Resources and Strategies to Improve the Safety and Quality of Diagnosis in Hospitals

Diagnostic Safety and Quality Webinar Series: Overview and Implications for Hospitals

November 28, 2023
Webinar Reminders

Accessing the Audio

• If you are using computer audio, please select that option in the audio options pop up.

• If you are joining by phone, please dial in using the Toll Free 800 number provided. Then enter the Meeting ID when prompted, then your Participant ID.
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  – The Participant ID can be found in the audio options in the bottom left-hand corner.
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• The Town Hall Call includes a live Q&A during the presentation; therefore, we do not monitor the chat for questions. Please reserve the Zoom Chat Function for reporting technical issues only.

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Q & A

Participants will be able to ask questions during the presentation. Please select the Q&A icon at the bottom of your screen:

- Once the icon has been selected a Q&A box will appear for you to type your questions.
- All participants will be able to view the questions and answers during the duration of the webinar.
  - You will be receiving responses in real time from a member of our team.
  - We will include a transcript of the Q&A on the Leapfrog website here: https://www.leapfroggroup.org/survey-materials/town-hall-calls
  - Some questions may be answered live – please pay close attention.

Following the presentation we will have a live Q&A session. Please use the Raise Hand icon at the bottom of your screen:

- Once the icon has been selected you will be placed in the que. When it is your turn to ask your question, you will receive a prompt from the host asking you to unmute yourself.
Introductions

Jill Dykstra-Nykanen, RN, MSN, CPHQ
Assistant Vice President Orlando Health
Chief Quality Officer, Orlando Health Arnold Palmer Hospital for Children

Divvy Upadhyay, MD, MPH
Program Leader – Diagnostic Safety
Geisinger

Jean-Luc Tilly, MPA, PMP
Program Manager
The Leapfrog Group

Mark Graber, MD, FACP
Founder and President Emeritus Society to Improve Diagnosis in Medicine
Leapfrog’s New National Initiative for Hospitals

A national initiative to publicly report and recognize hospitals for preventing patient harm due to diagnostic errors.

Progress:

• Published Recommended Practices Report describing 29 options for hospitals looking to reduce diagnostic errors

• Measured implementation progress in pilot survey of 95 hospitals across the country

This fall:

• Introducing new process and measures for inclusion in the 2024 Leapfrog Hospital Survey – not scored or publicly reported
Leapfrog
Webinar #3: Case Study in Improving the Safety and Quality of Diagnosis in Hospitals

Presented by
Jill Dykstra-Nykanen, RN, MSN, CPHQ
Assistant Vice President Orlando Health
Chief Quality Officer, Orlando Health Arnold Palmer
Hospital for Children
To improve the health and quality of life of the individuals and communities we serve.
The Orlando Health Way

- Embrace Quality & Safety
- Earn Physician Loyalty
- Be Your Best Place To Work
- Drive Growth & Innovation
- Strengthen Economics
- Serve Our Customers Well
At-A-Glance

- 29 Hospitals and ERs
  - 15 Hospitals
  - 9 Free-Standing ERs
  - 4 Hospitals
  - 4 Free-Standing ERs

- 4,750+ Physicians

- 100+ Medical Specialties

- 100+ Primary Care Practices

- 9 Specialty Institutes

- 27,000+ Team Members
  - Plus 1,200 Employed Physicians

- 3,850+ Bed System

- 155,000+ Inpatient Visits

- 3.9 Million+ Outpatient Visits
  - Including ER

- $9.2 Billion of Assets Under Management

- $782 Million+ In Total Value to the Local Communities (FY21)
Awards and Recognitions

Orlando Health Orlando Regional Medical Center (ORMC)
Orlando Health Dr. P. Phillips Hospital | Orlando Health South Seminole Hospital

Orlando Health Arnold Palmer Hospital for Children

Orlando Health Arnold Palmer Hospital for Women and Babies

Boynton Health

Orlando Health South Lake Hospital

Orlando Health South Lake Hospital

ORMC

Orlando Health

STS National Database

Accredited by Commission on Cancer® National Accreditation Program for Rectal Cancer

QCP QOPI Certification Program

THE COMMITTEE ON TRAUMA

FORBES 2022
America's Best-in-State Employers

2022 Orlando Business Journal's
Diversity in Business

2022 Orlando Health

2023 Becker's Healthcare
100 Hospitals with Great Heart Programs

2023 Becker's Healthcare
60 Top Oncology Hospitals

2023 Becker's Healthcare
2023 Orlando Sentinel

2023 Becker's Healthcare
Modern Healthcare
Best Places to Work 2023
Orlando Health Arnold Palmer Hospital for Children

- **Orlando Health Arnold Palmer Hospital** is a 156-bed free standing Pediatric facility
  - Region's only **Pediatric Level One Trauma Center** and the first American College of Surgeons' **Level One Children's Surgery Center**
  - Approximately 60,000 ED Visit annually
  - Approximately 1,300 Trauma admissions annually
  - Approximately 6,200 OR procedures annually
  - Connected via a bridge to OHWPH and their 149-bed, Level IV NICU
Recognizing Excellence in Diagnosis
Not under consideration
No discussions about implementing this practice

Exploring and Preparing
Discussions have started and additional staff being recruited

Planning and Resourcing
Implementation strategy formed; resources in place

Implementing and Operationalizing
Recent implementation of some or all the elements of this practice in one or more units

Fulling Implemented and Evaluating Impact
House wide implementation of all elements
Practice 1.4B – Measure and monitor diagnostic safety outcomes

Senior administrative leaders put processes and structures in place to identify, track, and analyze diagnostic errors, including errors that result in harm or death, with a focus on high-risk areas of the hospital (e.g., EDs, labor and delivery units, critical care units), and regularly communicate performance and progress on improvement initiatives with their board of directors.
Resources and strategies for implementation

Electronic Trigger Tools
- Measurement
- Monitoring
- Outcomes

Safe and Easy to use reporting
- Team Members and Patients
- Psychological Safety is key!

Ensure data from various sources are used to identify diagnosis related harm
- Case reviews
- RCA, M&M conferences, PIPS reporting

Psychological Safety is key!
Practice 1.2C – Target training and education to nurses, pharmacists, and allied health professionals

- Targeted training specific to the diagnostic process
- Targeted training to nurses, pharmacists, and allied health professionals through interprofessional patient rounds
Education

- National Collaborative Learning Session “Watch Parties”
- Roaming clinics to review bundle elements and diagnostic testing process
- Annual presentation to new Residents/Fellows
- Peer-to-Peer collaboration
- Tools/Pathways
- Sepsis-focused webinars
- Monthly compliance and outcomes results distributed to all units for targeted QI support and retraining
Practice 1.2D – Make it easy for hospital staff to report diagnostic errors and concerns

The hospital has a formal process in place for staff to report diagnostic errors and concerns (e.g., breakdowns in communication, breakdowns in the diagnostic process). The process encourages psychological safety and staff adoption (the process is safe and easy to use) and should include all the following:

1. Staff training on how and when to report diagnostic errors and concerns.
2. A formal protocol for investigating and responding to staff-reported diagnostic errors, concerns, or questions.
3. A formal protocol for notifying clinicians involved in the patient’s care.
4. A formal protocol for non-punitively including involved clinicians in investigations.
5. An emphasis on transparency.
6. A formal protocol for soliciting feedback from hospital staff on the psychological safety and usability of the process.
Strategies to implement

Resources

- Easy to use system to facilitate timely reporting
- Senior administrative leader review; retraining where indicated
- Risk reporting + CQO Champion = SUCCESS!
- Training for Medical Residents and Fellows
Thank you!

Jill Dykstra-Nykanen, RN, MSN, CPHQ AVP, OH & CQO, OHAPPH

Jill.Dykstra-Nykanen@orlandohealth.com
Implementing Diagnostic Safety

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Geisinger
Twitter: @Divvykant
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Acknowledgements
• Takes a village – always.

Predominantly rural
1 Million + patients
Integrated
100+ years old
Who are we? What do we do?

Slido.com; #1739541
Risk Manager? Patient Safety officer/liaison? Patient advocate, Quality team member, CMO, C-suite professional, patient, clinician, nurse, payor, insurance professional?

What are diagnostic errors?
CASE #1

• A healthy 12-year-old boy, Rory, cut his arm during a basketball game in school (Day 1).

• The next day (Day 2), he woke up with symptoms of vomiting and leg pain. Visited pediatrician - mottling. Sent to ED for GI bug/dehydration.
<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Reference Range</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White Blood Cells</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/29/2012 20:00 CBC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Blood Cells (WBC)</td>
<td>14.7 x10^9/L</td>
<td>4.0-11.0 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>Nucleated RBCs</td>
<td>0.0x10^9/L</td>
<td>0.0-1.0x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>Red Blood Cells (RBC)</td>
<td>4.94 x10^12/L</td>
<td>4.0-5.5 x10^12/L</td>
<td>Final</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>14.3 g/dL</td>
<td>12.5-16.0 g/dL</td>
<td>Final</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>42.4%</td>
<td>37.0-47.0%</td>
<td>Final</td>
</tr>
<tr>
<td>MCV</td>
<td>85.7 fL</td>
<td>70-95 fL</td>
<td>Final</td>
</tr>
<tr>
<td>MCH</td>
<td>28.9 pg</td>
<td>26-32 pg</td>
<td>Final</td>
</tr>
<tr>
<td>RDW</td>
<td>33.7 g/dL</td>
<td>25-35 g/dL</td>
<td>Final</td>
</tr>
<tr>
<td>Platelet Count</td>
<td>117 x10^9/L</td>
<td>150-400 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>MPV</td>
<td>9.03 fL</td>
<td>0.0-11.0 fL</td>
<td>Final</td>
</tr>
<tr>
<td><strong>Differential Count</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/28/2012 20:90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segs</td>
<td>39%</td>
<td>33-63%</td>
<td>Final</td>
</tr>
<tr>
<td>Bands</td>
<td>53%</td>
<td>5-15%</td>
<td>Final</td>
</tr>
<tr>
<td>Lymphocytes</td>
<td>3%</td>
<td>20-40%</td>
<td>Final</td>
</tr>
<tr>
<td>Monocytes</td>
<td>5%</td>
<td>3-12%</td>
<td>Final</td>
</tr>
<tr>
<td>Absolute Neutrophils</td>
<td>13.5 x10^9/L</td>
<td>1.5-8.0 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>Absolute Segs</td>
<td>5.7 x10^9/L</td>
<td>1.3-6.6 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>Absolute Bands</td>
<td>7.8 x10^9/L</td>
<td>0.2-1.7 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>Absolute Lymphs</td>
<td>0.4 x10^9/L</td>
<td>0.8-4.2 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td>Absolute Monocytes</td>
<td>0.7 x10^9/L</td>
<td>0.1-1.1 x10^9/L</td>
<td>Final</td>
</tr>
<tr>
<td><strong>Basic Metabolism</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/29/2012 20:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>131 mEq/L</td>
<td>134-146 mEq/L</td>
<td>Final</td>
</tr>
<tr>
<td>Potassium</td>
<td>3.9 mEq/L</td>
<td>3.6-5.2 mEq/L</td>
<td>Final</td>
</tr>
<tr>
<td>Chloride</td>
<td>96 mEq/L</td>
<td>98-108 mEq/L</td>
<td>Final</td>
</tr>
<tr>
<td>CO2</td>
<td>24 mEq/L</td>
<td>22-31 mEq/L</td>
<td>Final</td>
</tr>
<tr>
<td>Urea Nitrogen</td>
<td>13 mg/dL</td>
<td>10-26 mg/dL</td>
<td>Final</td>
</tr>
<tr>
<td>Creatinine</td>
<td>0.7 mg/dL</td>
<td>0.7-1.3 mg/dL</td>
<td>Final</td>
</tr>
<tr>
<td>Glucose, Random</td>
<td>118 mg/dL</td>
<td>70-100 mg/dL</td>
<td>Final</td>
</tr>
<tr>
<td>Calcium</td>
<td>6.6 mg/dL</td>
<td>8.3-10.3 mg/dL</td>
<td>Final</td>
</tr>
<tr>
<td>GFR Estimate (MDRD)</td>
<td>≥ 60 mL/min/1.73 m2</td>
<td>Final</td>
<td></td>
</tr>
</tbody>
</table>
• Rory continued to worsen and was again taken to the ED again (Day 3), after which he was admitted to the ICU.

• Diagnosed with streptococcal sepsis and multi-organ failure the following day (Day 4).
Where were the opportunities missed?

- Patient – provider encounter (elicitation of history, inadequate physical exam, or the actual clinical assessment – joining the dots to make the diagnosis)
- Diagnostic test interpretation or the testing process (diagnosis or interpretation by a pathologist or radiologist + how specimens or images are processed)
- Follow-up and tracking issues (delayed or missed follow-up of abnormal lab or radiology findings)
- Issues attributable to patient non-compliance or other patient factors
- Issues attributable to missed or dropped referrals
Case # 2

• 47-year-old woman, presented with persistent cough at an ED in October 2006. Her physician ordered a chest X-ray to rule out pneumonia. Physician determined that it was normal, and he diagnosed the patient with an upper respiratory infection.

• Barely a year later, the patient returned to the same hospital after her symptoms worsened. CT scan revealed signs of advanced stages of lung cancer. Within seven months, the cancer spread- ultimately led to the patient’s death in August 2008.

• 2006 X-ray clearly identified a 1.5 cm nodule in the upper right lung of the patient – which was missed.
Family members awarded $16.7 million after radiologist missed evidence of lung cancer

October 1, 2014

Related Articles

Family members awarded $16.7 million after radiologist missed evidence of lung cancer

Integrating Reproductive History Could Help Postmenopausal Women's

Lung Cancer Misdiagnosis Lawsuits
The case settled for $1 million. 2016, Illinois: $2,500,000 Settlement. A 79-year-old woman goes to the ER after a fall while at church. She is admitted...
Where were the opportunities missed?

- Patient – provider encounter (elicitation of history, inadequate physical exam, or the actual clinical assessment – joining the dots to make the diagnosis)
- Diagnostic test interpretation or the testing process (diagnosis or interpretation by a pathologist or radiologist + how specimens or images are processed)
- Follow-up and tracking issues (delayed or missed follow-up of abnormal lab or radiology findings)
- Issues attributable to patient non-compliance or other patient factors
- Issues attributable to missed or dropped referrals
On Sept 25, 20xx, late evening the 41-year-old male patient presents to ED with:
- Temperature of 100.1°F
- Dizziness
- Nausea
- Abdominal pain
- Sharp headache
- Decreased urination

3.5 hours into the patient’s visit at the ED, temperature spiked to 103 F, which later dropped to 101.2°F.

Patient rated his “severe headache” at 8 on a scale of 1 to 10

Nurse recorded patient’s recent travel to Africa
CASE#3

• Investigations: CT scans of “head and abdomen” ordered during the ED visit showed no evidence of sinusitis or other conditions such as stroke or appendicitis

• Discharge diagnosis “included sinusitis”

• Patient was prescribed antibiotics, told to take Tylenol, and discharged after 4 hours in the ED.

• Two days later, the patient worsened and returned to the same ED and was subsequently admitted to the hospital.
When a misdiagnosis led to full page apologies in newspapers and a testimony in Congress.

- “The fact that Mr. Duncan had traveled to Africa was not communicated effectively among the care team, though it was in his medical chart,” - Texas Presbyterian Health System CEO Berdan

- “On that visit to the Emergency Department, we did not correctly diagnose his symptoms as those of Ebola. For this we are deeply sorry.”
Where were the opportunities missed?

• Patient – provider encounter (elicitation of history, inadequate physical exam, or the actual clinical assessment – joining the dots to make the diagnosis)

• Diagnostic test interpretation or the testing process (diagnosis or interpretation by a pathologist or radiologist + how specimens or images are processed)

• Follow-up and tracking issues (delayed or missed follow-up of abnormal lab or radiology findings)

• Issues attributable to patient non-compliance or other patient factors

• Issues attributable to missed or dropped referrals
So why these cases? “The Dx Safety Lens”
Safer Dx Framework: Five Dimensions

Diagram: Diagnostic Process Dimensions
- Patient-provider encounter & initial diagnostic assessment
- Diagnostic test performance & interpretation
- Follow-up and tracking of diagnostic information
- Subspecialty consultation/referral issues

Divvy K Upadhyay MD MPH for Leapfrog Dx Excellence National Town Hall 11-28-23

Singh and Sittig, BMJ Qual Saf 2015
So these 3 cases take place at your organization. You are the CEO/CMO/CQO – what do you do? (Coincidentally all took place in the ED)

- Summon your ED chief/team and ask them to explain how they messed up
- Ask Risk management to handle the case as they routinely handle all incident reports i.e. send for PEER REVIEW, check boxes for TJC + CMS + DOH
- Quick safety huddle, reach out to family – empathize and establish communication; + make sure clinician(s)/team involved have the resources/support they need
- Task a multi-disciplinary group to review/analyze the case; provide feedback to the clinician(s)/team, create learning opportunities and identify quality improvement tasks. Disseminate lessons. Close the loop with hospital leadership/Board
2015 IOM Report on “Improving Diagnosis in HealthCare” Recommendations

• “few health care organizations have processes in place to identify diagnostic errors and near misses in clinical practice...but collecting this information, learning from these experiences, and implementing changes are critical for achieving progress”....

• “health care organizations should promote a non-punitive culture that values feedback on diagnostic performance...”
Geisinger Committee to Improve Clinical Diagnosis (CICD)

- Identify clinical champions/leaders
- Adopt working definition of diagnostic error
- Prioritize areas of opportunity
- Define program goals

Program Development

Diagnostic Error Workgroup (2014)

Committee to Improve Clinical Diagnosis (2017)

Initial Efforts to Identify and Categorize Errors

Proposed Formal Program with Charter & Reporting Structure

C-Suite Support + multi-stakeholder group

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Geisinger CICD – Creating Learning Opportunities

- Risk Management Data
- Providers (Hotline/TT/EHR Staff message)
- Patient Concerns
- EHR-based Triggers

CICD Review

Department & Quality Directors

Tool Kit

Feedback

Learning

Department Review/Presentation (e.g. M&M, clinical conference)

Individual Provider(s)

Action Plan (if needed)

Identification of System Issues

Close the Loop Feedback to CICD

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Sharing Diagnostic Opportunities with the Committee to Improve Clinical Diagnosis

- Call **Pt Safety Hotline** leave voicemail.

- Send **Staff Message** via EMR to POOL: “Diagnostic Opportunities”

- Page the **group**: “Diagnostic Opportunities”
DIAGNOSTIC PROCESS BREAKDOWNS - EXAMPLE

Patterns, Trends?

Cancer?

Referrals

Follow-up and Tracking (Test result) 21%

Diagnostic Test Interpretation and Performance (DMI) 20.15%

Patient-related

Patient-Provider Encounter (History, Physical Exam, Assessment) 47%

Diagnostic Process Dimensions

Patient-provider encounter & initial diagnostic assessment

Diagnostic test performance & interpretation

Follow-up and tracking of diagnostic information

Subspeciality consultation/referral issues
## Taxonomy

### Dimensions (select all that apply)

1) **Patient Related**
   - Delay in seeking care
   - Lack of adherence to appointments
   - Other, please specify:

2) **Patient-Provider Encounter**
   - Problems with history
   - Problems with physical exam
   - Problems ordering diagnostic tests for further work up
   - Failure to review previous documentation
   - Problems with data integration and interpretation
   - Other, please specify:

3) **Diagnostic Tests**
   - Ordered test not performed at all
   - Ordered tests not performed correctly
   - Performed tests not interpreted correctly
   - Misidentification
   - Other, please specify:
| 4) Follow-Up & Tracking | - Problems with timely follow-up of abnormal diagnostic test results
- Problems with scheduling of appropriate and/or timely follow-up visits
- Problems with diagnostic specialties returning test results to clinicians
- Problems with clinicians reviewing test results
- Problems with clinicians documenting action or response to test results
- Problems with notifying patients of test results
- Problems with monitoring patients through follow-up
- Other, please specify:

| 5) Referrals | - Problem initiating referral
- Lack of appropriate actions on requested consultation
- Communication breakdown from consultant to referring provider
- Other, please specify:

Reprinted with permission from Singh H, Khanna A, Spitzmueller C, Meyer AND. Recommendations for using the Revised Safer Dx Instrument to help measure and improve diagnostic safety. Diagnosis 2019;6(4):315-23. [https://doi.org](https://doi.org)
Original Investigation | Health Care Reform

November 9, 2009

Diagnostic Error in Medicine
Analysis of 583 Physician-Reported Errors

Gordon D. Schiff, MD; Omar Hasan, MD; Seijeoung Kim, RN, PhD; et al


<table>
<thead>
<tr>
<th>Where in diagnostic process</th>
<th>What went wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Access/Presentation</td>
<td>A. Failure/delay in presentation</td>
</tr>
<tr>
<td></td>
<td>B. Failure/deny care access</td>
</tr>
<tr>
<td>2. History</td>
<td>A. Failure/delay in eliciting critical piece of history data</td>
</tr>
<tr>
<td></td>
<td>B. Inaccurate/interpreted</td>
</tr>
<tr>
<td>3. Physical Exam</td>
<td>A. Failure/delay in performing ordered test(s)</td>
</tr>
<tr>
<td></td>
<td>B. Error in test sequencing</td>
</tr>
<tr>
<td>4. Tests (Lab/Radiology)</td>
<td>A. Failure/delay in mislabeling (eg, wrong patient/test)</td>
</tr>
<tr>
<td></td>
<td>B. Technical errors/poor processing of specimen/test</td>
</tr>
<tr>
<td></td>
<td>C. Error in lab/radiology reading of test</td>
</tr>
<tr>
<td>5. Assessment</td>
<td>A. Hypothesis generation</td>
</tr>
<tr>
<td></td>
<td>B. Suboptimal weighting/prioritizing</td>
</tr>
<tr>
<td>6. Referral/Consultation</td>
<td>A. Failure/delay in referring to specialist</td>
</tr>
<tr>
<td></td>
<td>B. Failure/delay in scheduling ordered referral</td>
</tr>
<tr>
<td>7. Follow-up</td>
<td>A. Failure to refer to specialist, physician, or primary care</td>
</tr>
<tr>
<td></td>
<td>B. Failure in timely follow-up/rechecking of patient</td>
</tr>
</tbody>
</table>
An Action Plan for Developing LEDE Organizations
LEDE = Learning & Exploration of Diagnostic Excellence


Figure 1. Learning and Feedback System for LEDE Organizations

Developing the Safer Dx Checklist of Ten Safety Recommendations for Health Care Organizations to Address Diagnostic Errors
Handeep Singh, MD, MPH; Umair Mawlaq, MBBS, MS; Abigail Marinos, MPH; Umber Shahid, DvPh; Joellen Hucker, MPH; Patricia McGaffigan, RN, MS, CPPS; Divvy K. Upadhyay, MD, MPH

The Joint Commission Journal on Quality and Patient Safety 2022; 000:1–10

Divvy K Upadhyay MD MPH for Leapfrog Dx Excellence National Town Hall 11-28-23
Providing Feedback on Diagnostic Performance

1) Schedule the Debriefing in a Timely Manner
- Ensure that the debriefing occurs soon after the event to promote a learning environment rather than a punitive one.

2) Plan and Prepare for the Debriefing
- Encourage the recipients to review the case before the debriefing.
- Consider including more than one person (i.e., core team) as recipients.

3) Set a Flexible Time Frame
- Schedule 10-20 minutes for debriefing.
- Allow for more time with a larger group.

4) Set the Stage for a Learning Environment
- Take a non-judgmental stance.
- Explain the context, including goals and objectives.
- Be aware of non-verbal cues.

5) Seek Input and Allow for Explanation
- Discuss specific actions or decisions.
- Do not infer motives.
- Explore unclear issues with curiosity.
- Include what went well.

6) Have Recipient(s) Identify Learning Objectives
- Emphasize learning for the individuals, the core team, the department, and the system.

7) End with Appreciation
- For their input.
- For their time.
- For their willingness to help improve clinical decision making at the facility/system.

Variety of work on diagnostic safety possible - Feedback to frontline clinicians To AI-enabled disease management and population health programs

A Program to Provide Clinicians with Feedback on Their Diagnostic Performance in a Learning Health System
Ashley N.D. Meyer, PhD * • Divvy K. Upadhyay, MD, MPH * • Charlotte A. Collins, PhD • Michael H. Fitzpatrick, MD • Maria Kobybinski, MD • Amit B. Bansal, MD, MBA • Dennis Torretti, MD • Hardeep Singh, MD, MPH  • Show less  • Show footnotes

Open Access • Published: September 23, 2020 • DOI: https://doi.org/10.1016/j.jcjq.2020.08.014

Collaboration to Improve Colorectal Cancer Screening Using Machine Learning
Daniel Underberger, MD, Keith Boll, DO, MS-HQSM, SFHM, Jeremy Orr, MD, MPH, Cory Siegrist, MBA, Sara Hunt
Vol. 3 No. 4 | April 2022
DOI: 10.1056/CAT.21.0170

Despite significant efforts and evidence to suggest the benefits of being screened for colorectal cancer (CRC), many eligible patients are not being screened for it. To help Geisinger Health System and Medial EarlySign identified patients overdue for CRC screening, they collected data from seven hospitals in Pennsylvania on patients who were not screened for CRC in the prior year. To understand why these patients were not screened, they conducted surveys to collect feedback from patients and clinicians. They found that patients were not screened because they did not know they were eligible, were not offered screening, or did not have a recommendation from their primary care physician.

Managing patients with pulmonary nodules: Redesigning a system to achieve the three “rights”
Eric D. Newman, MD, Paul F. Simonelli, MD, PhD, Matthew A. Facktor, MD, J. Edward Hartle, MD
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DOI: 10.1056/CAT.20.0013

The traditional specialty consultation process is often associated with access issues, test overutilization, provider inefficiencies, care failure, and patient frustration. We designed a new process of care that addresses these issues systematically. To test this model of care, we implemented it in a community practice, a teaching practice, and a large academic practice, and we compared the results to the traditional model. We found that the new model resulted in reduced access problems, test overutilization, and improved patient satisfaction.
No shortage of ideas – then what do we lack...rather, what do we need?

• A shared mental model – understanding this subject
• True “patient safety lens” – medico-legal vs. learning health system
• Dedicated resources – to address diagnostic safety.

• The right thing to do → “You cannot not do it”
• But is it an organizational priority?
• Thanks to this work from the Leapfrog Group ... it could be!
• Remember – this is not about the survey – use this as a nudge!
CEO Commitment to Diagnostic Excellence

1) In the past 36 months, has your hospital’s CEO made a formal commitment (verbally or in writing) to all staff to make reducing harm to patients from errors in diagnosis an organizational priority, and communicated at least one specific action the hospital will take to further the commitment?

   If “no” to question #1, skip question #2 and continue to the next question.

   Yes
   No

   □ Allocated financial resources
   □ Allocated staff time
   □ Designated a senior leader or clinician champion
   □ Formed a committee
   □ Implemented a performance measure
   □ Implemented a quality improvement project
   □ Other

2) What specific actions were communicated by your hospital’s CEO as part of their formal commitment to reducing harm to patients from errors in diagnosis?

   Check all that apply.

Patient Engagement

3) Has your hospital chartered a Patient and Family Advisory Council (PFAC) that meets regularly?

   If “no” to question #3, skip question #4 and continue to the next question.

   Yes
   No
### Convening a Multidisciplinary Team Focused on Diagnostic Excellence

7) In the past 36 months, has your hospital convened a multidisciplinary team that meets all of the following requirements?
   - Specifically focused on reducing harm to patients from errors in diagnosis.
   - Sponsored by either the CEO or CMO.
   - Includes, at a minimum, representatives from nursing, pharmacy, laboratory medicine, radiology, pathology, hospital medicine or inpatient care specialists, emergency medicine, and quality or risk management.
   - Meets at least quarterly.
   - Reports to senior leaders quarterly, and
   - Reports to the Board annually.

   *If "no" to question #7, skip questions #8-15, and continue to the next question.*

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<tr>
<th>Yes</th>
<th>No</th>
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8) Has the multidisciplinary team reviewed any clinical or administrative data, patient experience or patient reported data, or incident reports to identify or track errors in diagnosis?

*If "no" to question #8, skip question #9 and continue to the next question.*

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<th>Yes</th>
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# Closing the Loop for Cancer Diagnosis

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<tbody>
<tr>
<td>19) 12-month reporting period used:</td>
<td>01/01/2023 – 12/31/2023 07/01/2023 – 06/30/2024</td>
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<tr>
<td>20) Do pathologists at your hospital routinely document the date in which they communicate pathology reports indicating a diagnosis of colon, lung, or breast cancer to a patient or a patient’s ordering physician?</td>
<td>Yes  No</td>
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<tr>
<td><em>If “no” to question #20, skip questions #21-24 and continue to the Affirmation of Accuracy.</em></td>
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| 21) Did your hospital calculate the proportion of colon, lung, or breast cancer diagnoses in which the patient or patient’s ordering physician was notified within five business days of the report being signed by the pathologist, and do you choose to report those data to this Survey? | Yes  No  
Yes, but fewer than 30 cases met the inclusion criteria for the denominator |
| 22) Total number of patients (18 years or older) with a diagnosis of colon, lung, or breast cancer. |   |
| 23) Total number of patients indicated in question #22 with a documented communication between the pathologist and the patient or patient’s ordering physician within five business days of the report being signed by the pathologist. |   |
Thank you

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Q & A

Participants will be able to ask questions during the presentation. Please select the Q&A icon at the bottom of your screen:

- Once the icon has been selected a Q&A box will appear for you to type your questions.
- All participants will be able to view the questions and answers during the duration of the webinar.
  - You will be receiving responses in real time from a member of our team.
  - We will include a transcript of the Q&A on the Leapfrog website here: https://www.leapfroggroup.org/survey-materials/town-hall-calls
  - Some questions may be answered live – please pay close attention.

Following the presentation we will have a live Q&A session. Please use the Raise Hand icon at the bottom of your screen:

- Once the icon has been selected you will be placed in the que. When it is your turn to ask your question, you will receive a prompt from the host asking you to unmute yourself.
Proposed Changes to the 2024 Leapfrog Hospital Survey

• Now available on the Leapfrog website: https://www.leapfroggroup.org/survey-materials/proposed-changes-2024-leapfrog-hospital-survey

• Open for Comment until Midnight ET on December 15, 2023

• Leapfrog is proposing to assess hospital implementation of five evidence-based practices and one process measure aimed at reducing harm to patients from errors in diagnosis, including delayed, wrong, and missed diagnoses, and diagnoses not communicated to the patient:
  • The five practices will focus on CEO commitment, patient engagement, risk assessment and mitigation, convening a multidisciplinary team, and staff training and education.
  • The process measure is focused on closed loop communication of cancer diagnoses to patients or their ordering physician.
Thank you for joining us today.