



THE LEAPFROG GROUP
for **Patient Safety**
Rewarding **Higher Standards**

Founded By The Business Roundtable
With Support From NHCPI

INFORMATION FOR PURCHASERS

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I. Executive Summary

The Leapfrog Group: Giant Leaps in Value-based Purchasing

Leapfrog's goal is to mobilize employer purchasing power to trigger breakthrough in the safety and the overall value of healthcare to American consumers. Leapfrog is anchored in supporting consumer access to safer, higher value health care services via informed choices. It is a voluntary program aimed at mobilizing large purchasers to alert America's health care industry (both directly and via health plans) that big leaps in patient safety and customer value will be better recognized and rewarded with preferential use and other market reinforcements.

The Leapfrog Group also states as a fundamental principle its desire to work in partnership with health care providers. The Group has been working diligently with providers to date, and will continue to involve them proactively. In this document, we present Leapfrog's mission, strategies, and purchasing principles. We also present Leapfrog's safety standards, which we will continue to refine pending evidence-based input from additional purchasers, researchers and health care providers.

A. Leapfrog's Mission

Leapfrog's mission is to trigger giant leaps forward in patient safety, as well as the overall quality, customer service, and affordability of health care by:

1. Harnessing the power of purchasers of health care through joint adoption of purchasing principles;
2. Building public awareness of the need for and availability of a small number of highly compelling and easily understood advances in patient safety; and,
3. Rewarding those health care providers who adopt advances in patient safety.

B. The Case for Leapfrog

1. Current levels of quality, customer service and cost in the health industry vary tremendously; and average care has been characterized by the Institute of Medicine as suffering from "widespread and serious flaws."
2. The performance shortfall reflects a history of failure on the part of purchasers to provide adequate incentives to employees/beneficiaries and reward to providers who pursue superior value. It also reflects failure by the health industry to adopt modern methods of quality management.
3. The consequences of the shortfall are needless morbidity, mortality and patient dissatisfaction with health care.
4. Among the most disturbing consequences is the lack of basic patient safety, well documented in multiple scientific publications. Harvard and RAND researchers have documented *avoidable harm* to 3% of American inpatients and 11% of chronically ill outpatients.
5. The gross magnitude of the performance shortfall and its consequences are underappreciated by health care buyers, sellers, and the public.

6. The most expedient route to rapid improvement originates with changing the behavior of American health care purchasers and consumers.
7. The linchpin of necessary purchaser behavior change is rigorous identification of and reward for superior health care value and four critical ingredients: (1) reliable use of proven methods to assure basic patient safety; (2) improved clinical information systems; (3) routine use of modern quality improvement methods in managing and delivering clinical services; and, (4) routine and active participation of consumers in health care decision-making.
8. Mainstream public awareness of the health industry's progress in eliminating salient safety threats will increase both the likelihood and effect of purchaser behavior change.

C. Leapfrog's Strategy

1. Develop, execute and disseminate a set of common Purchasing Principles designed to promote and reward superior health care value.
2. Allow subscription to Purchasing Principles to be voluntary, documented by completion of the attached checklist, and propagated by social norms among purchasers analogous to subscription to ISO 9000 manufacturing norms.
3. Allow the execution of Purchasing Principles to be flexible to accommodate member differences in geographic, demographic, organizational and market factors.
4. Focus, in partnership with the health industry, on rapid, industry-wide adoption of discrete strategies likely to yield the largest gains in patient safety.
5. Transform these discrete strategies and the risks of not pursuing them, into simple, compelling concepts that will "stick" in the awareness of all stakeholders (e.g., hospitals without computerized physician order entry systems are unnecessarily risky).
6. Use the public stature and contacts of the Business Roundtable to catalyze wide adoption of the Purchasing Principles by purchasers, and establish the concepts in the common language of the American public.
7. Rely on the power of the American public to drive health care improvement by anchoring our efforts in strengthening consumers' ability to discern and gain access to safer and higher value health care.

Prepared by Arnold Milstein, M.D., M.P.H. and Robert Galvin, M.D.

II. Purchasing Principles

Leapfrog purchasers will implement the following principles, either directly and/or through their health plans.

A. Inform and educate employees. Purchasers will educate employees about the importance of comparing the performance of healthcare providers and assist them in understanding how to use such measures to make informed health care choices.

Rationale: Without a modification to the current contextual framework within which consumers currently process information about their healthcare providers, they are unlikely to use comparative performance data. Employees/consumers are central in making important improvements in the healthcare system. Their behavior can send powerful signals to the marketplace about the value patients place on better care.

B. Use comparative rating. Purchasers will aggregate available validated performance information on their major providers of health care into comparative value ratings for all of their employees, retirees and family members. Wherever available, the performance measurement will come from nationally recognized sources such as NCQA, JCAHO, states and medical societies, in addition to the data collected by and made available through The Leapfrog Group, to assure validity in performance comparisons.

Rationale: Without relevant information disseminated effectively to consumers, patients cannot make informed decisions about the facilities that may be better suited to treat them. Lack of transparency in the health care system occults the variations in quality that are inherent to it and fail to serve the needs of its primary customer: the patient.

C. Use substantial incentives. Purchasers will use two or more of the following methods to reward delivery systems with higher value ratings and will annually increase their intensity until they prove sufficient to motivate widespread and substantial annual performance improvement among their major providers.

1. *Patient Volume.* Support consumers' selection of higher value providers via one of the following methods.
 - Promotion, such as "blue ribbon" designation, selection/deselection of plans/providers and enrollment freezes;
 - Consumer economic incentives, such as Enthoven's model of price-conscious enrollee choice applied to providers or other methods of varying consumer out-of-pocket costs; and
 - Consumer decision support, such as easily accessible and understandable performance comparisons.

2. *Price.* Vary the prices paid to providers based on comparative value, such as value-based bonuses or rebates and/or incorporating risk-adjustment into the negotiation of cost targets or prices when feasible.
3. *Public Recognition.* Publicly recognize and disseminate information about superior performance.

Rationale: To motivate delivery systems to stretch for major breakthroughs in customer value, purchasers must build significantly more robust market rewards.

D. Focus on discrete forward leaps in patient safety. In implementing comparative rating and substantial incentives, purchasers will highlight a common set of discrete delivery system improvements likely to yield the largest safety gains ("safety leaps"). These will be earmarked for special visibility in purchasers' interaction with providers, insurers/ administrators, and consumers.

For example, purchasers will use common RFP questions to rate the implementation status of the safety leaps for their plans and providers and explicitly integrate such status information into every method used to reward superior value (patient volume, price and/or public recognition). With expert input, we identified three initial safety leaps, which have been transformed into the safety standards.

- *Computer Physician Order Entry:* Physician order entry in hospitals should be computerized. Adverse drug events are the leading cause of avoidable death and disability in American hospitals. As documented in research by Dr. David Bates at Brigham and Women's Hospital, computer physician order entry (CPOE) is a highly effective discrete remedy. In well-managed installations, its costs are likely to be offset substantially by savings from the avoided costs of treating complications.
- *Evidence-Based Hospital Referral:* Elective treatment should be guided by providers to hospitals and clinical teams with superior outcomes, when valid comparative outcome measurement systems exist. Where outcome comparisons do not exist, such guidance should be based on scientific evidence of volume-outcome relationships. For many treatments, the scientific literature documents significantly superior patient outcomes in hospitals with higher volumes or with teaching programs.

In California, for example, Adams Dudley, M.D., at the University of California at San Francisco, and others project that for 11 conditions, 602 deaths could be prevented annually through such evidence-based hospital referral.† In addition, if just 85% of California's infants with very low birth weight (less than 1500g) or major surgically-correctable anomalies -- who are also within 50 miles of a large regional neonatal intensive care unit -- were delivered there, approximately 700 additional deaths could be averted each year.‡ If the current California equilibrium reflects the nation, it implies a national opportunity to save many thousands of American lives annually.

- *ICU Physician Staffing:* Hospital ICU care should be managed by physicians certified (or eligible for certification) in critical care medicine who:
 - Are present during daytime hours;
 - Provide care exclusively in the ICU; and
 - At other times, can return ICU pages promptly and rely on a certified "effector" to implement telephonic orders.

Current scientific evidence on strengthened ICU physician-staffing models indicates that the risk of death could be reduced by more than 10%. To maximize initial safety gains and minimize unintended negative consequences on the healthcare system, initial efforts to implement these three safety leaps will focus on urban areas using metropolitan statistical area (MSA) boundaries.

Rationale: Of all types of quality improvement, focus on patient safety is likely to produce dramatic improvements in patient outcomes and garner the widest support from the public, the media, regulators, accreditors, other purchasers, and the health industry.

E. Hold Health Plans Accountable for Leapfrog Implementation. In advancing these principles, purchasers who utilize health plans as their intermediaries may delegate responsibility to plans for applying the principles to their network providers. If so, purchasers would hold their health plans accountable via nationally standardized Leapfrog questions in health plan RFPs, heavily weighted scoring criteria, robust health plan performance incentives, and other methods of assuring health plan application of Leapfrog principles. Purchasers would intensify these incentives annually until their largest health plans fully meet their delegated responsibility for applying Principles A, B, C and D outlined above.

Rationale: Many purchasers utilize health plans as their intermediaries to healthcare delivery systems. The application of Leapfrog principles by health plans to their relationships with providers, for their whole book of business, will further leverage purchaser efforts.

F. Encourage the Support of Consultants and Brokers. In selecting benefits consultants and brokers, purchasers will create strong incentives for them to incorporate Leapfrog principles (1) in their advice to other purchaser clients and (2) in their standard tools for assessing health plans and delivery systems.

Rationale: The purchasing principles advocated and utilized by these advisors profoundly shape the market experience of insurers and delivery systems. As major customers of these advisors, purchasers can motivate them to advocate these principles on behalf of all of their clients.

III. Safety Standards

A. Selection of Initial Standards

The Leapfrog Group's initial safety standards were selected and defined by The Leapfrog Group in consultation with leading experts in patient safety, health care quality improvement, and health services research. The Group believes purchasers are more likely to produce significant improvements in the safety and overall value of health care for Americans if we focus on specific strategies. The Group is continuing to seek input from purchaser, researchers, and providers to refine the standards and to forge partnerships to achieve the Group's goals.

Leapfrog purchasers will advance the three initial methods to improve patient safety:

1. Computer physician order entry (CPOE);
2. Evidence-based hospital referral (EHR); and,
3. ICU physician staffing (IPS).

These methods are well suited to purchasing standards because:

1. There is reasonable scientific evidence that they would significantly reduce avoidable danger.
2. Their implementation by the health industry is feasible in the near term.
3. Consumers can readily appreciate their value.
4. Health plans, purchasers and consumers can easily ascertain their presence or absence in selecting among health care providers.

Our initial selection of these three safety standards does not imply lack of support for other important methods of improving or assuring patient safety. We intend to expand this list as we identify other purchaser opportunities to improve safety with these four features.

B. Purchaser Role in Supporting Safety Standards

Leapfrog purchasers specifically commit to (1) identify for their enrollees which geographically proximate providers publicly warrant on a Leapfrog-designated web site their fulfillment of (hospitals) or promotion of (physicians) each of these safety standards; (2) provide this information proactively in a compelling and understandable way to all enrollees; (3) include a clear statement of each safety standard's limitations; (4) assure that all enrollees in urban areas have access to providers who warrant they meet the standards; (5) utilize the substantial incentives detailed in Section II. C. to pursue the goal that by 12/31/04 more than half of urban hospitalizations of their enrollees occur in hospitals that offer such a warranty; (6) annually intensify their efforts until they achieve significant annual improvement in hospital fulfillment and physician promotion; and (7) work regionally with other purchasers in their largest enrollee locations to encourage the support of providers, plans and consultants/brokers.

C. Safety Standard Definitions and Pertinent Medical Literature

1. Computer Physician Order Entry (CPOE). Hospitals that fulfill this standard will: (1) require physicians to enter medication orders via computer linked to prescribing error prevention software; (2) demonstrate that their CPOE system can intercept at least 50% of common serious prescribing errors, utilizing test cases and a testing protocol specified by the Institute for Safe Medication Practices (ISMP); (3) require documented acknowledgment by the prescribing physician of the interception prior to any override; and, (4) post the test case interception rate on a Leapfrog-designated web site.

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2. **Evidence-based Hospital Referral (EHR).** Hospitals fulfilling this standard will meet the favorable hospital volume characteristics listed below. In geographical areas where scientifically rigorous, risk-adjusted hospital outcome comparisons are publicly reported, favorable risk-adjusted outcomes will replace the favorable volume characteristic(s).

Treatments	Favorable Hospital Volume Characteristic ¹
Coronary artery bypass	Volume ≥ 500/year
Coronary angioplasty	Volume ≥ 400/year
Abdominal aortic aneurysm repair	Volume ≥ 30/year
Carotid endarterectomy	Volume ≥ 100/year
Esophageal cancer surgery	Volume ≥ 7/year
Delivery with expected birthweight <1500 grams or gestational age < 32 weeks	Regional neonatal ICU ² with average daily census ≥15
Delivery with pre-natal diagnosis of major congenital anomalies. Diagnosis codes 741.XX, 742.0X, 742.2-742.9, 745.XX, 746.00-746.85, 747.1X-747.9, 748.0, 748.2-748.8X, 750.16, 750.3, 750.4, 750.6, 751.XX, 752.7, 753.1X, 753.3, 753.6, 756.4, 756.51, 756.55, 756.59, 756.6, 756.7X, 756.89, 756.9	Regional neonatal ICU ² with average daily census ≥15

¹Consumer information will also explain the benefits obtainable above lower volume threshold(s).

²Applies in states in which hospital licensing agency makes such a designation.

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The Leapfrog Group – Information for Purchasers

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3. ICU Physician Staffing (IPS). Hospitals fulfilling this standard will operate adult ICUs that are managed by a physician certified (or eligible for certification) in critical care medicine who: (1) is present during daytime hours and provides clinical care exclusively in the ICU; and, (2) at other times, returns more than 95% of ICU pages within five minutes (unless the paging system can designate low-urgency pages), and can rely on an FCCS certified “effector” (physician or physician extender) who is in the hospital and able to reach ICU patients within 5 minutes in more than 95% of cases. In geographical areas where scientifically rigorous, risk-adjusted ICU outcome comparisons are publicly reported, favorable risk-adjusted outcomes will replace the IPS Staffing standard.

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