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Development of a Consumer Communications Toolkit

Report and Findings from The Leapfrog Group's 2001 Focus Groups

Prepared by

FACCT

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Table of Contents

Executive Summary 3

Objectives and Methodology 7

Findings: Phase 1 Focus Groups 11

Findings: Phase 2 Focus Groups 27

Communications Implications 35

Appendices

- Phase 1 Focus Group Discussion Guide 38
- Phase 2 Focus Group Discussion Guide 42
- The Leapfrog Group's Communications Toolkit 44

Executive Summary

Introduction

From April 2001 through September 2001, FACCT and KRC Research & Consulting conducted 16 focus groups for The Leapfrog Group. The overall goal of the project, funded by The Robert Wood Johnson Foundation, was to create a series of rigorously-tested consumer messages to be used by Leapfrog members and others to raise consumer awareness about medical errors and to explain the importance of considering whether hospitals meet Leapfrog's safety standards (the "leaps") when selecting hospitals.

The Leapfrog Group hoped to gain a better understanding of what purchasers need to do to help their enrollees focus on patient safety and use hospital-specific information when choosing a hospital. To develop the most effective communications toolkit, it was vital to have a comprehensive understanding of the target populations' existing knowledge, attitudes and practices (KAP), *before* work began on the toolkit. As a result of the findings outlined in this summary, the Group developed a communications strategy, centered around a comprehensive enrollee communications tool kit that incorporates the messages developed and tested in the focus groups, to address consumers' concerns and needs.

Throughout the focus groups, participants expressed a desire for information about Leapfrog and its activities; an explanation and rationale for their employer's involvement; details on why the three leaps were chosen and why the focus is on hospitals and not doctors or routine health care; and information about what resources are/will be available for consumers.

Materials were tested in an iterative fashion with focus group participants. ***The final materials successfully communicated the magnitude of the patient safety/medical error problem, a sense that medical mistakes are preventable, and the need for consumers to be concerned and take action.*** After reviewing the communications materials, participants:

- Believed in the severity of the problem
- Better understood the focus on hospitals
- Believed leaps were appropriate areas for focus
- Did not feel doctors/medical professionals were being personally blamed for errors

The focus groups were conducted with employees and retirees of Leapfrog member companies in the Bay Area of California, Minneapolis, MN, and Knoxville and Chattanooga, TN. Six focus groups were conducted with hourly employees, four with salaried employees, and six with retirees. A mix of ages, gender, and job positions were represented in all groups. In addition, only those individuals who were "medically active" or were active health information seekers were eligible to participate.

Consumer Views on Effective Messages

Participants preferred the description "preventable mistakes." Adding the words "that can lead to death" helps call attention to the serious nature and consequences of the problem. To participants "preventable mistakes" was a better way to describe "medical errors" for several reasons: it stresses that these mistakes are preventable; *mistakes* is an informal way of saying *errors,* which helps the phrase feel less remote/clinical; and the omission of "medical" from the phrase stresses the errors and not the sources.

The term "medical errors" was correctly identified and understood by participants; however, "patient safety" was not. Medical errors were viewed as occurring frequently in the health care system, but only infrequently with life-threatening consequences. Patient safety was not usually associated with medical errors, but more with patient physical safety and well-being. Discussion about these terms prompted some participants to defend their doctors. There was a sense that lack of resources and not random human error caused mistakes.

General messages about medical error and patient safety were more believable than statistics-based messages. Out of six, short messages or "taglines" tested, the majority of participants found three of six taglines credible. They believed that medical errors are preventable and can kill people. However, taglines that used numeric portrayals of the problem were less believable—they impressed some, were unbelievable to some, and turned-off others. The following taglines were tested. The highest rated taglines are listed in bold:

- ***Medical errors in hospitals kill people. (2nd highest rating)***
- *Not all hospitals are equal--some can kill you.*
- ***Medical errors can be prevented. (Highest rating)***
- *Medical errors are the 5th leading cause of death in America, causing more deaths than vehicle accidents, breast cancer or AIDS.*
- *More than 11 people are killed every hour in America's hospitals--and these deaths are preventable.*
- ***Don't be a victim of medical error! Find out which hospitals in your community are the safest. (3rd highest rating)***

Among the leap-related messages tested, participants rated shorter, simpler and straightforward ones the highest. Group discussion about these messages revealed a number of interesting findings and useful suggestions for revising and clarifying the language for the communications toolkit. Participants had a variety of observations about the safety standard-specific messages:

<u>Evidence-based hospital referral (EHR) messages</u>

- Participants accepted the notion that hospital choice for surgery can have deadly outcomes and they enthusiastically supported the phrase "practice makes perfect." While participants accepted this idea, they did not necessarily believe that hospital experience or outcomes were more important to consider than the surgeon's credentials. Further, many assumed that doctors must already consider volume/successful outcomes when choosing a hospital for their patients.

Computer Physician Order Entry (CPOE) messages

- The CPOE leap struck a familiar chord in all groups. Multiple participants in each group reported knowledge of medication errors. They could relate to instances of bad handwriting or an incorrect prescription being written/filled out. Yet, most felt death due to medication error was a very low-probability scenario.

- Some participants questioned if CPOE could dramatically reduce medication errors since human error could still exist at the order input stage. Others felt that some doctors were averse to or unskilled at using computers and this could raise new areas for errors.

ICU physician staffing messages

- These messages received the highest believability ratings because of their simple, general nature as compared to messages about other leaps. Participants liked knowing the technical terms ("intensivists," or "critical care specialists") to describe these staffers and found this knowledge empowering.

- Yet, many participants questioned whether significant improvements in ICU care were attainable because they believed patients in ICUs were already sick. Participants liked the notion of specially trained ICU staff, but were unconvinced that such staff could significantly reduce death rates and ICU stays. They felt it was difficult to do more for ICU patients than be vigilant in monitoring them.

Consumer Insights for Putting the Messages to Use

Early discussions with participants revealed a strong reliance on doctors when making hospital decisions in non-emergency situations. Participants noted that they were not actively engaged in the decision, but that their doctor would suggest a particular hospital and typically made the final choice. They had an almost "blind faith" in the doctor's ability to make the right choice and were extremely reluctant to question or challenge the doctor.

After being presented with information that could help them choose a safer hospital, participants had strong opinions about the best sources for messages designed to motivate them to take action on the three leaps. ***Participants perceived the employer as a convenient and unbiased source of information about patient safety and which hospitals have put the three leaps in place.*** They were dismissive of recommendations to call their hospital/health plan for more information because they believed it would be difficult to get answers to their questions and because it raised concerns about a potential bias in receiving information from these sources. Consistent with participants' reliance on their doctors, messages that asked patients to *suggest* their doctor consider leap-related information fared better than messages that asked patients to *question or challenge* their doctor.

Participants reacted enthusiastically to the notion of having access to a hospital report card and other related information. In fact, many participants felt that access to such data was the only meaningful way for consumers to participate in the Leapfrog effort.

Participants desired clear and well-defined data. They operationalized this as: abbreviations needed to be spelled-out; full disclosure of the source, time and method of data collection; explanations of why the different data were important to consider; and explanation of how scoring categories were developed. ***Participants had no adverse reaction to the notion of giving hospitals partial credit provided that hospitals that had made no progress were identified as such.***

Participant preference was for all information and resources to be available through a single, centralized location. Participants assumed that hospital data and other Leapfrog details would be on The Leapfrog Group's Web site. They expect to get there via links on their employer's Web site/intranet. Participants would like access to a non-Web source as well.

Objectives and Methodology

This report is based on 16 focus groups conducted by FACCT and KRC Research & Consulting for The Leapfrog Group. The overall goal of the project, funded by The Robert Wood Johnson Foundation, was to create a series of rigorously tested consumer messages to be used by Leapfrog members and others to raise consumer awareness about medical errors and to explain the importance of considering whether hospitals meet Leapfrog's safety standards when selecting hospitals. The final product of this project is a communications toolkit incorporating the messages developed and tested in the focus groups. A copy of the final communications toolkit is in the Appendix.

The Leapfrog Group hoped to gain a better understanding of what purchasers need to do to help their enrollees focus on patient safety and use hospital-specific information when choosing a hospital. To develop the most effective communications toolkit, it was vital to have a comprehensive understanding of our target populations' existing knowledge, attitudes and practices (KAP), *before* work began on the toolkit. Accordingly, we organized the research to start with a preliminary and broad exploration of the consumer's mindset (Phase 1) before moving on to test more specific and focused messages (Phase 2). Given the goal of the project and the desired final product, we determined that focus groups were the most appropriate research method since they allowed for detailed consumer discussion about the topics and messages of interest.

In addition to exploring the target populations' KAPs in Phase 1, we tested the essential key message components in a very raw and unpolished form. Based on the findings from Phase 1, we then developed a complete draft toolkit for testing in Phase 2. We edited the toolkit extensively based on what we learned in Phase 2 to create the final communications toolkit. The project began in April 2001 and completed in September 2001.

Phase 1. Test messages for general use by Leapfrog partners

The key research objectives for Phase 1 fell into three areas critical to the development of a communications toolkit:

1. Awareness and understanding
   - Are consumers aware and do they understand the broader issues around medical error and patient safety, e.g., "All hospitals are not equal"?
   - Do people understand the three leaps? How receptive are they to information about the three leaps?

2. Specific messages and descriptions
   - Which messages are more effective at raising awareness of medical errors and patient safety?
   - Which messages are more effective at helping consumers understand the three leaps and their importance in selecting hospitals?
   - Is it more effective to communicate about safety, variability, or personal risk in broad terms, or in terms of the specific leaps?
   - Which messages about the three leaps would stimulate people to act?

3. Timing, channels, sources
   - When are consumers the most receptive or most in need of information?
   - Through what channels (e.g., e-mail, Web, mail, in-person) and through which messengers (e.g., employers, health plans, doctors, the media) do consumers want to receive information?

Phase 2. Develop communications toolkit for purchasers and other partners
Phase 2 focus groups centered around review of draft toolkit materials and sample, Web-based hospital report card prototypes. Key research objectives included:

1. Communications toolkit materials
   - Can consumers identify and understand the key messages included in the materials?
   - Do consumers find the messages in the materials believable?
   - Do consumers find the toolkit layout visually appealing and interesting?

2. Hospital report card prototypes
   - Do consumers understand the information included in the sample report cards?
   - What elements of the formats, if any, are confusing or hard to understand?
   - What are the preferred formats?
   - When and from whom would consumers like to gain access to such information?

For both phases of focus groups, KRC sent to randomly selected sets of potential participants an invitation letter by their HR/benefits departments[1]. We instructed potential focus groups participants to contact KRC Research for more information via a toll-free number if they were interested in participating. KRC then used a screener to qualify participants and provided qualified candidates with complete information about the focus group. As part of the screening process, we made every effort to recruit participants from a mix of gender, ages, departments and lifestages. In addition, only those who were "medically active" or were active health information seekers were eligible to participate.

[1] In one instance, the employer self-recruited a random set of participants.

The focus groups were organized as follows:

Phase 1: Six focus groups

Minneapolis (June 11-12, 2001)
Three groups:

- Carlson Companies hourly employees; mixed gender, ages and job positions
- Ceridian Corporation retirees; mixed gender; nearly all age 65
- 3M salaried employees; all male

Knoxville (June 13-14, 2001)
Three groups:

- City of Knoxville hourly employees; mixed gender, ages and job positions
- Knox County hourly employees; mixed gender, ages, and job positions
- Tennessee Valley Authority retirees; mixed gender; all under age 65

Phase 2: Ten focus groups

San Francisco (August 13-15, 2001)
Four groups:

- Chevron salaried employees; mixed ages, gender and job positions
- GE retirees; mixed gender, over age 65
- Union Bank of California retirees; mixed gender and ages
- Wells Fargo hourly employees; mixed ages, gender and job positions
- Note: The Wells Fargo and Chevron groups tended to have far more female participants than male.

Minneapolis (August 16-17, 2001)
Three groups:

- Carlson Companies hourly employees
- Ceridian Corporation retirees
- 3M salaried employees
- Note: Across all groups, a mix of ages, gender and job positions were represented.

Chattanooga (August 20-21, 2001)
Three groups:

- Maytag hourly employees
- Oak Ridge Associated Universities retirees
- Olan Mills salaried employees
- Note: Across all groups, a mix of ages, gender and job positions were represented.

The focus group locations were selected because:

- They are among the seven Leapfrog Group Roll-Out regions where the Group is working to implement Leapfrog on a fast track.

- They offer multiple employer sites and access to key early-adopter target audiences.

- They allow for assessing any regional variances in knowledge, attitudes and practices.

Discussion guides for Phase 1 and Phase 2 focus groups are included in the Appendix.

Note: Focus groups are a type of qualitative research designed to provide insights into opinions and attitudes. By design, they are conversations among small groups of people who, in sharing their thoughts, may influence one another, and who do not comprise a statistically reliable sample that can be projected onto a larger population.

Findings: Phase 1 Focus Groups

Before the actual development of the toolkit began, it was important to arrive at a baseline understanding of where the target populations "were" with respect to awareness of — and safeguarding themselves against — preventable medical mistakes. Accordingly, we organized the research to start with a preliminary and broad exploration of the consumer's mindset (Phase 1).

This phase was devoted to understanding the target populations' attitudes and behaviors with respect to hospital decision-making, and to discover the barriers and obstacles that had to be overcome in this regard. In keeping with the exploratory spirit of this phase of research, we also examined participants' understanding of key terms (e.g., patient safety, medical errors) and the three leaps. We also tested the "raw" content (key communications messages) for the toolkit.

The discussion in the phase 1 focus groups centered around six topics:

1.Hospital choice	Discussed how hospital choices are made in non-emergency situations; role of doctor vs. patient in making choice.
2. Medical Error and Patient Safety	Discussed enrollees' understanding of both terms; best alternative phrase.
3. Content evaluation of taglines	Discussed and rated believability of various leap-related taglines.
4. Content evaluation of leap messages	Discussed and rated believability of messages about the three leaps.
5. Content evaluation of behavior messages	Discussed and rated the likelihood of adopting behavior consistent with the leaps.
6. Message delivery	Discussed appropriateness of employer as a deliverer of leap-related information.

1. Hospital Choice

Choosing a Hospital

> *"Certain hospitals are known for certain things. If you start asking around, you can get that information."*

Participants said they usually had multiple hospitals to choose from and that choices were offered by both their doctors and health plans. Realistically, they understood that their options were often limited to where their particular physician had privileges. Participants were aware that some hospitals were less safe than others, and that some did better at certain procedures. Their impressions of local hospitals were usually driven by word-of-mouth and media.

When it came to making a decision, participants expected their doctor to tell them which hospital was best. They were reluctant to challenge their doctor even if they had heard about the reputations of hospitals to which they were to be admitted. Participants believed their doctors considered the safety and outcome records of hospitals when they chose where to admit patients and thus, protected their patients against less safe hospitals.

2. Medical Error and Patient Safety

Medical Error

Typically, consumers thought the phrase "medical error" referred to mistakes made in diagnosis and treatment. Errors in processes were mentioned less often. Commonly mentioned examples by participants included:

- Wrong-area surgery, e.g. amputating the wrong limb
- Medication errors
- Misdiagnosis / overlooking symptoms

> *"My stepmother would have had the wrong eye taken out if someone from our family hadn't been there."*

The universal perception among participants was that medical errors occur frequently. But medical errors were not perceived as a serious problem – many felt that the bulk of medical errors were *not* life-threatening. Some participants wondered if physician malpractice qualified as a medical error.

Patient Safety

With few exceptions, most participants did not see "patient safety" as related to medical errors. Some participants felt patient safety broadly meant ensuring a patient's well being, but very few made the connection with medical errors. Instead, most equated the term with ideas like ensuring a patient's physical safety or providing more information to patients so they can better understand treatment options and procedures.

Errors and the System

In some focus groups, the existence of widespread medical errors was blamed on HMOs and the managed care system. Participants felt these organizations try to maximize profits by reducing staff and hospital stays, and minimizing doctors' time with patients, thereby putting undue pressure on all medical professionals. These participants thought medical errors occur because of a lack of resources.

> *"I think the problem is that hospitals have cut back on staff so much and now we have one nurse doing 10 things at once."*

Alternative Phrases

We evaluated several other phrases, like "safety and security," "medical mistakes" and "preventable mistakes" in the focus groups. No clear favorites emerged, but indicators suggest that "preventable mistakes" is a good way to describe the phenomenon. "Preventable mistakes" could be a better way to describe "medical errors" for several reasons:

- It stresses these mistakes are preventable.
- *Mistakes* is an informal way of saying *errors,* which helps the phrase feel less remote/clinical.
- Participants tended to be defensive of their doctors during the discussion; to participants, the omission of "medical" from the phrase stresses the errors and not the sources.

"Preventable mistakes that can lead to death" emerged as a meaningful and convincing phrase. Describing medical errors this way has the additional benefit of reinforcing the potentially deadly consequences of medical errors.

3. Tagline Evaluations

Taglines Tested

Participants rated a total of 12 taglines designed to be short, catchy statements that draw consumers' attention to the seriousness of the problem. Six taglines were centered on medical errors and patient safety. We also tested two taglines for each of the three leaps. We asked participants to rate all messages on a five-point believability scale.

The following medical errors and patient safety taglines were tested:

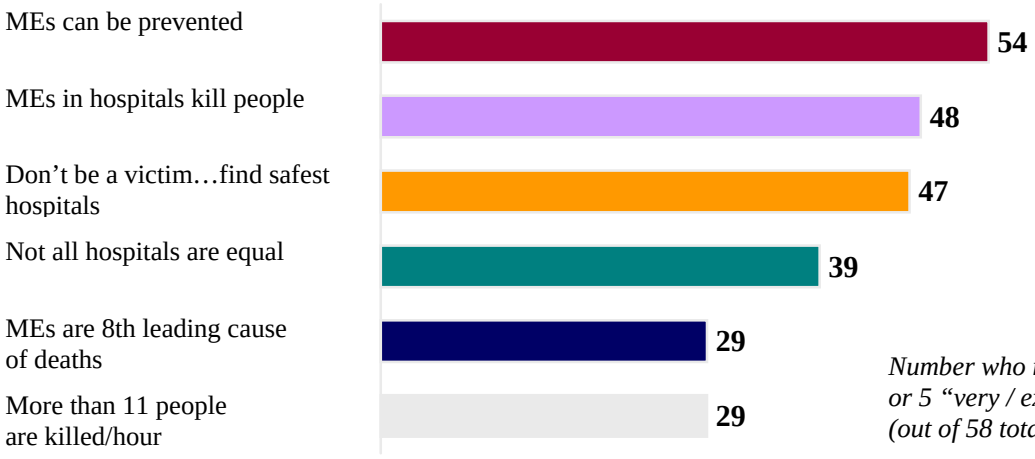
- *Medical errors in hospitals kill people.*
- *Not all hospitals are equal--some can kill you.*
- *Medical errors can be prevented.*
- *Medical errors are the 8th leading cause of death in America, causing more deaths than vehicle accidents, breast cancer or AIDS.*[2]

[2] As reported in the Institute of Medicine's report "To Err is Human," between 44,000 and 98,000 deaths occur every year in U.S. hospitals due to preventable medical errors. The Leapfrog Group has chosen to use the higher estimate of

- *More than 11 people are killed every hour in America's hospitals--and these deaths are preventable.*
- *Don't be a victim of medical error! Find out which hospitals in your community are the safest.*

The discussion of these taglines revealed the following:

❖ General messages are more believable; statistics-based messages less so.



Number who rated statement as 4 or 5 "very / extremely believable" (out of 58 total participants)

❖ Large majorities believed that *medical errors kill* and that they are preventable.

❖ They also believed the statement that not all hospitals are equally safe ("Don't be a victim"), but were less likely to believe the more extreme statement that some *hospitals can kill* you.

> *"I know mistakes are there. You read and hear about them. You know friends and families who have experienced them."*

Participants stereotypically tend to think of general ward patients or ER visits when they think of hospitals (and not surgeries or ICUs), and therefore find it hard to believe that hospitals can kill.

98,000 deaths in the final toolkit. Based on this figure and recent CDC data, medical errors are the 5th leading cause of death, not the 8th. Accordingly, the final toolkit cites preventable deaths as the 5th leading cause of death.

- ❖ Only one in two participants believed that medical errors were the 8th leading cause of death (even when told to assume that all statements were factually correct).

  The death rate seemed too high to several and many wanted to know the source for this fact. There was a sense of denial among some participants, as they did not want to believe this fact. Those who believed it were shocked. Some of these participants did not express any further interest in the issue, others questioned what they could do about the problem to protect themselves.

- ❖ About half the participants were impressed by the fact that 11 people die a preventable death each hour. Others found it too abstract and difficult to relate to.

> *"The numbers grab me. If I ever need hospital care, I don't want this to happen to me. I'm thinking, 'Now, what can I do to make sure this doesn't happen to me?'"*

- ❖ No participant questioned the number of deaths due to medical errors. It was more an issue of how the number was presented. Showing the death rate within an employee population ("X" employees a day/year), or that it equates to 98,000 annual deaths was more impressive to some.

We tested the following leap-related taglines with participants:

CPOE

- *Computerized prescription systems can protect you from getting wrong, potentially life-threatening medication; shorten hospital stays and save money. Does your hospital have the latest technology?*

- *Research shows that hospitals that use computerized prescription systems can save your life.*

Evidence-based Hospital Referral

- *The hospital where you have your surgery done can mean the difference between life and death.*

- *Practice makes perfect. Patients get better results at hospitals that do a lot of surgeries every year. Does the hospital you are considering have a lot of experience with your kind of surgery?*

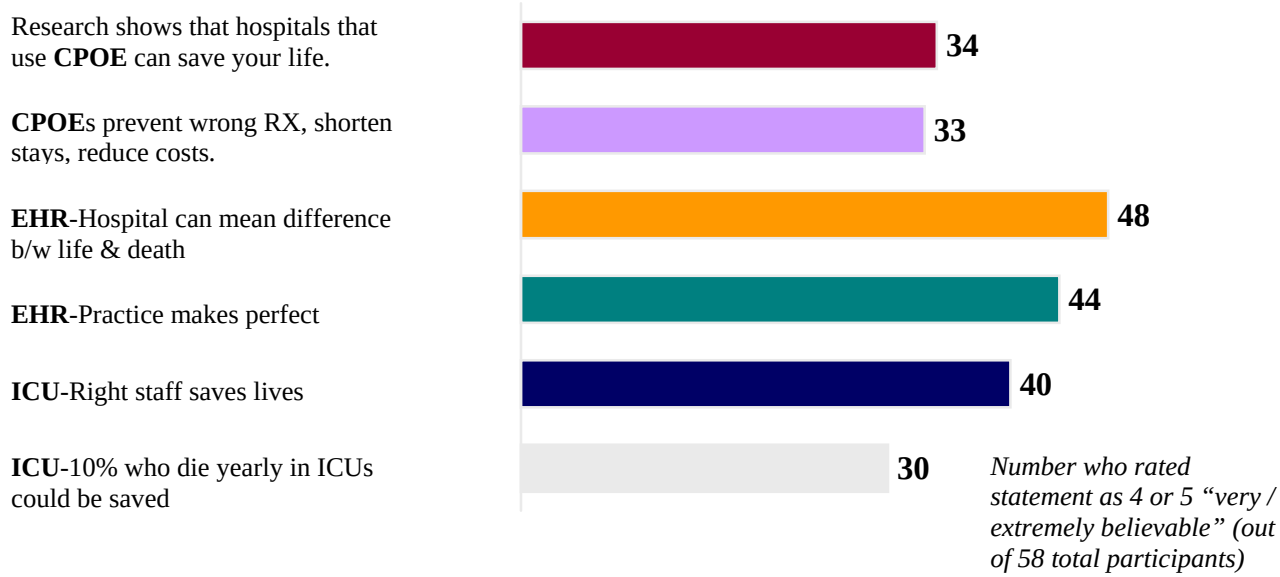
ICU Staffing

- *10% of patients who die in ICUs every year could be saved if the right medical staff took care of them.*

- *Hospital ICUs that have the right experts on staff save more lives. Does your hospital have the right ICU staff?*

The discussion of these taglines revealed the following:

- EHR taglines were most believable.



- Participants felt that both statements related to CPOE over promised on benefits.

  Participants questioned how it was determined that CPOEs shorten hospital stays and decrease costs. Similarly, they felt wrong medication mostly leads to non-life threatening complications, so CPOE could not be of life-saving importance.

- The evidence-based hospital referral taglines were comparatively the most believable.

  In contrast to more general statements, participants accepted the notion that hospital choice for surgery can have deadly outcomes. They enthusiastically supported the notion that "practice makes perfect" – this was a phrase that resonated with many.

- Participants found the more general statements about ICU staffing to be more believable and questioned the statement with statistical facts ("10% of patients who die…").

  These taglines with statistical facts were less believable, because of a feeling among participants that patients admitted to ICUs were already in critical condition, and that it was hard to do more to help them.

4. Evaluations of Leap Messages

Messages Tested

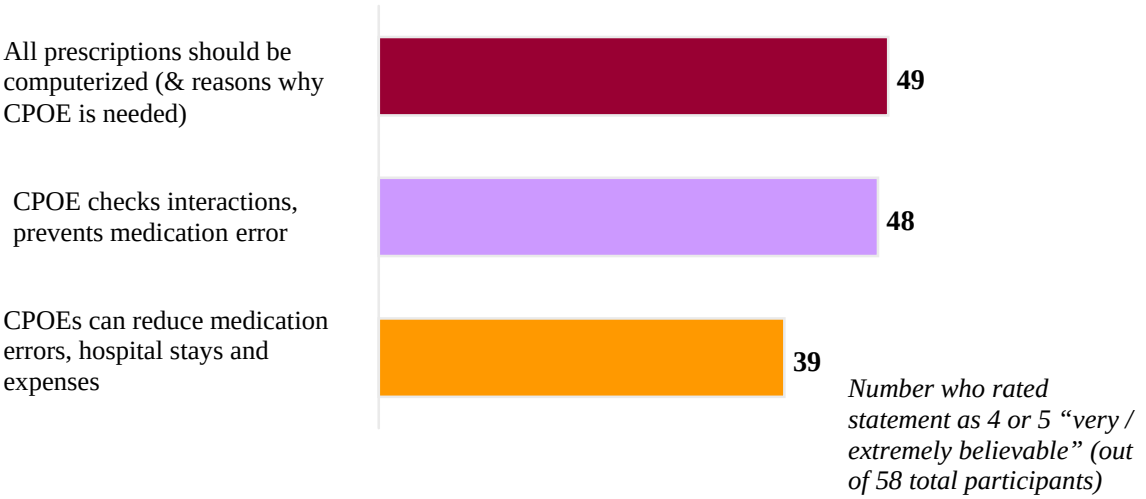
Participants rated a total of eight messages. All were detailed messages, much longer than taglines. The messages for each leap were designed to provide more detailed and complementary information to the taglines. Three messages about CPOE, three messages about ICU staffing and two messages about EHR were tested. All messages were rated on the same five-point believability scale used for taglines.

CPOE: We tested the following messages with participants:

- *All prescriptions in hospitals should be computerized. Medical experts estimate that more than one million serious medication errors occur each year in US hospitals. Typically, these errors occur for three reasons:*
  - *Handwritten prescriptions by physicians are hard to read and often lead to the wrong drug being given.*
  - *Serious drug overdoses resulting from incorrectly filled out prescriptions or prescriptions that are difficult to read.*
  - *Dangerous drug interactions and allergies that are overlooked when new medication is prescribed and used without regard to the patient's current medication.*
- *When prescriptions are computerized, doctors enter orders into a computer rather than writing them down on paper. New prescriptions are added to the patient's information already in the hospital's computer system. The prescription is then automatically checked against the patient's current medications for potential errors or problems.*
- *Scientific studies show that a computerized prescription system can dramatically reduce medication errors, and can even decrease how long a patient stays in the hospital (by about one day) and decrease hospital expenses (by almost 15 percent).*

The discussion of these messages revealed the following:

- The benefits of CPOE beyond reducing medication error (e.g., shorter hospital stays) were questioned.



- Multiple participants in each group reported knowledge of medication errors. They could relate to instances of bad handwriting or an incorrect prescription being written/filled out.

- Participants liked descriptions of how CPOE works and why it should be implemented.

  But, as mentioned above, all CPOE benefits beyond reducing medication errors and preventing adverse reactions were questioned.

> *"It think it [CPOE] would be a timesaver. In fact, the whole health system needs to be computerized."*

- Some participants questioned if CPOE could dramatically reduce medication errors since the element of human error still exists at the order input stage. Others felt that some doctors were averse to or unskilled at using computers and this could raise new areas for errors.

- Knoxville participants, in particular, did not like the notion of *not* receiving a handwritten prescription from their physician. Without one they felt they had no way of knowing if their prescription was indeed the one their doctor wrote for them.

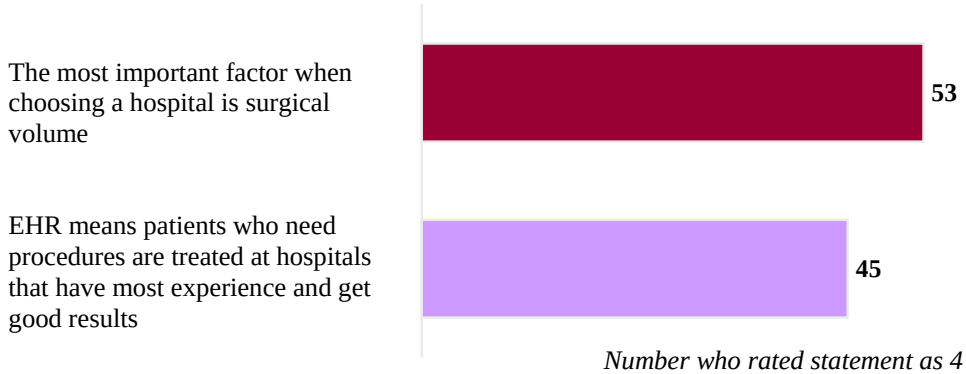
Evidence-based Hospital Referral: We tested the following messages with participants:

- *The most important factor to consider when choosing a hospital is surgical volume - how many surgeries of a certain type a hospital does each year. Over 100 studies have shown that patients get better results at hospitals that perform a high volume of surgeries. For example, with heart surgery, hospitals that do this surgery frequently have death rates that are three times lower than hospitals that do not.*

- *For certain high-risk procedures, you have the best chance of survival and successful recovery at hospitals that have the most experience. Evidence-based Hospital Referral (EHR) means making sure that patients who need these procedures done are treated at hospitals that have the most experience and get good results.*

The discussion of these messages revealed the following:

❖ Approximately 3 in 4 participants judged the EHR messages believable.



Number who rated statement as 4 or 5 "very / extremely believable" (out of 58 total participants)

❖ These higher ratings do not mean that the EHR Leap was the participants' favorite. While participants accepted the premise that practice makes perfect, they did not necessarily buy into the notion that hospital experience or outcomes are more important to consider than the surgeon's credentials.

❖ The second statement (the one that mentions EHR by name) prompted much skepticism that volume and outcomes are the most significant predictors when choosing a hospital for surgery. Further, many assumed that doctors must already consider volume/successful outcomes when choosing a hospital for their patients.

❖ Other issues raised by participants about these two statements included a sense of contradiction between the statements: the first only discussed volume, while the second mentioned both volume and outcomes. Participants also felt that the phrase "Evidence Based Hospital Referral" was too dry and unclear.

> *"If you could choose between one hospital that does 5 operations per year and one that does 100 operations per year, which one is more apt to have mistakes? But, what about success rates?"*

❖ Finally, there was some confusion over why EHR was important. Participants did not understand the need to consider the *entire* surgical team (as opposed to just the surgeon) and the level of post-op care that is available when making their hospital choice.

ICU Staffing: We tested the following messages with participants:

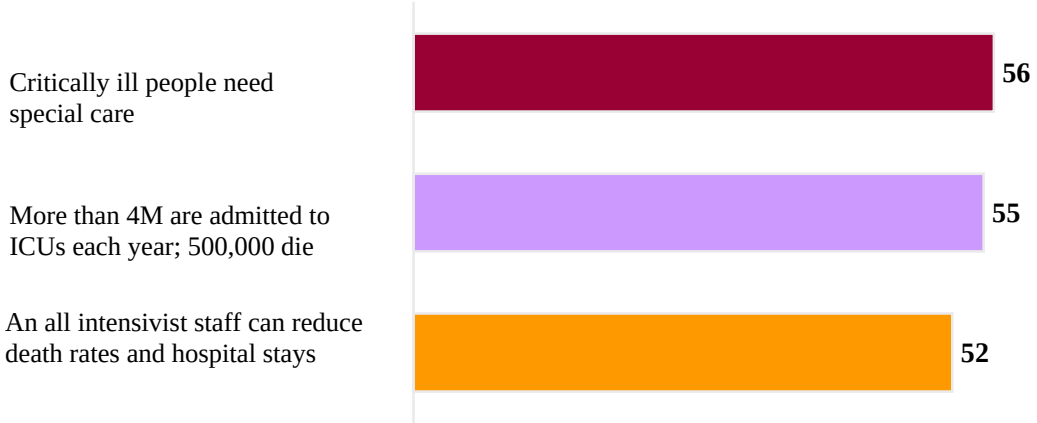
- *Critically ill people need special care. If a patient is admitted to an intensive care unit (ICU), care should be provided by medical professionals who are trained and exclusively focused on the care of critically ill or injured patients.*

- *More than four million patients are admitted to ICUs each year in the US. And approximately 500,000 patients die in ICUs each year. Given the high stakes involved, it is vitally important to ensure that the highest possible quality of care is available in ICUs.*

- *Numerous medical studies have found that ICUs staffed only by medical personnel trained to care for critically ill or injured patients have lower death rates and shorter ICU stays for patients. The medical personnel are often called "Intensivists" or "Critical Care Specialists" and are physicians specially trained to care for people in the ICU.*

The discussion of these messages revealed the following:

❖ Participants found the ICU messages believable, but do they validate the leap?



Number who rated statement as 4 or 5 "very / extremely believable" (out of 58 total participants)

- These statements got high ratings because of their simple, general nature when compared to statements about other leaps. The high believability ratings given to the three statements indicate the messages were clear, convincing and easy to understand.

- Participant feedback, however, suggests the messages may not communicate why the leap is important.

  Participants liked the notion of specially trained ICU staff, but were unconvinced that such staff could significantly reduce death rates and ICU stays. They felt it was difficult to do more for ICU patients than be vigilant in monitoring them.

  > *"I guess I've always assumed that ICUs are already staffed with qualified people."*

- Participants liked knowing the technical terms ("intensivists", "critical care specialists") to describe these staffers; they found this knowledge empowering.

5. Evaluation of Behavioral Messages

Messages Tested

Participants rated six behaviorally oriented messages about the three leaps. Two messages were related to all three, two other messages pertained to EHR, one addressed CPOE and the other ICU staffing. We asked participants to rate all messages on a five-point scale that measured the likelihood of a participant acting in a manner consistent with the message.

General Observations

- None of the behavior-related messages was overwhelmingly well received by participants or found to be persuasive.

> *"The three ideas are terrific but are not easy to implement. What can I possibly do? This information isn't telling me that."*

- Shorter messages elicited stronger ratings.
- Messages that directed enrollees to sources other than their doctors were rated highly.
  - Messages that asked patients to *suggest* their doctor take certain issues into consideration fared OK.
  - Messages that asked patients to *question or challenge* their doctor fared poorest.
- Some participants like the level of detail provided by the longest messages.
  - The fact that none of the other participants commented on the greater detail *may* suggest they did not find this appealing.

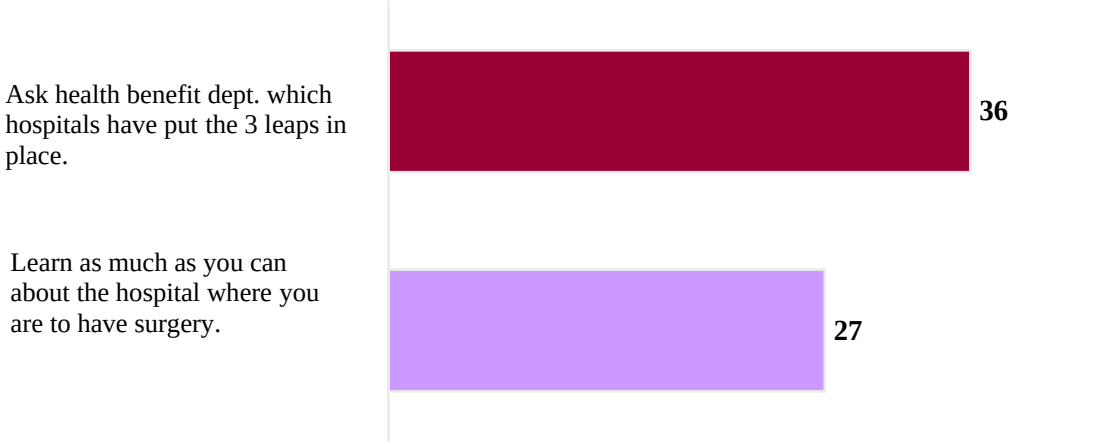
Leap-related messages tested:

- *Ask your [EMPLOYER'S] health benefit department which hospitals on your health plan's list have put in place the three patient safety leaps.*
- *Learn as much as you can about the hospital where you are scheduled to have surgery. Ask your doctor the following:*
  - *Does the hospital's medical staff use computer systems to order medications for patients in the hospital? Using this system can help avoid medication errors.*
  - *How many operations of the kind you are scheduled to have did the hospital do last year? The more the better.*
  - *What was the success and failure rate for this surgery compared with other hospitals in your town or city?*
  - *Does the hospital have doctors certified in critical care medicine who work full time in the intensive care unit, during the day? It's important that they do.*

If your doctor can't answer all of your patient safety questions, call [EMPLOYER'S] health benefit department and ask them to help you get the information you need.

The discussion of these messages revealed the following:

- Shorter, more specific message was favored.



Number who rated statement as 4 or 5 "very / extremely likely" (out of 58 total participants)

- Despite their skepticism that their health benefits/HR department could provide such information, more people said they would contact HR instead of their doctor to get leap-related information.

  To encourage participants to act on this information, they need to be explicitly told that while HR may not have been able to provide this information in the past, it can do so now.

ICU Staffing message tested:

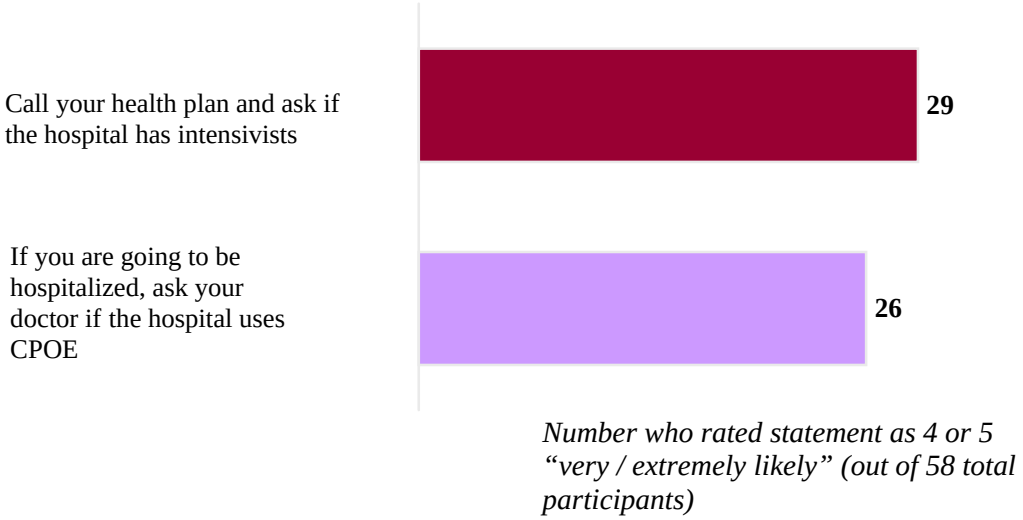
- *Call your health plan and ask if the hospital it uses staffs their intensive care units (ICUs) with "Intensivists" or "Critical Care Specialists," physicians who are specially trained to care for people in the ICU.*

CPOE message tested:

- *If you are going to be hospitalized, ask your doctor if the hospital you are going to uses a computerized prescription system.*

The discussion of these messages revealed the following:

❖ Only half would act on either message.



❖ Even though the CPOE Leap seemed more important than ICU staffing to many, more participants were likely to ask about intensivists than about CPOE in hospitals.

This may be because the CPOE message directed participants to question the doctor, while the ICU message steered them towards the health plan or hospital.

Evidence-based hospital referral messages tested:

- *Talk with your doctor, surgeon and health care team about your options if you need hospital care. If you have more than one hospital to choose from, ask your doctor which one has the best care and results for your condition.*

- *If you need surgery and have a choice of hospitals, find out which hospitals are high-volume hospitals, that is which hospitals do the most of the kind of surgery you need. Below are a couple examples that state the <u>lowest</u> number of surgeries or procedures a hospital should do every year to reduce the risk of medical errors and increase the survival rate of the patients undergoing the procedures or surgeries:*
    - *<u>Heart bypass surgery</u> - Choose hospitals that do more than 500 of these surgeries a year.*
    - *<u>Maternity care when infant is expected to be low birth weight or premature</u> - Choose hospitals that care for an average of 15 or more patients each day. In some states, care will be provided in "Regional Neonatal ICUs."*

The discussion of these messages revealed the following:

❖ Shorter message performed better:

Number who rated statement as 4 or 5 "very / extremely likely" (out of 58 total participants)

❖ The messages on evidence-based hospital referral generated the strongest ratings of all behavior messages.

❖ The shorter statement performed better, even though it suggested approaching a doctor.

The important nuance could be the fact that this message suggested *engaging in a dialog* with the doctor to be informed of options, instead of the more aggressive or questioning line of conversation suggested by other messages. Also, it did not directly mention volume or outcomes.

6. Message Delivery and Segmentation

Employer as Communicator

Retirees and active employees alike had no reservations about employers providing them with leap-related information. The employer was considered an unbiased, convenient and preferred source of information. Participants raised concerns about the potential for bias if hospitals or health plans were to provide such information.

> *"You need to make sure that whoever puts this information out has not conflict of interest."*

However, other credible sources in addition to the employer included disease-advocacy groups, health care related non-profits and Web sites.

Form of Delivery

No universal form emerged by which most participants would prefer to receive the information. Instead, they equally favored several different ways of seeing the information. Most frequently, participants wanted to get information in printed form; electronically, via e-mail or on the Web; and by telephone.

Differences Observed Across Population Groups

Age and gender had minimal impact on knowledge, attitudes and predispositions to the materials tested. Those with higher levels of education were more likely to evaluate health care options critically and desire greater control.

Few regional differences were observed. Knoxville participants were less likely to doubt or question their doctors than those in Minneapolis. Knoxville participants also questioned the benefits of CPOE more than in any other location.

Findings: Phase 2 Focus Groups

While we organized Phase 1 of the research to start with a preliminary and broad exploration of the consumer's mindset, in Phase 2 we moved to testing more specific and focused messages.

We developed a complete draft toolkit for testing in Phase 2, based on the learnings from the earlier phase. During the groups, participants read and reacted to these draft materials. They also evaluated several Web-based hospital report card prototypes.

The discussion in the Phase 2 focus groups centered around three topics:

1. Evaluation of toolkit components	7 pieces were evaluated across all 10 groups; usually no more than 3-4 were shown in any one group
2. Evaluation of hospital report card prototypes	4 prototypes were tested; for consistency, similar "results" page(s) for each prototype were tested; usually only 2 tested per group
3. Key "take-aways"	Participants were asked to summarize the key pieces of information learned/ inferences drawn during the group

1. Communications Toolkit

Materials Tested

We tested the following seven communications pieces with participants:

- **Direct mail letter**: Overview of initiative and leaps; features names of all 90+ members on masthead
- **Newsletter articles**: Two articles; designed to raise awareness of problem and the initiative
- **E-mail alerts**: Series of 12 short alerts; designed to drive traffic to the Web site
- **Did-you-know factoids**: Six short statements, intended for use in textboxes or sidebars; designed to draw attention to the problem and the three leap "solutions"
- **Lunch & learn plan**: Key talking points about The Leapfrog Group, medical mistakes, the leaps and desirable consumer behaviors
- **Postcard**: Serves both as a reference resource and a quick way to attract attention to the problem

Consumer Observations about Toolkit Components

Direct Mail Letter
Participants felt the letter did a good job of explaining the nature of the problem and Leapfrog's proposed solutions. They liked the listing of the 90+ members of The Leapfrog Group because it gave them a sense of the strength and support behind the effort.

> *"If 90 plus organizations are working together at improving this [hospital safety] and listing good versus poor hospitals, it doesn't take long before we can have a big effect. This would have a real influence on those at the bottom that they better shape up."*

However, they felt the letter did a poor job of telling them, as consumers, what they should do. They did not get a clear understanding of who The Leapfrog Group was or its activities; nor did they understand their employer's motivation for joining the effort.

Newsletter Articles
Some preferred the two-column layout of the articles better than that of the letter. The headlines for both articles were well received. Both articles had the same strengths/weaknesses as the letter.

Once again, participants were unclear on how and why these articles were relevant to them. For example, they were unsure on what steps or actions they should take as consumers after reading the articles. Nor did they have a clear sense that they might find personally relevant information on the Web site. They were also dismissive of a recommendation to call their hospital/health plan for more information.

E-mail Alerts/Factoids
Overall, statements on both of these pieces were well received. As one might expect, "favorite" statement choices ranged widely within and across groups. Participants liked the statements because they were action-oriented and provided specific examples of the kinds of information and resources that would be available at the Web site.

Lunch & Learn Plan
This piece was well received, with the points made under the various sub-sections deemed on target and important. However, participants felt that they needed more information on the following: Leapfrog's motivation, range and scope of activities; the rationale for the three leaps; and more explicit information on consumer actions/benefits and contents of a Web site on this effort.

Postcard
Many participants liked the brevity of the postcard, and all liked the listed leap-related questions.
However, they felt they did not know where to go to get the answers. They suggested making the "where to go to get information" aspects more explicit and visually bolder.

> *"I like it. It gets to the heart of the problem—preventable medical mistakes—and tells me I can do something about it and how. It's direct."*

2. Hospital Report Card Prototypes

Materials Tested

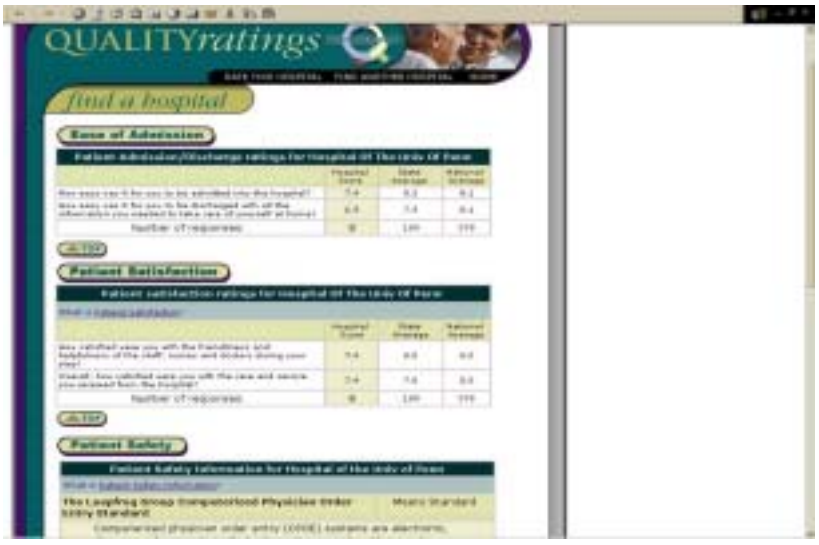
We tested the following four prototypes. To ensure fair comparisons, we tested only screens that provided information on CABG surgery and the three leaps.

- **DoctorQuality**: Presents data in a table format for one hospital at a time; 'ease of admission' and 'patient satisfaction' data also shown
- **HealthGrades**: Presents data in table format for multiple hospitals; uses icons and graphic scales to rate hospitals
- **Leapfrog**: Presents data in table format for multiple surgeries, but only one hospital at a time; provides leap-related data for multiple hospitals, uses mix of icons, graphic scales and raw numbers to rate hospitals
- **Subimo**: Presents side-by-side data for multiple hospitals; provides additional information on CABG-related procedures and other areas; uses only text and numbers to rate hospitals

Consumer Observations about Prototypes

DoctorQuality Prototype

Some participants liked the unique 'ease of admission' and 'patient satisfaction' sections. The graphical layout was well liked, especially the description of each leap. The scale used to describe hospital performance on the three leaps was easy to understand ("Meets standard", "Does not meet standard"), but absence of data/criteria used to develop the scale lessened its value for participants. The disclaimer at the bottom of the screened turned off some participants.



HealthGrades Prototype

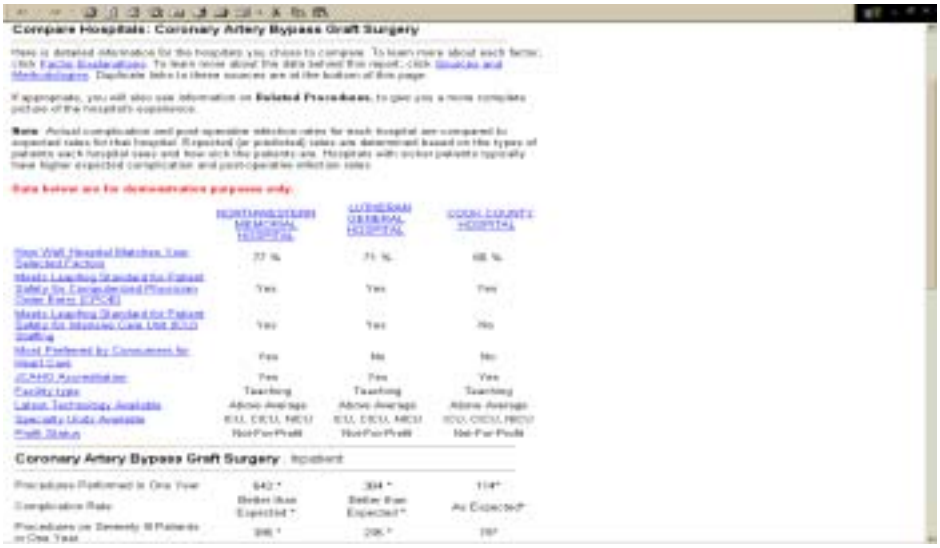
The ability to compare several hospitals simultaneously was appreciated by participants. They did not understand the significance of the “star” rating scale used to show mortality rates. The layout was considered confusing by many. Several noticed and wondered why some hospitals did not submit data.

Leapfrog Prototype

Participants liked how hospital volume and minimum requirements were shown in numbers rather than via a word or symbol scale. Overall, layout and presentation were well liked. Symbols used to show progress on leaps were universally accepted as clear and easy to understand. Use of the lily pad symbol for EHR was confusing.

Subimo Prototype

The sheer richness of data included in this prototype made this the favorite. Participants spent the most time pouring over this prototype, and were not overwhelmed by the data. Comprehensiveness provided a degree of credibility that was absent for others reviewed. The relevance of some information, like JCAHO accreditation, was unclear to participants. Overall, the prototype would benefit from better formatting, although participants were able to look past this in their review of the materials.



3. Key "Take-aways"

Communications Toolkit

Several barriers encountered in Phase 1 research were overcome in Phase 2. The draft toolkit materials succeeded in communicating the magnitude of the patient safety/medical error problem, a sense that medical mistakes are preventable, and the need for consumers to be concerned and take action.

Effective rewording and phrasing of key notions compared to Phase 1 meant that *now* participants:

- Believed in the severity of the problem
- Better understood the focus on hospitals
- Believed leaps were appropriate areas for focus
- Did not feel doctors/medical professionals were being personally blamed for errors.

> Q: What were the materials trying to tell you?
>
> *"It's a wake-up call. There is a problem."*
>
> Q: Was that believable?
>
> *"Yes, especially if you regularly read the newspaper."*

Adding an element of "branding" (e.g., Leapfrog Group logo and member company names) to the toolkit materials was well received by participants. The employer's logo must be included on toolkit materials– without recognizing the source as the employer, many are likely to ignore the communication. At the same time, keeping the Leapfrog logo could be beneficial – the logo would serve as an easy visual cue to inform enrollees about the topic of future communications. However, there is need for caution in using the Leapfrog logo, as the phrase "*rewarding* higher standards" leads some to conclude cynically that Leapfrog is nothing more than a cost-cutting measure. Yet, listing 90+ members on materials has a favorable impact – the list brings to life the size and bargaining power of the Leapfrog effort.

> *"Use both logos—a combination of some kind."*

While all the toolkit materials tested well for what they offered, to be truly effective participants felt the toolkit needed to better address the following:

- What is Leapfrog and its activities? Why is my employer involved? What is my employer's role?
- Why is Leapfrog focused on hospitals, and not on doctors and routine health care?
- Why did Leapfrog focus on these three leaps?
- What can consumers do? What resources are or will be available?

Without a full understanding of why Leapfrog was advocating change, some participants feared the initiative would lead to premium increases or more restrictive health plan offerings. Further, there is a perceived lack of hospital choices, especially among those enrolled in an HMO. These enrollees need to be reminded explicitly that they may have a choice (albeit a limited one).

Despite the suggestions for additional revisions to the toolkit materials, participants left the groups feeling that:

- They understood the problem and the urgent call to action
- Their employer was engaged in a credible, worthwhile and laudable effort to fight preventable mistakes
- Tools will be available to help consumers minimize their exposure to such mistakes and make more informed health care decisions.

> *"Thank god that someone like Leapfrog and [Employer] are addressing the situation."*
> [Other participants]: *"Here, here."*

Hospital Report Card Prototypes

Participants reacted enthusiastically to the notion of having access to a hospital report card and other related information. In fact, many participants felt that access to such data was the only meaningful way for consumers to participate in the Leapfrog effort.

"I'd pull up all the hospitals in my area and compare them."

"It's a far step forward. It's an evaluation system. It's about time we started doing it."

Participants favored content over style. The Subimo prototype tested well despite the perception that all other prototypes had superior presentation formats. The Subimo prototype was the most valued because it provided the most information (both in latitude and depth). The sheer volume of data lent Subimo an unparalleled credibility since participants felt that no information was being withheld from them.

Participants wanted the greatest possible detail and desired clear and well-defined data. They operationalized this as: abbreviations needed to be spelled-out; full disclosure of the source, time and method of data collection; explanations of why the different data were important to consider; and explanation of how categories were developed. For example, for leap-related information, they preferred a scenario where they would be shown both the symbol/label and the actual data, so they could see how the scoring categories were developed. In another example, participants requested clarification about the evidence-based hospital referral data. They wanted more detail about why surgery volume is a better predictor than a surgeon's credentials and why the minimum number of acceptable procedures varies as much as it does between the different surgeries. Both examples illustrate the level of interest among participants and the degree of depth and explanation they desire about this information.

"I want to know, when was the data collected? Who collected it and how did they do it?"

While participants had no trouble comprehending the information presented in all four prototypes, there was some preference for the presentation format of the DoctorQuality and Leapfrog prototypes, which participants perceived as cleaner and less cluttered. On several occasions, and across different groups, participants requested that hospital data be presented in a manner similar to *Consumer Reports.* Participants appeared familiar with *Consumer Reports'* use of symbols, and appreciated its easy-to-comprehend layout, and concise explanation of terms and definitions.
Finally, participants had no adverse reaction to the notion of giving hospitals partial credit provided that hospitals that have made *no* progress are identified as such.

Message Delivery and Segmentation

Participant preference was for all information and resources to be available through a single, centralized location. They expressed no reservations about the employer as the source for information—in fact, participants welcomed the idea. There was some hesitancy about the credibility of hospitals and health plans as the source because it raised concerns about a potential bias in receiving information from these sources.

> *"We tend to go to [Employer's Web site] for a lot of things already, so it would be fine to have it there. Once there, it would be OK to be linked to different sites."*

Participants assumed that hospital data and other Leapfrog details will be on The Leapfrog Group's Web site. They expect to get there via links on employer's Web site/intranet.
However, participants were concerned about the over-reliance on the Internet to gain access to additional information and decision-making tools. Since Internet access is neither universal nor most favored, alternative modes of information dissemination should be made available.

Only minimal differences in reactions to the communications materials and hospital report card prototypes were observed across population groups. Age and gender had no significant impact on knowledge, attitudes and predispositions to the materials tested. No meaningful regional differences were observed.

> *"If something like this [hospital data] comes out, that's certainly going to have some kind of impact on hospitals to change what they're doing and how they're doing it."*

Communications Implications

The following are the "lessons learned" from a communications perspective from both phases of the research. These implications obviously guided the development of the toolkit, but may also be relevant and useful for *any* Leapfrog-related communications efforts.

1. Provide explanations early on about The Leapfrog Group:
   - Definition of the Leapfrog initiative
   - Employer's rationale for participation
   - Big picture/roadmap that The Leapfrog Group will follow (both in its dealings with hospitals and other health institutions, and in consumer education and outreach efforts)
   - Absence of any new, hidden costs to enrollees as a result of the initiative

2. Explain why the focus is on hospitals and not other forms of health care delivery. Communicate that future efforts may focus on outpatient and ambulatory care.

3. Emphasize the importance of investigating hospital quality:
   - Before scheduled hospitalizations
   - During open enrollment, to help make plan choices
   - When considering a new doctor
   - When helping family and friends in similar situations

4. Make materials more relevant for enrollees by:
   - Stating employer's interest and motivation in issue
   - Providing information that enrollees can act on early in the communication, *and* repeating it later
   - Providing motivation for action by explicitly stating benefits to enrollees for each action they adopt
   - Providing examples of what hospital report cards may look like

5. Continue to stress that:
   - The death rate due to preventable mistakes is high and it is not well known or publicized
   - These deaths are preventable
   - Most of these deaths are avoidable by the implementation of the three leaps
   - Mistakes are caused by human error, not incompetence
   - Mistakes can be caused by anyone in the medical care delivery system

6. Other observations:
   - Constant reminders about where the information can be found are critical. Since most enrollees are likely to consider information only when certain "trigger" events occur (e.g., at time of diagnosis), they need to remember where to find the information when they need it.
   - Fear appeals do not always work. Sometimes they shock people into denial. Other times they make people tune out.

7. Communications “Do’s”
    - Use employer as a source of information
    - Keep actionable statements brief and simple
    - Provide the sources behind facts and figures
    - Stress that health care delivery is not just provided by doctors, but includes a broader health care system
    - Provide varied examples of medical errors, especially those caused by non-doctors
    - Make information available in multiple formats

8. Communications “Don’ts”
    - Avoid sweeping generalizations
    - Avoid presenting low-probability or extreme scenarios
    - Don’t present too many numbers or arguments (except in hospital report cards, where detail is appreciated)
    - Don’t suggest questioning/challenging doctors
    - Don’t assume enrollees understand your motives and rationale: be explicit

Appendices

LEAPFROG TOOLKIT DEVELOPMENT

PHASE 1 FOCUS GROUP DISCUSSION GUIDE

Total Time: 120 minutes

I. Introduction 10-15 minutes

1. Moderator's introduction.

2. Introduction to focus groups / explain purpose of group.

3. Participant introductions. (Keep brief)

II. Hospital Choice Behaviors 10 minutes

4. How would you make hospital choices in non-emergency situations? What things are most important for you to consider?

5. Role of various people in making choice (like physician, other medical professionals, friends, family, self).

6. Sources (and credibility) of information about the hospitals in local area.

7. Imagine you decided to change your hospital choice based on some new information you received. What would that new information be?

III. Content Evaluation: Medical Error and Patient Safety 45 minutes

8. Understanding of both terms. (Probe to draw out perceived similarities and disparities between the two terms.)

9. What phrase would you use to describe the phenomenon whereby patient die in hospitals because of mistakes or errors made in the treatment or care provided to them? (AS NECESSARY, ASK) Which of the following phrases makes most sense to you to describe the phenomenon, e.g. safety and security, medical errors, medical mistakes, preventable mistakes, etc

10. Awareness and extent of problem.

11. Recall any media reports about medical errors in hospitals? What do you think of these? Do they affect you?

12. Are medical errors and patient safety serious health issues that you are exposed to? Or, are there other more serious issues?

13. DISTRIBUTE HANDOUTS. Here are a set of statements about *medical errors and patient safety.* I'd like you to read and rate each one using a 5-point scale where a five means you find the statement to be extremely believable and a one means you find the statement to be not at all believable. You can also use a number anywhere in between. READ AND DISCUSS EACH.

- Was this statement believable? Why/why not?

- If you heard this on the radio, or saw the line in an ad or article in a newspaper or magazine, would you pay attention to it? Why/why not?

- What does this statement make you think about or want to do? (Probe why.)

14. AFTER ALL ARE RATED, DISCUSS TOP 2-3 DEPENDING ON TIME.

    - Help me understand why (READ STATEMENTS) were most believable to more of you than the others? (Probe fully)

    - Did anything surprise you in any of the statements? What and why?

15. *DISTRIBUTE HANDOUTS ABOUT THE 3 LEAPS* (ROTATE PRESENTATION ORDER OF LEAPS). Here is another set of statements about what can be done to improve patient safety. As before, I'd like you to read and rate each one using a 5-point scale where a five means you find the statement to be extremely believable and a one means you find the statement to be not at all believable. You can also use a number anywhere in between. Once you rate a statement, I'd like you to cross out the parts you don't like and circle parts that you do like. You should then move on to the next message.

16. AFTER ALL ARE RATED, COUNT RATINGS OUT LOUD, AND DISCUSS EACH LEAP BRIEFLY. FOR EACH LEAP, ASK:

    - Which statement was most believable? (Probe fully)

    - Which statement seemed least believable? (Probe fully)

    - How could you make it more believable?

    - Thinking about these statements on (LEAP) together, what do these statements want you to do? (Probe fully)

    - Did anything surprise you in any of the statements? (Probe fully)

17. *AFTER STATEMENTS FOR ALL 3 LEAPS HAVE BEEN DISCUSSED, ASK:* Which one of these 3 actions, the computerized physician order entry system, evidence-based hospital referral or qualified ICU staffing seems most important to you? RECORD HANDCOUNT FOR EACH. Why do you feel this way?

18. Which one of these three do you think is most likely to lead to improvements in the quality of health care available to you? RECORD HANDCOUNT FOR EACH. Why do you feel this way?

IV. Content Evaluation: Consumer Behaviors 20 minutes

19. *DISTRIBUTE HANDOUTS ABOUT TARGET CONSUMER BEHAVIORS* (ROTATE PRESENTATION—SHOW MESSAGES RELATED TO ALL LEAPS FIRST. RATE AND DISCUSS.
    NEXT SHOW MESSAGES FOR INDIVIDUAL LEAPS ON 1 PAGE. RATE AND DISCUSS).
    Here is another set of statements about things you can do to prevent medical errors. I'd like

you to read and rate each one using different 5-point scale for the one we've been using. Here, I'd like you to use a 5-point scale to rate how likely you are to do what each statement says. On this scale, a five means you are extremely likely to do what the statement says and a one means you are not at all likely to do what the statement says. And, you can also use a number anywhere in between. Also, as before, as you rate a statement, I'd like you to strike out the parts you don't like and circle parts that you do like, and then move on to the next message.

20. AFTER ALL ARE RATED, COUNT RATINGS OUT LOUD, AND DISCUSS EACH SUB-SECTION BRIEFLY. FOR TOP & LOWEST RATED ASK:

- Why do you say you are likely / not likely to do what this statement says?
- Would it be easy or hard to do? Why?
- Do you think doing as this statement says will make a difference to the quality of health care you and your family receive?

21. Look back at the last two handouts I gave you. They all contain statements that are written to help you be aware of the ways you can get higher quality health care. Look through those statements again and let's discuss them.

- Looking at all the statements contained here, which of these things would you be most likely to do?
- Which would be easiest to do?
- Which would be hardest to do?
- Which would make the biggest difference in making sure that you and your family got the best quality health care?
- Did anything surprise you in any of the statements? (Probe fully)

22. Imagine that your job is to convince your family and friends that they need to play a more active role in ensuring they receive higher quality health care. What would you tell them to do? [HAVE RESPONDENTS WRITE DOWN RESPONSES. IF TIME IS AVAILABLE, DISCUSS.]

V. Message Delivery 20 minutes

23. Thinking about the information that we've talked about, can you think of a particular time of the year or the onset of certain conditions or events when such information would be most valuable to you and your family?

[DON'T SPEND TO MUCH TIME ON QUESTION 23 IF THE DISCUSSION ON THE MESSAGES IS GOING WELL, AND GETTING GOOD FEEDBACK]

24. There are many sources from which you could receive information to help you make safer health decisions and health care choices. Keeping in mind that the information here is focused on the issues of patient safety and medical error, please tell me if you would

consider (READ SOURCE) a balanced and believable source for the kinds of information we've been discussing. TEST APPEAL OF FOLLOWING (ROTATE ORDER):

a) Employer (explain how employer is a logical source given participation in LF)
b) Health Plan
c) Doctor vs. other Health Professionals, like RNs/Pharmacists
d) Media (test for appeal of TV vs. print vs. radio; and medical info related sources vs. general info/news related sources)
e) Government sources like: county health clinics, National Institutes of Health, Centers for Disease Control and Prevention, etc
f) Commercial medical information provider
g) Consumer groups, like American Cancer Society, American Diabetes Association
h) Any others?

25. There are different ways in which this information can be presented to you. How would you most like to have access to this information? (READ CATEGORIES) Why?

a) In printed form
b) Via e-mail
c) Via the web
d) Face-to-face
e) By telephone
f) Or some other way?

26. Are there any kinds of information that you think would be inappropriate for [EMPLOYER NAME] to provide, and which would be better coming for somewhere else? Why?

VI. Closing 5 minutes

27. *Of all the medical and health problems and their solutions that we've discussed, what is the most important thing [EMPLOYER NAME] can do to help you make the safest possible healthcare choices?*

LEAPFROG TOOLKIT DEVELOPMENT

PHASE 2 FOCUS GROUP DISCUSSION GUIDE

Total Time: 120 minutes

I. Introduction — 15 minutes

1. Moderator's introduction.

2. Introduction to focus groups / explain purpose of group.

3. Participant introductions. (Keep brief)

II. Toolkit Evaluation — 70 minutes

4. Show various toolkit materials, one at a time. For each, ask:

   a) What was the main message?
   b) What is it telling you to do?
   c) (WRITE RESPONSE TO BOTH Q'S ABOVE, THEN DISCUSS)
   d) Was the (piece) believable? Why/why not?
   e) What parts are unclear? Why?
   f) (AS APPROPRIATE, FOR RELEVANT MATERIALS, IDENTIFY AND ASK IF:) Key terms are clear? Self-explanatory?
   g) (IF APPROPRIATE) Is this piece visually attractive or is it too boring/cluttered?

TOOLKIT MATERIALS INCLUDE:

- *"Ad" copy*
- *Series of newsletter articles*
- *E-mail alerts*
- *Direct mail letter and postcard*
- *Series of "did-you-know" statistics and facts*
- *Paycheck stuffers*

(NOTE: DEPENDING UPON THE NUMBER OF TOOLKIT MATERIALS DEVELOPED AND HOW LONG PARTICIPANTS TAKE TO EVALUATE EACH, ALL MATERIALS MAY NOT BE REVIEWED IN EVERY GROUP. HOWEVER, ***ALL MATERIALS WILL BE TESTED*** *IN AT LEAST SOME GROUPS.)*

5. After all materials have been evaluated, ask participants:
   - Which pieces they liked best and why;
   - Which Leap(s) are most likely to make a difference to the quality of healthcare they/family receive.

6. Was anything surprising or unusual in these materials?

III. Evaluation of Hospital Survey Data Formats — 30 minutes

(2 – 3 FORMATS WILL BE TESTED. THE FOLLOWING ARE QUESTIONS OF A GENERAL NATURE THAT CAN BE ASKED:)

7. What does the information shown here tell you?

8. Are any parts: confusing / hard to understand / hard to read?

9. ONCE ALL FORMATS ARE COMPARED: Which format did you like best/least? Why?

10. Under what circumstances would you and your family find such information to be useful?

11. How would you and your family like to get access to such information? (GET A SHOW OF HANDS FOR EACH AND IF TIME, BRIEFLY DISCUSS.)
    - Through your company's Intranet site?
    - The Leapfrog Group's website?
    - Health plan administrator's website?
    - Website of the company that collects and distributes this data?
    - Website of a non-profit dealing in health issues, or a disease advocacy organization like the American Heart Association, or American Cancer Society?

12. How would you like your employer to communicate about the availability of this tool? How would you like to be reminded about it?

IV. Closing 5 minutes

13. (WRITTEN EXERCISE) What have you learned from today's discussion? (DISCUSS IF TIME PERMITS.)

14. CAPTURE E-MAIL ADDRESSES OF THOSE WHO ARE WILLING TO REVIEW DETAILED PROTOTYPES LATER

Introduction to the Leapfrog Group's Communications Toolkit

Dear Leapfrog Member:

This letter provides an overview of the contents of the attached toolkit and guidance on how to use these materials in communicating with employees and retirees about the issue of preventable medical mistakes. The use of this toolkit is voluntary. These resources are designed to complement the open enrollment communications materials you received earlier and are intended to raise awareness about the importance of consumers taking three key steps when making decisions about hospital care.

Research Findings

From our focus group research, we know that there are key points for us to emphasize in communicating with consumers about preventable medical mistakes and these items are woven throughout the documents. These points include:

1. Many medical mistakes in hospitals are preventable.

2. Many medical mistakes in hospitals can cause harm and even death.

3. The Leapfrog Group is a not-for-profit coalition of more than 90 public and private organizations that provide health care benefits. Leapfrog works to help consumers make more informed health care choices and educate them about ways to improve the safety and overall value of health care. Leapfrog has identified **three practices** that influence the number of preventable mistakes in hospitals. Consumers can play a role in encouraging adoption of these practices by taking the following steps in choosing a hospital:

   - Verifying that a hospital uses a computerized physician order entry system (CPOE system).

   - Selecting hospitals with proven outcomes or extensive experience with specific procedures or diagnoses.

   - Verifying that Intensive Care Units are adequately staffed by physicians and other caregivers specifically trained in intensive care.

   The Leapfrog Group recognizes that there are other very important practices that hospitals implement to ensure patient safety. However, Leapfrog has decided to focus initially on these three Leaps because of the scientific evidence that these specific leaps will significantly reduce preventable mistakes and save lives.

4. We can all be better-informed consumers of hospital services. Consumers should not rely exclusively on the Leapfrog Group's criteria in making health care decisions. They should also consult other sources of information about

quality care. There are several steps consumers can take to encourage better safety practices in hospitals:

- Visit [**insert company name**]'s Web site at [**insert company web address here**] and/or other Leapfrog-certified sites to get information about hospitals in your area to make informed decisions about which facility to select for medical care. These resources should be available by [**insert date**].

- Call your health plan representative to find out what hospitals in your plan are doing to reduce preventable mistakes.

- Talk with your doctor, surgeon and health care team about your options if you need hospital care. If you have more than one hospital to choose from, ask your doctor and consult other sources of information to determine which one has the best care and results for your condition. You should also ask your doctor what hospitals she/he is affiliated with and what they are doing to reduce preventable medical mistakes.

Communications Materials

These materials are adaptable for use throughout the year, so you can leverage all communication opportunities effectively, including new employee orientation, retirement information sessions, holidays, etc. Included in the toolkit is a model timeline for distributing the materials.

Communication materials include:

- **Direct mail letter:** The letter introduces the issue of preventable medical mistakes and provides an overview of the steps some hospitals are taking and key actions consumers should take in making decisions about hospital care. (We distributed an earlier version of this letter previously as part of the open enrollment toolkit, and have updated it and included it in this toolkit for your future use.)

- **Newsletter articles**: These articles are designed to raise awareness of The Leapfrog Group and highlight why your company is a part of the initiative. They can be placed in company newsletters, in human resources correspondence, etc.

- **E-mail alerts:** These short, snappy e-mails are designed to get employees' attention and drive traffic to a Leapfrog member's Web site and other Web sites. Over time those sites will provide employees with information about preventable medical mistakes and how they can be better consumers of hospital services. In the near future, these e-mails can be used to create a heightened awareness of the availability of Web-based report cards on hospitals. Employers can circulate e-mails to new hires, during open enrollment periods, in conjunction with holidays, etc.

- **"Did you know" statistics:** These statements are designed to capture people's attention quickly and are for use as sidebars in newsletters, banners in e-mails, or teasers on Web pages. The statistics address such subjects as preventable deaths, medical mistakes, and the potential impact of three actions consumers can take to make an informed hospital choice.

- **"Lunch and learn" event:** It may be helpful to have a "lunch and learn" session for interested employees and retirees. The plan includes talking points about the work of The Leapfrog Group, preventable medical mistakes, and actions people can take to minimize instances of preventable medical mistakes and ensure safer, high quality health care. A follow-up postcard about the three key actions for consumers is also included.

- **Graphs:** Three graphs are included that present key data about the issue of preventable medical mistakes. These graphs can be incorporated into communications pieces, particularly newsletter articles, to underscore the urgency of both hospitals and consumers addressing the issue of preventable medical mistakes.

Guidelines for Use

1. The use of this toolkit is voluntary. These guidelines are meant to make the kit easier to use.

2. We recommend that you have your corporate counsel review all toolkit documents before dissemination to employees and retirees.

3. This toolkit is based on in-depth research and consumer communication strategies that have demonstrated success in modifying consumer behavior. The enclosed toolkit materials emphasize only the three specific Leaps instead of patient safety in general because behavioral research has shown that consumers need simple, direct, and repetitive messages in order to act. However, we recognize that not all of its contents may be relevant to or appropriate for your situation and may need to be modified for your particular audience(s).

4. This toolkit is designed with minimal formatting to emphasize the content and to facilitate easy use of each component in various company communication materials (e.g., newsletters, Web sites). Feel free to use in-house graphic design expertise to enhance the layout of the materials.

5. You will note that there are places in the toolkit –in brackets, bolded and underlined – for you to insert information such as local statistics, Web addresses, graphs, and dates when information will be made available to employees.

   For example, a sentence in the second newsletter reads:

   *A 1999 report from the Institute of Medicine…estimates that up to 98,000 Americans die every year from medical mistakes in hospitals. That's approximately [**insert local numbers here**].*

   Based on the 98,000 lives figure (from the IOM report, "To Err is Human"), you can localize this number by taking your covered population (employees, retirees, and dependents) and multiplying by .0003589. For example, if your total covered population is 20,000, the number of preventable deaths in your population is approximately 7 deaths a year (20,000 x .0003589 = 7.2).

   Note: If you choose not to make certain resources available to your employees (e.g., Web site with hospital report card data), you should delete references to these resources throughout the toolkit materials to avoid creating expectations among your employees that will not be met.

6. Throughout the communications materials, you will note that we displayed the logo of The Leapfrog Group. In addition to featuring this logo, we strongly encourage you to add your company logo to the materials to underscore your company's active involvement in the work of The Leapfrog Group. We know from our research that it's important for employees and retirees to see their company's logo prominently featured in these materials.

7. Similarly, you will note that the masthead of Leapfrog Group members is used on several toolkit pieces. As The Leapfrog Group continues to grow, its list of members will change and we encourage you to update the masthead. For the most up-to-date list of members, please visit http://www.leapfroggroup.org/about2.htm. Please note, however, that if you do revise any part of the toolkit (per #3 above), you may not include the masthead of Leapfrog Group members since the membership will not be aware of the changes you have made and may not be comfortable with having their name associated with them.

8. You should note that The Leapfrog Group has chosen to concentrate on and request self-reported data from urban area[3] hospitals. The Group did not seek data from rural hospitals.

9. We have prepared a set of possible employee/retiree questions and suggested answers to help you in fielding comments and questions about the toolkit. These are included on the following page.

10. Finally, we would appreciate feedback from both you and your employees about the content and usefulness of this kit. Please contact me with any suggestions you have so we can continue to improve the tools we provide to our members.

The toolkit materials offer a number of diverse, direct methods for providing key information to your employees, retirees and dependents about the problem of preventable medical mistakes and the solutions recommended by members of The Leapfrog Group. Used in conjunction with company efforts at education and assistance, they are designed to meet the goal of helping consumers make more informed decisions about hospital care.

Sincerely,

Suzanne Delbanco, PhD
Executive Director
The Leapfrog Group

About this toolkit: FACCT—The Foundation For Accountability and Weber Shandwick Worldwide developed this toolkit for The Leapfrog Group. The toolkit materials were tested in 16 focus groups with employees and retirees of Leapfrog Group members (see report, *Development of a Consumer Communications Toolkit: Report and Findings from The Leapfrog Group's 2001 Focus Groups,* FACCT). Development of the toolkit was made possible by a generous grant from The Robert Wood Johnson Foundation.

[3] Designation of an urban hospital is a hospital that is in a county designated by OMB (and therefore) Medicare as being part of a Metropolitan area. Go to http://www.whitehouse.gov/omb/bulletins/95-04attachintro.html for a complete listing of Metropolitan Statistical Areas (MSAs).

About The Leapfrog Group's Communications Toolkit and Hospital Data
Possible Questions and Suggested Answers

1. **Who developed the toolkit?**

   The toolkit was developed for The Leapfrog Group by FACCT—The Foundation For Accountability, a not-for-profit research organization, and Weber Shandwick Worldwide, a strategic communications firm. The toolkit materials were developed with input from over 100 consumers through 16 focus groups of employees and retirees from Leapfrog member companies. Funding for the toolkit was made possible by The Robert Wood Johnson Foundation.

2. **What is The Leapfrog Group and what is it trying to do? When and why was it formed?**

   The Leapfrog Group is a not-for-profit coalition of more than 90 public and private organizations that provide health care benefits. The Leapfrog Group works to help consumers make more informed health care choices based on information that medical experts throughout the country believe will improve hospital systems that break down and harm patients.

   Although research on hospital safety has been going on for years, The Leapfrog Group officially began in November 2000 with the backing of many large employers that were concerned about safety problems in the health care industry and the resulting harm to employee health. Currently The Leapfrog Group represents over 26 million health care consumers in all 50 states and it continues to grow.

3. **Why is my employer involved in The Leapfrog Group? Is this entire effort just about saving money?**

   Because your employer provides health care benefits to its employees and their families, your employer wants to make sure that the benefits it's paying for and providing are helping its people have access to the safest, highest quality health care. Recent evidence has shown that this is not always the case. So, in response, your employer has joined The Leapfrog Group as a sign of its commitment to helping employees make more informed health care choices, and as a signal to the health care industry that implementation of practices that protect patients from preventable mistakes will be rewarded.

   Simply put, most medical mistakes are *preventable* – which means something *can* be done – and your employer wants to be part of the solution. Your employer's primary motivation is to help make the health care system safer for its people. Also, as with your own company's products, higher quality does save money.

4. **Does this impact my health benefits in any way? Will premiums/out-of-pocket payments rise? Will I have fewer choices?**

   No, currently this effort does not directly impact your health benefits – neither in terms of the level of coverage or choices available nor any costs you have to bear. Over time, however, your employer may encourage you to choose hospitals with proven safety practices in place over others. And this is good news! For once, we'll all be able to know and look for high-quality health care providers and take our business there just as we have for years with other consumer products (e.g., cars, appliances). And, some of the hospitals with key patient safety practices in

place may actually cost less because studies show that patients recover quicker and spend less time in safer hospitals than unsafe ones. From the employer's perspective, the more quickly a patient can get out of the hospital, the more quickly they can return to work. It's a win-win situation for you and your employer.

5. Why is the information provided only about hospitals? What about preventable mistakes in my doctor's office or other settings?

The Leapfrog Group has chosen to focus its first efforts on educating employees about the quality of care provided in hospitals. While for many of us visits to the doctor's office are the way we usually interact with the health care system, we are most vulnerable and dependent on medical professionals when we are patients in a hospital. This is why The Leapfrog Group focuses on hospitals – because a preventable mistake that occurs in a hospital can have far more serious consequences than a preventable mistake in a doctor's office.

Over time, The Leapfrog Group may provide additional information on other aspects of health care, such as the safety of doctor's office visits and ambulatory surgery centers.

6. Why is the information only focused on these three steps or "Leaps" and not others?

The Leapfrog Group recognizes that hospitals are already taking very important steps to ensure patients' safety. However, The Leapfrog Group decided to focus on the three key safety steps for three important reasons:

1) There is scientific evidence that these steps will significantly reduce preventable mistakes in hospitals and save lives. In fact, the three steps together could prevent approximately 60,000 hospital deaths and more than half a million serious medication errors caused by preventable mistakes *every year.*
2) Consumers can easily understand and appreciate their value.
3) Health plans and employers can easily tell if the steps have been implemented when they are deciding which health care providers to work with.

Over time, The Leapfrog Group will mostly likely add other steps to the information it makes available to consumers.

7. Where do all the statistics come from about number of deaths due to preventable mistakes? (note: see below for specific citations)

The statistics come from the Institute of Medicine. Based on an extensive review of research on hospital safety, the Institute of Medicine released a book in 1999, "To Err is Human: Building a Safer Health System" which reported that between 44,000 and 98,000 preventable deaths occur each year in America's hospitals. The book went on to cite and discuss the other statistics used in this toolkit.

The Institute of Medicine is a congressionally chartered, independent organization that provides objective, timely, authoritative information to improve human health. You can visit its Web site at www.iom.edu for more information about how to order the book. Many local bookstores and libraries also carry it.

8. How current is the information (both the toolkit and hospital data)?

The toolkit materials were developed in September 2001. The information about hospitals that will be provided on The Leapfrog Group's Web site and other Leapfrog-certified cites beginning in January 2002 was collected starting in July 2001 and continues to be updated monthly.

9. I don't need to use the hospital right now but I want to keep this information for future reference. Where will I always be able to find it? When should I use it?

Many employers will continue to make this information available on their company's Intranet or corporate Web site. Contact your HR/benefits department and ask where the information will be made available to employees on the Web. If your employer does not make it available, you can always visit The Leapfrog Group's Web site at www.leapfroggroup.org to get the information.

This information can be useful at many times during the year. Consider checking the information at the following times:

- Before scheduled hospitalizations;
- During open enrollment, to help make health plan choices;
- When considering a new doctor (to check on the safety steps in place at hospitals a doctor is affiliated with); and
- When helping family and friends in similar situations.

10. I don't have access to the Web. Where can I get information about specific hospitals?

At this time, most of the information is only available on the Web. However, certain areas around the country are producing printed versions. In the meantime, contact your HR/benefits department and ask how you can get access to the information.

11. I went to the Web site but found that my hospital is not on the list? How can I get more information?

The majority of the information that you will find on the Web site is for hospitals in the following regions: Atlanta, California, East Tennessee, Minnesota, Seattle, and St. Louis. Although hospitals in all parts of the country are encouraged to fill out the survey, to date the Leapfrog Group has concentrated its outreach efforts in these areas. Leapfrog intends to expand its outreach efforts across the rest of nation in the near future. Leapfrog and its members are continuing to encourage hospitals to report the information on the three safety steps, so you'll likely see information about additional hospitals in the future. In the meantime, you can contact the hospital directly (call the hospital's executive office or administration department) and ask what practices it has put in place to reduce preventable mistakes. You can also call your health plan's member services department and ask what hospitals in your health plan are doing to reduce preventable mistakes. The more consumers ask for the information, the more likely it is that hospitals will provide it.

12. I live in a rural area and I see that there is no information on rural hospitals? What can I do to make sure my hospital is safe?

The Leapfrog Group's current recommended standards are most applicable to urban area hospitals; therefore it did not ask rural hospitals to complete the survey. Many rural hospitals are also engaged in reducing preventable medical mistakes by instituting practices other than the three practices recommended by Leapfrog. Ask your hospital what it is doing to reduce preventable mistakes and ask if it has or is considering implementing the three safety steps.

13. I'm in an HMO and I can only go to one hospital. What can I do if I don't have a choice?

First, you should double check with your HMO about your hospital choices. Some HMOs utilize more than one hospital and you may in fact have a choice. Second, you should talk with your doctor if you need to be admitted to the hospital and would like to select a hospital that has put in place the three safety steps. Share your concerns with your doctor about preventable mistakes and show him or her the information on the three safety steps. Many doctors have admitting privileges at more than one hospital and your doctor may be able to help you get referred to the hospital of your choice. Finally, you can call your HMO and ask if you can use a different hospital with key safety steps in place for your upcoming procedure or surgery. In some cases, you will be able to choose that hospital.

14. My health plan uses a couple of different hospitals but my doctor only admits patients to one of them. What can I do?

While doctors often choose to admit patients to only one hospital, many doctors have admitting privileges at more than one. Share your concerns with your doctor about preventable mistakes and show him or her the information on three safety steps. If you need to be admitted to the hospital, tell your doctor that you would like to select a hospital that has put in place the three steps. Your doctor will be happy to engage in an informed discussion about your hospital choices with you.

15. Does my doctor know about Leapfrog? What will he/she say if I bring in this information to my next appointment? What should I say to my doctor if he/she says this information isn't valid?

Some doctors are aware of The Leapfrog Group and its activities--and more are learning about it every day. In fact, The Leapfrog Group is establishing a special committee just for doctors to become more involved in the effort. Your doctor should welcome your questions about hospital safety and preventable mistakes. Because your doctor is often very busy, you should be prepared when you arrive for your next appointment--have your questions ready and bring copies of the information you've received on The Leapfrog Group and the three safety steps. If your doctor doubts the information or questions its accuracy, show him or her the list of research articles that back up the three safety steps and the list of organizations supporting The Leapfrog Group's efforts. If your doctor doesn't answer your questions or dismisses the information, you might consider talking to another doctor.

16. I trust my doctor to send me to the safest hospital. Do I really need to know about this?

Many doctors do in fact know which hospitals do a good job and those that don't. However, often these opinions are formed by years of practice and impressions from other doctors and not always by actual evidence or data. By using the information about hospitals provided by The Leapfrog Group, patients and doctors can know for certain which hospitals have put in place important safety steps to care for their patients. And, these safer steps are backed by scientific evidence that shows that they will significantly reduce preventable mistakes and even death. You should trust your doctor, but with medical breakthroughs and advances happening every day, you need to help your doctor take care of you. Discuss hospital safety with your doctor and the information about the three safety steps. It will help you--and other people who see your doctor--avoid potential harm from preventable medical mistakes.

Citations: Below are the citations for the statistically-based statements made in the toolkit.

Every year, up to 98,000 people die in America's hospitals as a result of mistakes that are preventable.

Source: The Institute of Medicine: To Err is Human: Building a safer health system. 1999.

Medical mistakes are the fifth leading cause of death in America, causing more deaths than car accidents, breast cancer and AIDS.

Source: The Institute of Medicine: To Err is Human: Building a safer health system. 1999. Additional estimates from the Centers for Disease Control and Prevention, National Vital Statistics Reports, Vol. 47, No. 25.

More than 11 people are killed every hour in America due to medical mistakes.

Source: Statistic based on the following data: The Institute of Medicine: To Err is Human: Building a safer health system. 1999. Additional estimates from the Centers for Disease Control and Prevention, National Vital Statistics Reports, Vol. 47, No. 25.

While death is the most tragic outcome, medical mistakes cause other problems as well. They lead to permanent disabilities, extended hospital stays, longer recoveries and/or even additional treatments.

Source: Steel K, Gertman PM, Crescenzi C, et al. Iatrogenic Illness on a General Medical Service at a University Hospital. The New England Journal of Medicine. 1981;304:638-642.

Approximately 60,000 hospital deaths caused by preventable medical mistakes could be avoided every year if the three safety steps are implemented.

Source: Birkmeyer JD, Birkmeyer CM, Wennberg DE, Young MP. Leapfrog Safety Standards: Potential benefits of universal adoption. The Leapfrog Group, Washington, DC. 2000.

Medical experts estimate that more than one million medication mistakes happen every year in U.S. hospitals.

Source: Bates DW, Leape LL, Cullen DJ, Laird N, Petersen LA, Teich JM, Burdick E, Hickey M, Kleefield S, Shea B, Vander Vliet M, Seger DL. Effect of computerized physician order entry and a team intervention on prevention of serious medication errors. Journal of the American Medical Association. 1998;280:1311-6.

Source: Bates DW, Teich JM, Lee J, Seger D, Kuperman GJ, Ma'Luf N, Boyle D, Leape L. The impact of computerized physician order entry on medication error prevention. Journal of the American Medical Informatics Association. 1999;6:313-21.

Additional sources cited in: Birkmeyer JD, Birkmeyer CM, Wennberg DE, Young MP. Leapfrog Safety Standards: Potential benefits of universal adoption. The Leapfrog Group, Washington, DC. 2000.

Studies show that computerized physician order entry systems (also referred to as CPOE systems) can reduce serious medication mistakes by up to 86 percent.

Source: Bates DW, Teich JM, Lee J, Seger D, Kuperman GJ, Ma'Luf N, Boyle D, Leape L. The impact of computerized physician order entry on medication error prevention. Journal of the American Medical Informatics Association. 1999;6:313-21.

Over 100 studies have shown that patients usually get better results at hospitals that perform a high volume of their type of surgery.

Source: Luft HS, Bunker JP, Enthoven AC. Should operations be regionalized? The empirical relation between surgical volume and mortality. New England Journal of Medicine. 1979; volume 301; pages 1364-9.

Source: Begg CB, Cramer LD, Hoskins WJ, Brennan MF. Impact of hospital volume on operative mortality for major cancer surgery. Journal of the American Medical Association. 1998; volume 280; pages 1747-51.

More than four million patients are admitted to ICUs each year in the U.S. and 500,000 of these patients die.

Source: Zimmerman JE, Wagner DP, Draper EA, Wright L, Alzola C, Knaus WA. Evaluation of acute physiology and chronic health evaluation III predictions of hospital mortality in an independent database. Critical Care Medicine. 1998;26:1317-26.

Source: Shortell SM, Zimmerman JE, Rousseau DM, et al. The performance of intensive care units: does good management make a difference? Medical Care. 1994;32:508-25.

More than 10 percent or at least one in ten patients who die every year in ICUs would have an increased chance to live if care were managed for at least eight hours per day by "intensivists", who are physicians specially trained to care for critically ill or injured patients.

Source: Reynolds HN, Haupt MT, Thill-Baharozian MC, Carlson RW. Impact of critical care physician staffing on patients with septic shock in a university hospital medical intensive care unit. Journal of the American Medical Association. 1988;260:3446-50.

Source: Multz AS, Chalfin DB, Samson IM, et al. A "closed" medical intensive care unit (MICU) improves resource utilization when compared with an "open" MICU. American Journal of Respiratory & Critical Care Medicine. 1998;157:1468-73.

Source: Brown JJ, Sullivan G. Effect on ICU mortality of a full-time critical care specialist. Chest. 1989;96:127-9.

Source: Manthous CA, Amoateng-Adjepong Y, al-Kharrat T, et al. Effects of a medical intensivist on patient care in a community teaching hospital. Mayo Clinic Proceedings. 1997;72:391-9.

Source: Carson SS, Stocking C, Podsadecki T, et al. Effects of organizational change in the medical intensive care unit of a teaching hospital: a comparison of 'open' and 'closed' formats. Journal of the American Medical Association. 1996;276:322-8.

Source: Ghorra S, Reinert SE, Cioffi W, Buczko G, Simms HH. Analysis of the effect of conversion from open to closed surgical intensive care unit. Annals of Surgery. 1999;229:163-71.

Source: Hanson CW, 3rd, Deutschman CS, Anderson HL, 3rd, et al. Effects of an organized critical care service on outcomes and resource utilization: a cohort study. Critical Care Medicine. 1999;27:270-4.

Source: Pronovost PJ, Jenckes MW, Dorman T, et al. Organizational characteristics of intensive care units related to outcomes of abdominal aortic surgery. Journal of the American Medical Association. 1999;281:1310-7.

The Leapfrog Group's Communications Toolkit

Toolkit Timeline

Below is a suggested timeline for communication and outreach activities about the issue of preventable medical mistakes. While most communication items can be disseminated at any point in the year, the following calendar has been developed to ensure regular and consistent communication with employees and retirees over a one-year period, starting with the fall open-enrollment period.

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Communications Opportunities												
Direct Mail Letter	**X**											
Newsletter Article 1	**X**											
Newsletter Article 2					**X**							
E-mail Alert One	**X**											
E-mail Alert Two		**X**										
E-mail Alert Three			**X**									
E-mail Alert Four				**X**								
E-mail Alert Five					**X**							
E-mail Alert Six						**X**						
E-mail Alert Seven							**X**					
E-mail Alert Eight								**X**				
E-mail Alert Nine *(ongoing)*	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
E-mail Alert Ten										**X**		
E-mail Alert Eleven											**X**	
E-mail Alert Twelve												**X**
Did You Know One		**X**										
Did You Know Two				**X**								
Did You Know Three						**X**						
Did You Know Four								**X**				
Did You Know Five										**X**		
Did You Know Six												**X**
Lunch and Learn Event	**X**				**X**							

Aetna Inc. ▪ American Medical Systems ▪ American Re-Insurance Company ▪ ArvinMeritor, Inc. ▪ AT&T ▪ Barry-Wehmiller Group, Inc. ▪ Bath Iron Works Corporation ▪ Bemis Company, Inc. ▪ Bethlehem Steel Corporation ▪ BF Goodrich/Rosemount Aerospace ▪ Board of Pensions of the Presbyterian Church (U.S.A.) ▪ The Boeing Company ▪ Buyers Health Care Action Group ▪ Cargill, Inc. ▪ Carlson Companies ▪ Caterpillar Inc. ▪ Ceridian Corporation ▪ Cerner Corporation ▪ Chicago Business Group on Health ▪ Colorado Business Group on Health ▪ The Commonwealth of MA Group Insurance Commission ▪ Coors Brewing Company ▪ DaimlerChrysler Corporation ▪ Delta Airlines, Inc. ▪ The Doe Run Company ▪ The Dow Chemical Company ▪ Eastman Kodak Company ▪ Eclipsys Corporation ▪ Electronic Data Systems ▪ Eli Lilly and Company ▪ Empire Blue Cross and Blue Shield ▪ Employer Health Care Alliance Cooperative (The Alliance) ▪ Exxon Mobil Corporation ▪ FedEx ▪ Fisher Scientific International ▪ Ford Motor Company ▪ Gateway Purchasers for Health ▪ General Electric Company ▪ General Mills, Inc. ▪ General Motors Corporation ▪ Georgia Health Care Leadership Council ▪ Georgia-Pacific Corporation ▪ GlaxoSmithKline ▪ Greater Milwaukee Business Group on Health and the Health Care Network of Wisconsin ▪ Hannaford Bros. Co. ▪ HealthPartners ▪ HealthCare21 Business Coalition ▪ Health Care Payers Coalition of New Jersey ▪ Honeywell Inc. ▪ Indiana Employers Quality Health Alliance ▪ International Association of Machinists ▪ IBM ▪ Jostens ▪ LG&E Energy Corporation ▪ LTV Steel Company ▪ Land O' Lakes ▪ Lockheed Martin Corporation ▪ Maine State Employee Health Commission ▪ Marriott International, Inc. ▪ Massachusetts Healthcare Purchaser Group ▪ The Mead Corporation ▪ Merck & Co., Inc. ▪ Midwest Business Group on Health ▪ Minnesota Life ▪ Minnesota Mining & Manufacturing Company (3M) ▪ Motorola, Inc. ▪ Musicland ▪ Northwest Airlines, Inc. ▪ Olin Corporation, Brass & Winchester Divisions ▪ Pacific Business Group on Health ▪ PepsiCo ▪ Pillsbury Company ▪ Pitney Bowes Inc. ▪ The Procter & Gamble Company ▪ Quality Systems Inc. ▪ Qwest Communications International Inc. ▪ Ramsey County ▪ Reliant Energy, Incorporated ▪ Rosemount Engineering ▪ Ryder System, Inc. ▪ Schering-Plough Corporation ▪ Solutia, Inc. ▪ Southern California Schools Voluntary Employees Benefits Association ▪ SUPERVALU INC. ▪ TCF Financial Corporation ▪ Target Corporation ▪ Tennant Company ▪ Textron Inc. ▪ Tri-State Business Group on Health ▪ TRW Inc. ▪ Union Pacific Railroad ▪ Union Pacific Railroad Employees Health Systems ▪ United Parcel Service ▪ Verizon Communications ▪ Washington State Health Care Authority ▪ Wells Fargo ▪ Xcel Energy ▪ Xerox Corporation ▪ ▪ The U.S. Office of Personnel Management, Centers for Medicare & Medicaid Services, and the Minnesota Departments of Human Services and Employee Relations also participate as liaison members.

Direct Mail Letter

The following letter can be included in open enrollment mailings, or – with the alternative first paragraph – can be included in other general employee communications.

Insert your company logo in the upper right corner of this letter before distributing it to employees. For the most up-to-date list of Leapfrog Group members, please visit http://www.leapfroggroup.org/about2.htm. Please note, however, that if you do revise any part of this letter (other than inserting your company-specific information), you may not include the masthead of members since the entire Leapfrog membership will not be aware of the changes you have made and may not be comfortable with having their name associated with them.

Dear Employee,

Open enrollment period is an excellent time to review important health care decisions that affect you and your family. It is a time for us to pause and prepare for the year ahead. As you review your health care options, we encourage you to visit [***If relevant content is on your company Web site, insert address here. Otherwise, insert www.leapfroggroup.org***] to learn about a pressing issue that requires our attention – preventable medical mistakes in hospitals.

(ALTERNATIVE FIRST PARAGRAPH) They say to be forewarned is to be forearmed. At some point you or a loved one is likely to need medical care in a hospital. Before an urgent medical need arises that may require you to visit a hospital, we encourage you to go to [***If relevant content is on your company Web site, insert address here. Otherwise, insert www.leapfroggroup.org***] to learn about a pressing issue that requires our attention – preventable medical mistakes in hospitals. The information there may help you make a more informed choice of hospitals. We also encourage you to consult with other sources of information, including your doctor and health plan representative, before making any medical decisions.

PREVENTABLE MEDICAL MISTAKES--A LEADING CAUSE OF DEATH

Did you know that a 1999 report from the Institute of Medicine found that up to 98,000 people die each year in America's hospitals, as a result of medical mistakes that are preventable? That's approximately [***insert local numbers here***]. While death is the most tragic outcome, medical mistakes cause other problems as well. They lead to permanent disabilities, extended hospital stays, longer recoveries and/or even additional treatments. Medical mistakes in hospitals can range from receiving an incorrect procedure or prescription to being served a meal that violates dietary restrictions set by the patient's physician. For example, many drug names are mistaken due to handwriting that is difficult to read or names that sound alike. The drug *codeine*, which is used to treat moderate pain or to control a serious cough, is sometimes misread as *cardene*, a drug used to treat high blood pressure and chest pain. The problem is not carelessness, but that highly qualified people are working under stress in a setting with many complex processes. Those processes could be improved to reduce avoidable errors.

WHAT CAN BE DONE TO REDUCE PREVENTABLE MEDICAL MISTAKES?

Our company wants to do something about this situation. Why? Simply because we're concerned about the health and safety of our employees and many medical mistakes are *preventable* – which means something *can* be done. We have joined **The Leapfrog Group** as one step in addressing this problem. Comprised of more

than 90 public and private organizations that provide health care benefits, The Leapfrog Group helps consumers make more informed health care choices based on information that medical experts throughout the country believe will improve hospital systems that could break down and harm patients. Representing over 26 million health care consumers in all 50 states, this group provides important information and solutions for consumers and health care providers.

The Leapfrog Group has chosen to focus on the quality of certain aspects of care relevant to urban area hospitals. This is because a patient is usually in fragile health when in a hospital and therefore, preventable mistakes that occur in a hospital have far more serious consequences. In the future, The Leapfrog Group plans to focus on other aspects of health care, such as doctor office visits.

Hospitals are already taking important steps to ensure patients' safety. Based on overwhelming scientific evidence, The Leapfrog Group decided to focus on **three practices** that have potential to save lives by reducing preventable mistakes in hospitals. While these steps will not prevent all mistakes in hospitals, they are a vital first effort. If these practices are implemented, they could prevent a substantial number of hospital deaths caused by preventable mistakes *every year*.

WHAT CAN EMPLOYEES DO?

Here are the three practices– and what you can do as a consumer – to make better choices concerning hospital care:

- **Choose hospitals that require doctors to use CPOE systems.**

  Research has found that many medical mistakes are due to handwritten prescriptions, which are hard to read and often lead to the wrong drug being given. Incorrectly filled prescriptions are responsible for many serious drug overdoses and dangerous drug interactions that are overlooked when new medication is prescribed. Medical experts estimate that more than one million of these kinds of serious mistakes happen each year in U.S. hospitals.

  But there is a way to prevent many of these prescription mistakes – with computerized physician order entry systems, or CPOE systems. When prescriptions are computerized, doctors enter orders into a computer rather than writing them down on paper, and the prescription is then automatically checked against the patient's current information for potential mistakes or problems. This helps the doctor by giving him or her all the information needed to make the best decision for the patient. Studies show this type of system can reduce serious medication mistakes by up to 86 percent. Go to [***If relevant content is on your company Web site, insert address here. Otherwise, insert www.leapfroggroup.org***] to find out which hospitals in your area report that they have CPOE systems.

- **Select hospitals with proven outcomes or extensive experience with specific procedures or diagnoses.**

  It's a simple truth. Patients who go to hospitals that have a history of good results in performing certain procedures have the best chance of surviving and successfully recovering. One of the most important factors to consider when choosing a hospital for surgery is how many times it performs that type of surgery each year. Over 100 studies published in leading medical publications like the New England Journal of Medicine or the Journal of the American Medical Association, have shown that patients usually get better results at hospitals that perform a high volume of their type of surgery. You can also ask your doctor if your hospital is known to have

good outcomes for your type of surgery, and go to [***If relevant content is on your company Web site, insert address here. Otherwise, insert www.leapfroggroup.org***] to find out what hospitals in your area report about their experience performing certain procedures.

- **Choose hospitals with Intensive Care Units that are staffed by specially trained critical care physicians and other caregivers.**

  Critically ill people need special care. Having the right experts in Intensive Care Units (ICUs) could mean the difference between life and death. In fact, at least one in ten patients who die every year in ICUs would have an increased chance to live if care were managed for at least eight hours per day by "intensivists," who are physicians specially trained to care for critically ill or injured patients. Go to [***If relevant content is on your company Web site, insert address here. Otherwise, insert www.leapfroggroup.org***] to find out which hospitals in your area report adequate ICU staffing.

TOGETHER WE CAN MAKE HEALTH CARE SAFER

One of our fundamental goals as a company is to help ensure that our employees have access to the safest and highest quality health care and can make informed health care decisions. While we cannot ensure that a hospital meeting these criteria will not make mistakes, we believe it is important to make informed health care decisions.

Our first step in achieving this goal is to share with you this important information about the issue of preventable medical mistakes. We are working to include information on our Web site – including a link to a report card that will help you assess how effectively hospitals are implementing the three safety practices discussed above. We are reaching out to hospitals that have not yet shared their information to urge them to do so. We anticipate information on hospitals will be accessible on our Web site by [**insert date**]. This is not the only source of information that you as a health care consumer should consult. You should also talk to your doctor and health plan representative. While the decision is ultimately up to you, we want to provide you with some information to make intelligent and informed decisions about your health care. Furthermore, if you come across any helpful information, we encourage you to share it with us so we can continually offer the best advice possible.

Stay tuned for more details on how we can effectively work together to reduce preventable medical mistakes.

Sincerely,

[Company Representative]
[Company Name]

Newsletter Article 1

The following newsletter article can be placed in company newsletters, human resources correspondence, etc. Include your company logo with this article to underscore your company's active involvement in the work of The Leapfrog Group. For the most up-to-date list of Leapfrog Group members, please visit http://www.leapfroggroup.org/about2.htm. Please note, however, that if you do revise any part of this letter (other than inserting your company-specific information), you may not include the masthead of members since the entire Leapfrog membership will not be aware of the changes you have made and may not be comfortable with having their name associated with them.

Choosing the Right Hospital Can Make a Big Difference to Your Health

Looking for a new doctor? It's important to know which hospitals a doctor is affiliated with. For that matter, do you know which hospitals your regular doctor is affiliated with? Is a friend or loved one in need of hospital care? You never know when you or a loved one is likely to need to be hospitalized.

While most of us know it's important to choose the right doctors for our medical needs, we often don't realize that choosing the right hospital is as important. Not harming patients is clearly a high priority at all hospitals, yet it is essential to remember that the quality of the care you receive as a patient can vary greatly from hospital to hospital. Choosing the right hospital can mean the difference between a successful recovery and tragic results.

Medical mistakes are the fifth leading cause of death in America, causing more deaths than car accidents, breast cancer and AIDS. Even more startling is the fact that more than 11 people are killed *every hour* in America due to medical mistakes – that's approximately [**insert local numbers here**]. [**Insert Graph 2**.] When mistakes made in hospitals are not fatal they still have consequences. They lead to permanent injury or disability, longer hospital stays, or longer recovery periods.

The Leapfrog Group – a coalition of more than 90 public and private organizations that provide health care benefits to more than 26 million Americans – has worked with medical experts throughout the country to identify problems and propose solutions that it believes will improve hospital systems that can break down and harm patients.

The Leapfrog Group's initial focus is on practices relevant to urban area hospitals. This is because a patient is usually in fragile health when in a hospital and therefore, any preventable mistakes that occur in a hospital have more serious consequences. In the future, The Leapfrog Group plans to focus on other aspects of health care, such as doctor office visits.

To date, The Leapfrog Group has identified three practices it recommends consumers consider when choosing a hospital for care. These practices were chosen because scientific evidence shows that they offer potential for significantly reducing deaths and injury due to preventable medical mistakes. Here are three steps you can take:

- Choose a hospital that requires doctors to use CPOE `systems`.
- Select a hospital with proven outcomes or extensive experience with specific procedures or diagnoses.
- Choose a hospital with an Intensive Care Unit (ICU) that is staffed at least eight hours per day by specially trained physicians and other caregivers.

THE LEAPFROG GROUP for Patient Safety
Rewarding Higher Standards

Aetna Inc. ▪ American Medical Systems ▪ American Re-Insurance Company ▪ ArvinMeritor, Inc. ▪ AT&T ▪ Barry-Wehmiller Group, Inc. ▪ Bath Iron Works Corporation ▪ Bemis Company, Inc. ▪ Bethlehem Steel Corporation ▪ BF Goodrich/Rosemount Aerospace ▪ Board of Pensions of the Presbyterian Church (U.S.A.) ▪ The Boeing Company ▪ Buyers Health Care Action Group ▪ Cargill, Inc. ▪ Carlson Companies ▪ Caterpillar Inc. ▪ Ceridian Corporation ▪ Cerner Corporation ▪ Chicago Business Group on Health ▪ Colorado Business Group on Health ▪ The Commonwealth of MA Group Insurance Commission ▪ Coors Brewing Company ▪ DaimlerChrysler Corporation ▪ Delta Airlines, Inc. ▪ The Doe Run Company ▪ The Dow Chemical Company ▪ Eastman Kodak Company ▪ Eclipsys Corporation ▪ Electronic Data Systems ▪ Eli Lilly and Company ▪ Empire Blue Cross and Blue Shield ▪ Employer Health Care Alliance Cooperative (The Alliance) ▪ Exxon Mobil Corporation ▪ FedEx ▪ Fisher Scientific International ▪ Ford Motor Company ▪ Gateway Purchasers for Health ▪ General Electric Company ▪ General Mills, Inc. ▪ General Motors Corporation ▪ Georgia Health Care Leadership Council ▪ Georgia-Pacific Corporation ▪ GlaxoSmithKline ▪ Greater Milwaukee Business Group on Health and the Health Care Network of Wisconsin ▪ Hannaford Bros. Co. ▪ HealthPartners ▪ HealthCare21 Business Coalition ▪ Health Care Payers Coalition of New Jersey ▪ Honeywell Inc. ▪ Indiana Employers Quality Health Alliance ▪ International Association of Machinists ▪ IBM ▪ Jostens ▪ LG&E Energy Corporation ▪ LTV Steel Company ▪ Land O' Lakes ▪ Lockheed Martin Corporation ▪ Maine State Employee Health Commission ▪ Marriott International, Inc. ▪ Massachusetts Healthcare Purchaser Group ▪ The Mead Corporation ▪ Merck & Co., Inc. ▪ Midwest Business Group on Health ▪ Minnesota Life ▪ Minnesota Mining & Manufacturing Company (3M) ▪ Motorola, Inc. ▪ Musicland ▪ Northwest Airlines, Inc. ▪ Olin Corporation, Brass & Winchester Divisions▪ Pacific Business Group on Health ▪ PepsiCo ▪ Pillsbury Company ▪ Pitney Bowes Inc. ▪ The Procter & Gamble Company ▪ Quality Systems Inc. ▪ Qwest Communications International Inc. ▪ Ramsey County ▪ Reliant Energy, Incorporated ▪ Rosemount Engineering ▪ Ryder System, Inc. ▪ Schering-Plough Corporation ▪ Solutia, Inc. ▪ Southern California Schools Voluntary Employees Benefits Association ▪ SUPERVALU INC. ▪ TCF Financial Corporation ▪ Target Corporation ▪ Tennant Company ▪ Textron Inc. ▪ Tri-State Business Group on Health ▪ TRW Inc. ▪ Union Pacific Railroad ▪ Union Pacific Railroad Employees Health Systems ▪ United Parcel Service ▪ Verizon Communications ▪ Washington State Health Care Authority ▪ Wells Fargo ▪ Xcel Energy ▪ Xerox Corporation ▪ ▪ The U.S. Office of Personnel Management, Centers for Medicare & Medicaid Services, and the Minnesota Departments of Human Services and Employee Relations also participate as liaison members.

Hospitals are working on many programs to reduce preventable mistakes and make health care safer for their patients, but we as health care consumers must also do our part. Your responsibility is to make informed health care choices and where possible, choose hospitals that adopt practices known to improve the quality of care provided.

If you or someone in your family needs medication during a hospital stay (and this is often the case), you should choose a hospital that requires doctors to use computerized physician order entry systems, or CPOE systems. Medical experts estimate that more than one million medication mistakes occur each year in U.S. hospitals. A CPOE system can reduce medication mistakes by up to 86 percent.
[**Insert Graph 1**.]

If you or someone you love is about to be hospitalized, you should choose a hospital that frequently performs the surgery or treatments needed. Studies show that the more experience a hospital has performing a specific surgery, the less likely the patient is to be the victim of a preventable medical mistake. In addition, you should also find out if your hospital has a proven track record for the type of surgery you or a loved one will need.

For hospital visits that might require a stay in an Intensive Care Unit (ICU), you should ask about the expertise of the hospital's ICU staff. Numerous studies published in leading medical publications, such as the New England Journal of Medicine and the Journal of the American Medical Association, have shown that ICUs staffed by critical care physicians that take care of patients at least eight hours per day have lower death rates and shorter ICU stays for patients.

We strongly recommend that you investigate the hospitals you might go to *before* a medical situation arises. When the time comes for you or a loved one to be hospitalized, you may not have time to do a thorough investigation.

Our company wants to do something about this situation. Why? Simply because we're concerned about the health and safety of our employees and most medical mistakes are *preventable* – which means something *can* be done. One of our goals as a company is to help ensure that our employees have access to the safest and highest quality health care and can make informed health care decisions. [**Insert company name**]'s first step in achieving this goal is to share this important information with you about preventable medical mistakes.

We are working to include information on our Web site – including a link to a hospital report card (like the example shown below) that will help you assess how effectively hospitals are implementing the three safety practices discussed above. We anticipate these resources will be available by [**insert date**].

The report cards are only one source of information you can use to make your hospital decisions. While we cannot ensure that a hospital meeting the three practices will not make any mistakes, we believe you will find the report cards a useful tool in evaluating your options. Hospitals are reporting the data in these report cards voluntarily.

Stay tuned for more details on how we can effectively work together to minimize preventable medical mistakes.

Newsletter Article 2

The following newsletter article can be placed in company newsletters, human resources correspondence, etc. Include your company logo with this article to underscore your company's active involvement in the work of The Leapfrog Group. If you would like to include the masthead of Leapfrog Group members, please visit http://www.leapfroggroup.org/about2.htm for the most up-to-date list. However, if you do revise any part of this letter (other than inserting your company-specific information), you may not include the masthead of members since the entire Leapfrog membership will not be aware of the changes you have made and may not be comfortable with having their name associated with them.

Preventable Medical Mistakes Lead to Thousands of Deaths Every Year

Being admitted to a hospital is often a stressful and sometimes frightening experience. During hospital stays, patients and their families put their trust in medical professionals to make sure they are well cared for and not harmed. Most of the time, patients are safely cared for without incident. Yet too often, some are harmed or die as a result of medical mistakes.

We would like to share a few things you should look for when choosing a hospital. We believe that a wise choice of hospitals includes selecting a hospital that has implemented the three key practices described in this article.

The issue of medical mistakes in hospitals is a serious problem, yet is too often not adequately addressed. A 1999 report from the Institute of Medicine – a congressionally chartered, independent organization that provides objective, timely, authoritative information to improve human health – estimates that up to 98,000 Americans die every year from medical mistakes in hospitals. That's approximately [**insert local numbers here**]. It is startling for many to discover that medical mistakes are the fifth leading cause of death in the U.S., ahead of car accidents, breast cancer or AIDS.

Medical mistakes in hospitals can range from receiving an incorrect procedure or prescription to being served a meal that violates dietary restrictions set by the patient's physician. For example, many drug names are mistaken due to handwriting that is difficult to read or names that sound alike.

Consider how similar the names of these medications are:

Codeine (used to treat moderate pain)	**Cardene** (used to treat high blood pressure)
Hydrocortisone (used to reduce swelling)	**Hydrocodone** (used to relieve pain)
Zoloft (used to treat depression)	**Zocor** (used to block cholesterol production)

These mistakes are most often caused by systems that break down and don't support the high quality and dedicated caregivers the way they should.

While death is the most tragic outcome, medical mistakes cause other problems as well. They lead to permanent disabilities, extended hospital stays, longer recoveries and/or even additional treatments. The real tragedy is that most of these medical mistakes are preventable.

In response to this serious problem, [**Employer**] and The Leapfrog Group – a coalition of more than 90 public and private organizations that provide health care benefits – are taking action. One of the group's primary objectives is to help consumers make informed health care decisions that will encourage hospitals to fix the systems that could harm patients.

The common goal is to work with medical experts to encourage hospitals to find ways to reduce the number of preventable mistakes in the U.S. health care system.

The Leapfrog Group has identified three key practices that it recommends everyone consider when deciding on a hospital. These practices were chosen because scientific evidence shows that they offer potential for successfully addressing the problem of preventable medical mistakes. If implemented, these practices could significantly reduce medical mistakes.

Here are three key steps you can take:

- **Choose a hospital that requires physicians to use CPOE systems.** Over one million serious medication mistakes occur each year in U.S. hospitals due to illegible prescription slips and poor record keeping. Studies show that computerized physician order entry systems can reduce serious medication mistakes by up to 86 percent.

- **Select a hospital with proven outcomes or extensive experience with specific procedures or diagnoses.** One important factor to consider when choosing a hospital is how many times each year it performs the type of surgery you need. Over 100 scientific and academic studies have shown that patients get better results at hospitals that perform a high volume of the type of surgery they need. For certain high-risk procedures, you may have the best chance of surviving and successfully recovering at hospitals that perform them frequently. It is also important to review any information available on surgery success rates at the hospitals you are considering.

- **Select a hospital with an intensive care unit that is staffed by expert critical care physicians and other caregivers.** More than four million patients are admitted to ICUs each year in the U.S. and 500,000 of these patients die. More than 10 percent of them could be saved if the right physicians cared for them. Numerous studies have found that ICUs that use critical care physicians called "intensivists" to manage patient care for at least eight hours per day have lower death rates and shorter ICU stays for patients.

While hospitals are working on many initiatives and programs to reduce preventable mistakes and make hospitals safer, not all initiatives will have the same impact. That's why it's important for you to talk with your doctor about these three practices and other steps hospitals are taking to reduce preventable mistakes. We believe with more information you can make a wiser choice of hospitals.

One of our goals as a company is to help ensure that our employees have access to the safest and highest quality health care and can make informed health care decisions. [**Insert company name**] is working to include this important information on our Web site – including a link to a hospital report card (like the example shown below) that will help you assess how effectively hospitals are implementing the three safety practices. We anticipate these resources will be available by [**insert date**].

The report cards are only one source of information you can use to make your hospital decisions. While we cannot ensure that a hospital meeting the three practices will not make any mistakes, we believe you will find the report cards a useful tool in evaluating your options. Hospitals are reporting the data in these report cards voluntarily.

Stay tuned for more details on how we can effectively work together to minimize preventable medical mistakes.

E-mail Alerts

The following e-mail alerts are designed to raise awareness of how employees and retirees can be more informed consumers of hospital care. All are intended to drive employees and retirees to company Web sites where they can learn more about preventable medical mistakes and how they can help address this issue. While most can be sent out to a broad audience at any point in the year, some have been drafted for dissemination at specific times and to specific audiences. Incorporate the logo for The Leapfrog Group and your company logo in these e-mail alerts to help provide a context for the messages about preventable medical mistakes.
We suggest sending a new alert each month. Alert Nine can be sent out each month.

- Did you know that every year up to 98,000 people die in U.S. hospitals due to medical mistakes *that could be prevented*? Hospitals are already working to address this issue. Find out what you can do to protect yourself from becoming a victim of medical mistakes by visiting [**insert company web address here**].

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Alert One**)

- Don't be a victim! Every year up to 98,000 people die in hospitals due to preventable medical mistakes – that's approximately [**insert local numbers here**]. Many more people are injured or disabled or have longer recoveries due to medical mistakes that could be prevented. Hospitals are working to avoid harming patients, but consumers have a role to play in addressing this issue. Your life is in your hands. There is information available today that can tell you which hospitals have implemented key practices to protect patients. Visit [**insert company web address here**] for more information.

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- If you can't read your prescriptions, what makes you think your pharmacist can? Handwritten prescriptions can lead to the wrong drug being given, but computerized physician order entry systems (or, CPOE systems) can prevent this. Does your hospital require doctors to use CPOE systems? Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Alert Three**)

- Practice does make perfect. More than 100 scientific studies show that people who select hospitals that frequently perform the medical procedure they need, have a better chance of recovery. The hospital where your surgery is performed can mean the difference between life and death. Visit [**insert company web address here**] for more information on how to choose a safe hospital.

The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Alert Four**)

- More than 10 percent of patients who die every year in Intensive Care Units (ICUs) could be saved if care were managed for at least eight hours per day by physicians specially trained to provide intensive care. Critically ill people need special care, and ICUs with the right experts save lives. Find out how the ICU at your hospital is staffed. Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Alert Five**)

- It pays to think ahead. Up to 98,000 Americans die every year from preventable mistakes in hospitals. Informed patient decisions are the key to avoiding such mistakes. Be certain. Choose the hospital with the right experience and proven track record for the procedure you need. Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Alert Six**)

- Intensive Care Units (ICUs) handle hospitals' most critical medical cases. These cases need the best care and patients deserve treatment by people who are specially trained to help them. More than 10 percent of patients who die every year in ICUs could be saved if the right medical staff took care of them. Be certain your hospital staffs its ICU at least eight hours per day with physicians in critical care medicine. It truly is a matter of life and death. Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Alert Seven**)

- We may not see you around the water cooler anymore, but [**Employer**] is still concerned about your wellbeing. In fact, we've started working to address a troubling situation that impacts us all. Did you know that more than one million serious medication mistakes occur each year in U.S. hospitals? Hospitals are already working to address this issue, and we're encouraging them to take additional steps. Find out what you can do to protect yourself by visiting [**insert company web address here**].

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual***

patient's outcome from receiving health care services at a particular hospital. (**Alert Eight – Retirees Only**)

- We know you've got a lot of new information to cover these days, but we want you to take a moment to learn about our involvement with The Leapfrog Group and how this group is working on a life and death issue – preventable medical mistakes. Leapfrog invited hospitals to report information about the practices they use to reduce medical mistakes. Use the information, in conjunction with other resources, to choose between different doctors that you are considering on your health plan and choose a doctor that is affiliated with a hospital that has a good safety record. Learn more at [**insert company web address here**].

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital***.
  (**Alert Nine – New Hires**)

- It's summer time. A time for relaxing, taking a vacation, spending time with family. Hospitals and medical emergencies are probably the last things on your mind. But did you know that up to 98,000 people die a preventable death each year in America's hospitals? Find out how you can dramatically reduce your chances of dying a preventable death. Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital***.
  (**Alert Ten – Summer Time**)

- More than one million serious medication mistakes occur each year in U.S. hospitals. Computerized physician order entry systems, or CPOE systems, take the risk out of getting your prescriptions filled. They can dramatically reduce medication mistakes and the likelihood of serious drug overdoses. Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital***. (**Alert Eleven**)

- Four million patients are admitted to Intensive Care Units (ICUs) each year, and approximately 500,000 of these patients die in ICUs each year. More than 10 percent of them could be saved if care were managed for at least eight hours a day by doctors specially trained to work in ICUs. Given the high stakes involved, it's essential that critically ill patients receive the highest quality of care. Visit [**insert company web address here**] for more information.

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Did You Know?

The following statements can be incorporated as textboxes and sidebars in newsletters and other print and online communications. Incorporate the logo for The Leapfrog Group and your company logo to help provide a context for the messages about preventable medical mistakes.
We suggest sharing a new statement every other month.

- Preventable medical mistakes in hospitals are the fifth leading cause of death in America. And though no one likes to think about it, one of us could be the next victim. There's good news, though. Many hospitals are taking action and [**Employer**] is working with other organizations to encourage other hospitals to do the same. We're collaborating with a group of experts on the issue of reducing preventable medical mistakes to identify some ways we can help. Find out more about this initiative and what you can do at [**insert company web address here**].

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- Do you know someone who has been mistakenly given the wrong medication? That's not surprising given that more than one million serious medication mistakes occur each year in U.S. hospitals. Some of these mistakes occur because of something as simple as bad handwriting on a prescription. Did you know the majority of these mistakes are preventable? Find out why your hospital should require doctors to use computerized physician order entry systems (CPOE systems) and how this could save lives. Learn more at [**insert company web address here**].

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- The next silent killer? Preventable medical mistakes cause more deaths every year than car accidents, breast cancer, or AIDS. Unless something is done to address this problem you or someone you love could be the next statistic. Hospitals are already working to address this situation. Find out how you can access information about your hospital and learn what the hospital is doing to reduce preventable medical mistakes [**insert company web address here**].

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- Some 98,000 people die a preventable death each year in America's hospitals – that's approximately [**insert local numbers here**]. Each and every one of these deaths is caused by medical mistakes that can be prevented. Many more people are injured or disabled or have longer recoveries due to preventable medical mistakes. Find out why you need to know what your hospital does to prevent medical mistakes – and where you can access this information – before you're admitted as a patient. Learn more at [**insert company web address here**].

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- More than 11 people die a *preventable death* every hour in America's hospitals. That's more than twice the number of people who die in car accidents each hour. Too many of these deaths are due to medication mistakes. Find out how most of these deaths can be avoided and how requiring doctors to use computerized physician order entry systems (CPOE systems) is already saving lives in some hospitals. Learn more at [**insert company web address here**].

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Five**)

- It's a fact. Patients have more successful recoveries from high-risk surgeries at hospitals that perform them frequently. Don't play the odds. Find out how many times your hospital has performed the type of surgery you need and what its success rate is for those surgeries. Visit [**insert company web address here**] for more information.

  The information about specific hospitals that is published by The Leapfrog Group is based upon data voluntarily submitted by hospitals. ***As a member of the Leapfrog Group, we make no direct or implied representations with respect to the content of these data or to any individual patient's outcome from receiving health care services at a particular hospital****.* (**Six**)

Lunch and Learn Event

The following is a plan for a lunch and learn session for employees and retirees to discuss the work of The Leapfrog Group. Included below are a number of key talking points about preventable medical mistakes and recommended action steps for consumers. Also included is a draft postcard for distribution to employees as a quick reference about the work of The Leapfrog Group and the recommended actions for consumers. You can also modify this card for inclusion in employees' paychecks.
We suggest conducting these sessions at least twice a year.

The Leapfrog Group

- [**Employer**] has joined The Leapfrog Group to address the problem of preventable medical mistakes in U.S. hospitals. Some 98,000 people die each year in America's hospitals due to medical mistakes that can be prevented.

- Comprised of more than 90 public and private organizations that provide health care benefits, The Leapfrog Group works to help consumers make more informed health care choices based on information that medical experts believe will improve hospital systems that could break down and harm patients. Representing more than 26 million health care consumers in all 50 states, this group is providing important information and solutions for concerned consumers and health care providers.

- The Leapfrog Group is focusing on the quality of care provided in urban area hospitals. While visits to the doctor's office are the way we usually interact with the health care system, we are most vulnerable and dependent on medical professionals when we are patients in a hospital. This is why The Leapfrog Group's initial focus is on hospitals – because a preventable mistake that occurs in a hospital can have more serious consequences than a preventable mistake in your doctor's office. In the future, The Leapfrog Group plans to focus on other aspects of health care.

- The members of The Leapfrog Group are providing health care information that enables people to make informed decisions about hospital care.

- Our company wants to do something about this situation. Why? Simply because we're concerned about the health and safety of our employees and most medical mistakes are *preventable* – which means something *can* be done. One of our goals as a company is to help ensure that our employees have access to the safest and highest quality health care and can make informed health care decisions.

- We would like to share a few things that we recommend you look for when choosing a hospital. Selecting a hospital that has implemented the three key practices discussed later in this session is an important health care decision.

Preventable Medical Mistakes

- Preventable medical mistakes are the fifth leading cause of death in the U.S., taking more lives than car accidents, breast cancer or AIDS. These mistakes may lead to death – but are largely preventable. While death is the most tragic outcome, medical mistakes cause other problems as well. They lead to permanent disabilities, extended hospital stays, longer recoveries and/or even additional treatments. The real tragedy is that most of these medical mistakes are preventable.

- Without proper safeguards, preventable mistakes can happen anywhere, anytime – and in surprising and unexpected ways. For example, many drug names are mistaken due to handwriting that is difficult to read or names that sound alike. The drug *codeine*, which is used to treat moderate pain or to control a serious cough, is sometimes misread as *cardene*, a drug used to treat high blood pressure and chest pain.

- [**Employer**] is taking action to minimize the occurrence of preventable medical mistakes. Up to 98,000 people die a preventable death in hospitals each year in the United States – that's approximately [**insert local numbers here**].

Actions for Consumers

Hospitals are working hard to avoid harming patients, but consumers have a role to play in addressing this issue and encouraging all hospitals to prevent medical mistakes. The Leapfrog Group proposes **three steps** that consumers can take to make more informed health care choices. These steps are based on scientific evidence that shows they offer potential for significantly reducing preventable medical mistakes. Here are the three steps you can take:

- **Choose a hospital that requires doctors to use computerized physician order entry systems.**

  Many medical mistakes are due to handwritten prescriptions, which are hard to read and often lead to the wrong drug being given. Incorrectly filled prescriptions are responsible for many serious drug overdoses and dangerous drug interactions that are overlooked when new medication is prescribed. Medical experts estimate that more than one million of these kinds of serious mistakes happen each year in U.S. hospitals.

  But there is a way to prevent many of these mistakes – with computerized physician order entry systems, or CPOE systems. When prescriptions are computerized, doctors enter orders into a computer rather than writing them down on paper, and the prescription is then automatically checked against the patient's current information for potential mistakes or problems. The result is up to 86 percent fewer mistakes and increased patient safety.

- **Select a hospital with proven outcomes or extensive experience with specific procedures or diagnoses.**

  It's a simple truth. Patients who go to hospitals with the most experience or with proven records of success have the best chance of surviving and successfully recovering. Two important factors to consider when choosing a hospital are how many times each year it performs the type of surgery or treatment you need and its success/failure record for that surgery or treatment. Over 100 studies have shown that patients get better results at hospitals that perform a high volume of their type of surgery or treatment.

- **Choose a hospital with an Intensive Care Unit that is staffed by critical care physicians and other caregivers.**

  Critically ill people need special care. Having the right experts in Intensive Care Units (ICUs) could mean the difference between life and death. In fact, at least one in ten patients who die every year in ICUs could be saved if care were managed at least eight hours per day by "intensivists," or physicians trained to care for critically ill or injured patients.

What Else You Can Do

- Go to [**insert company web address here**] to find out more about what [**Employer**] is doing to minimize preventable medical mistakes and to make hospital care safer.

- Find out what hospitals your doctor is affiliated with and find out what safety practices those hospitals have in place. You will rest easier knowing more about the hospitals that your doctor could admit you to.

- Talk with your doctor about the three safety practices and consider these factors when you make your hospital choices.

- Find out more about which hospitals in your community are taking action to ensure safer care:

-- Does the hospital require doctors to use `computerized physician order entry systems`?
-- Does the hospital have the right experience with your type of surgery?
-- Do specially trained physicians staff the hospital's Intensive Care Unit?
-- What other practices has the hospital considered or implemented to reduce preventable mistakes?

[**Insert company name**] is working to include this information on our Web site – including a link to a hospital report card (like the example below) that will help you assess how effectively hospitals are meeting the above safety practices. We anticipate these resources will be available by [**insert date**]. The data in these report cards was provided voluntarily by the hospitals.

Stay tuned for more details on how we can effectively work together to reduce preventable medical mistakes.

Postcard

Distribute a quick reference card to lunch and learn participants. Consider including this postcard in employees' paychecks and other employee communications.

Preventable medical mistakes are a problem
you can do something about.

- ✓ Does your hospital require doctors to use computerized physician order entry systems (CPOE systems)?
- ✓ Does your hospital have the right experience with and a proven track record for *your* type of surgery?
- ✓ Is your hospital's Intensive Care Unit staffed at least eight hours daily by "physician intensivists"?

Visit [**insert company web address here**] to access a hospital report card and to find out what you can do.

Informed decisions are the key to avoiding preventable medical mistakes.

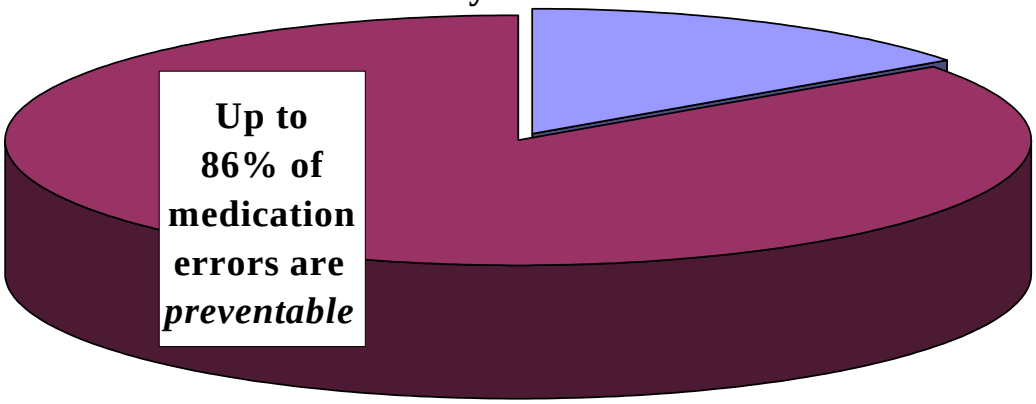
[Insert company logo here]

Graphs

Included here are graphic representations of key data about preventable medical mistakes. While a specific distribution point is not noted in the timeline, these graphs can be included in employee mailings, company newsletters and other print and online communications throughout the year. Several of the communication materials include bracketed notes with suggestions on where to insert a graph.

Graph #1

Of the one million medication errors each year, up to 86% can be prevented by computerized physician order entry (CPOE) systems



Find out what you can do to minimize your chances of being a victim of preventable medical mistakes. Visit [insert company web address] for more information.

Source: Bates DW, Teich JM, Lee J, Seger D, Kuperman GJ, Ma'Luf N, Boyle D, Leape L. The impact of computerized physician order entry on medication error prevention. Journal of the American Medical Informatics Association. 1999;6:313-21.

Graph #2

Twice as many people die from preventable medical mistakes as those who die in car accidents

Every hour…

11 people die from preventable medical mistakes

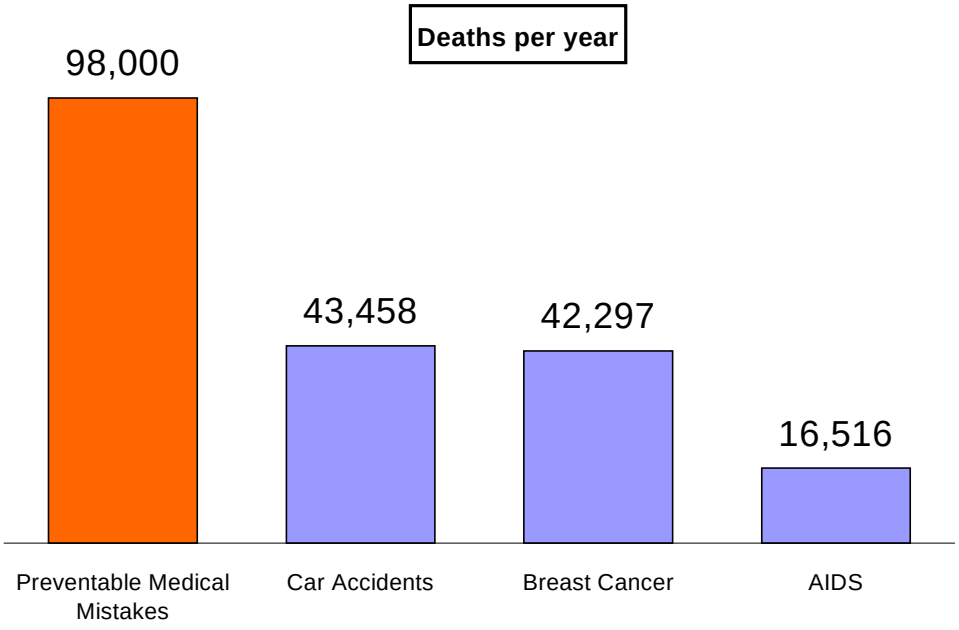
5 people die in car accidents

Find out what you can do to reduce preventable medical mistakes. Visit [**insert company web address**] for more information.

Source: Centers for Disease Control and Prevention, National Vital Statistics Reports, Vol. 48, No. 11

Graph #3

Preventable medical mistakes cause more deaths per year than car accidents, breast cancer or AIDS



Find out what you can do to address this critical issue and to minimize instances of preventable medical mistakes. Visit [insert company web address] for more information.

Source: The Institute of Medicine: To Err is Human: Building a safer health system. 1999. Additional estimates from the Centers for Disease Control and Prevention, National Vital Statistics Reports, Vol. 47, No. 25