations from the inside of the brochure to the back cover. Since the back cover is sometimes overlooked by readers, it’s a good place for supplementary content that can “stand alone” – such as these testimonials. Since the quotations are an enhancement rather than a core message, readers who overlook this back cover will not miss vital information.

See Toolkit Guideline 2.2.

Formatting that draws attention without sacrificing ease of reading

In the original brochure, the testimonial quotations were in smaller print, italicized, enclosed in quotation marks, and printed on a shaded background – *all* of which made them harder to read.

In this version, the text is formatted for ease of reading. It has regular size type, without italics, printed on a white background. Using callouts or speech bubbles makes the clutter of quotation marks unnecessary and lends visual appeal.

In this Toolkit, we urge you to avoid putting text on shaded backgrounds because it reduces contrast and makes the text harder to read (and therefore less likely to be read). *See Toolkit Guidelines 6.7 and 6.8.*

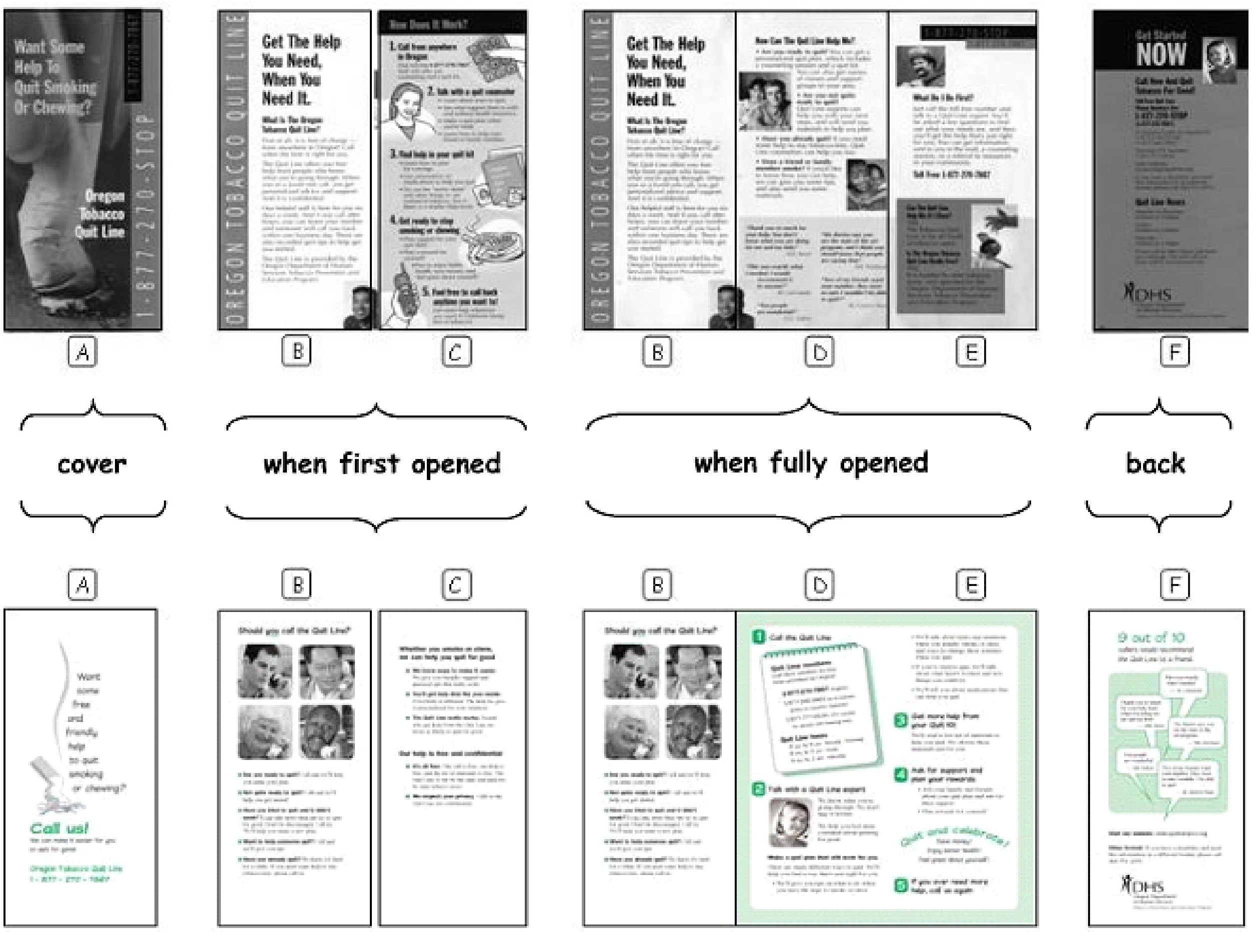
The formatting on this panel shows how **you can use color to accent text without printing the text itself on a colored background**. *For other suggestions, see Toolkit Part 5, Chapter 4, Figure 5-4-d, “Replacing the shaded background and boxed-in text: Ideas for better ways of emphasizing important blocks of text.”*

Source: Makeover of Oregon Tobacco Quit Line brochure; with permission from the State of Oregon. Rewriting, redesign, and commentary created for use in this Toolkit.

Comparing the original and revised brochures

To recap this makeover, Figure 10-c below compares the original brochure with the revised version.

Figure 10-c. Comparing the original and revised Quit Line brochures.



Source: Created for this Toolkit; adapted and used with permission from the State of Oregon.

Reference list of Toolkit guidelines

The page by page commentaries mention many, but not all, of the *Toolkit Guidelines for Writing and Design*. For easy reference while you are reading the page-by-page commentaries on the “before” and “after” versions of the Quit Line brochure, this section gives you the text of all guidelines mentioned in either or both of the commentaries. Guidelines for writing are grouped at the beginning, followed by guidelines for graphic design.

[Please note that **the reference list below does not include all of the guidelines**. There are some numbers missing from the sequence of guidelines because the list omits guidelines that were not mentioned in either of the panel-by-panel commentaries. For the full list of *Toolkit Guidelines for Writing and Design*, see Toolkit Part 3.]

Content

Toolkit Part 4, Chapter 1 shows how to apply these guidelines

1.1 **Make the purpose and usefulness of the material immediately obvious.**
Use the title and other upfront text to make clear to readers what the material is about, who it is for, and how to use it. Remember that readers skim and make quick judgments about what’s worth reading.

1.2 **In choosing which content to include, be guided by the *readers’* interests, knowledge, and needs (which may be quite different from your own).**
Focus on what matters most to the intended readers. Address their issues and concerns, as well as areas of possible misunderstanding.

1.3 **Show awareness of and respect for diversity among intended readers.**
Choose content that is culturally appropriate for the intended readers, reflecting and responding to differences in their experiences and situations.

1.4 **Repeat new concepts and summarize the most important points.**
All readers need time to absorb new information. Repetition helps them remember it.

1.6 **Limit the information to an amount that is reasonable for the intended readers.**

Too much text can be overwhelming, especially to less-skilled readers. If the material is too long, consider other ways to package it. If you condense it, don't oversimplify or drop the examples and explanations that readers really need.

1.7 **Identify the organization that produced the material, and include a publication date and contact information.**

Including contact information makes it easy for readers to follow up with questions or ask for permission to reprint the material. Including the date will help remind you when it's time to update the information.

Organization (sequencing, grouping, and labeling)

Toolkit Part 4, Chapter 2 shows how to apply these guidelines

2.1 **Group the information into meaningful "chunks" of reasonable size.**

Readers can handle only a limited amount of information at one time. To avoid information overload, divide the text in ways that will make sense to the readers. Keep each segment or section of text relatively short. When you use bulleted lists, limit the number of bulleted points (group the points into sections if the list is long).

2.2 **Organize the information in an order that will make sense to the intended readers.**

Topics should build in a natural way, giving readers the background and context they need to understand new information.

2.3 **Use headings, subheadings, and other devices to signal what's coming next.**

These devices are "advance organizers" that show readers how the material is grouped and sequenced, and prepare them for the next topic.

2.4 **Use specific and informative wording for sections, headings, and subheadings.**

To reinforce the main points and help readers skim, compose text for headings that is meaningful and explicit.

2.5 **Use navigational tools to help orient readers and make important information easy to find.**

For printed material, these tools include page numbers, headers and footers, table of contents, and index. Choose navigation tools that are appropriate for the intended readers and type of material.

Writing style

Toolkit Part 4, Chapter 3 shows how to apply these guidelines

3.1 **Write in a conversational style, using the active voice.**

To make your message informal and appealing, use "we" and "you." To make it direct and easy to understand, write in the active voice.

3.2 **Keep your sentences simple and relatively short.**

Don't pack too much information into a single sentence. Keep most of your sentences relatively short, and use simple conjunctions (*or*, *but, and*). To create good rhythm and natural tone, and avoid sounding choppy, vary the length of your sentences.

3.3 **Be direct, specific, and concrete.**

To help readers understand and use the information, spell out its implications, and be direct in saying what they should do.

3.5 **Create cohesion by making strong, logical connections among your sentences and paragraphs.**

Develop ideas in a logical progression that makes the connections between ideas explicit. Repeat key words and phrases to reinforce learning and create continuity.

3.7 **Use technical terms and acronyms only when readers need to know them.**

Technical terms can be difficult and intimidating; use simpler words whenever you can. It takes extra effort for readers to learn and remember a new acronym, so don't use acronyms just out of habit.

3.8 **Write as simply you can, taking into account the reading skills of your intended audience.**

As a general goal, whatever your audience, write as simply as you can without sacrificing content or distorting meaning. (Be very cautious about using readability formulas or setting goals based on reading grade levels. Readability formulas predict the difficulty of words and sentences, usually based only on their length. Despite their name, readability formulas do not measure ease of reading or comprehension, and the scores from these formulas are not good indicators of overall suitability of material. For concerns and recommendations about using formulas to score written material, See Toolkit Part 7, *Using readability formulas: A cautionary note*.)

Guidelines 4.1 to 4.6

Engaging, supporting, and motivating your readers

Toolkit Part 4, Chapter 4 shows how to apply these guidelines

4.1 **Be friendly and positive.**

When your messages have a supportive tone, readers will be more receptive, especially if you are urging them to do something difficult or unfamiliar.

4.2 **Use devices that engage and involve your readers, such as stories and quotations, questions and answers, quiz formats, and blank spaces for them to fill in.**

When you get people actively involved with the material, they become more interested and learn more easily.

4.3 **When you give suggestions or instructions, make them specific, realistic, and culturally appropriate for your intended readers.**

To keep people from feeling frustrated or discouraged, be sure that the behavior you are urging seems feasible to them. If you raise awareness of risks or problems, tell people what they can do about them.

4.6 **Tell readers how and where to get help or more information.**

Make it easy for people to follow up on what they’ve just read by telling them what additional information or assistance is available and where they can get it.

Overall design and page layout

Toolkit Part 5, Chapter 2 shows how to apply these guidelines

5.2 **Make the material look appealing at first glance.**

Create uncluttered pages with generous margins and plenty of white space. Include something to catch the reader's eye but not confuse it. A clean, crisp layout encourages readers by making the material look as if it's going to be easy to read.

5.3 **Create a clear and obvious path for the eye to follow through each page.**

Design your layout to fit with a reader's natural and deeply ingrained way of progressing through a printed page (called "reading gravity"). Place the headings, text, and images in a way that guides readers smoothly through all of the material without diverting or distracting them.

5.4 **Create an overall design for the material that has a clear and consistent style and structure.**

For a clean and well-organized look, use a page grid and style sheets to guide your design. Line up your headings, blocks of text, lists, illustrations, and other design elements in a clear and consistent way. Keep the same style or "look" throughout the material.

Fonts (typefaces), size of print, and contrast

Toolkit Part 5, Chapter 3 shows how to apply these guidelines

6.2 **For the headings in your printed materials, use an easy-to-read "sans serif" font, preferably one that is a "font family" with different weights (some bolder than others).**

To help readers skim and pick out the main points in your material, be sure that there is good contrast between the serif font you use for text and the sans serif font you use for headings. Choosing a font for headings that offers variations in weight is helpful because it gives you better options for creating good contrast.

6.3 **In general, use no more than two or three different typefaces in a single piece of material.**

Limiting the number of fonts will give your material a cleaner look and greater unity. For most information materials, it works well to use just one serif font for the text and one sans serif font for the titles and headings. Experiment a bit to be sure the fonts you have chosen work well together. You may want to add an additional font or two for a particular purpose, such as using a special font to accent the title.

6.4 **Make the type size large enough for easy reading by your intended audience.**

The best way to know whether your type is large enough is to get feedback from your intended readers. Older readers will need somewhat larger type than younger ones. You can use point size (such as "12 point font") as a rough guide, but keep in mind that fonts in the same point size can vary a lot in actual physical size due to differences in style of the letters. These differences in lettering style can affect ease of reading as much or more than point size.

6.5 **For all of your text, including titles and headings, use upper and lower case letters in combination – nothing written in "all caps."**

Text in all capital letters is hard to read, so use capital letters only at the beginning of sentences and other places where they are required. For ease of reading, try capitalizing only the first word in titles and headings (rather than capitalizing all of the important words).

6.6 **To emphasize words and short phrases that are part of your regular text, use italics or boldface type.**

Do not use underlining or put the text into all capital letters, because these make text hard to read. Be restrained in using italics, boldface, and other devices such as contrast in size or color accents on text. If you use these devices too often, they lose impact. If you use them on longer blocks of text, they make it hard to read.

6.7 **For ease of reading, use dark colored text on a very light non-glossy background.**

Make sure there is enough contrast between the printed text and the paper to be able to read everything easily. Black text on a white or cream-colored non-glossy background is best. Don't use light-colored text on a dark background (this is called "reversed out" text), because it is too hard to read.

6.8 **For ease of reading, do not print text sideways, on patterned or shaded backgrounds, or on top of photos or other images.**

Printing a title or heading that runs vertically rather than horizontally puts a burden on readers to tilt their heads or twist the page in order to read it (and most won’t). When you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The words are harder to read because of reduced contrast and distraction in the background, and the impact of the image is undermined by the words on top of it. Even a plain shaded background makes words harder to read, because it reduces the contrast between the text and background.

6.9 **For ease of reading and a cleaner look, adjust the line spacing in your material.**

To make blocks of text easier to read, add a little extra space between the lines. To help readers connect a heading with the text that follows it, leave a little less line space after the heading than you leave before it. To make bullet points stand out more clearly, put a little extra space between them. Keep these line spacing adjustments consistent throughout the document.

6.11 **Keep your lines of text to an appropriate length for easy reading – neither too short nor too long.**

For many materials, a line length of about five inches long works well. If the paper is wide, set the text in columns to maintain a readable line length. Avoid “wrapping” your text in awkward ways that make it hard to read.

Headings, bulleted lists, and emphasizing blocks of text

Toolkit Part 5, Chapter 4 shows how to apply these guidelines

7.1 **To make the material easy to skim and show how it is organized, create a clear hierarchy of prominent headings and subheadings.**

Left-justify the headings and subheadings, because readers sometimes miss headings that are centered. To emphasize how the material is structured, use contrast in fonts and maintain clear and consistent alignments, indentations, and spacing between headings and the text that follows.

7.2 **Use contrast and other devices to make the main points stand out on each page.**

Remember that your readers are skimming and looking for information of personal interest. Help them by using devices such as bulleted and numbered lists, captions for illustrations, emphasis on key words and phrases, and summaries of main points. Use design elements or images to accent important information, such as putting a picture of a phone next to the helpline number.

7.3 **For ease of reading, use care in formatting bulleted lists.**

To set off a list of bulleted points and connect it more closely with the sentence that introduces it, indent the entire list slightly. To make the bulleted points stand out clearly, add extra line space between them and use hanging indents. To set off each point without distracting readers, use bullets that are simple solid shapes. Bullets should be large enough to notice but not so large that they are distracting. Place bullets close to the text that follows them.

7.4 **Choose effective ways to emphasize important blocks of text.**

Outline boxes are often used to emphasize text, but they clutter your layout and readers sometimes ignore text that’s enclosed by a box. Shaded backgrounds tend to attract the eye, but they also reduce the contrast, making text less legible and therefore less likely to be read. Instead of using outline boxes or shaded backgrounds, try other methods that tend to work better for emphasizing blocks of text.

Use of color

Toolkit Part 5, Chapter 5 shows how to apply these guidelines

8.1 **Choose colors that are appealing to the intended readers and free from unwanted connotations or problematic cultural significance.**

Depending on your audience, there can be much variation in the appeal and cultural connotations of various colors and color combinations. To avoid possible problems, get audience reactions to your color choices.

8.2 **Use color sparingly, in a consistent and deliberate way that reinforces the meaning of your messages and enhances their impact.**

Resist the impulse to use color in decorative ways that may distract people from the text. For greatest impact, use color with restraint, since using too much color creates “color overload” that can overwhelm and distract your readers. Be cautious about using color coding as a device. If you use color coding, do it in a consistent way and make the meaning clear to readers. Get feedback from readers to verify that they understand the color coding and find it helpful.

8.3 **Verify that the color scheme and shades of color work well from a design standpoint (including when the material is photocopied or printed in black and white).**

While color selection is partly a matter of taste, certain colors are less effective than others for text, shaded areas, and other design purposes. Check to be sure that the colors reproduce well when photocopied. If material with color is downloadable from a website, it may work best to produce a separate version for users who will print it in black and white. If you are using two colors in your material, it works best to make one of them black and use it for the text.

Guidelines 9.1 to 9.8

Photographs, illustrations, clip art, and symbols

Toolkit Part 5, Chapter 6 shows how to apply these guidelines

9.1 **Use photos, illustrations, symbols, and other visuals that relate directly to the information in the material and reinforce your key messages.**

Images have great impact, so select them carefully and use them to highlight key points. Instead of using images to decorate the pages, choose images that reflect the subject matter of your materials. Try to show only the behaviors you want to encourage. Avoid using images that are too abstract or hard for readers to understand, such as parts of the body shown in isolation, cross-sections, and highly magnified images.

9.2 **Use images that are clear, uncluttered, and consistent in style.**

For greatest appeal and impact on your readers, keep the images clear and simple, with good contrast that emphasizes the main subject. Avoid using photographs or illustrations with cluttered backgrounds or distracting detail (or edit them to remove the clutter). For a unified look, choose images that are compatible in style and color.

9.3 **Use photos, illustrations, symbols, and other visuals that are culturally appropriate for your intended readers.**

Choose images of people and activities that are contemporary and representative of the intended audience in their demographics, physical appearance, behavior, and cultural elements. Check to be sure that the images you use are free from unwanted connotations or problematic cultural significance.

9.4 **When images include people, make sure that their poses, facial expressions, and body language are appropriate to the situation and appealing to the intended audience.**

Poses that show people engaged in doing something may be more effective than stock photography shots of people smiling directly at the camera. If there is more than one person in the image, poses that show the people relating to each other tend to have more impact.

9.7 **Pay careful attention to the total number, quality, size, placement, and labeling of the images you use.**

For best impact, limit the number of images you use. Use images of high quality that will reproduce well, and make each one large enough for good impact. Keep images close to the text they reinforce. Place images in positions that fit with the natural progression of reading so that they do not cause your readers to overlook parts of the text.

9.8 **Check for accuracy, if applicable, and pretest the images with your intended readers.**

If your images include technical or medical subject matter, verify that the details are correct. Check on the appeal, cultural appropriateness, and comprehension of the images by getting feedback directly from members of the intended audience.

End notes

Acknowledgments

We are grateful to the *Tobacco Prevention and Education Program* at the Oregon Department of Human Services for supplying the Oregon Tobacco Quit Line brochure and granting the Toolkit writer permission to do a makeover and publish it as an example in this Toolkit. In particular, we thank Cathryn Cushing, Nancy Clarke, and Karen Main for their assistance. We are grateful to all of the state staff and others who reviewed and commented on the changes made to the brochure for purposes of using it as an example in this Toolkit.

Thanks to reviewers Mary Hunter, Sue Tarjan, Melissa Barker, and Mark Evers for their helpful comments on the revised brochure and the panel-by-panel commentaries. We also thank Karen Laksamana, Bruce Wilson, and Nancy Phillips at Formations Design Group in Vancouver, Washington, for their assistance in producing the revised version of the brochure.

To view, save, or print all or parts of this Toolkit from your personal computer, visit http://www.cms.gov and select Outreach & Education.

CMS Product No. 11476

September 2010

TOOLKIT for Making Written Material Clear and Effective

SECTION 5: Detailed guidelines for translation

PART 11

Understanding and using the "Toolkit Guidelines for Culturally Appropriate Translation"

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services

TOOLKIT Part 11

Understanding and using the "Toolkit Guidelines for Culturally Appropriate Translation"

List of figures:

This document is Part 11 of the *Toolkit for Making Written Material Clear and Effective*. The Toolkit has 11 Parts. It was written for the Centers for Medicare & Medicaid Services (CMS) by Jeanne McGee, McGee & Evers Consulting, Inc. The guidelines and other parts of the Toolkit reflect the views of the writer. CMS offers this Toolkit as practical assistance to help you make your written material clear and effective (not as requirements from CMS).

Introduction

Background on the Toolkit

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare and Medicaid Services (CMS). It has practical tools to help you improve printed material you develop for people who are enrolling in or receiving services from CMS programs such as Medicare, Medicaid, or Children’s Health Insurance (CHIP). These CMS audiences are culturally diverse and they include people with limited reading skills and older adults such as people with Medicare.

For background on the Toolkit, see Toolkit Part 1, *About this Toolkit and how it can help you*, and Toolkit Part 2, *Using a reader-centered approach to develop and test written material.* To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing in Toolkit Part 4 and 46 guidelines for graphic design in Toolkit Part 5. For the full list of guidelines for writing and design, and a discussion about how to use them, see Toolkit Part 3, *Summary List of the “Toolkit Guidelines for Writing and Design”*. This part of the Toolkit offers additional guidelines that apply to translation of written material.

About this part of the Toolkit

To meet the needs of people with limited English proficiency, many written materials are translated from English into other languages. This document, Toolkit Part 11, has guidelines to help you produce culturally appropriate translations. We discuss issues to consider and give practical advice on the translation process from start to finish.

Our discussion focuses on translation of written material that is intended for use in a printed format. While people with limited English proficiency also need help from interpreters, this guide focuses only on their *translation* needs:

“interpret”

refers to **spoken** communication.
We don’t cover spoken (oral) communication in this Toolkit

“translate”

refers to **written** communication.
This part of the Toolkit gives guidelines for translating written material that people read in a printed format (typically printed on paper).

Since our topic is translation of written material, it's important to note the limitations of written material. For some audiences and purposes, written material is simply not appropriate. It is not suitable for people who cannot read, and must be adapted for readers who have vision loss. And even if your audience members have sufficient reading ability and other literacy skills, written material may not be the most effective way to deliver your message, since learning styles and media preferences differ among readers at all literacy levels and from different cultures.

If you need to share information with people who have limited English proficiency, it's important to know whether they have the literacy skills and inclination to use written material that is in their native language. If people cannot read in their native language, it will not work to translate your written material into their language.

As you read the discussion that follows, please keep in mind that the design guidelines in this chapter are biased toward English speakers in general and may require adaptation for cultural differences. The discussions of overall layout and navigation, in particular, assume that text is read from left to right. If you are translating materials into languages that read from right to left, such as Arabic or Hebrew, the entire layout must change.

Common problems with the quality of translated documents

If you have worked on translation projects, you already know how challenging it is to produce translations that stay true to the meaning of the English original, yet are easy for the intended readers to understand and use. Anecdotal evidence suggests that when written materials are translated for consumer use, the quality of the translations can vary considerably. Figure 11-a below identifies some common problems with translations.

Figure 11-a. Common problems with the quality of translated documents.

Translation is done literally, without cultural adaptation

Some translations are done word for word ("literal translations"), without any adaptation to make the meaning clear and the text sound natural in the target language. A literal translation replaces the English words and phrases with words and phrases in the target language in a way that does not take account of differences in linguistic structure and complex connections between culture and language.

- **At best, a literal translation tends to be awkward.** It is also potentially annoying to those who notice the vestiges of English grammar and syntax in the translated text.
- **But often, literal translations are confusing and potentially misleading**. For example, a leaflet urging people to get more exercise says, "Don't be a couch potato." Imagine how strange the term *couch potato* might sound if translated word for word in other languages.

While errors from literal translations can be confusing or misleading, they can also be amusing at times. Humorous examples of corporate slogans and advertising copy that have been mistranslated, either from or into English, have been widely circulated on the Internet. You may have seen examples of clumsy literal translations into English in the instructions that come with products manufactured in another country. Examples of mistranslation remind us of how culture-bound and complex the connections are among the language we use and the lives we lead.

The translator lacks knowledge of the intended readers' culture and language patterns

Some translations miss the mark due to the translator's lack of familiarity with the culture of the intended readers and their local language patterns and word use. When translators are deciding how to convey English words and concepts in the target language, they face many choices about which words and phrases to use. To make good choices, translators must know a lot about the culture and language of the people who will use the translated text, including variations in language use.

For example, many words in Spanish have different meanings or connotations for Spanish speakers from different cultural backgrounds and countries. If the English text refers to x-rays, the best term for the Spanish translation might be *rayos-x* for Mexican readers, but *placas* would be better for Cuban or Puerto Rican readers.

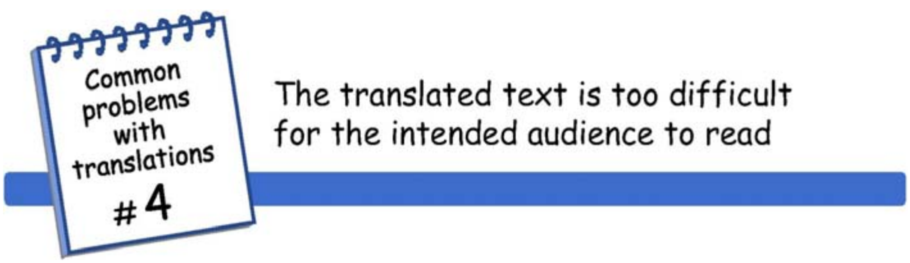
Some terms and concepts are very hard to translate in a meaningful way

Even when translators are skilled and culturally knowledgeable, some terms and concepts are very difficult to translate in a meaningful way. Effective translation from English into another language can be challenging because many words, concepts, and phrases have no direct equivalent. Here are some examples:

- Many Medicaid clients with limited English proficiency are immigrants or refugees from countries where health care is organized, delivered, and paid for in ways that are very different from the American system in general, and state Medicaid programs in particular. These clients have trouble understanding the concept of a health plan, no matter how carefully it is translated into their language.
    - Here is an example from the author’s own experience: During an interview that explored her reactions to translated versions of Medicaid CAHPS survey questions and reports, a Vietnamese woman explained the meaning of “health plan” in the following way: “‘Health plan’ is how and what I eat so that it is good for my health.”

- Some concepts that are commonplace to Western medicine defy effective translation because they contradict people’s beliefs about the causes of and appropriate treatment for health conditions. Here are two examples:
    - The *Translation Protocol* by the Minnesota Department of Health (2000:6) has an example that is drawn from an article published in St. Paul Pioneer Press on July 17, 1997. According to this article, there is no word for cancer in Hmong or even a concept of it in the Laotian homeland of the Hmong people. Physicians in St. Paul, Minnesota, discovered to their surprise and horror that the way in which information was translated from English to Hmong had caused some Hmong patients to refuse cancer treatment. When the text about having a patient undergo radiation therapy that had been translated from English into Hmong was translated back into English, it read: **“We’d like to put fire in you.”**

- Cambodian staff members at a hospital in Washington State translated materials about Hepatitis B into Cambodian, and then found that Cambodian patients did not understand or accept the information in translated materials. The patients had no concept of a virus, and were bewildered by the biomedical information. Traditional Cambodian beliefs made the new information incomprehensible in any case, since **patients could not imagine that those who followed the traditional Cambodian rules for maintaining health could contract Hepatitis B**. [This example was provided by the late Donald Himes, a CMS staff member who made valuable contributions to *Writing and Designing Print Materials for Beneficiaries, A Guide for State Medicaid Agencies* (HCFA, 1999). This Toolkit is an updated and expanded version of that Guide.]



Translated text can be too difficult for its intended readers because of problems with the original text, problems with the translation, or differences in reading skills of the English and target language audiences:

- If the original English text is too difficult, the translated text will probably also be too difficult.

- Even when the original text is written in plain English that is easy to read, it can lose this ease of reading in translation. This can happen if translators have not been thoroughly briefed about the reading skills of the audience, or if they lack the ability to write text that is easy for less-skilled readers to understand and use.

- Even when translation preserves the ease of reading found in the English original, the translated text may still be too difficult for the intended readers if their reading skills are more limited than the English readers' skills.

Common problems with translations # 5

The translation style is unsuitable for the type of document or the intended readers

Some translations are done in a style that is not suitable for the purpose of the document and the intended readers. For example, the style might be too formal or too casual for the document or readers. The *Toolkit Guidelines for Writing and Design* are oriented toward material distributed in the United States. Written with an American audience in mind, the Toolkit guidelines that deal with writing style urge you to use a direct, friendly, and informal style (see Toolkit Part 4, Chapter 3). These guidelines may need some cultural adaptation when you apply them to translated text. For example, for some languages and some audiences, it may be important to show respect by using a more formal and distant style. To make such adaptation, translators would need to be familiar with the typical social and language patterns of the intended readers.

Common problems with translations # 6

The translation contains errors that should have been caught

Some translated text contains errors that should have been caught by careful editing and proofreading. There’s no substitute for careful editing and proofing of written materials before they go to press. Doing this work is more challenging when it involves translated text because editors and proofreaders must be bilingual.

Source: Created for this Toolkit; see acknowledgements at the end of this document.

How can you safeguard the quality of translations?

With limited time and resources, people who work in government agencies and community-based organizations face many challenges when they translate written materials for the populations they serve. It can be hard to judge and monitor the quality of translations, especially if you are only fluent in English. Even staff members who are bilingual or multilingual may not be fluent in all of the languages used in translation of written materials.

Here are two important things that government agencies and community organizations can do to improve and monitor the quality of language translation:

1. **Establish and implement written guidelines for translation methods and for assessing the qualifications of translators**. To help you review your own procedures for translation, this document offers a set of guidelines for translating written materials. We recommend additional resources at the end.
2. **Strengthen your organization's capacity for translation oversight.** If your organization does a good deal of translation, you may already have an in-house capability to do professional translation of written materials. If not, it helps enormously to at least have some bilingual or multilingual staff members who speak the requisite languages.

   - Of course, language fluency alone does not give you the skills to do competent translation. Neither does training in oral interpretation, since the tasks and skills involved in written translation are quite different from those involved in oral interpretation. If you have bilingual or multilingual staff, consider investing in training that prepares them to take a more active role in translation oversight and quality control.

   - You can also build your organization's capacity to produce effective translations by developing cooperative arrangements with local community organizations that have close contacts with the audiences you are trying to reach with your translated materials. Such organizations can serve as cultural informants or advisors, and may be able to assist with your translation needs as well.

Toolkit Guidelines for Culturally Appropriate Translation

With the needs of government agencies and community-based organizations in mind, this Toolkit Part 11 offers step-by-step guidelines for translation. These guidelines focus on ways to exercise quality control over the entire translation process, regardless of the translation method you choose.

Figure 11-b below gives the full list of *Toolkit Guidelines for Culturally Appropriate Translation.* Sections that follow discuss how to apply each one to your translation projects. The examples we use to illustrate these guidelines emphasize translation of an English text into Spanish, because Spanish speakers are the largest language group among Medicare, Medicaid, and CHIP enrollees. (According to the 2000 Census, about one in ten people in the United States speak Spanish at home. Of all people who speak a language other than English at home, about 60 percent speak Spanish.)

To help you make practical choices based on budget, time, and staff resources, and other considerations, we suggest different ways to accomplish some of the key tasks, such as different ways to review the translated text. While following a set of carefully-considered procedures will help ensure the quality of translations, we emphasize the crucial importance of using reactions from the intended readers as the ultimate test.

Figure 11-b. Step-by-step guidelines for translating written materials.

First, consider whether it is appropriate to translate the material.

- Is written material a good choice for the intended audience? Do they have the reading skills in their native language? Is the native language mainly an oral language? Do they prefer other methods of communication?
- Are there any translated materials already available that might meet your needs?

To prepare for translation, review the English text.

- To get a good translation, start with a good text in English. For example, does the English text follow the *Toolkit Guidelines for Writing and Design?* Are there ways to improve the English text before it is translated?
- Then identify terms and concepts that may be challenging to translate.

Decide what method you will use for the translation.

- You can write the material independently in each language, which helps ensure cultural appropriateness and makes translation unnecessary.
- Or, you can do a "one-way" translation from English into the target language, using one or more translators.
- Or, you can do "two-way" or "back translation," where one person does the initial translation, and a different person translates it back into English. Then as a check on the translation, you compare the original English and back-translated English.

Plan how you will format the translated text.

Decide whether to use a single or dual-language format, and how you will integrate the translated text with other parts of the material. You can use the *Toolkit Guidelines for Graphic Design*, making cultural adaptations as needed.

- Allow extra space for translated text (it often takes more words in most other languages, compared to English).
- Allow extra time for formatting text in languages that read from right to left.
- Translated materials need bilingual or multi-lingual text to alert readers that versions are available in other languages, and a label in English that identifies the title, language, and date of translation for reference by those who speak English.

Use professional translators who have the cultural knowledge and the skills needed to do a good translation.

- To produce a culturally appropriate translation that is easy for the intended readers to understand and use, use translators who have the necessary writing skills and cultural knowledge.

Give the translator clear instructions and background information, including guidance on translation issues.

- Discuss the material and the audience with the translator, giving guidance about how to translate potentially problematic concepts and terms.
- Go over the technical details related to fonts, software, and formatting requirements.

Translate for meaning (rather than word for word), in a culturally sensitive way.

- Translation should preserve the content and meaning of the original text, with cultural and linguistic adaptations as needed, so that the translated text sounds natural and is easy for the intended readers to understand and use.

Review the translated text for accuracy, cultural and linguistic appropriateness, and ease of use.

- Use multiple reviewers to check on the adequacy of the translation.
- If possible, get reactions from intended readers.

Use an independent editor to review and polish the translation.

- Like the translator, the editor needs to be a skilled writer who is familiar with the culture and language patterns of the intended readers.

Use an independent proofreader as a final check on the translation.

- The person who does the final proofreading needs to check both text and design elements of the translation.

Source: Created for this Toolkit; see acknowledgements at the end of this document.

Does it make sense to translate the material?

Government agencies and other organizations are required to translate certain materials. In situations where translation is not required, you may want to start your project by reviewing your goals and thinking about how well a translation would work for the intended readers.

First, consider whether it's appropriate to translate the material.

Is written material a good choice for the intended audience? *(Do they have the reading skills in their native language? Is the native language mainly an oral language? Do they prefer other methods of communication?).*

Are there any translated materials already available that might meet your needs?

As summarized in Translation Guideline #1 shown above, there are some important things to consider when you are deciding whether to translate written material from English into other languages:

- **Take into account whether those with limited English proficiency are able to read in their native language.** Before you invest time and resources in translation, it’s wise to check on the literacy skills of those you are trying to reach with your translated materials. Just because people *speak* a language does not necessarily mean that they can *read* in that language. Instead of trying to generalize about the readings skills of people who speak a particular language, think about the specific readers that you are trying to reach who speak that language. There is often great variation in native language reading skills among people with limited English proficiency.

- **For languages that are oriented mainly toward oral communication, written translations may not be feasible or may be of little use.** Some people with limited English proficiency speak languages for which there is no widely used written equivalent, such as Haitian Creole and Hmong. A written version of Hmong was devised by French missionaries in 1955 mainly for religious and bureaucratic use, and Hmong immigrants in this country continue to rely mainly or exclusively on their spoken language. For example, many first-generation Hmong people in Minneapolis-St. Paul routinely use small tape recorders to “make notes” to themselves in Hmong as they go about their everyday lives, including during their dealings with government agencies (personal communication, Melissa Barker).

- **Keep in mind that written materials are often less effective than other methods of communication for some audiences and some purposes.** Some people who can read prefer to get their information in a format that doesn’t involve reading. For example, communications specialists often recommend radio as a good way to reach Spanish-speaking audiences. Many older adults who can read prefer to get their information about Medicare by talking with someone, such as calling the 1-800-MEDICARE helpline or talking with a State Health Insurance Program counselor.

- **Check to see if there are any translated materials available that might suit your needs**. If your materials cover topics of broad general interest, such as patient education leaflets, you may be able to find suitable materials in different languages. There are many good sources of health-related materials written in languages other than English. Many of these materials have been translated from English, but some have been developed directly in other languages. Check with local sources such as refugee and immigrant organizations, programs for English as a second language, public and college libraries, the State Department of Health, and local health care organizations to see if they have translated materials available. Since many materials are available on websites, one of the best strategies is to use a search engine on the Internet. This works especially well for tapping into national and international sources as well as local ones. Try putting a message out to colleagues on one of the Internet discussion groups, such as NIFL-HEALTH list serv (see resource section at the end of this document).

To get a good translation, start with a good text in English

As shown below, the next translation guideline reminds us that getting a good translation is much more likely when you start with a good original. Take the time to review the English material carefully before you submit it for translation. If it is not accurate and well written, you can expect either to have long conversations to clear up confusion, or to receive a poor translation.

To prepare for translation, review the English text.

To get a good translation, start with a good text in English. *(Does the English text meet the guidelines on the Checklist for Writing and Design? Can it be improved before translation?)*

Then identify and discuss translation issues, including terms and concepts that will require cultural or linguistic adaptation.

To help with your review of the English original, you can use the Toolkit Guidelines for Writing and Design (see Toolkit Parts 3, 4, and 5). These guidelines identify features of writing and design that make written materials easy for readers to understand and use – *whatever their language*. Many of the guidelines specifically address issues related to making written material culturally appropriate for the intended readers.

To help prepare for translation, examine the content of your English original for terms and concepts that need to be explained more fully or in a different way when they are translated in order to make sense to people with limited English proficiency from another country or culture. If your material includes concepts that require a lot of explanation or visual display of information, using another method such as video may be more effective than translating written materials.

To identify topics that need additional explanation or clarification, draw on your knowledge of the intended readers. For example, suppose that the written material tells enrollees in a Medicaid managed care plan when and how they should use the emergency room. If this material is translated for people from countries where emergency care is handled in a different way, the translation should make cross-cultural comparisons to help readers understand the difference between what they are used to and the program rules that apply in this country. In many South American countries, for example, people are used to receiving hospital care for free, because hospitals belong to municipalities or states. If recent immigrants from these countries get sick, they automatically go to the hospital because they don't know how the American system works (personal communication, Mercedes Blanco). To guide cultural adaptations of your materials, seek specific advice from members of the intended audience and/or informants who are familiar with the audience, and discuss strategies for dealing with translation challenges in your initial consultation with the translators (see Guideline # 6 below).

Choose a method of translation

Decide what method you will use for the translation.

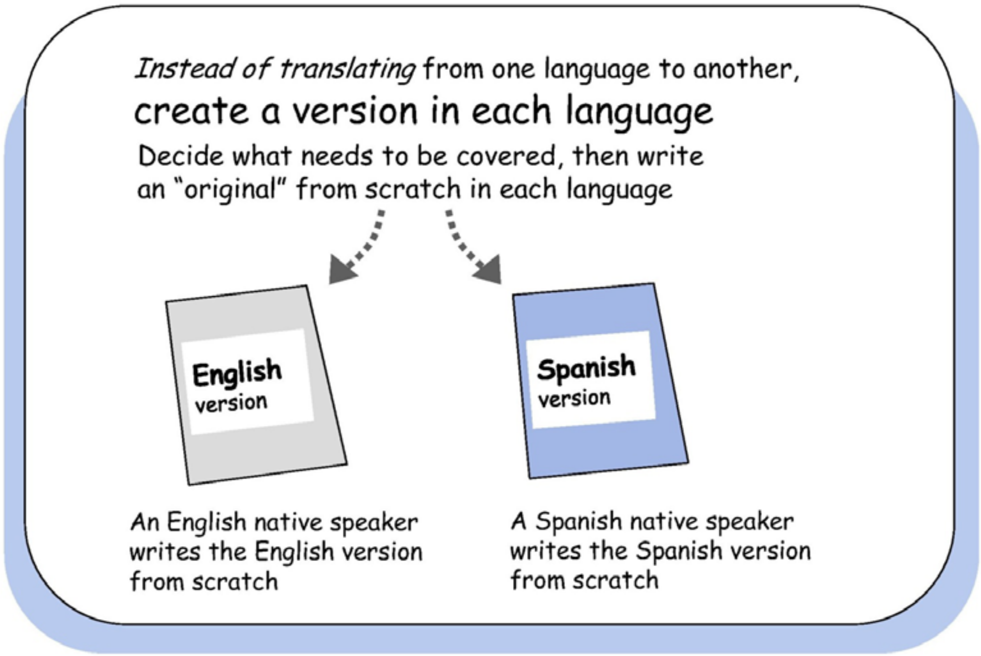
You can write the material independently in each language, which makes translation unnecessary.

Or, you can do a "one-way" translation from English into the target language, using one or more translators.

Or, you can do "two-way" or "back translation," where one person does the initial translation, and a different person translates it back into English. Then you compare the original English and back-translated English.

In this section, we use an English-Spanish example to explain and compare the different methods of translating written material. Instead of recommending a particular method of translation, we discuss the advantages and disadvantages of the common methods**. How you *implement* your method is more important than the method you pick.**

ONE APPROACH: ***Create it separately in each language.***



This first approach is not actually a method of translation. Instead, **this method makes translation unnecessary.** Here is how it works:

- **Create specifications for the material by defining its purpose and describing its content and the intended readers.** The project team that is responsible for producing the written material in multiple languages discusses what they want to accomplish with the material and what it needs to say. They also describe the cultural background and reading skills of the intended readers in each language, as well as any other characteristics that are relevant to the written material. Then the team gives the set of specifications and information about the intended readers to the writers who will be drafting the material in each language.

- **Working from these specifications, writers of the different languages work independently to produce a version in their respective language**. Since each version in a given language is developed individually from the same set of specifications, each is an "original." There is no translation of text from one language into another.

- **The various language versions are reviewed and revised to create the final materials.** Typically, writers and the project team compare versions and make adjustments as needed. Each language version is checked to see how well it meets the specifications for the material. Sometimes this approach includes independent assessments by outside reviewers.

> When final revisions are completed, the last step is copy editing and proofreading of the final text in each language.

Many translation specialists see this approach of creating the material separately in each language as the ideal method for producing materials in multiple languages. Creating an "original" in each language sidesteps the struggles and compromises inherent in the translation process. Instead of trying to reproduce the meaning of an English text in a different language, writers are free to concentrate on expressing specified content in a culturally and linguistically appropriate way in their native language.

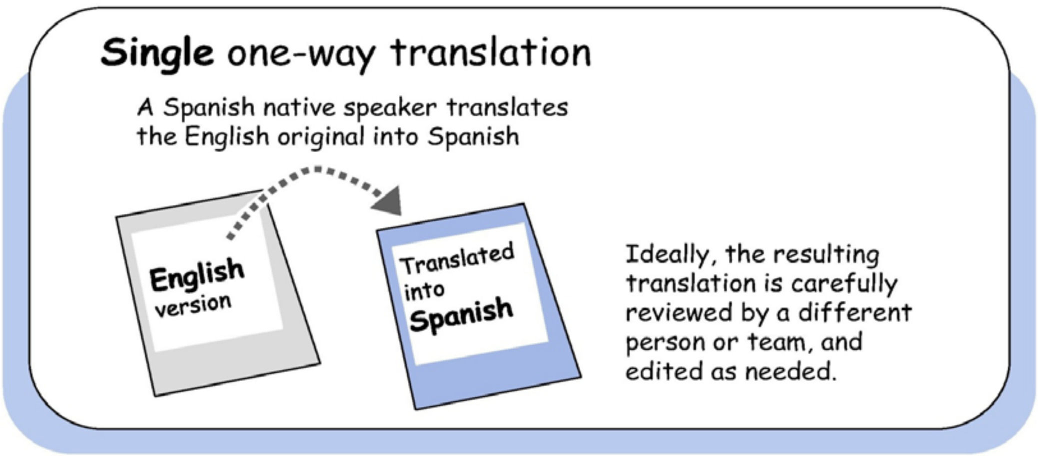
Creating an original in each language requires writers, not translators. Writing text from scratch takes different skills than translating an existing text, and writing from scratch can be more time consuming and expensive. It can be hard to find writers who are good at creating health-related, culturally sensitive text that is easy for less-skilled readers to understand and use. In addition to the potential for added time and expense, some are reluctant to use this approach for legal documents, because the text is free to vary considerably within each language.

Despite the merits of this approach, it is seldom used. People tend to assume that creating separate originals in each language would cost more than translating from English into other languages, but the *cost comparisons are misleading if the cost of producing the original in English is not included for both options*. Force of habit may be another reason this method has received relatively little attention. People tend to be ethnocentric about their own language, so we tend to think in terms of creating something in English first, and then translating it.

If you have not yet created an English version of your written materials, consider using this method. If good writers are available, it may be faster and less expensive than working through all of the steps involved in developing, reviewing, and editing of translated text, especially if the terminology and concepts in the English original are unfamiliar to the people who will be reading the translated text.

ANOTHER APPROACH: *One-way translation (single or multiple).*

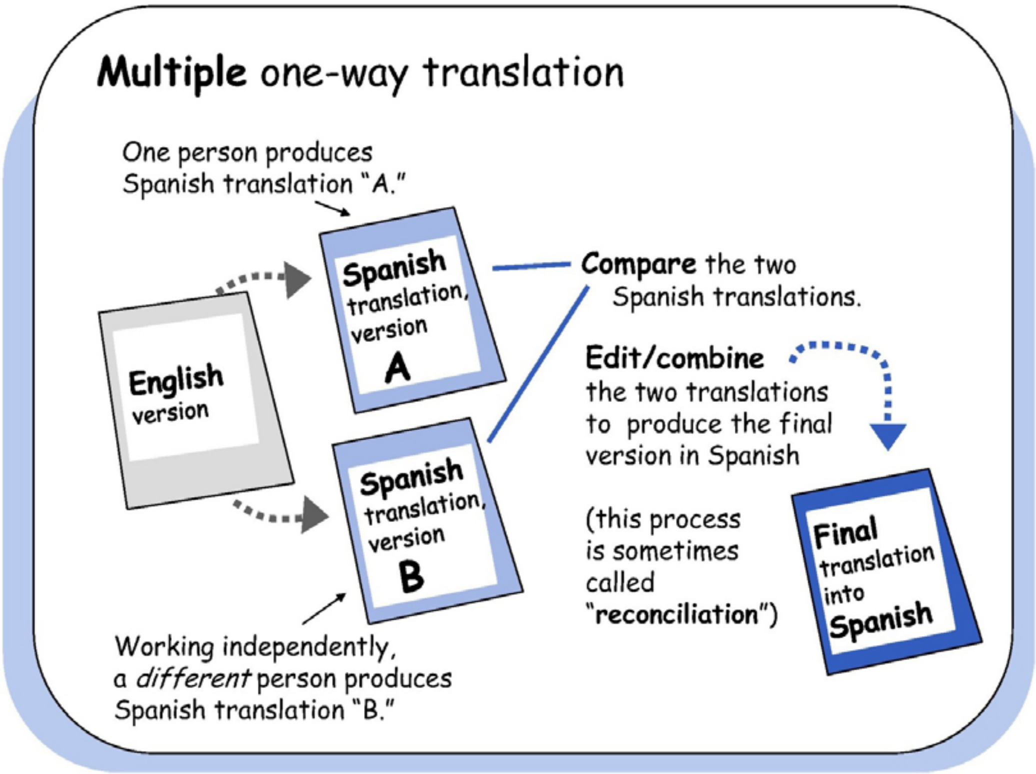
One-way translation involves translating the English text into another language: As shown below, you can do this as simple "single" one-way translation, using only one translator:



Single one-way translation is the simplest and least expensive method, because there is only one translator. While this method is widely used because it is the most expedient, it is typically criticized as relying too heavily on the cultural understanding, language fluency, and writing skills of a single individual. Some of the guidelines we discuss later in this chapter address this concern in several important ways:

- Guideline # 5 emphasizes the need to hire skilled professional translators, and our discussion gives suggestions about how to find translators with the right qualifications.
- Guidelines # 8, 9, and 10 call for the involvement of additional bilingual people who are familiar with the cultural and language patterns of the intended readers. These additional people include one or more who review the initial translation, as well as one to serve as editor and another to serve as proofreader.
- Guideline # 8 recommends using feedback from the intended readers as the ultimate test of translation quality, whenever circumstances permit.

If you do one-way translation using more than one translator, it’s called “multiple” one-way translation. This approach is depicted below:



Multiple one-way translation. Instead of having just one person do the translation from English into the other language, you can have two (or even more) people do independent translations, then compare the results and reconcile any differences that exist to produce a final version. The comparison-reconciliation can be handled in various ways that may include discussions with the translators, committee review, and final decision making by a third translator or an editor.

If you are planning to use one-way translation, consider whether it is worth the added time and expense to use more than one translator to do it. While it sounds better in theory to have two translations to compare, much depends on the skill and cultural knowledge of the translators you select.

What’s crucial is the **adequacy of the translation**, not the number of different translations that are done.

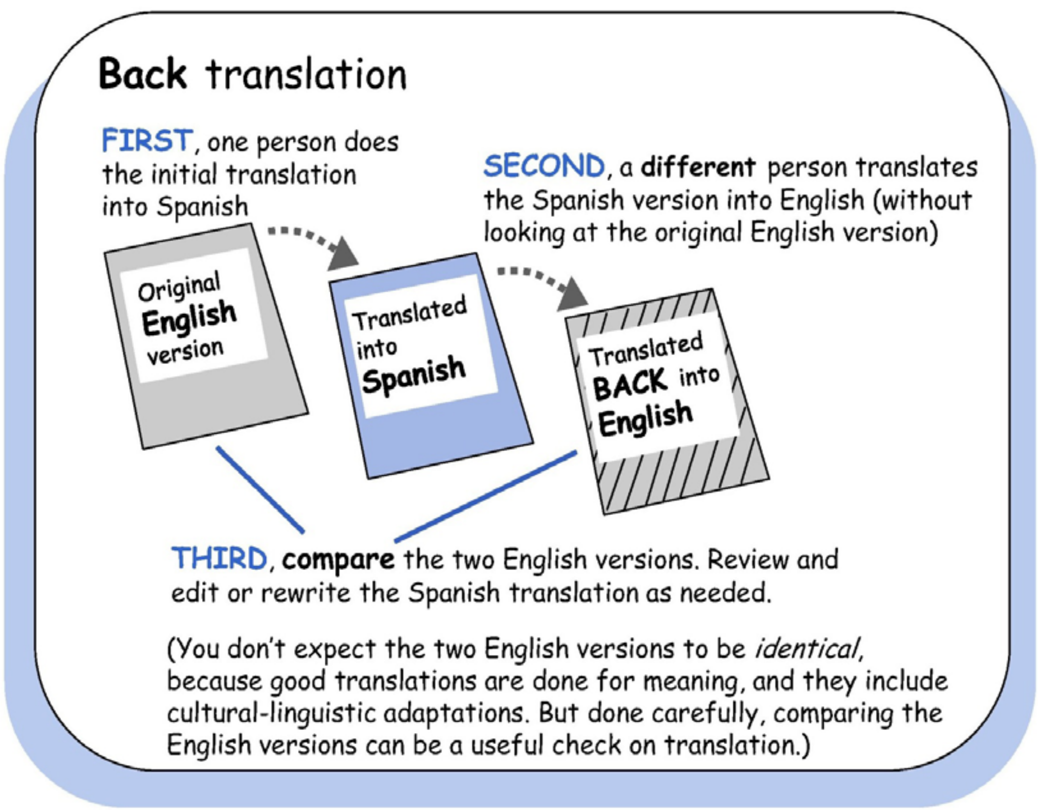
Take into account the extra time it can take to compare and discuss differences in two translations, as well as the cost of the extra translation, and what benefits you may gain:

- If one translation is competent and the other is not, you will have paid for an additional translation that is not useful.
- If both translations are competent but differ in small ways, a group can waste time discussing nuances of translation that don't really matter. Much as in English, trying to write or wordsmith text in another language "by committee" can be time-consuming and frustrating to everyone.

Provided that you have a culturally knowledgeable and skilled translator, and a good review process (such as the one we describe later in this chapter), a single one-way translation may be perfectly adequate. When you have a second person with the requisite skills and cultural knowledge, it may be more cost-effective and efficient to have that person serve as a reviewer of the initial translation, rather than having the person do an additional full translation.

ANOTHER APPROACH: *Two-way or "back" translation*

Two-way translation, or "back translation," is often recommended by translation specialists:



As shown in the illustration above, this approach involves translation in both directions. First, the text is translated from the source language into the target language, and then it is translated *back* into the source language for comparison with the original text.

The two translations are done independently, by different people. Ideally, both are unaware of whether they are doing the initial translation or the back translation.

Comparing the original English text and the back-translated English text can help identify inconsistencies, mistranslations, and other problems. However, the comparison must be done with care, keeping the following points in mind:

- **The back-translated English text will hardly ever match the wording of the original text**. Sometimes people may want to reject a translation because the back translated text is not exactly the same as the original English text. In fact, they should not expect the two versions to use exactly the same words. Instead, when translations are done for meaning rather than word for word, the *comparison of the English versions should be based on whether the back translation covers the same content and preserves the meaning of the original text*. Sometimes the back-translated text will contain some additional content that was added by the translators to clarify a concept or term that is unfamiliar to the readers of the translated text. This discrepancy from the original text would be the mark of a culturally appropriate translation, rather than a cause for rejecting the translation.

- **Reviewing the back-translated English text is no substitute for a close review and editing of the translated text.** Just because an English back translation preserves the meaning and content of the English original does not mean that the translated text is well written and easy for its readers to understand and use. Skilled translators can often improve on the style and clarity of the original text when they write a translation. It may be that the person who did the back translation produced a gracefully worded English text from a poorly worded Spanish text with spelling and punctuation errors.

While we have been focusing on formal back translation of an entire document, back-translation is also used in other ways:

- **Back-translation can be done verbally**, rather than in written form.

- **Back-translation is sometimes selective**. In some situations, it makes sense to focus back-translation on selected portions of text, rather than spending resources on a complete back-translation. For example, you may want to back-translate a couple of passages that were especially challenging to translate, as a measure of quality control.

- **Back-translation is a handy way to share the meaning of translated text with people who don't speak the translation language**. For example, later on in Figure 11-e on page 37, there is an example that shows a cultural adaptation in Spanish. At the end, the adapted text has been “back translated” into English to show you its meaning.

Two-way translation tends to be more time consuming and more costly than one-way translation. It usually takes longer than a single or multiple one-way translation because the person doing the back translation can’t get started until the initial translation has been completed.

To make the best use of available resources, you may want to use different methods of translation depending on the material and its purpose. For example, it may be important to include a full and formal back-translation when you translate legal documents, but you may decide to skip it for patient leaflets.

Plan how you will format the translated document

As shown in the guideline below, there are many decisions related to formatting your translated document. Since some of them affect the instructions you give to the translator, as well as the arrangements you will need to make for graphic design and printing, it makes sense to think about formatting at an early stage. Keep in mind that formatting is not explicitly part of the translator’s responsibilities, though many translation companies make arrangements with graphic designers to format their client’s work, for an additional charge (MAXIMUS, 2005:94).

Plan how you will format the translated text.

Decide whether you will use a single or dual-language format, and how you will integrate the translated text with other parts of the material.

Just as with English materials, you can check translated text using the guidelines for the writing and design (for the full list of guidelines, see Part 3 of this Toolkit). Allow extra space for translated text, because it often takes more words to say the same thing in other languages compared to English. Allow extra time for formatting text in languages that read from right to left.

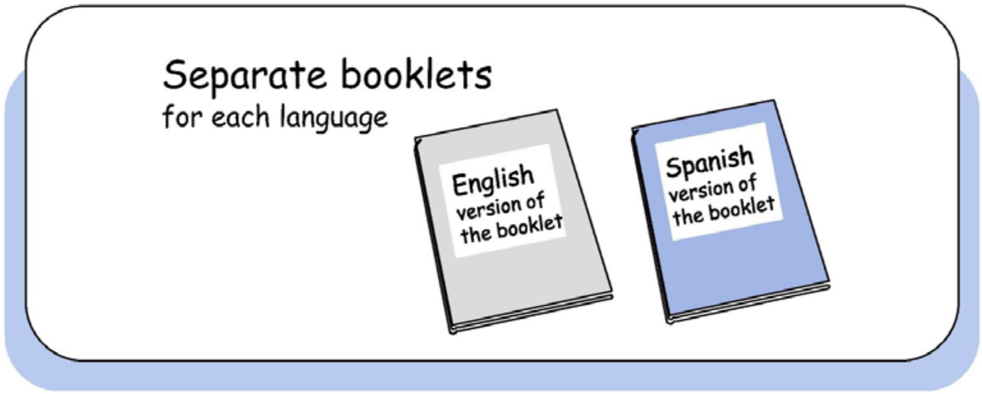
Label the original and each translated version to tell readers how and where to get the same information in a different language.

To help English speakers who distribute the material, include a notice *in English* that gives the title and name of the language.

When you are considering how to format your translated material, one decision is whether to package and distribute the translation separately (“single language format”), or to package and distribute it together with the English version (“dual language format”). Consider also whether any of the photographs, illustrations, or other visual elements need adaptation to make them more culturally appropriate for your readers of the translated versions. For help with this, see Toolkit Part 5, Chapter 6, *Guidelines for use of photographs, illustrations, and clip art*. As with any cultural adaptations of content, be guided by advice from members of your audience, the translators, and other informants about revising visual elements of your translated materials.

Single language formatting is one option

As shown in the illustration below, separate packaging of each language version is a simple and common choice for formatting of translated materials.



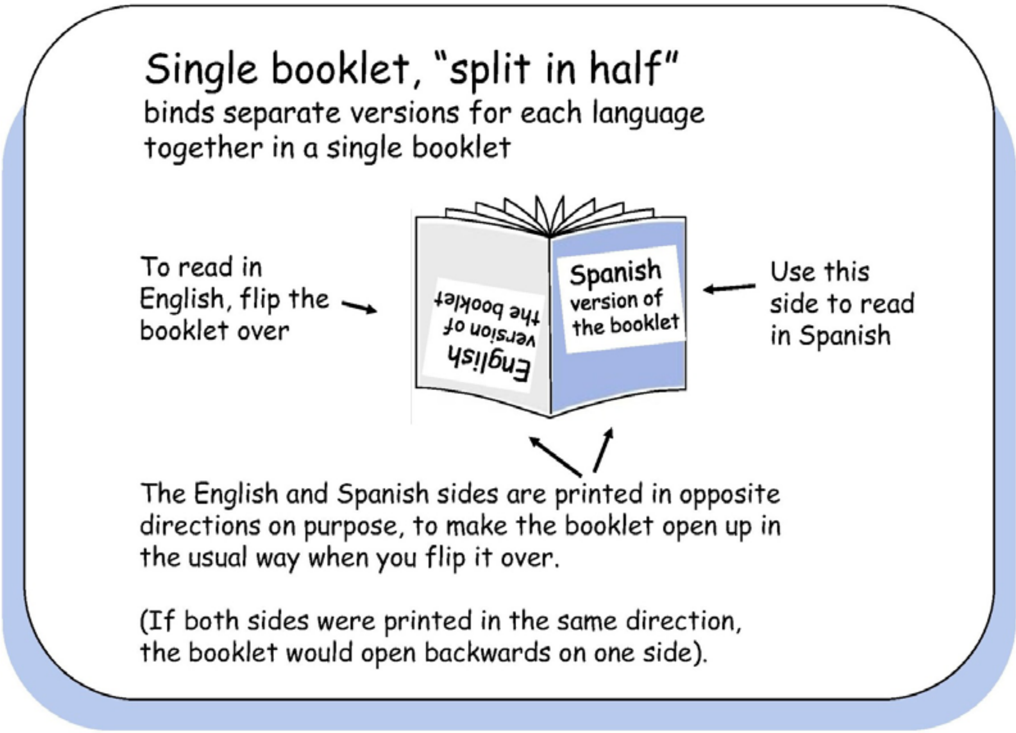
The single language format has several advantages. Readers generally like it, and it looks less intimidating at first glance because it is half as long as the dual-language formats that cover the same information twice, once in each language. The single language format is very flexible, since you can format each version independently to accommodate any differences in length and graphic elements.

Distribution can be challenging. Matching up the correct language version with the people who read in that language can be difficult, especially since many state Medicaid agencies, managed care organizations, and other groups have difficulty identifying the language translation needs of the people they serve.

If you want to use the single language format, consider whether you can accurately identify the language needs or preferences of the intended readers, and whether you have a cost-effective and reliable way to deliver the right language version to the right people. Otherwise, it's hard to know how many copies you will need of each version, and distribution can be costly, frustrating, and ineffective.

Dual language formatting is the other option

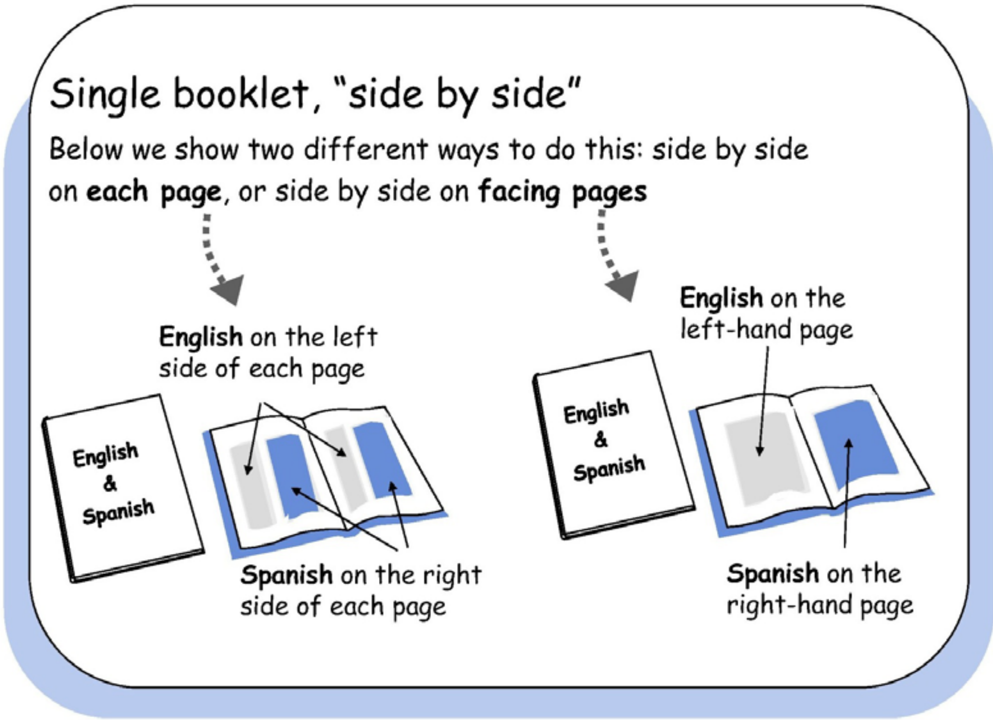
If you combine the two languages, there are two common ways to handle the formatting. The first, shown below, is a "**split in half" approach** that devotes each half of a booklet, leaflet, or information sheet to a different language. In this split-half approach, you see the other language when you flip the booklet or brochure over.



If you use the split-in-half approach, it's **crucial to label each side clearly** to alert readers that a different language is on the back side**.**

- For example, the English cover should have a label written in Chinese that tells readers to turn the booklet over for Chinese, and vice versa.
- This need for labeling seems obvious, but materials that use the split-in-half format have been published without it. With a fifty-fifty chance of looking at the "wrong" side first, people have tossed these materials when they can't read the language on the cover – never realizing that all they had to do was flip it over to read it in their own language.

The other dual language option is to put the languages "side by side." As shown below, there are two ways to do this. Either way you choose, it's immediately obvious to readers that both languages are included.



Advantages and disadvantages of dual language formatting

Whether you use the "split in half" or the "side-by-side" approach, dual language formats offer several potential advantages:

- **Dual language formats don't require advance knowledge of language preference, so distribution is simplified**. The dual language format can be useful in situations where the majority of your intended readers speak either English or one other language, because the dual language version supplies the same text in both languages. For example, a Spanish-English booklet would meet the language needs of most Medicaid enrollees in states such as California where a sizeable proportion of enrollees with limited English proficiency speak Spanish. You would not need to know ahead of time which people read in Spanish in order to deliver a Spanish version to them.

- **Dual-language formats offer flexibility in choosing the preferred language**. For example, readers who are learning English can refer to both versions. If a reader needs to get help with the material from someone else, both languages are available to the person who is helping.

There are also some disadvantages:

- **Dual-language formats can be confusing at first.** Unless you live in a country where dual-language formatting is widespread, such as Canada or Switzerland, dual-language materials can take you by surprise. It can take a moment to figure out how to focus on just your preferred language as you read the material. (This tends to be easier with a split-in-half format than with the side-by-side format).

- **Some readers dislike the dual-language format.** While dual-language formats have been successful for many projects, there are some readers who find these formats objectionable and want to see material in their own language only.

- **At first glance, the material may look a lot longer and more imposing than it really is**. When you put both languages together in a single piece of written material, it doubles the length. For shorter materials, this may have little or no impact. But for something that is longer, like a booklet, or a patient satisfaction questionnaire, the material will appear to be twice as long. This added length may discourage or intimidate some people, especially those who are less-skilled readers.

- **Dual language formatting may (or may not) cost more than a single language format**. Sometimes you can save money by using a dual-language format, but often it costs more. Here are things to consider in making a cost comparison:

    - What proportion of *all* readers are likely to read the translated text? If the proportion is small, a single language format for these readers may make more sense and cost less, too.

    - Added length can mean higher postage for materials that are mailed, depending on size of the item and how cut points for additional postage happen to fall.

    - Graphic design tends to be more time consuming and costly for the dual language formats, especially for the side-by-side versions that put both languages on each page. This variation is harder to format because of the two-column format. The column width will likely be uneven, because compared to English, it typically takes more space to say the same thing in most other languages. If the paper is relatively narrow, you can't use this format variation, because splitting the text into two columns makes the columns too narrow for easy reading.

General tips for formatting translated documents

Allow space for "text expansion"
(translated text tends to require more space than the original text in English)

Whether you plan to produce separate versions of translated documents or use a dual language format, keep in mind that the translated text will likely require more space than the original English text. For example, *The Health Literacy Style Manual* says you should count on a Spanish translation taking approximately 25% more room (MAXIMUS, 2005:94). As explained in this manual (MAXIMUS, 2005:95), there are a number of reasons for text expansion. For example, the text can be longer in translated documents than in the English original if:

- The other language is more descriptive than representative. For example in Hmong many concepts are explained, not represented by a word or phrase.
- The other language doesn't use the standard Western, Cyrillic, and Greek fonts. Examples are Arabic and the Chinese, Japanese, Korean, and Southeast Asian languages.
- The fonts don't correspond in size to the fonts chosen for the original text.
- The translator makes cultural or linguistic adaptations, such as adding explanations or definitions to make the material easier for readers of the translated versions to understand.

This tendency for translated versions to be longer than English versions has important implications for the production and distribution of the translated document:

- Allow extra room for this natural expansion when you do your original planning of design. **You don't want to end up compromising good design in the translated versions** by crowding your translated version into too little space, reducing the size of the type, or sacrificing visual appeal by dropping illustrations, photographs, or other visual elements.
- Check into the possible impact on the overall costs of printing and distribution.

For languages that differ in orientation from English (such as reading from right to left) , allow time for reformatting

If you are translating materials into languages that read from right to left, such as Arabic, Chinese, Hebrew, or Farsi, be sure to allow some extra time. This difference in orientation can have major implications for layout of your materials. Keep in mind that the graphic designer who integrates the translated text and the non-text elements may not be able to read the translated text, and will need to rely heavily on others who do.

To alert readers and make the translation easier to distribute, label it clearly

Clear labeling of translated materials is crucial. People who need a translated document must be told that it's available and how to get it. In addition, people who distribute the translated material may read only in English, and they need to be able to identify the title and target language of the material.

Here are suggestions for labeling of translated materials:

- On the front of each language version, tell readers about other language versions that are available, and how to get them. This message must be written separately in each of the translation languages. For example, if a leaflet is available in English, Russian, and Vietnamese, the English leaflet should have a notice in Russian on the cover that tells how to get a copy in Russian. It should also have the same notice written in Vietnamese, telling how to get a copy in Vietnamese. Some organizations have a standardized "language block" of multilingual text with these messages that is placed on the front of all translated materials. Be sure to put in a prominent place (not on the inside or the back cover).

- If the material itself is bilingual with each version on an opposite side, put a note on the front of each side that tells readers to turn the material over (for example, a note in English on the Arabic side, and a note in Arabic on the English side).

- To make it easy for English speakers to identify and distribute translated materials, include unobtrusive labeling in English that gives the title, name of the language, and date of translation.

Use skilled professionals to do the translation

Translation Guideline #5

Use professional translators who have the cultural knowledge and skills needed to do a good translation.

Use professional translators who have the necessary writing skills and cultural knowledge to produce a culturally and linguistically appropriate translation that is easy for the intended readers to understand and use.

Figure 11-c. Five things to look for in a translator.

1. **Translators must be able to write well in their native language.** For the types of written materials we discuss in this Toolkit, “able to write well” means being able to write translated text that is easy for people with limited reading skills to understand and use. Here are some things to keep in mind:

   - **Use only professional translators who have appropriate qualifications and training**. Most translators work mainly in one direction, translating into their native language. But for English and any other language, being a native speaker does not automatically make you a good writer or a good translator in your native language. Written translation requires a special set of skills. These skills differ from what’s required to do oral interpretation, so don’t assume that a person who is good at interpreting would also be good at written translation.

   - **Keep in mind that not all professional translators understand how to write well for less-skilled readers**. Translators or translation services that are accustomed to producing translations of business documents or literary works may not be familiar with the needs of low literacy readers, and may produce translated text that is too difficult for members of your intended audience.

2. **Translators must have enough fluency in English to understand the English text.** Translators don’t need to be highly fluent in English, but they do need to be able to understand the English text well enough to be able to translate its meaning. They also need to be fluent

enough in English to communicate with others about the translation when questions arise or clarifications are needed.

3. **Translators must be familiar with the culture and language patterns of the intended readers.** Cultural and linguistic knowledge is essential because translators need to know how and when to adapt the translated text in a way that preserves its meaning, yet makes this meaning easily understandable to the intended readers. While you will need to brief the translator on the specifics of your materials and their intended readers, there is no way that you can supply translators with all of the taken-for-granted cultural knowledge that they will need to draw on to produce an effective translation.

4. **It is helpful if translators have experience in translating materials that are similar to yours.** If they have done similar work, samples of this work will help you judge their ability to do the type of translation you need.

5. **It is helpful if translators are familiar with the subject matter of your materials.** Familiarity with the subject matter makes it easier to communicate with the translator about the content of the material. Also, the translator may have learned some good ways to handle translation of difficult terms and concepts.

Source: Created for this Toolkit; see acknowledgements at the end of this document.

How can you find translators who meet these requirements?

It's worth spending some time and effort to do careful screening of prospective translators, because **working with well-qualified translators will produce better results and will save you time and money in the end**. When you are seeking translation services, it helps to know a little about how the translation industry works. Here are some key points that are based in part on the *Translation Protocol* (Minnesota Department of Health, 2000:13-14):

- Translators typically work by translating into their native language only. Even people who are proficient speakers of several languages tend to express themselves best in their native language.

- Translation services are typically priced by the word or block of words. Editing and proofreading services are often priced by the hour.

- The time required for translation varies from language to language and topic to topic. Many translators average somewhere around 10,000 words a week. Allow plenty of time for your translation jobs, so that translators can do their best work.

- Most translators are freelancers who list through agencies or have a very small circle of clients. When agencies accept translation jobs, they typically subcontract the work to a particular translator. The agency manages the project and can usually provide typesetting, editing, and proofreading services, unless you prefer to make other arrangements for these services, such as using an in-house capability instead.

Figure 11-d Questions to ask when you are screening translators.

When you screen prospective translators, you are seeking information that will help you to judge what it will be like to work with that person or agency, and whether the completed translations will be of suitable quality. Here are some things to ask about when you are screening translators:

- **Ask about the translator's qualifications and experience**. Ask about areas of specialization, and whether the person has experience in translating for readers with low literacy skills. Keep in mind that translation services are often highly specialized in subject matter or type of translation (such as business documents or literature).

- **Ask if the translator is familiar with the culture and language patterns of those who will use the translated material**. Translators differ in their knowledge of subcultures and ability to adapt language according to locality. For example, if the people who will use a Spanish translation are Mexicans who live in California, try to hire a Mexican translator who lives in California.

- **Ask whether the translator is certified or accredited**. Some translators are accredited or certified by the American Translators Association or other recognized domestic or international organizations such as the Institute of Translation and Interpretation, Société Française des Traducteurs, Defense Language Institute Foreign Language Center, and Association of Interpreters and Translators Quebec, Canada. The American Translators Association (ATA holds written examinations that lead to certification in a specific language pair and direction (from or into English). For example, a translator might have ATA certification for translating from Russian into English, or from English into French. Keep in mind that the ATA only offers certification in a selected group of languages, which are mostly Indo-European languages. The list of language pairs include both directions for Spanish (Spanish into English and English into Spanish), but limited pairs for Asian languages (English into Chinese, English into Japanese, and Japanese into English). For more information, visit http://www.atanet.org.

- **Ask about the technical details**. Describe the format of the English text, and your requirements for the format of the translated text. Depending on the written material and your particular needs, you may need to know about computer hardware, software, specialized fonts, and the ability to integrate graphics and other design elements into the translated text.

- **Ask for names of other clients to serve as references**. Then contact these references and ask about their experiences with the freelancer or agency. Ask about such things as timeliness, flexibility and problem solving, and satisfaction with completed translations.

- **Ask for samples of their work and review these samples to assess suitability of the translation**. Ask for samples that are as similar as possible to the type of material you want to translate, and be sure to get the English original as well as the translated text. Then show these samples to people who have the requisite cultural knowledge and language fluency to assess them. Ask reviewers to tell you if the translated text is easy to read, and to estimate its literacy level. Ask if it stays true to the meaning of the original text, with appropriate adaptations, and whether it is free of grammar, spelling, and punctuation errors. If possible, ask a couple of consumers to read a sample for you. They should be able to tell you the most important messages in the document, and you should be able to see that they are reading without undue struggle.

If you are screening an agency, there are some additional questions to ask:

- **Ask the agency how it recruits, selects, and trains its translators.** Ask for details about how the agency selects its translators. What qualifications do they look for? Do they administer tests or require samples of work before they entrust a job to a translator?

- **Ask what procedures the agency follows to monitor the quality of the translations.** For example, does the agency have written guidelines for its translators? What methods of translation does it use, and why? Does it have its own editors and proofreaders? How do agency staff members check the translation before sending it on to the client? Agencies that do careful work will welcome questions about their quality control procedures and will have answers readily available.

Source: Created for this Toolkit; see acknowledgements at the end of this document.

Should you use an agency or a freelance translator?

Careful screening is more important than whether you choose an agency or a freelance translator, since either can provide good services.

- Translation agencies typically charge more for translations than freelancers do, because agencies supply a number of additional services. It may be worth paying more to have the agency supply qualified translators, monitor the quality of their work, and coordinate the whole process to keep your project on track.

- Using a freelance translator will generally cost less, and you will be able to deal directly with the person who does the translation, rather than going through the agency. You can sometimes get more personalized attention by working with an individual rather than an agency.

Give the translator clear instructions and a full briefing

As shown in the next guideline below, you can help your translators do their best work by giving them clear instructions and plenty of background information about the material itself and the intended readers.

Give the translator clear instructions and background information, including guidance on translation issues.

Discuss the material and the audience, giving guidance about how to translate potentially problematic concepts and terms.

Go over the technical details related to fonts, software, and formatting requirements.

If possible, meet in person for the initial briefing on a new translation project. Let the translator know what you expect, and what you will be checking for in your quality control process. Be sure that he or she understands the need to produce text in the target language that is written clearly and simply, at an appropriate reading level.

Here are some suggestions for working effectively with translators:

- **Urge translators to ask questions.** They should feel free to contact you if they are unclear about the meaning of the English text, or want to consult with you about any terms or concepts that seem awkward or difficult to translate. Be sure that someone is available to provide a prompt response to questions or any other translation issues that arise.

- **Give them a translation glossary to show your preferred ways of translating words, terminology, and concepts that occur frequently in your written materials**. Creating your own custom glossary will help maintain consistency in your materials and will help translators produce culturally appropriate language that you will find acceptable. Here are some suggestions:

   - Update your custom glossary with new entries after each translation job. You should also edit and expand it to reflect any programmatic changes or other changes that affect translated materials.

   - It's especially helpful to include a brief commentary that gives the rationale for a particular translation preference. You can include comments about alternatives that were considered but rejected, if appropriate. Sharing this information with your translator at the outset will make the process more efficient for everyone.

   - Besides providing translators with a great head start on understanding the material and the needs of readers, a custom translation glossary is a handy way to keep a running record of your deliberations and decisions about challenging translation issues. This running record helps new staff members get up to speed.

   - These suggestions emphasize creating a customized glossary that reflects your organization's own experiences and judgments about the best ways to translate certain words or concepts for your intended readers. There are cross-cultural glossaries of medical terms available, but be cautious if you use them. Just because a translation is given does not mean that the translated term will be understood by your intended audience. Many of these glossaries are written at a high reading grade level that is more suitable for health professionals than for the public. Even if the translated words are not difficult, they may be unfamiliar to the intended readers, and it may work better to give an explanation than to simply substitute the translated term.

- **Share feedback with them (and with the agency, if applicable).** If you are delighted with the quality of a translation, let them know. If reviewers have been critical of the way the material was translated, talk with the translator about the specific concerns in a professional, nonjudgmental way. Producing a culturally appropriate translation is a complex process that involves many decisions. You can learn a lot by giving the translators a chance to comment on reviewers' feedback and to explain the translation choices they made.

Translate for meaning (rather than word for word), in a culturally sensitive way

Translate for meaning (rather than word for word), in a culturally sensitive way.

Translation should preserve the content and meaning of the original text, with cultural and linguistic adaptations as needed. The translated text should sound natural and be easy for intended readers to understand and use.

Good translation requires cultural and linguistic adaptation

This translation guideline goes to the heart of what constitutes effective translation: a good translation recreates the intended meaning of the English text as closely as possible in the target language, in a way that makes sense to the intended readers.

To transform English text into clear and meaningful text in the target language, translators need to be familiar with cultural and linguistic nuances of both English and the target language. This will help them make good judgments about when and how to adapt the translated text. Adaptation is so crucial to effective translation that some people prefer to call the process “*adaptation* into another language” rather than “*translation* into another language.”

When text is translated, it may need adaptation for one or more of the following reasons:

- **To make the translated text sound natural to the intended readers**. Sometimes you can tell that a text has been translated into English, because the sentence structure and grammatical forms sound awkward and strange, as if they belonged to a different language. Good translators adapt text to make it sound smooth and natural to native speakers of the translated language.

- **To make the translated text easier for the intended readers to understand and use.** Ideally, the translator will be starting with a good text in English (see Translation Guideline #2). If the

English text is a good match to the reading skills of those who will use the translated text, then the translator just needs to preserve the ease of reading in translation. But sometimes the English text is difficult, or the readings skills of those who will use the translated text are very limited. In these situations, translators need to make adaptations, such as simplifying the vocabulary and sentence structure, and adding examples or explanations.

- **To make the translated text culturally and linguistically appropriate for the intended readers.** As we've already noted, communicating the meaning of an English text clearly and accurately in another language can be a huge challenge. Some English words, phrases, and concepts have no direct equivalent in the target language. Other words and concepts can be translated in multiple ways, each of which carries a different meaning. As the Minnesota Department of Health translation guidelines emphasize, any text to be translated contains implicit, or unstated meaning, as well as the explicit, overtly stated information (*Translation Protocol*, 2000:8-9). Part of the translator's task is to identify these implicit meanings and decide how to convey them to readers of a different language that has different taken-for-granted cultural and linguistic complexities. The rest of this section discusses a few aspects of cultural and linguistic adaptations in more detail, with examples.

Choosing which word or phrase to use in the translated text

There is often more than one way to translate a particular word, and each may have a different meaning. A skilled translator who is a native speaker, and who is familiar with the intended readers, will generally know which words to choose for a particular meaning and context. The review process that we describe in the next section will also help catch any problems with word choices.

Here are some suggestions about making cultural and linguistic adaptations in word choices:

- **Watch out for words that look similar in English and the target language, but don't really mean the same thing.** The Spanish word "aplicacion" looks like the English word "application," but it actually means "assignment" in Spanish. If you want to refer to an application form in Spanish, you would say "solicitud" rather than "aplicacion."

- **Be alert to figures of speech, colloquialisms, and other expressions that need special care in translation**. If idioms or informal expressions of casual speech appear in the source text, translators first have to grasp the intended meaning in English, then figure out the best way to say essentially the same thing in the target language. Doing a good job at this requires an understanding of culture and language patterns in both languages. Since you can't figure out the meaning of an idiom just from knowing the meaning of each of its words, idioms are especially prone to mistranslation if the translation is done literally rather than for meaning. Imagine, for example, how bewildering the results might be if you did a word-for-word translation of expressions such as "give way," "short and sweet," "hooked on drugs," or "you'll start feeling better down the road."

- **To deal with regional and other variations in word use, consider including alternative words in parentheses**. For example, depending on their country of origin or where they live in the United States, Spanish speakers might use different terms for the same thing. Eye glasses are called *espejuelos* in Puerto Rico, *gafas* in Venezuela, *anteojos* in Argentina, and *lentes* in Chile. If you were developing materials in Spanish for use by people in California, you would orient the translation toward Mexican terminology. If the materials were for use by people in New York, you would orient the translation toward Caribbean terminology. If Spanish-language materials will be used nationwide, you could make the translation as generic as possible, or include important regional variations in parentheses. If you have questions about which words to use, be guided by feedback from cultural informants and intended readers.

- **Take into account the extent to which the intended readers have adapted to the culture and language patterns in this country.** As you make translation choices, consider what mix of people with limited English proficiency you are trying to reach. Some of your intended readers with limited English proficiency may be recent immigrants who are unfamiliar with American culture and language patterns, while others who have lived in the United States longer may have adapted to parts of American culture and language. Sometimes the local immigrant community adopts English words and phrases. Take the word for carbonated beverage as an example. On the East coast, Americans say "soda," and in the Midwest, they say "pop." The word is "gaseosa" in Spanish, but some Spanish speakers living in the United States have adopted the word "soda." Similarly, some Spanish speakers say "nurse" rather than using the Spanish word "enferma." An example of regional language adaptation is the use of English-nuanced Spanish called "Tejano" ("Tex Mex") that has developed among Chicanos who live in some towns along the Mexican border.

- **For ease of reading, choose the simplest word when there is more than one good choice in the target language.** Just as in English, the target language may include multiple words with similar meaning. Faced with choices of this type, translators should pick the simplest words that stay true to the English text, to avoid making the translated text harder for people with low literacy skills to understand and use. It helps to hire translators who understand the need to write in plain language, and have done it successfully. For example, a translator who specializes in business translations may not appreciate what it takes to communicate effectively with less skilled readers.

- **To maintain consistency and make future translations more efficient, compile your own custom translation glossary**. A translation glossary is a useful tool for your organization as well as for the translators you use. For more about this, see the discussion above about briefing your translator. Note that we are recommending a glossary for staff use only. We don't recommend putting glossaries into written materials for less skilled readers, because they seldom use them. Instead, the material should incorporate definitions into the text right where readers need them, which makes a glossary unnecessary. For more on this topic, see Guideline 3.4 in Toolkit Part 4, Chapter 3, *Guidelines for writing style.*

Translating words and concepts that are unfamiliar to readers of the target language

When English words, phrases, and concepts have no direct equivalent in the target language, translators need to adapt the text – as best they can – to make sense to the intended readers. Here are some issues and suggestions to consider:

- **Sometimes you may need to help readers learn the new word or acronym in English, because they will hear it repeatedly in English**. “PCP” for “Primary Care Provider” is a possible example. To help readers learn the new word, you need to define the term such as PCP in words they understand, and reuse it in English, including the translated definition in parentheses to help reinforce the learning.

- **Adding specific cross-cultural comparisons can be very helpful**. As shown below in the example in Figure 11-e, it can help a lot to make explicit comparisons to the reader’s own experiences and frame of reference.

Figure 11-e. Example of cultural adaptation in Spanish translation (adding a cross-cultural comparison).

Here is an example of English text (from a booklet on understanding managed care) that is adapted:

> Health Care Is Changing in the United States: In the past, your health insurance may have covered all services. Today it is very important to know what your plan will and will not cover.

Spanish adaptation --

> El cuidado de salud está cambiando en los Estados Unidos. Anteriormente el seguro cubría todos los servicios. Hoy en día es importante saber qué está cubierto y qué no está cubierto, antes de usar un servicio. Tenga presente que en los países latinoamericanos los seguros de salud son diferentes. En algunos países de latinoamerica los doctores todavía hacen visitas a domicilio, esto no existe en Estados Unidos. Pregunte antes de usar un seguro de salud.

The Spanish version above reads: "In the past, the health insurance covered all services. Today it is very important to know what is covered and what is not covered. You must have in mind that the health insurance in Latin America is very different. For example, in some Latin American countries, doctors still make home visits. This service does not exist in the United States. Ask questions before using your health care plan."

Source: "Lost in Translation: Each Word Accurate, Yet..." by Christina Zarcadoolas and Mercedes Blanco, *Managed Care*, August 2000, pages 2-3 of 4. http://www.managedcaremag.com/archives/0008/0008.translate.html (accessed on September 11, 2006). Used with permission.

Review the translated text for accuracy, cultural suitability, and ease of use

Review the translated text for accuracy, cultural and linguistic appropriateness, and ease of use.

Use multiple reviewers to check on the adequacy of the translation, and get reactions from intended readers too, if possible.

When the translation is complete, the next step is to have other people assess it. How you handle this review phase of translation depends on many factors that include the time and resources you have available, as well as the material itself and the intended readers. If the translated material is short and simple, and you are using a translator who has done good work on previous translations of a similar type, the review may be brief. You will want to put more time and effort into the review if you are using a new translator, or the material is long and complex, or you suspect that the intended readers may have trouble understanding its content.

Tips for reviewing the translation

To provide a thorough review from different perspectives, try to get reactions from a variety of reviewers. If you do numerous translations, it may be more efficient to set up a standing review committee of people who represent different expertise and perspective than to assemble reviewers each time you produce a new translation.

- **You may have in-house staff members who have the language fluency and other skills needed to review the translation**. If possible, try to involve staff from different areas of the organization. For example, your review team might include a person who does community outreach, another who works on the telephone helpline, and a third who helps create information materials.

- **The best way to judge how well the translation is working is to get some feedback directly from your intended readers.** While they can’t assess the clinical or legal accuracy of the materials, members of the intended audience are the ultimate judges of whether the material is culturally acceptable and easy to understand and use. For help with this, see Toolkit Part 6, *How to collect and use feedback from readers*. As we emphasize in Toolkit Part 6, you do not have to spend a lot of time and money to get reader feedback, and the benefits will be enormous. One quick and inexpensive way to get feedback from readers is to do brief interviews with them in settings such as community centers or waiting rooms at local agencies. People are typically grateful to see that material has been translated into their own language, and happy to help by sharing their feedback. Even if you can only do three or four interviews with readers, you will learn a lot.

- **If you can, get help from community-based organizations, government agencies, and other local organizations that serve the people you are trying to reach with your translated materials**. Organizations in your own community are great resources and excellent partners in projects that include translated materials. These organizations may have bilingual staff members who can review the translated text and give you feedback based on their experiences with the intended readers. If you are doing feedback sessions with intended readers, as recommended above, these organizations may be willing to help with recruitment.

- **Translated materials that will be used across dialect subgroups should be reviewed by representatives from each of the subgroups**.

- **Some translated materials require specialized review by legal staff or other departments.** Some types of materials such as application forms, legal notices, and descriptions of benefits and services, and patient education material, require special scrutiny. For example, you may need to get clearance from an attorney, an assessment of clinical accuracy from a physician, or approvals from other specialized reviewers. Typically, you will need to provide a back-translation into English for these purposes, since many specialized reviewers will not be able to read the translated text.

- **Other possibilities for your review team include freelance translators and translation agencies.** For example, if in-house staff members have done the initial translation, you might want to seek assistance at the review stage from other translation professionals in your community.

Using the feedback from reviewers

How you process the feedback you get from reviewers depends on your project and the nature of the feedback you get. If comments and edits are minor, they can be handled by the editor (see Translation Guideline # 9 below). If there are serious concerns about the adequacy of translation, or serious disagreements among reviewers, you will likely need to meet and discuss the issues. These meetings may include the translator who worked on the text as well as some reviewers. Unless reviewers are skilled, professional translators with the requisite cultural knowledge of the intended readers, be cautious about how you use specific edits they may suggest. Reviewers may prefer one word over another, but that does not mean that the translation is inaccurate or inadequate.

When addressing feedback from reviewers, focus on major issues that affect accuracy of content or ease of reading, and try not to get bogged down by minor differences of opinion. When a translation controversy arises, consult with the person who did the initial translation. Share the concerns that have been raised by reviewers, and ask for comments and suggestions from the translator. Once reviewers have given their feedback, and translation issues have been discussed, it usually works best to have one person take responsibility for doing the final edits.

Use an editor to review and polish the translation

Translation Guideline #9

Use a bilingual editor to review and polish the translation.

Like the translator, the editor needs to be a skilled writer who is familiar with the culture and language patterns of the intended readers.

The editor puts the text in final form, paying special attention to style, grammar, and reading level. You may have someone in-house who can edit the translation, or you can hire a freelance editor or use the editing services of a translation agency.

The editor needs good writing skills and should be familiar with the material and intended readers. To provide diversity of background and viewpoints, as well as appropriate distance for editorial work, the person who serves as editor should not be the same person who did the initial translation. Some people work as translators and also as editors of translated text. Others specialize in one role or the other.

The role of the editor and the type and amount of work that he or she will need to do depends on the nature of the material and the feedback from reviewers. In some cases, the translated text reaches the editing stage in good shape, and only minor polishing is required. Other times, editors may need to do substantial work on the content and writing style to get the text in final form. For example, if there were many differing opinions about how the text should read, the editor will need to make the final decisions and follow through with whatever rewriting or editing is needed. If substantial rewriting is needed at this late stage, it is wise to circulate the final draft to some of the reviewers again for review and comment.

Careful proofreading is the final step

Use a bilingual proofreader to do a final check on the translation.

The proofreader looks for consistency and corrects any errors in grammar, spelling, punctuation, and formatting.

Use an independent proofreader to check for spelling, grammar, and punctuation – both the English and the translation. Don’t skip this step, because small mistakes in phone numbers or words can turn into big problems. The proofreader should do a final check of the page proofs or other final formatting that will be used in printing, photocopying, or other methods of distribution.

End notes

Acknowledgments for this chapter

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Suggested resources

For networking with colleagues when you need help or advice related to translation issues, the Internet interest groups sponsored by the National Institute for Literacy (NIFL) can be a good resource. Try searching the archives or posting a message to the Health and Literacy mailing list:

> National Institute for Literacy (http://www.nifl.gov/). *The Health and Literacy Discussion List (NIFL-HEALTH)*: You can subscribe to the list at http://www.nifl.gov/mailman/listinfo/Healthliteracy. This discussion list is a service of the National Institute for Literacy, in partnership with World Education. It is an online forum for interested professionals who can discuss literacy issues in health care, including health education and literacy programs and issues.

Diversity Rx, an electronic clearinghouse of information about language and culture in health care

1997 Washington, DC: National Conference of State Legislatures, Resources for Cross Cultural Health Care, and the Henry J. Kaiser Family Foundation. May 1997 and ongoing. *Diversity Rx* website: http://www.diversityrx.org/(accessed September 9, 2006).

Office of Minority Health, U.S. Department of Health and Human Services

2001 *National standards for culturally and linguistically appropriate services in health care: final report.* Washington, DC. Available on website http://www.omhrc.gov/assets/pdf/checked/finalreport.pdf (accessed September 12, 2006).

The provider’s guide to quality & culture

This website is “designed to assist healthcare organizations throughout the US in providing high-quality, culturally competent services to multi-ethnic populations.” http://erc.msh.org/qualityandculture (accessed September 8, 2006).

Salimbene, Suzanne

2001 *CLAS A-Z: A practical guide for implementing the National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health Care.* This is a step-by-step guide to assist health care organizations to create a health care environment that would meet the needs and expectations of diverse patient and consumer populations. Office of Minority Health, U.S. Department of Health and Human Services, Washington, DC. This guide can be downloaded from http://www.omhrc.gov/assets/pdf/checked/CLAS_a2z.pdf.

Schriver, Karen A.

1997 *Dynamics in document design: Creating texts for readers*. New York: John Wiley and Sons. This book discusses some of the cross-cultural challenges of design, and strongly advocates testing materials with the intended audience.

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1999 *Writing and designing print materials for beneficiaries: A guide for state Medicaid agencies.* HCFA Publication No. 10145. Written under contract by Jeanne McGee, Ph.D., McGee & Evers, Consulting, Inc. Centers for Medicare & Medicaid Services, 7500 Security Blvd., Baltimore MD 21244-1850. NOTE: This publication is out of print. It is replaced by this *Toolkit for making written material clear and effective.*

MAXIMUS

2005 *The Health Literacy Style Manual*. Published by MAXIMUS (11419 Sunset Hills Road, Reston, VA 20190, 1-800-MAXIMUS, http://maximus.com). *The Health Literacy Style Manual* is a publication of Covering Kids & Families™ a national program supported by the Robert Wood Johnson Foundation with direction provided by the Southern Institute on Children and Families (140 Stoneridge Drive, Suite 140, Columbia, SC 29210, (803) 779-2607, http://www.thesoutherninstitute.org). The manual can be downloaded at http://www.coveringkidsandfamilies.org/resources/docs/stylemanual.pdf. To request a printed copy, send an e-mail to jimpalumbo@maximus.com.

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