ORIGINAL ARTICLE

Patient Safety Practices: Leaders Can Turn Barriers Into Accelerators

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Abstract: This paper is intended to meet a critical need expressed by community hospital administrative and medical leaders: to provide a briefing resource to call trustees and CEOs to action in patient safety. We seek to answer key questions regarding patient safety and the emerging Pay-For-Performance movement. To illustrate the terrific opportunities for trustees and CEOs to lead, we chart the early course of the Leapfrog NQF Safe Practices Program. We sort some of the truth from the myth. We then describe how trustees and CEOs can turn the common adoption barriers of awareness, accountability, ability, and action into accelerators of patient safety in their organizations. Leadership is truly the critical ingredient to rapid safety practice adoption. As such, trustees and CEOs have a duty to serve their communities as fully engaged leaders.

Key Words: patient safety, pay-for-performance, business case, trustees, innovation adoption, barriers

Our health care system and our communities are in crisis. We have a very serious patient safety problem, a terrible innovation adoption rate, and strong systemic resistance to change. Most hospitals are unprepared to deal with the emerging Pay-For-Performance (P-4-P) tsunami that is looming on the horizon. On the positive side, this crisis offers a golden opportunity for leaders who have the courage to catch the P-4-P wave and to drive adoption of safe practices that save money saving lives.

Leadership by our trustees, CEOs, and physician leaders is the single most important success factor to turning barriers of awareness, accountability, ability, and action into accelerators of performance improvement and transformation.

Hospital leaders and trustees need to become aware of the performance gaps—most are not. They need to be directly and personally accountable to close those gaps—very few are. They need to invest the resources and capacity into becoming able to change—few hospitals have yet to make adequate investments. Finally, they need to take explicit actions to close those gaps. Few trustees and other leaders do so without external pressure by health care purchasers.

OUR COMMUNITIES IN CRISIS

Are we really in a crisis? What are the facts? Have we made any progress since the Institute of Medicine report *To Err is Human*?

Worse Than Previously Believed

More than 4 out of 10 American consumers and 1 out of 3 physicians report that they themselves or a member of their family has experienced a medical error. In the case of the physicians, almost 1 in 5 of those events caused death, disability, or severe pain. In the case of the consumers, almost 1 out of 4 of the medical errors resulted in death, disability, or severe pain.[1]

Over time, we are finding that adverse event rates are much higher than previously thought. For instance, as many as 1 out of 4 admissions to hospitals result in an adverse drug event that causes death, disability, or harm requiring additional care. Surprisingly, many adverse events can be prevented without excessive expenditures on new technology.[2]

Further, it is likely that the patient safety problem was underestimated in the past. With every passing month, we find that the frequency and magnitude of medical error and harm is greater than expected. Although the estimation of such national impact is not an exact science, reports in 2004 ranged as high as 195,000 deaths per year.[3] This upper range may be challenged; however, most safety experts agree that the number has to be higher than the 44,000–98,000 cited in the 1999 Institute of Medicine report. Most importantly, such reports of harm to the public continue to be picked up by the mainstream press and thus perception becomes reality to the consumer.[4]

Not only are we realizing that adverse events are more common and causing more harm than previously thought, there are frontline innovators that are developing and adopting new best practices that is establishing a new standard of care. Practices such as the 6 included in the *100,000 Lives Campaign* announced by Dr. Don Berwick in December 2004 have such extraordinary impact that it is clear that more than 100,000 deaths can be prevented in 18 months if even a portion of U.S. hospitals adopt them.[5a] They include deployment of rapid-response teams that can prevent early patient decline and dramatically reduce hospital mortality, evidence-based care of acute myocardial infarction, prevention of adverse drug events by implementing medication reconciliation,

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and prevention of central line infections, surgical site infections, and ventilator-associated pneumonia by the adoption of well-grounded methods. So clear is the evidence of the impact of these practices that this commitment program is supported by the AMA, JCAHO, ANA, the Leapfrog Group, and numerous other national organizations.[6] A typical frontline 350-bed hospital with 20,000 admissions per year will have approximately 520 deaths. Using the IHI calculations, almost one-third of those lives could be saved by adopting the campaign practices.

Little Progress in 5 Years

Although there are bright lights of innovation, progress across our industry has been painfully slow. Even when best practices are established in the medical literature, only slightly more than half of all medical care is delivered using best practices.[6]

November 1, 2004 marked the 5-year anniversary of the IOM report *To Err is Human: Building a Safer Health System*. Sadly, aside from isolated examples (such as hospitals involved with the Institute for Healthcare Improvement (IHI), hospitals pursuing performance recognition awards such as the Baldridge Award, and hospitals seeking top tier recognition by The Leapfrog Group), there is no clear evidence that preventable deaths, disabilities, and harm have been reduced across the industry. Although the incentives for promoting patient safety have grown much stronger since the original publication of the IOM report, in the words of Dr. Bob Wachter, author of *Internal Bleeding: The Truth Behind America's Terrifying Epidemic of Medical Mistakes,* "these forces have not yet become robust enough to generate the dollars, systems, training models, and culture to transform modern health care into the safe, reliable system that patients and providers deserve."[7]

The press has recognized that we have definitely fallen short of our patient safety goals. They cite Dr. Don Berwick, CEO of IHI, who acknowledges that there has been some progress; however, American hospitals lack both the will and the funding to make a major impact.[8] Dr. Lucian Leape says, "Although we have all these examples of really meaningful progress, real improvements in safety, the vast majority of hospitals aren't doing it.…So we have a very major problem of how we diffuse this knowledge out to all hospitals, and I think that's the challenge for the next five years."[9]

According to a survey of 2,012 adults, undertaken as a joint project of the federal Agency for Healthcare Research and Quality (AHRQ), Harvard School of Public Health, and the Kaiser Family Foundation, and reported November of 2004, Americans are now more dissatisfied with health care quality than they were 4 years ago; 40% said health care has gotten worse over that time. Over half of the respondents said they were unhappy with quality of care today. As many as 48% of respondents said they were concerned about the safety of the medical care they and their family members receive.[10]

The biggest myth in health care is that we are rapid adopters of innovation. True, we are leaders in the discovery and development of products and procedures. However, unless there is direct short-term financial reward to caregivers or hospitals, it takes an average of 17 years for the results of clinical trials to become incorporated into standard clinical practice.[11–18] In the field of patient safety, it can be even longer. Sadly, the most powerful accelerators of innovation adoption (new Medicare reimbursement codes) for the most part cannot be directly linked to patient safety.

The Damage Reaches Far Beyond Patients—Our Communities Are Suffering

Not just patients and families are harmed by medical accidents. Our entire communities are impacted.

We often add insult to injury when an error occurs that causes serious harm. Rather than disclosing the facts of the situation, we often (on legal advice) stonewall patients and their families, in the mistaken belief that this will reduce malpractice risk. This forces families to seek legal means to find out what happened. Thus, we generate the opposite of the intended effect and generate only more malpractice claims, at the same time violating the vital bond of patient trust.[19]

We are abandoning the families we have harmed just when they need us the most. This is the perspective of Sue Sheridan, a consumer advocate whose family experienced not 1, but 2, catastrophic medical errors. First, her newborn experienced easily preventable brain damage from kernicterus. Second, her husband died the preventable death of a misplaced surgical pathology report. A true hero of patient safety, she led the development of the first consumer driven sentinel event designation by partnering with leading medical experts, other parents of children suffering the same medical error, and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Despite deplorable treatment by our medical and legal system, she has chosen to work tirelessly and partner with providers to make health care better.[20]

There is no definitive evidence that transparency and an aggressive disclosure policy increases the cost of malpractice. Although the number of claims may be greater, the overall expenses (including litigation and ultimate court awards) are believed to be less. In fact, malpractice insurance company leaders and plaintiff attorneys believe that disclosure reduces overall risk and magnitude of awards made by the courts.[21,22]

The difference between error-related catastrophes in aviation and those in health care is that pilots are always the first ones at the scene of the accident and the damage is clear. In health care accidents, our harshest critics are not totally in error when they say that we bury our dead and quiet the survivors. Cash awards are almost always coupled with non-disclosure requirements of recipients.

Plaintiffs and defendants alike have little positive to say about how our legal system handles medical errors. Adoption of best practices in disclosure has been slow. Further, we have done little to police our industry and deal with the growing cadre of experts for hire who can be found to support any argument that pays their fee.

When we turn a deaf ear to the rising evidence of preventable harm caused by systems failures and when hospitals stonewall and abandon families, we only extinguish the precious trust in our communities that is so vital to delivering optimal care. Whether or not a case ends up on the front page of a local paper or whether or not a non-disclosure clause is tied to an award, the stories of such behaviors rapidly move

through the social networks in our communities—often without the knowledge of trustees or even senior management teams.[23]

Perception Is Reality, and the Community Is Listening

Consumers are only encouraged to become more skeptical as they witness the leadership disasters of Wall Street and eroding trust in brands.[24] As such, they become primed to blame their hospitals for any untoward outcomes.

If we take our cues from consumer market dynamics and major business leaders, we find that brand value and trust is giving way to word-of-mouth references from a certain segment of our society termed the "Influentials." These people are highly connected individuals within the community to whom others turn to for advice, especially when it comes to health care. They are more likely to become activists for better health care and are far more likely to be aware of patient safety issues.[25,26]

Finally, 1 out of 4 Americans care for someone else, and 3/4 of them are women. The majority of health care decisions in families are made by women.[27] Women have much more extensive personal communication networks[28] and are 2.5 times more likely to seek health care information from the Internet than men.[29] These women, who make up the very fabric of our communities, are beginning to recognize that patient safety is a real threat to their families. Women are frequently the targets of national television public awareness campaigns addressing medical error.[30] Make no mistake—perception **is** reality and our communities are listening.

HOW CAN THIS HAPPEN IN AMERICA?

Don't we have the best caregivers, technologies, and hospitals in the world?

A Matter of Evolution—No One Is to Blame

It is fair to ask how we got here. Natural evolution explains our growing systems failures—it is not the fault of any one stakeholder. Over time, we have had to treat sicker and sicker patients with more and more complex treatments, faster and faster. In essence, we are practicing 21st century medicine within a 20th century infrastructure.

Years of reinforcing production-centered financial incentives have led to the evolution of a production-centered system driven by transactional volume. This unit-based compensation reward system is what has fueled discovery, procedural innovation, and throughput. Unfortunately, our great American innovators have just out-innovated our underlying infrastructure.

Our infrastructure framework can be deconstructed into at least 3 elements: 1) the social infrastructure—how we communicate and work together and communicate as teams; 2) our information management infrastructure; and 3) our physical infrastructure, such as our facilities. At present, our evolving care processes have exceeded the performance envelope of all three. Since there are no infrastructure-related reimbursement fees, these systems have been starved of investment.

The inadequacies of our social infrastructure and how we communicate and work as teams are brought into sharp relief when we consider stories such as that of Josie King. Even the pleadings of the most vigilant, bright, and well-educated mother could not stop the preventable death of her 18-month-old daughter from dehydration and a medication error in one of our best U.S. hospitals, served by some of our best clinical teams. Instead of using, Josie's mother, Sorrel King, chose to settle with the hospital without a law suit. She then used the funds to start a patient safety center that is now saving lives at the same hospital where her daughter died. Again, another consumer steps up to recognize the crisis and our shortcomings to help us close our performance gaps.[31]

Our health information technologies (H.I.T.) and infrastructure are only in their infancy. We are just now beginning to establish standards and to see investment by government purchasers and quality organizations.[32]

One only has to compare a typical hospital to a well-run hotel to see that our physical infrastructures are centered around production centers and not organized around the patient experience.

Healthy competition and market forces have not been at play until very recently. In the words of Porter and Teisberg, "Competition in the health care system occurs at the wrong level, over the wrong things, in the wrong geographic markets, and at the wrong time. Competition has actually been all but eliminated just where and when it is most important."[33] The ramifications of this evolution were first imperceptible, but now we have hit a tipping point resulting in our current economic and quality crisis.

Information Overload Drives Fragmented Care

Surprisingly, although less than 20% of what physicians do to deliver care is supported by evidence in the medical literature, we are already suffering from information overload.[34,35]

Health care information is expanding at a faster rate than we can synthesize. The new scientific material that is produced every 24 hours would take the average person 5 years to read.[36]

In response to the explosion of information and complexity, we have had to divide up medical care into domains of care or specialties. We have become so specialized that we know more and more about less and less such that the care of patients care has become extremely fragmented. We have lost direct view of the full trajectory of a patient's care and the systems that support that care. We have evolved to the point that we have ever widening blind spots to systems failures.

Our specialties have grown in number from 41 in 1953 to 160 in 2004.[37,38] The number of drugs physicians prescribe has grown from 435 in 1880 to more than 4,000 now.[39,40]

The number of randomized controlled *clinical* trials has grown from 38 in 1965 to 12,370 in 2003.[41,42] At any given time, 8,500 clinical trials are underway.[43] In 1874, there were 260 biomedical journals, a number that has doubled every 19 years since. By 2010 there will be over 45,000.[44] The doubling time of information in some sub-specialties of imaging can be measured in a matter of months.

With the growing population of baby boomers who will need chronic care, there is no end in sight for increasing demand.

In our current production-centered care system, where all of our care activities revolve around centers of production rather than individual patients, we deliver batch care where, in the words of patient center care guru Susan Edgeman-Levitan, "one size fits nobody."[45]

Challenging the Unimpeachable With the Inconceivable for the Invisible

Trust is vital to the care process. Caregivers have to be unimpeachable to have the trust of their patients and trust in our systems to take the heroic measures they do to treat patients.[23] It is simply inconceivable to many caregivers that, although they may have played their role perfectly, their patients still fall prey to bad outcomes through systems failures. Physicians now rarely see the entire care trajectory of any of their patients. They trust that the aggregate of our care processes will keep patients safe and will return them to health. The world of fragmented care betrays that trust. The systems-based harm to their patients remains invisible to the physicians.

It is critical that we recognize these blind spots; however, many of our medical journals lean toward recording interesting topics specific to care domains. As such, the basics of systems performance (or non-performance) rarely get airtime, especially if the message casts a negative light on physicians and hospitals.

WHY HAVE WE NOT IMPROVED? WHY IS KNOWLEDGE OF OUR FAILURES NOT ENOUGH?

The Grief of Performance Failure

One very real barrier to improvement has to do with the psychology of personal failure. Compounding the difficulty in recognizing systems failure is the very human reaction of grief. This grief comes with the difficult realization that we often unknowingly do harm when we are trying to do good.

Dr. Elizabeth Kubler Ross, who taught us the stages of grief, died in September of 2004. She taught us that we go through a series of stages after a major loss, beginning with denial, then anger, then bargaining, then depression, and finally acceptance.[46]

It becomes clear that each individual caregiver personally **and** each organization collectively must go through these stages of grief to take up the baton of patient safety.[47] This grief is very real: none of us aspired to deliver mediocre care or harm patients.

Some organizations go through these stages rapidly when a celebrated catastrophic event occurs. In fact, some of our greatest hospital champions for patient safety had to have a catastrophic event occur to a child or family member of a board member or CEO at their hospital. Such an event collapses the grief cycle, propelling the entire organization to transformation.[48]

The barriers to patient safety adoption are hard coated with this grief layer, which makes change so difficult. Most hospitals will proceed through these barriers; however, it takes time. This can be accelerated when courageous trustees, CEOs, managers, and physicians step up and lead.

Innovation Adoption Dimensions: Awareness, Accountability, Ability, and Action

Not unique to patient safety, there are very real barriers to innovation adoption, which we find in all industries that relate to the complexity of systems and relationships. Hospitals are complex adaptive organizations. Not only are they dealing with a myriad of internal relationships; there are many strained relationships with multiple external stakeholders. As such, innovation adoption is very complex and difficult.

We define the four dimensions of innovation adoption as Awareness, Accountability, Ability, and Action (the 4A's) and have incorporated them into a model for accelerating innovation adoption described in a later section.

Awareness is the first critical dimension of innovation adoption. Leaders must be aware of performance gaps before they can commit to adoption of any innovation. In the case of hospitals and patient safety, few are fully aware of the magnitude of the problem common to all hospitals. Fewer still are aware of the performance gaps at their own hospitals that can only be defined by direct measurement and communication to leadership teams.

Accountability of leaders to closing performance gaps is a key success factor. For innovation adoption to occur, leaders need to be directly and personally accountable to close the performance gaps. Although things are changing, across the industry few leaders are directly accountable for specific and measurable patient safety performance gaps.

Leaders can be aware of performance gaps and accountable to those gaps; however, they will fail to close them if their organizations do not have the ability to adopt new practices and technologies.

The dimension of ability may be measured as capacity. It includes investment in knowledge, skills, compensated staff time, and the "dark green dollars" of line item budget allocations. Our preliminary results from the TMIT Research Test Bed, where we are studying the impact of patient safety practices and solutions in hundreds of community hospitals, indicate that few hospitals have made adequate investments in patient safety.

Finally, to accelerate innovation adoption, organizations need to take explicit actions toward line of sight targets that close performance gaps and that can be easily scored.

Barriers exist along each of these dimensions. Such barriers can often be converted into accelerators by specific interventions.[49,50]

Health Care Mirrors Our National Culture

Societal values drive behaviors. Collective behaviors of groups define their culture. Some culture experts define culture simply as "the way we do things around here."[51]

Much airtime and ink have been given to the challenges of our current blame and shame culture. Most safety leaders agree that we need to develop a culture that includes "learning, trust, curiosity, systems thinking, and executive responsibility."[52]

What is rarely addressed in the health care literature is the obsession with the bottom line and associated cost containment behaviors. The "what's in it for me" mentality and "the end justifies the means" behaviors seen in other industries and taught to us by commercial business leaders are,

unfortunately, also present in health care. The driving values of short-term financial performance and stockholder gain described by experts on leadership have insidiously gripped all aspects of our society.[53]

Fortunately, the Pay-For-Performance movement heralds the beginning of the end of blind health care purchasing. The days of the glib self-satisfied "no margin—no mission" response by some administrators to requests for funding of safety or quality initiatives are over. This philosophy of the last 2 decades has robbed many institutions of the opportunity to deliver great care. As regulators, payers, and the press continue to peel back the onion of our cottage industry, they are finding clear evidence of the many tradeoffs between quality and financial performance. They are not pleased.

Middle level managers driven to meet unrealistic goals are forced to game the system and to make compromises in reporting performance and to stretch reimbursement coding criteria. Unfortunately, reports of outright fraud are likely to increase in frequency and magnitude as groups like the National Health Care Anti-Fraud Association (NHCAA) network federal agencies and insurance companies together. A GAO report estimates that as much as 1 out of every 10 dollars of annual spending in health care can be related to fraud.[54,55]

Some health care providers have fallen into the trap of other industries, blurring the facts to exaggerate performance or shirk accountability. As in major segments of our society, the noble act of telling the truth has been replaced by the "art of positioning." Facts about performance or medical error are less frequently brought to light than what "position" can be taken to reduce risk or increase gain.[56]

As hospitals increasingly respond to the demands for transparency by consumers and payers, it will be an eye-opener to some CEOs and trustees who do not realize how much gaming has been institutionalized in their very own health care organizations.

The good news is that competitive forces will reward transparency and ethics. It will be the great leaders who will put the trust back in public trust and the care back into health care.

Leaders who make themselves fully aware of the opportunity and importance of improving patient safety and health care quality are the same leaders who will be well poised to successfully surf the coming Pay-For-Performance tsunami that threatens all but the best prepared.

THE PAY-FOR-PERFORMANCE TSUNAMI

At the risk of being insensitive to the tsunami disaster of December 2004, we employ a metaphor previously used to describe the Pay-For-Performance phenomenon below.

More Than a Rising Tide

The Pay-For-Performance (P-4-P) movement is much more than a "rising tide that will raise all boats." It is a tsunami coming with little warning and can wreak havoc with those who are unprepared.

The cost containment anchor that became the lifeline that held hospitals in place during the 80s and 90s might become the very chain that pulls them under when the full impact of the tsunami strikes.

CEOs like Dr. Christopher Olivia of Cooper Healthcare have seized quality as a strategic differentiator and have shown us that clinical, operational, and financial performance are interdependent. He inspires us with the message that a focus on quality can deliver to the bottom line. He warns us that P-4-P may catch many unaware, similar to the HMO phenomenon when it struck in the 1980s.[57]

The No Outcome—No Income Tsunami

Falling reimbursement, rising malpractice woes, cresting work force issues, and strained hospital-physician relations are hammering healthcare leaders in ever more powerful waves. Just when it couldn't get any worse, the biggest threat is looming just over the horizon. Quietly building offshore in a climate of stakeholder unrest is a P-4-P tsunami that threatens all but the best prepared. Under a sea of complexity, long-ignored fault lines in the tectonic plate of health care have finally snapped into a major fracture with unprecedented force. The early shock waves under the water line were first felt by quality leaders, triggering a slow-motion chain reaction through Congress, then employers, JCAHO, the media, consumers, and finally government payers. With each layer an ever-surging tidal wave is forming.[6,58] (See Fig. 1 of No Outcome—No Income Tsunami.)

Quality Leaders

Quality leaders such as Dr. Lucian Leape recognized and reported our early failures. They helped the U.S. Congress understand the magnitude of the crisis in quality and safety.

IOM

Prompted by briefings and reports by quality leaders, Congress charged the Institute of Medicine (part of the National Academies of Science) to produce a report on the status of health care. Finding a patient safety problem of crisis proportions, the IOM released its first blockbuster report, *To Err is Human: Building a Safer Health System*, followed by a series of reports including *Crossing the Quality Chasm: A New Health System for the 21st Century.* They are providing an extraordinary roadmap for health care.
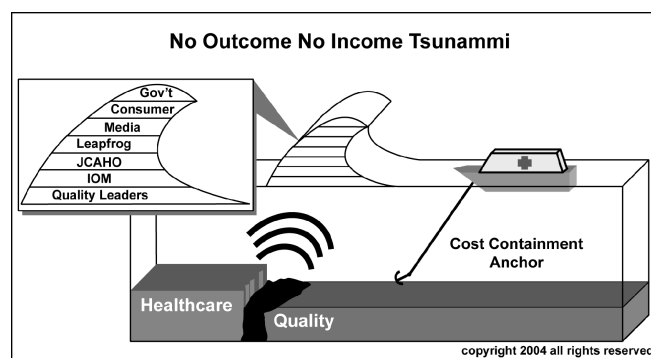

No Outcome No Income Tsunammi

Gov't
Consumer
Media
Leapfrog
JCAHO
IOM
Quality Leaders

Cost Containment Anchor

Healthcare Quality

FIGURE 1. A break in healthcare quality has triggered a chain reaction through major healthcare stakeholders to generate the Pay-For-Performance movement. (Reproduced with permission from Charles R. Denham.)

JCAHO

Following the IOM reports, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), an organization important to assuring hospital payment, has become aggressive in the area of patient safety. Many of JCAHO's new requirements are tied to tangible areas of impact on adverse events. Even with such focus, JCAHO has been under pressure from the federal government to step up efforts in this area.[60] JCAHO has recognized the importance of the P-4-P phenomenon and has recently issued a set of recommended principles for the construct of P-4-P programs.[60]

The Leapfrog Group

Appalled with the preventable cost, loss of life, and suffering of their employees, U.S. employers became active and formed The Leapfrog Group. Leapfrog is composed of more than 160 Fortune 500 companies and other large private- and public-sector health care purchasers. Together, these purchasers wield more than $62 billion in annual purchasing power and represent more than 34 million covered lives. The rapidly expanding Leapfrog Group P-4-P programs have clearly caught the attention of hospitals and caregivers. In the words of Leapfrog co-founder Dr. Arnie Milstein, "My message to CEOs is that if you bet your job on high-yield performance improvement, the market will reward you."[61] As shown by the early returns from the Leapfrog NQF Safe Practices Survey (described in the next section), hospital leaders making true commitments to performance improvement initiatives are experiencing a galvanizing effect on patient safety and health care quality in their institutions.

Media

The majority of our television stations, newspapers, and radio stations are now owned by companies that have turned "news programs" into profit centers driven by ratings and advertising sales. The story selection criteria becomes "if it bleeds—it leads" or the "three C's—conflict, controversy, and combat," only serving to drive sensational storytelling. Transparency will be an absolute given in the future. The risk to hospitals that are not taking patient safety very seriously will only grow. A 2000 survey shows that more than half of the American public was following media coverage of medical errors shortly after the release of *To Err Is Human*.[10]

Consumers

After the 1999 release of the IOM report, horror stories of individual health care consumers dominated the press. This trend continues today, in both the national and local news. A November 2004 report from the Kaiser Family Foundation and the AHRQ found that 40% of consumers believe that the state of health care has deteriorated since 2000.[30] As health care costs are increasingly shifted to consumers, these consumers are becoming energized and vocal. Tomorrow's health care consumers will be demanding quality, safety, and value from their providers, or else they will be taking their health care dollars elsewhere.[62]

Government

Dr. Mark McClellan, Administrator for the Centers for Medicare and Medicaid Services (CMS), has set a new course for CMS. CMS will become a public health agency with highly focused initiatives to improve quality. P-4-P programs will be the key to that transition. [Editor's Note: See the interview with Dr. McClellan in this issue's Solutions for Leaders column.]

Surfers, Swimmers, and Sinkers

When the full brunt of the P-4-P tsunami comes—and it will—there will be 3 types of organizations: the surfers who "make things happen" and race ahead, leveraging the power of the wave; the swimmers who "watch what happens" and barely ride it out; and the sinkers who "wonder what happened" and drown.

The P-4-P movement now threatens not only to shift market share away from some hospitals, but also portends a drop in unit payment reimbursement. This is happening so fast that some hospital leaders will have little time to react.

Not until now, with the phenomenon of the P-4-P movement, have quality measures been a market driver. However, Porter and Teisberg state that "the health care system can achieve stunning gains in quality and efficiency. And employers, the major purchasers of health care services, could lead the transformation."[33]

LEAPFROG NQF SAFE PRACTICES SURVEY

A real world example of turning barriers into accelerators is the story of the Leapfrog National Quality Forum (NQF) Safe Practices Program. The program has provided a concrete basis from which hospitals can build actionable patient safety development plans. Although we will be publishing a detailed analysis in a future report, a brief review of the development process and overview of the early returns may be helpful to leaders as they prioritize patient safety initiatives.

The Leapfrog NQF Safe Practices Survey

Comprised of a voluntary survey and ranking system developed by the Texas Medical Institute of Technology (TMIT) for the Leapfrog Group, the Leapfrog NQF Safe Practices program is being used by Fortune 500 Companies to reward hospitals for their progress in adopting patient safety practices.

The survey is tied to a set of safe practices that have been carefully vetted by the NQF and published as the *Safe Practices for Better Healthcare Consensus Report* of 2003.

Included in the 30 practices are the original 3 focus areas or "Leaps" of The Leapfrog Group: 1) Computerized Physician Order Entry, 2) ICU Physician Staffing, and 3) Evidence-Based Hospital Referral for certain high-risk procedures.

For this new program, Leapfrog's Fourth Leap, a survey is used to assess hospitals' progress on the remaining 27 safe practice areas. One practice relates to creating a culture of safety, 2 relate to matching care needs to service capability, 7 relate to improving information transfer and communication, 11 relate to specific care processes, and 6 relate to safe medication use. After completion of the online Leapfrog hospital survey, each hospital's relative ranking compared with other hospitals will be displayed on the Leapfrog Web site, along with their results for the initial 3 Leapfrog initiatives, so that they can be used by purchasers and consumers.

The Mission Impossible

The Leapfrog Group challenged our team at TMIT to apply our innovation acceleration methods to the design of a survey that would allow hospitals to assess their own progress in adopting 27 of the Safe Practices. The objective was to not only assess the hospitals' progress in patient safety, but to create a roadmap for implementation, thus turning many of the traditional barriers to adoption into adoption accelerators.

The detail of the methods used to weight each of the practices and the rationale for the ranking system will be provided in a future report. A highly disciplined approach was undertaken with a senior medical advisory board of international experts in patient safety and quality, which it is an honor for me to chair. This board includes Dr. Lucian Leape, the father of patient safety; Dr. Don Berwick, CEO of IHI, a national treasure and north star of the quality movement; Dr. Jim Bagian, the visionary head of the Patient Safety Center at the VA; Dr. David Bates, a tremendous thought leader and co-author of the NQF Report; Dr. David Classen, a vital contributor to safety and informatics; Professor James Reason, an enormous global contributor in human factors psychology and safety; Dr. Gregg Meyer, a former leader and major contributor at AHRQ and Medical Director at Massachusetts General Physicians Organization; Dr. Roger Resar, a terrific innovator from Mayo Healthcare System; and Dr. Carol Haraden from IHI, who is energizing patient safety teams around the world.

They were supported by panels of 120 subject matter experts from leading academic centers and frontline hospitals, who provided specific expertise for each of the NQF Safe Practices. A group of more than 60 pilot hospitals and the TMIT National Solution Test Bed were also contributors.

Encouraging Continuous Performance Improvement

Our design objectives were to create the most reasonable and appropriate program possible, while at the same time creating a mechanism to recognize those hospitals that were continuously trying to improve.

The 4A model described below was systematically applied to each of the 27 Safe Practices. By measuring the progress of the hospitals along the dimensions of awareness, accountability, ability, and action, we allowed them to gain credit even if they were not undertaking the practices explicitly stated in the NQF report.

The hospitals were given the opportunity to implement performance solutions from the most current research available, which effectively neutralized the datedness of the report and the limitations of its references.

Partial credit was provided for those hospitals that made commitments to start certain programs. We also created an opportunity for the hospitals to take immediate actions before submitting the survey that would generate credit. We hoped to create a Hawthorne Effect. That is to say, we attempted to create the opportunities for hospitals to catalyze new patient safety activities by just participating in the survey process. We wanted to raise the level of debate regarding patient safety to the leadership teams.

By using a "select all that apply" survey question design, hospitals have many opportunities to generate partial credit for partial progress and partial credit for commitment as described above.[63]

Finally, all hospitals were given the opportunity to resubmit the survey as frequently as once per month so that they could be recognized for their latest progress and to stimulate continuous performance improvement along the road to patient safety.

Applying the 4A Accelerator Model

We measured the progress of hospitals toward patient safety using our 4A Accelerator Model. The model assesses an organization's progress relative to a performance gap along 4 dimensions: awareness, accountability, ability, and action.

The model applies concepts, tools, and resources that are part of a comprehensive innovation decision support system developed over 20 years. The system has been applied through more than 400 solutions projects in over 50 product, service, and technology categories, including pharmaceuticals, IT solutions, devices, and services.[64,65]

Essential to using the model for accelerating new innovations is the concept of Performance Solutions. Performance solutions are individual or combinations of products, services, and technologies that enable best or better practice, as assessed by established process measures, outcomes measures, or structural measures. In the case of the Leapfrog NQF Safe Practices Program, the safe practice areas were examined relative to the dimensions of adoption in the same way we would approach a technology. One objective of the model, when used with solutions, is to target total systems performance using a patient-centered and evidence-based medicine approach.

In the case of the NQF Safe Practices (Fig. 2), we measured awareness of the hospital to THE performance gap common to all hospitals by measuring the existence of educational programs they have held addressing the adverse event pertinent to the safe practice being examined. We measured their progress toward awareness of their own (OUR performance gap) by assessing their progress in measurement of their own performance. Each year as process measures, outcome measures, and structure measures evolve, the survey will become more explicit and tie performance improvement to reliability metrics (how often an adverse event occurs relative to the processes undertaken).

The centers of gravity or leverage points in an organization exist with the leadership. The personal accountability of leaders to performance parameters is a direct corollary to success. For each practice, accountability of the appropriate level of leadership was measured by the existence of specific references in performance reviews or compensation reviews (Fig. 3).

As mentioned previously, a hospital may be aware of performance gaps and leaders may be accountable to close those gaps; however, if the organization does not have the ability to change, success is unlikely. We measured progress in development of ability by assessing investment in education, skill development, compensated staff time, and line item budget allocations (Fig. 4). Investment in ability is clearly a major
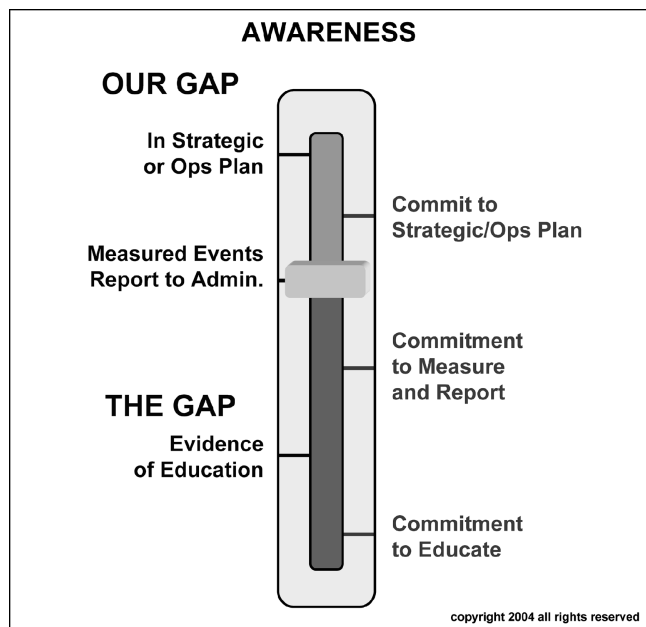
FIGURE 2. Awareness of THE Performance Gap common to all hospitals was scored in terms of safety education. Awareness of OUR Performance Gap scored progress in performance measurement. (Reproduced with permission from Charles R. Denham.)

FIGURE 4. Ability was measured in terms of investment in education, skill development, compensated staff time, and line item budget allocations. (Reproduced with permission from Charles R. Denham.)

driver of sustainable innovation adoption. Without such investment, transformational change is impossible.

If the NQF practices were clear, up to date, and easy to measure through a survey, we assessed explicit actions by the hospital. As many practices were not easy to audit and there were several instances where we wanted to provide generous
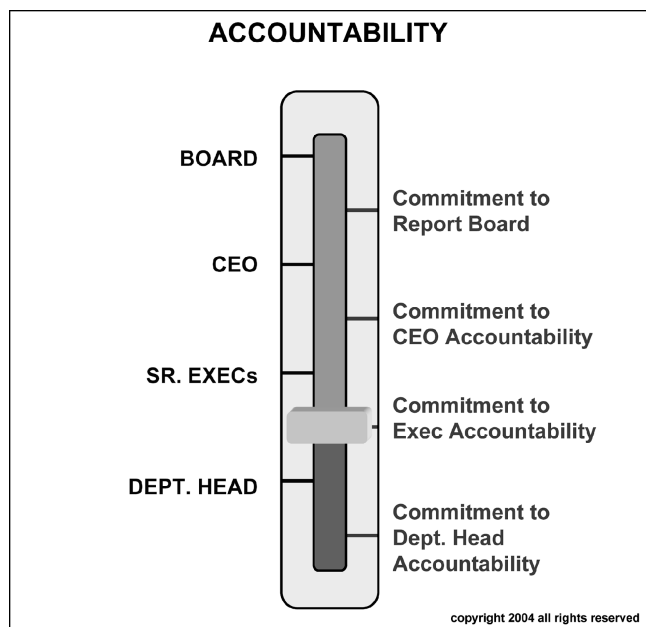
FIGURE 3. Accountability of leaders to performance gaps through performance reviews and compensation were scored. (Reproduced with permission from Charles R. Denham.)
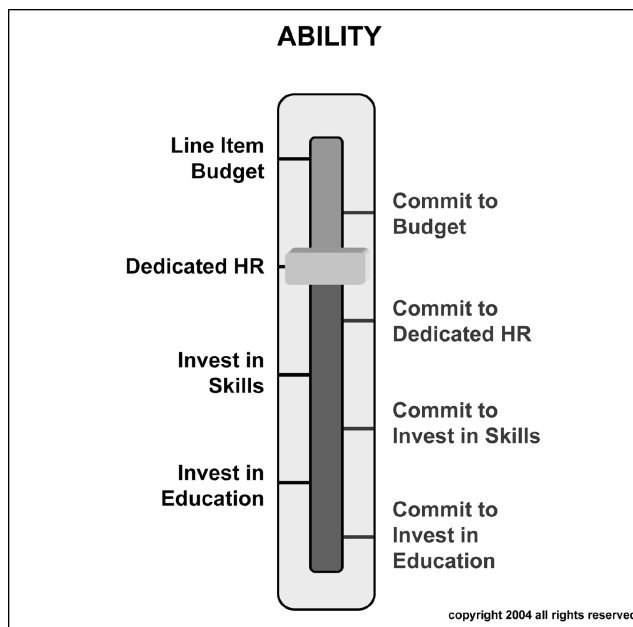
interpretation, we gave credit for performance improvement (PI) programs. PI programs had to include 5 elements: education, skill development in PI tools, measurement, process improvement, and reporting to leadership. We then cross-walked our requirements to those of the Joint Commission and other certifying, regulatory, and payer organizations common across all hospitals (Fig. 5). In future surveys, hospitals' overall performance and actions may be measured in terms of reliability, as is currently done in the field of technology adoption.

Early Returns and Lessons Learned

Although the survey returns are early and we will be analyzing aggregated results and reporting on them in the months ahead, we are very pleased with the preliminary findings that have been gratifying and enlightening.

The survey results of over 1,000 hospitals reveal that many hospitals are making progress. For instance:
7 in 10 hospitals require a pharmacist to review all medication orders before medication is given to patients.
8 in 10 hospitals have implemented procedures to avoid wrong-site surgeries (operating on the wrong part of the body).
However, many hospitals still have significant progress to make. For example, of all respondents to date:
7 in 10 hospitals report they do not have an explicit protocol to ensure adequate nursing staff, or a policy to check with patients to make sure they understand the risks of their procedures.
6 in 10 hospitals lack procedures for preventing malnutrition in patients.
5 in 10 hospitals report they do not have procedures in place to prevent bed sores (pressure ulcers).
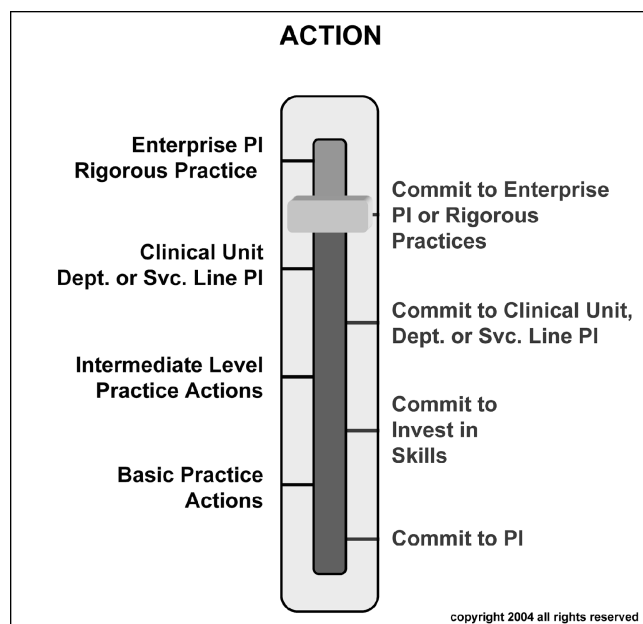
FIGURE 5. Action was measured by assessing progress toward meeting requirements of certifying, regulatory, and payer organizations and participation on Performance Improvement Programs. (Reproduced with permission from Charles R. Denham.)

4 in 10 hospitals lack policies requiring workers to wash their hands with disinfectant before and after seeing a patient.

It is clear that our objective of generating a Hawthorne Effect has been achieved. Many hospitals have morphed the survey into a tactical plan for patient safety improvement—the dimensions of awareness, accountability, ability, and action become categories of activity toward closing performance gaps. Scores of follow-up interviews, calls, and e-mails from mid-level staff and physicians confirm a shift in priorities and resources toward patient safety as a result of coupling P-4-P to patient safety through the program.

A Submitter's Tool Box was prepared for hospital personnel who are charged with preparing the survey for their institutions. The Tool Box prioritizes scenarios for the CEO, addressing how much credit would be gained by making commitments that would generate partial credit and addressing immediate actions prior to submission that could be taken to generate optimal scores. This process raised the patient safety debate and in many cases drew new financial and staff allocations for safety.

Some leading multi-hospital systems, such as Texas Health Resources led by CEO Doug Hawthorne, have made patient safety core to board retreats and enterprise-wide strategic plans.

Dr. Gregg Meyer has a unique perspective, having formerly served as an architect of the NQF Safe Practices development as a leader at the AHRQ and then subsequently being the physician leader at Massachusetts General Hospital. His message of "be careful what you wish for" underscores both the importance of adoption of the practices and the difficulty of making such changes. [Editor's Note: See the Solutions for Leaders column (Denham, CR) in this issue of the *Journal of Patient Safety.*]

One disconcerting finding, gleaned from national teleconferences, was that many hospitals presumed that their competition would cheat or game the system. There was a great deal of preoccupation with this issue, which will be dealt with through quality assurance follow-up reviews. This finding reflects the importance of cultural and integrity issues as we design future quality reporting or P-4-P initiatives.

The Future Leapfrog NQF Safe Practices Program

The 2005 survey will address the same topics with the same weighting of safe practices. However, the Frequently Asked Questions (FAQs) will be greatly enhanced to clarify the criteria for answers and to address new evidence in the literature. An auditing process will be built into the program to assure accuracy and clarity of reporting.

The input of TMIT task forces addressing pediatric hospitals, rural hospitals, and a number of specialty areas will be incorporated into the program as well.

The NQF Safe Practices will likely be updated in the future and may be reflected in the 2006 survey and program. This will include the ranking systems.

In the case of development work that may be linked to payment, there is always the risk of conflicts of interest affecting the results. Although it may disappoint the skeptics who believe that P-4-P is merely a cost reduction effort, to date, all guidance and work with The Leapfrog Group and employers has been absolutely focused on quality and safety. TMIT funded the program with no outside funding from industry and has been empowered to focus solely on driving patient safety.

Through the TMIT National Solutions Test Bed of hundreds of frontline hospitals, we will be studying the clinical, operational, and financial impact of the Safe Practices. We will also address cost and adoption factors important to their success. We will identify and validate performance solutions that enable them.

Until very recently, the patient safety plan development process was like any innovation adoption effort in early stages. We are sculpting fog. With the convergence of patient safety measures, standards, and practices that is beginning to occur and the emergence of the P-4-P movement,[60,66] leaders can now prioritize initiatives that will save lives and preserve revenue streams.

CALL TO ACTION FOR TRUSTEES AND CEOS

What can trustees do that they are not already doing? Shouldn't trustees focus on finances and development and leave quality to the administration and physicians? What value can a non-clinical trustee add?

A Community Crisis Requires Community Leadership

Our communities are in crisis and there is a clear and present danger to every patient admitted to a hospital. Our community leaders need to step up to the plate. Some of the most

compassionate and dedicated people in the country are our hospital administrators, medical leaders, nursing leaders, and other caregivers. They are extraordinarily capable, but they desperately need the direct and dedicated help of community leaders on their governance boards to take immediate action.

Great leaders give teams a destination to seek, a course to steer, and a helm to grasp. If the new destination we must seek is a safe hospital, they must allow us the luxury of mid-course corrections in our plans, and give us the hands-on direction and provide the resources for systems improvement.[67]

Get in the Quality Game—It's Not Just About Hospital Economics

Governing boards of non-profit hospitals, generally comprised of non-clinical successful community leaders, naturally concentrate on the parameters that they are used to managing—financial performance and development. Historically, trustees entrust hospital performance quality to senior management. Senior management, in turn, entrust quality to well-credentialed medical staff in the belief that credentialing assures safe and high quality care.

The problem with this is that today's medical leaders in community hospitals were trained at a time when the formal disciplines of evidence-based medicine, human factors science, systems performance, and reliability science were simply never taught to physicians. As such, the integrated systems failures we experience are invisible to nearly all until the celebrated catastrophic event occurs.

Trustees, CEOs, management teams, physicians, and nursing leaders must get into the quality game, or else their hospitals will inevitably suffer the consequences of more and more frequent systems failures.

Many trustees who have led businesses outside of health care have a better understanding of systems performance than we do as health care providers. Trustees, Administrative Leaders, and Physician Leaders must forge an alliance and work as a leadership team: We all have to get into the quality game together.

"Leadership Is Not Just a Noun—It Is Also a Verb"

These are the words of Gary Kaplan, MD and CEO of Virginia Mason Hospital. His hospital is posting extraordinary performance in quality and safety. At our greatest hospitals, leadership occurs at all levels and is far more about action than position.

Some of our greatest contributors are servant leaders from the rank and file, leaders like Jane Justensen, a staff nurse at Luthor Middleford hospital in Eau Claire, Wisconsin. She developed the medication reconciliation methodology that was ultimately adopted by the State of Massachusetts. Medication reconciliation will be a major area of focus by JCAHO in 2005 and is a major feature of the *100,000 Lives Campaign* mentioned earlier. All of our hospitals have people like Jane who are ready to innovate. They just need to be tapped.

Terrific frontline innovators like Dr. Roger Resar from the Mayo Health System and other faculty members of IHI hospital collaborative programs are re-writing the book on patient safety and are accelerating the adoption of Safe Practices all across the country. Patient Safety leaders like Dr. John Whittington from Saint Anthony Medical Center/OSF are sharing their time and energies to bring about change across the country through peer-to-peer training and IHI innovation groups. Every hospital has physicians and administrators who could become the next generation of such educators. They just need to be encouraged.

Great leaders can be found all along the health care value chain, beyond the providers and academic centers. Nancy Foster of the American Hospital Association, formerly a leader at the Agency for Healthcare Quality and Research, is working tirelessly with the AHA team to help hospitals drive safety and embrace the new age of P-4-P and transparency. Without the steadfast support of Rick Norling, the CEO of Premier, the national group purchasing organization, the CMS–Premier Health Quality Initiative pilot focusing 287 hospitals on performance improvement through a P-4-P framework would never have become a reality.

The days of the "3 CEO keeps"— keep the board happy, keep the doctors happy, and keep your job—are over: The best CEOs in the country are aggressively crafting a coalition of leadership across their trustees, their senior management teams, and their leading physicians to drive meaningful change. They are what Jim Collins, the author of *Good to Great,* calls Level 5 Leaders. These leaders are characterized by deep humility and fierce determination, like Lowell Kruse, CEO of Heartland Healthcare in St. Joseph, Missouri.

Our trustees, CEOs, and physician leaders must avoid the pitfalls of leaders in other industries. Bill George, a phenomenal leader and former CEO of Medtronic, now the world's largest device manufacturer and author of *Authentic Leadership,* provides a list of what leaders need to avoid. This list includes succumbing to pressure to meet others' expectations, a priority on financial returns and power, not facing reality and distorting bad news, eliminating critical voices, avoiding hard choices, the unwillingness to face shortcomings, and deviating from their values. Again, this issue of values surfaces as a number one leadership responsibility.[53,68]

Finally, as an industry, we should be ashamed of ourselves for allowing consumers to have to lead us. These leaders, whose family members have died the preventable deaths of systems failures and suffered from our barbaric disclosure policies—like Sue Sheridan and Sorrel King previously mentioned; Ginny Dingeman, founder of patient safety consumer groups; and Nancy Conrad, the wife of astronaut Pete Conrad who has founded the Community Emergency Healthcare Initiative—are donating their time and money as well as reliving their stories to help us lead on our own.

Patient safety begins with leadership, it ends with leadership, it is all about leadership. We have our call for action. It is time.

It's Not About ROI, It's About SIB—Stay in Business

Historically, much hospital revenue has been guaranteed, and thus insulated from typical market forces. Since we were paid regardless of our quality, as long as we had unit volume,

we could cost contain our way to generate margins. There was no check and balance.

We have been lulled into an entitlement mentality that can prove fatal. Those on the national scene who have argued that there is not a return on investment for patient safety innovation routinely neglect to address 2 critical issues[69]: 1) that our revenue will not be at risk even if we allow quality and patient safety to slip; and 2) that hospitals that are safer are more reliable, have less rework, and fewer costly adverse events that are not reimbursed, and are rewarded by enterprise-wide performance gains. Arguing that there is not a business case for patient safety now that P-4-P is coming is like the restaurant industry arguing that there is no ROI for refrigeration. It is not about ROI, it is about SIB—Stay in Business. Transparency will provide a check, and P-4-P will provide the balance. A spirit of entitlement has so permeated our culture that we forget to factor revenue as a variable rather than as a given. We have not considered market forces and competition.

Clinical, operational, and financial performance are intrinsically interlocked and tightly coupled. Pathfinder hospitals that have single-mindedly focused on quality have been gratified in finding that there is a terrific business case for patient safety and quality as they generate extraordinary financial results. They have active trustees who are highly motivated and are getting into the quality game with great enthusiasm.

Some leaders, like Frank Sardone of Bronson in Kalamazoo, Michigan, recognized that a culture of entitlement and complacency is mutually exclusive with creating a world-class health care organization. His leadership team attacked such complacency with vigor and dramatic re-engineering. As a result, Bronson Hospital has been rewarded by numerous national awards and outstanding clinical, operational, and financial performance. Such leaders recognize that quality and safety are not only the right thing to do, but that there are new forces, new rewards, and a new game based on real market competition.[70,71]

There are many progressive boards of hospitals that are embracing the concept of patient centered care and using it as a uniting value across physician groups and administrative leaders, such as Hoag Memorial Hospital in Newport Beach, California.

Forgive the Past…But Living in the Past Is Unforgivable

In light of the rapid explosion of patient safety knowledge, we can't hold hospital administrators and providers responsible for previously underemphasizing patient safety in operational plans and strategies.

We must forgive the past; however, it is unforgivable to allow managers to cling to past plans and positions to save face. It is critical that we remove patients from harm's way. Trustees and CEOs must forgive and even insist on immediate mid-course corrections that will make our hospitals safe. This takes real leadership.

In many cases this will require "out of budget" allocations of funds and staff time. It is far too easy to blame someone than to take the effort to understand and correct systems failures. Shifting priorities and changing plans that may have been developed through hard-fought battles and substantial initiatives is difficult work.

Without the support and understanding of trustees and CEOs, managers will remain captive to operational gridlock with no way to succeed. We cannot hold management teams responsible for the failure of immature I.T. solutions and the failure to meet budgets for technology implementation programs that are incomprehensible even to some vendors.

Those in senior management who are not absolutely dedicated to health care excellence and safety need to be given the opportunity to seek a new career path in other industries. Trustees must help accelerate their career shift to industries where a mentality of entitlement and complacency does not cost lives.

Demand Transparency and Integrity—Lives Depend on It

It is critical that governance, administrative leadership teams,and physicians accept nothing less than transparency and integrity from each other and those who report to them.

Consumers are going to demand both in the future, and they are going to receive it whether health care organizations like it or not.

Voluntary declaration of errors should be celebrated, near misses should be treated as treasures for change that prevent future harm, and no nurse or staff member should ever be fired for a systems failure.

We still have the time in health care to put our values house in order. Only the leaders can recalibrate the moral compass of the organization. It is time to separate the myths from the truths (see Table 1).

LEADERS CAN TURN ADOPTION BARRIERS INTO ACCELERATORS

Trustees, CEOs, and physician leaders can turn barriers along the dimensions of awareness, accountability, ability, and action into accelerators of patient safety practice adoption. The following is provided not as a complete list, but as a starter set to stimulate the creativity of leadership teams to develop their own plan.

This writer is humbled daily by the creative brilliance of leaders at frontline hospitals. There is no doubt that motivated teams of trustees, CEOs, senior leaders, and physicians will come up with terrific approaches once they are focused and motivated by a common passion.

As for the direct leadership role of trustees; in the words of Dr. Dennis O'Leary, President of JCAHO: "There is no room on the sidelines—trustees don't have to know the answers, they just need to know the right questions."

Awareness
1. Assess the Grief State of your leaders and organization— are they in denial, angry, bargaining, in depression, or in acceptance?
- Where are the key trustee, administrative, and physician leaders in the process of awareness and recognition of the failure of our systems?

TABLE 1. Myths and Truths

The Patient Safety problem has been exaggerated – Myth
- It has become clear that the 1999 estimate of 44,000–100,000 preventable deaths in the Institute of Medicine Report was, if anything, low. With the march of time the numbers are only growing – our communities are in crisis.

Pay-For-Performance is a Major Trend – Truth
- Payment is being tied to quality and safety at an increasingly rapid rate. The incentive of purchasers are great and are driving the stakeholder behavior along the entire value chain.

There is no Business Case for Patient Safety – Myth
- Now that care unit price and market share are at risk, the business case for quality revolves around economic survival. Early arguments against a business case for safety were based on an entitlement payment system with no check and balance for quality.

Community Hospital Leaders and Doctors are typically unaware of their patient safety problem – Truth
- The relative invisibility of system failures and simple denial make awareness a major barrier to improvement. The magnitude of the problem is so great that preventable harm should be a major focus for every hospital regardless of size.

Trustees without clinical training should not weigh in on quality and patient safety – Myth
- Trustees have historically concentrated on financial issues. Most quality and safety issues revolve around systems performance failures. Trustees do not need to know the answers…they just need to ask the right questions.

Accountability and fear are major barriers to safety – Truth
- Fear of blame for prior performance is the single greatest barrier to transparency. "If we are unsafe now – who is responsible?" It takes the courage of hospital leaders to embrace transparency and the forgiveness by trustees to make needed mid-course corrections.

Hospitals must make significant investments in the ability to deliver safe care beyond technologies. – Truth
- Purchasing technologies or simply assigning patient safety to typical quality programs is not enough. Few community hospitals have the competencies to develop first class safety programs without external help and collaboration. This requires funding for knowledge transfer and internal development.

Patient safety metrics are not mature enough to act on now – Myth
- Hospital staff may complain about the magnitude and validity of quality information being requested by payer, regulatory, and certification organizations, however the safety measures, standards, and practices are converging with consensus by these groups. The major purchasers are savvy and aware of the validity of the metrics. Leading hospitals know this and are quietly seizing the competitive advantage.

Disclosure policies at community hospitals are typically inadequate and can actually magnify malpractice risk – Truth
- Immediate and clear disclosure may increase the frequency of claims; however, it is believed by legal experts, as well as leaders of insurance companies, that the fully loaded cost of medical errors will go down. It is a moral imperative that we take care of patients and families after an error instead of abandoning them at the very worst time.

The same crisis of integrity is occurring in healthcare as it is industries – Truth
- Healthcare is not immune to the impact of our eroding value systems. It is estimated that 1 in every 10 dollars spent in healthcare is associated with fraud. It is commonly believed by many leaders that "gaming the system" has become an institutionalized behavior. Courageous leaders and engaged trustees will show us the way to put the trust back in public trust and the care back into healthcare.

- Where is the organization in its recognition of the problem—has it realized that there is a patient safety crisis, or is it early in the process and does it need help?

2. Determine how aware the senior leadership is of THE Gap—the performance gap in patient safety common to all hospitals.

- Are they engaged in outside performance collaboratives, are they actively seeking knowledge to improve? If not, why not?
- The *100,000 Lives Campaign* mentioned earlier provides a clear example of performance gaps that can be closed by evidence-based interventions that require no technology. Are your hospital quality leaders aware of such opportunities? Are they investing in becoming aware of them?[72] Is your hospital investing in patient safety education?

3. Determine how aware the senior leadership is to OUR Gap—how much real measurement is going on at your hospital in the common areas of patient safety?

- Re-evaluate performance scorecards—do they address critical safety parameters? Are they addressing the top 10 malpractice issues? Do they address the evolving patient safety measures, standards, and practices such as the NQF Safe Practices, JCAHO requirements, and CMS target areas?

- Do quality and safety have as much "airtime" with the board of trustees as finance and development?

4. Disclosure—what is the state of the board's awareness of your disclosure issues?

- Does your hospital practice what we call "the big 3" — immediate disclosure of the facts, a genuine apology, and explaining how measures will be taken to prevent the same harm from occurring to others.
- Are you abandoning patients and families? Who is establishing an ongoing relationship with the person or family that was harmed?
- Does your legal representation recommend stonewalling patients and families? Ask to review the last 10 malpractice cases and the current 10 cases being managed.
- Is the behavior of the organization 100% consistent with the articulated mission and values of the organization?
- Do disclosure policies need to be re-engineered or completely rewritten?
- Establish direct briefing of the board of each and every case of error that has caused serious harm to patients.

Accountability

1. Establish transparency and build trust—Address the F.U.D.G.E. Factor:

- **The F.U.D.G.E. Factor and Innovation:** After many years of dealing with innovation teams, we have recognized that human nature can contribute to real barriers along the dimension of personal accountability.
- **Fear:** Remove the fear of blame and shame for non-performance by focusing on the faceless enemy of systems failure. Establish that patient safety is a core value and as such it trumps assigning blame at every turn.
- **Uncertainty:** Remove uncertainty of the future as prior plans are updated and changes are made by focusing on the mission of the organization.
- **Doubt:** Remove doubt of the staff that you mean business about adoption of patient safety innovations and quality focus by practicing what you preach. Executive walk-arounds, clear investment in performance improvement, "town hall meetings," and real efforts to develop relationships with clinical and staff leaders can go a long way to reduce doubt and insecurity.
- **Greed:** Remove the perverse incentives that work against patient safety objectives immediately. Adoption of certain patient safety practices, expenditures for new technologies, and relaxation of cost savings tactics will impact short-term revenue and margin. Make sure that these do not affect key stakeholders who must support patient safety objectives.
- **Envy:** Celebrate liberally and make sure that attribution for improvement is received by all. Make sure that programs that impact personal recognition are not defeating patient safety objectives. Amazingly, enterprise-wide initiatives can be defeated by the failure to recognize simple issues of human nature.

2. Forgive the past and reject living in the past.
- CEOs, senior leadership teams, staff, and physician leaders are prisoners of prior plans and budgets. Trustees have a great opportunity to lead by publicly recognizing that we have new information about patient safety and that mid-course corrections will be required without blaming anyone.
- Living in the past is unforgivable—some leaders and managers are ignorant and don't know we have a patient safety crisis. They need education. Some are arrogant and don't seem to care—they need to be understood and shown a new path to improvement. A few even don't care that they don't know. They are dispensable.

3. Get the right people on the bus and the wrong people off the bus.
- Jim Collins, the author of *Good To Great*, tells us that great leaders get the right people on the bus and the wrong people off the bus.[73]
- Ann Rhoads, the H.R. guru who has helped transform the airline and hospitality industries, says that you must hire and keep the excellent A players, help B players who have values improve, and clear out non-performing C players who do not have strong values. Surprisingly, A players will work for average pay for the opportunity to work with other A players.[74] Financial incentive is not the issue. Pursuit of excellence is.

4. Make the entire leadership and key staff personally accountable to patient safety.
- Tie personal leaders' performance reviews, and where appropriate compensation reviews, to specific patient safety performance goals. You may use the Leapfrog NQF Safe Practices survey as a guide. Thus, your hospital could receive full credit for these changes if you submit to the Leapfrog initiatives.
- Make the entire organization aware of the accountability and celebrate achievement of the goals when they are attained. A trustee's participation in such celebrations sends a clear message to the staff.

Ability

1. Take stock of the organization's capacity for change.
- Is the organization operating at 120% to keep maintaining financial targets? If they are, it may be time for the trustees to get off of their assets and invest in capacity to be safe.

2. Take a hard look at strategic plans and budgets—build in flexibility.
- Any plan more than 6 months old is obsolete. The good news is that there is much new knowledge in patient safety now available. The bad news is that this can complicate gaining momentum on strategic plans. All performance improvement programs need room for adjustment.

3. Examine investment in education and skill building.
- If your hospital is not participating in national performance improvement collaboratives, it should be. Such initiatives are less expensive than fully relying on consultants, and they build competencies inside.
- All stakeholders need knowledge, and the implementers of improvement need performance improvement skills. Rarely can they be developed internally, so they require investment.

4. Examine compensated staff time allocations to patient safety activities.
- We know that staffs in most hospitals are already overloaded. Without providing real compensated staff time to patient safety, such efforts get lost and drop to the end of priority lists. Our Leapfrog NQF Safe Practices survey provides credit when hospitals make such formal allocations to projects.
- Trustees can insist on investment and deliverables from such work. The right staff are almost always excited about such work when they know they can spend the time without compromising other duties.

5. Make sure line item patient safety allocations exist and are appropriate.
- Are dark green dollars being invested in specific patient safety programs that can be measured? Beware of the "lumping syndrome," where budget items are lost in spreadsheets with no accountability to performance metrics.
- For a start, identify whether you are investing in your top 10 malpractice issues and the most common patient safety areas requested by P-4-P groups like the Leapfrog Group and CMS.

6. Investment in disclosure best practices:

- Determine whether outside and inside counsel are on the same page regarding implementing disclosure policy.
- Determine whether investment must be undertaken in awareness of, accountability, ability, and action issues pertaining to disclosure.
- Determine if administrative leaders, managers, staff, and physicians need education regarding disclosure policies.
- Determine if investment should be made in coupling customer service, risk management, and patient safety staff to common objectives and improvement projects.

Action

1. Attack inertia.

- The famous business leader Warren Buffet provides us a sobering thought when he says that "the chains of habit are too light to be felt until they are too heavy to be broken."[75] Hospital leaders, staff, and physicians are working about as fast and as hard as they can. Trustees and leadership teams must be thoughtful and sensitive as they provide firm pressure on their systems to change behaviors. Inertia is a system property requiring constant attention.

2. Synchronize actions with smart targets.

- Leadership teams cannot focus hospitals on all of the quality metrics that exist. They must carefully select target measures, standards, and practices that give the greatest safety to the patients they serve. We recommend that patient safety, purchaser P-4-P requirements, and accreditation targets be assessed for overlap and greatest return on your hospital's efforts. Most are surprised with the natural overlap of many of the metrics.
- If your hospital is not pursuing national or state quality awards such as the Baldridge Award, seeking to become a Magnate Hospital, or submitting to the Leapfrog initiatives, find out why not. They offer terrific opportunities for performance improvement.

3. Demand disciplined action.

- Jim Collins, in *Good to Great*, insists that leaders must emphasize the focus of disciplined people, disciplined thought, and disciplined actions. Leadership teams must be unrelenting in requiring continuous and direct actions that will close performance gaps. Targets must be visible and initiatives must be disciplined and organized. Trustees need to be briefed frequently on the impact of the patient safety actions being taken.

4. Demand transparency and integrity.

- Trustees and CEO teams have a golden opportunity to use patient safety initiatives to instill the values of transparency and integrity. Mid-level managers who feel that they have had to compromise their values to meet unrealistic objectives or respond to quality information submissions need to be given relief.

5. Take immediate action on disclosure issues.

- Trustees and CEOs have a rare opportunity to ask the tough questions that can bring about rapid and dramatic change in disclosure policies. If you do not have a rapid disclosure policy, which includes providing the facts to patients, apology, and a commitment to make sure errors are reduced, this can be addressed rapidly.

- The coordination of administrative leaders, risk management, customer satisfaction, legal services, and physicians can be accelerated by trustees who are unrelenting in insisting that patients and families receive the respect they deserve. A message from the top is critical.

CONCLUSIONS

Ships are never built to just ride at anchor. Our hospitals were not built to ride at the anchor of cost containment and languish in the harbor of complacency. They are built to carry us on our mission—to restore our patients to better health as safely as possible. Our trustees and CEOs need to provide a helm to grasp, a course to steer, and a port to seek.

It is time to pull up the anchors and catch the wave. As quality measures, standards, and practices converge and Pay-For-Performance emerges, our leaders can help us turn our barriers into accelerators. They will be a vital success factor as to whether our organizations will be sinkers, swimmers, or surfers when the no outcome—no income tsunami strikes.

REFERENCES

1. Blendon RJ, DesRoches CM, Brodie M, et al. Views of practicing physicians and the public on medical errors. *N Engl J Med.* 2002;347: 1933–1940.
2. Rozich JD, Haraden CR, Resar RK. Adverse drug event trigger tool: a practical methodology for measuring medication related harm. *Qual Saf Health Care.* 2003;12:194–200.
3. Health Grades. *Patient Safety in American Hospitals.* Lakewood, CO: Health Grades, Inc. 2004.
4. Davies P. Fatal medical errors said to be more widespread. *Wall Street Journal,* July 27, 2004.
5. Bellomo R, Goldsmith D, Uchino S, et al. Prospective controlled trial of effect of medical emergency team on postoperative morbidity and mortality rates. *Crit Care Med.* 2004;32:916–921.
5a. Berwick DM. *Some Is Not A Number, Soon Is Not A Time.* Presented at the 16th Annual National Forum on Quality Improvement in Health Care, Orlando, FL, December 14, 2004.
6. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. *N Engl J Med.* 2003;348:2635– 2645.
7. Wachter RM. The end of the beginning: patient safety five years after "To Err Is Human." Health Affairs. 2004;W4:534.
8. Landro L. Hospitals make fewer errors, but fall short on safety goals. *Wall Street Journal,* November 17, 2004.
9. Denham CR. A conversation with Lucian Leape, M.D. [video] Austin, TX: Texas Medical Institute of Technology; 2004.
10. Kaiser Family Foundation, Agency for Healthcare Research and Quality, Harvard School of Public Health. *National Survey on Consumers' Experiences With Patient Safety and Quality Information.* Available at: http://www.kff.org/KaiserPolls/7209.cfm. Accessed November 2004.
11. Balas EA, Boren SA. Managing clinical knowledge for health care improvement. In: *Yearbook of Medical Informatics 2000: Patient-Centered Systems.* Stuttgart, Germany: Schattauer; 2000:65–70.
12. Dickersin K, Chan S, Chalmers TC, et al. Publication bias and clinical trials. *Control Clin Trials.* 1987;8:343–359.
13. Koren G, Graham K, Shear H, et al. Bias against the null hypothesis: the reproductive hazards of cocaine. *Lancet.* 1989;50:1440–1442.
14. Kumar PD. Publication lag intervals—a reason for authors' apathy? *J Assoc Physicians India.* 1992;40:623–624.
15. Balas EA, Austin SM, Ewigman BG, et al. Methods of randomized controlled clinical trials in health services research. *Med Care.* 1995;33: 687–699.
16. Poyer RK. Time lag in four indexing services. *Spec Libr.* 1982;73:142– 146.

17. Poynard T, Conn HO. The retrieval of randomized clinical trials in liver disease from the medical literature: a comparison of MEDLARS and manual methods. *Control Clin Trials.* 1985;6:271–279.
18. Antman EM, Lau J, Kupelnick B, et al. A comparison of results of meta-analyses of randomized control trials and recommendations of clinical experts: treatments for myocardial infarction. *JAMA.* 1992;268:240–248.
19. Nance, John J. Personal Communication, October 2003.
20. Denham CR. *The Sheridan Story, Told by Sue Sheridan.* [video] Austin, TX: Texas Medical Institute of Technology. Available at: http://www.safetyleaders.org. Accessed December 2004.
21. Popp PL. How will disclosure affect future litigation? *ASHRM Journal.* Winter 2003.
22. Fisher, W. Personal Communication, October 2003.
23. Shore, D. Personal Communication, October 2004.
24. Roberts K, Lafley AG. *Lovemarks: The Future Beyond Brands.* New York: powerHouse Books; 2004.
25. Keller E, Berry J. *The Influentials: One American in Ten Tells the Other Nine How to Vote, Where to Eat, and What to Buy.* New York: Free Press; 2003.
26. LaBarre P. How to lead a rich life. *Fast Company.* 2003;68:72.
27. Pandya SM, Coleman B. Caregiving and Long-Term Care. Public Policy Institute, American Association of Retired Persons. December 2000. Available at: http://research.aarp.org/health/fs82_caregiving.html. Last accessed November 26, 2004.
28. Chatterjee C. More is less. *Psychology Today.* 1999;32:12.
29. 7th HON Survey on the Evolution of Internet Use for Health Purposes. February–March 2001. Available at: http://www.hon.ch/Survey/Feb-Mar2001/survey.html. Last accessed November 12, 2004.
30. Harvard School of Public Health, Kaiser Family Foundation, Princeton Survey Research Associates. Survey on Health Care and the 2000 Elections. Storrs, CT: Roper Center for Public Opinion Research; 2000.
31. Denham CR. *The Josie King Story, Told by Sorrel King.* [video] Austin, TX: Texas Medical Institute of Technology; 2002. Available at: http://www.safetyleaders.org.
32. Brailer, David. Personal Communication, October 2004.
33. Porter ME, Teisberg EO. Redefining competition in health care. *Harvard Business Review,* 2004;June:65–76.
34. Research on the Delivery of Medical Care Using Hospital Firms. Proceedings of a Workshop. April 30 and May 1, 1990, Bethesda, MD. *Med Care.* 1991;29(7 Suppl):JS1–70.
35. Meyer G. *Outcomes and Quality in Clinical Practice.* 2000.
36. Liongosari ES. Accelerating drug discovery process through model-based knowledge integration. KM World, 2002. Available at: http://www.accenture.com/xdoc/en/services/technology/publications/kmworld2002.pdf. Last accessed October 25, 2004.
37. Advisory Board for Medical Specialties, Inc. *Directory of Medical Specialties.* Chicago: Marquis-Who's Who; 1939–1990.
38. American Board of Medical Specialties. *The Official ABMS Directory of Board Certified Medical Specialists.* St. Louis: Elsevier Science; 1994–2004.
39. Higby GJ, Ed. *One Hundred Years of the National Formulary: A Symposium.* Madison, WI: American Institute of the History of Pharmacy; 1989.
40. United States Pharmacopeia—National Formulary Official Compendia of Standards. Rockville, MD: The United States Pharmacopeia Convention; 1985, 1990, 1995, 2000, 2002, 2003.
41. Chassin MR. Is health care ready for six sigma quality? *Milbank Q.* 1998;76:565–591.
42. PubMed—Indexed for MEDLINE, National Library of Medicine. Available at: www.pubmed.com. Last accessed December 3, 2004.
43. ClinicalTrials.gov—Information on Clinical Trials and Human Research Studies. Available at: http://www.clinicaltrials.gov. Last accessed November 12, 2004.
44. Wyatt J. Uses and sources of medical knowledge. *Lancet.* 1991;338:1368–1373.
45. Edgman-Levitan, S. Personal Communication, December 2002.
46. Associated Press. "On Death and Dying" author dies at 78. *New York Times.* August 25, 2004.
47. Meyer GS. Quality and Safety Measurement and Reporting to Drive Change: The Role of Trustees. Washington, D.C.: AHA Annual Meeting, May 2, 2004.
48. Dotseth M. *Reporting of Adverse Events in Health Care: Minnesota's Law* [slide set]. Minnesota Hospital Association, 2004. Available at: http://www.health.state.mn.us/patientsafety/lawoverview.pdf
49. Denham CR. Turn barriers into accelerators. *Qual Health Care.* 2004; 9:14–20.
50. The Leapfrog Group. Available at: www.leapfroggroup.org. Last accessed November 24, 2004.
51. Sexton, Bryan J. Presented at the Adventist CEO Meeting in Irvine, CA. January 7, 2004.
52. Leape LL, Berwick DM. Safe health care: are we up to it? *BMJ.* 2000; 320:725–726.
53. George B. *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value.* San Francisco, CA: Jossey-Bass Publishers; 2003.
54. National Health Care Anti-Fraud Association. Available at: http://www.nhcaa.org. Last accessed November 27, 2004.
55. U.S. Government Accountability Office. *Health Care Fraud: Information-Sharing Proposals to Improve Enforcement Efforts.* Washington, DC: U.S. Government Printing Office, 1996.
56. Callahan D. *The Cheating Culture: Why More Americans Are Doing Wrong to Get Ahead.* Orlando, FL: Hartcourt-Brace & Company; 2004.
57. Olivia, Chris. Focusing on Patient Safety as a Business Case Model. Presented at the 6th Annual NPSF Patient Safety Congress in Orlando, FL, May 6, 2004.
58. Denham CR. *The Economics of Honesty: Is There a Business Case for Ethics in Healthcare?* National Patient Safety Foundation, multimedia application, 2003.
59. U.S. Government Accountability Office. *CMS Needs Additional Authority to Adequately Oversee Patient Safety in Hospitals.* Washington, DC: U.S. Government Printing Office, 2004.
60. Principles for the Construct of Pay-for-Performance Programs. Joint Commission on Accreditation of Healthcare Organizations, November 22, 2004. Available at: http://www.jcaho.org/news+room/news+release+archives/jcaho_112204_principles.htm. Last accessed November 27, 2004.
61. Denham CR. *The Leapfrog Group: An Introduction* [video]. Austin, TX: Texas Medical Institute of Technology, 2002.
62. How to be a smart patient. *U.S. News & World Report.* November 8, 2004.
63. Rogers EM. *Diffusion of Innovations.* New York: Free Press; 1983.
64. Denham CR. *Spectrum Innovation Guidance System.* Austin, TX: Health Care Concepts, 2004.
65. *2004 Leapfrog National Quality Forum Safe Practices Survey.* The Leapfrog Group. July, 2004. Available at: http://www.leapfroggroup.org.
66. Conn J. Quality group calls meeting on establishing benchmarks. *Modern Physician Stat.* 2004;November 15.
67. Schyve PM. What you can do: the trustee, patient safety, and JCAHO. *Trustee.* 2003; February 6:19–21.
68. George B. *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value.* Presented at the Premier CEO Leadership Forum in Colorado Springs, CO, September 22, 2004.
69. O'Leary D. *Patient Safety: Instilling Hospitals With a Culture of Continuous Improvement.* Testimony before the Senate Committee on Governmental Affairs, June 11, 2003.
70. Bronson Awards. Bronson Group Health. Available at: http://www.bronsonhealth.com/content_long.asp?menu=A9. Last accessed November 27, 2004.
71. Sardone F. *At the Heart of Hoag—Advancing Patient-Centered Care to the Next Level.* Presented at the P.I. Conference on Patient-Centered Care in Newport Beach, CA, November 5–6, 2004.
72. Berwick D. Presented at the Premier CFO Meeting in San Diego, CA, October 2, 2002.
73. Collins J. *Good To Great: Why Some Companies Make the Leap…and Others Don't.* New York: HarperCollins; 2001.
74. Rhoads A. Presented at the Premier CFO Meeting in San Diego, CA, October 2, 2002.
75. Denham CR. *A Systematic Approach to Technology Assessment.* Presented at the 5th Annual NPSF Patient Safety Congress, Washington, DC, March 13, 2003.