# The Essential Guide for Patient Safety Officers

Second Edition





Edited by Michael Leonard, MD Allan Frankel, MD Frank Federico, RPh Karen Frush, BSN, MD Carol Haraden, PhD

Foreword by Gary S. Kaplan, MD Institute for Healthcare Improvement

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# Foreword

In reading this second edition of *The Essential Guide for Patient Safety Officers*, I was struck by the progress that we've made in understanding patient safety since the first edition's publication in 2009. The work described in the book reveals growing insight into the complex task of taking care of patients safely as an intrinsic, inseparable part of quality care. To do this we need to create a systematic, integrated approach, and this book shows us how to do it.

This new approach not only addresses our own desires to do the best we can for our patients but also reflects the influence of external forces such as demands for greater transparency and accountability. The impact of health care reform through the Patient Protection and Affordable Care Act<sup>1</sup> on health care providers is far-reaching, including increasing emphasis on the following:

• Quality metrics—to enable payers (the government, employers, and patients) to identify hospitals and other health care organizations that are providing the best outcomes and safest environments for care.

• The patient's experience—as the government's hospital Value-Based Purchasing program links a portion of the hospitals' CMS (Centers for Medicare & Medicaid Services) payments to performance on the 27-item HCAHPS [Hospital Consumer Assessment of Healthcare Providers and Systems].<sup>2,3</sup> Safety certainly influences patients' perceptions.

• Cost control and efficiency—which are critical for the well-being of health care providers, the overall health care system, and, indeed, the entire economy. For example, providers can receive incentives from government programs such as the Medicare EHR (electronic health record) Incentive Program (including the meaningful use criteria),<sup>4</sup> which motivates medical centers to use EHRs that improve efficiency, accuracy, and safety.

This book outlines several crucial elements of safe care delivery. One is the full engagement of health care leadership in improving patient safety. Organizations emphasize and pursue what leaders, by their example, believe is important. Executive management must lead and be seen to lead improvement work, and this naturally includes patient safety improvement. As a CEO myself, I can attest to the truth of this. And, as Chapter 1 points out, leaders must not only lead the effort, they must "learn that the science of reliability is essential to their role. They must understand and accept the science behind this work and expect others including other leaders, physicians, and staff on the front line—to learn about it."<sup>(p. 3)</sup>

Physician leadership is an important part of leadership commitment. An organization that reforms around physicians but does not make them a part of the team will not succeed in the long run. As Chapter 1 reminds us, organizations with stronger physician leadership have been shown to be more successful in delivering change.

This book points out that a culture of safety is not a culture that seeks to blame individuals when things go wrong. Humans are not individually capable of the sustained awareness and attention required for perfect patient safety. On the other hand, as Chapter 10 tells us, the human factor is crucial to a successful system. The human operator is the "one system component that has the capability to resolve the unanticipated forms of failure that emerge in complex systems."<sup>(p. 111)</sup>

Technology alone is not the answer but is a crucial part of the systems we need to develop. Achieving the promised benefit, while avoiding the risks inherent in health information technology (HIT), will require us to integrate our use of technology into "human factors, cognitive engineering, and the team-based concept to have maximum effect. Applying HIT to the most complex human endeavor of health care will require the development of new approaches for the design, development, implementation, and optimization of the overall system of care, not just information technology."<sup>(p. 113)</sup>

The effective team is a central aspect of safe care, complementing and using technology intelligently. The very diversity of education, outlook, and experience found on teams that communicate effectively (which is so important to collaboration—Chapter 6) is their strength. Each member will see things a bit differently; together they will see the whole.

As discussed in Chapter 9, sometimes overlooked in the movement to create teams are patients and families, who make good partners in the care delivery process. Their insights and experience add invaluable knowledge to our improvement efforts. Patients and families are increasingly well informed and want be involved in care decisions. They also have the right to understandable information, not only about their care and treatment, but also about outcomes and results. We don't yet have a simple way to provide meaningful comparative data, but, as stated, such transparency is part of the reform effort.

When an adverse event occurs or is only narrowly averted, we must be straightforward in disclosing it to all concerned. Disclosure is the right thing to do—and can be viewed as another way to engage patients and their families in care (Chapter 8). It helps begin the coping process, it greatly helps in identifying and repairing systems issues that led to the event, and it may actually improve public perception of the organization.

I am pleased that Chapter 12 covers two improvement approaches, both developed in industry—the Model for Improvement and Lean, which has been gaining ground in health care more recently.<sup>5</sup> The chapter provides a good overview of how Lean improvement efforts work. We have been taking the Lean approach, based on the Toyota Production System, since 2002; we call it the Virginia Mason Production System.

Now, all our collective efforts to improve patient safety will fail if we don't recognize that this endeavor entails remaking and transforming health care as we know it. That means rethinking our assumptions and accepted truths, attitudes, and practices. Keeping patients safe is a leading indicator of how we are doing in this transformative work.

> —Gary S. Kaplan, MD Chairman and Chief Executive Officer, Virginia Mason Medical Center, Seattle

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### Introduction

# CREATING A ROAD MAP FOR PATIENT SAFETY

Michael Leonard, MD; Allan Frankel, MD; Frank Federico, RPh; Karen Frush, BSN, MD; Carol Haraden, PhD

Anna Rodriguez—a 27-year-old mother of young twins enters a preeminent teaching hospital for arthroscopic knee surgery on a Tuesday morning after a holiday weekend. The surgery department has a full schedule, with both elective and emergency surgeries scheduled.

Eileen Page, a registered nurse and 20-year veteran of the hospital, preps Ms. Rodriguez in the preoperative area. Per the organization's protocol, Ms. Rodriguez is supposed to receive prophylactic antibiotics one hour before her surgery. Because it is approaching 45 minutes before Ms. Rodriguez's scheduled surgical start time, Ms. Page is in a hurry to give the preoperative antibiotics. Busy with another patient as well, Ms. Page has dozens of procedural steps she must perform to ready both patients for surgery, and she inadvertently overlooks checking the medical record for allergies. Unfortunately, Ms. Rodriguez is allergic to certain antibiotics, including the ones that Ms. Page is about to administer. Buried in the many pages of the medical record is a note about a significant systemic reaction to antibiotics, but no one has noted Ms. Rodriguez's allergies in a prominent place where Ms. Page could easily be reminded.

Because she is in a hurry, Ms. Page tries quickly to explain to Ms. Rodriguez what she is doing. Ms. Rodriguez is from Venezuela and does not speak English well. Ms. Page does not speak Spanish, so communication is sketchy at best. The Spanish-speaking nurse on staff is busy attending to another patient, and Ms. Page is trying to move Ms. Rodriguez quickly into surgery so the surgery schedule will not be delayed. Organization leadership has repeatedly stressed to frontline staff the importance of adhering to the surgery schedule—cases must start on time. In fact, management closely tracks the percentage of cases that start on time and continually pushes to improve it.

As Ms. Page begins to administer the antibiotics, Ms. Rodriguez becomes agitated because of her lack of ability to communicate clearly. Although Ms. Page notices the agitation, she assumes Ms. Rodriguez is just nervous before her surgery.

Approximately 45 minutes after receiving the antibiotics, Ms. Rodriguez is brought into the operating room (OR). The surgeon is anxious to get started and curtly calls the OR team together to begin surgery. As the surgery begins, the OR staff notices that Ms. Rodriguez's vital signs are abnormal, and she appears to be in respiratory distress. The team is unclear as to what is happening. The surgeon and anesthesiologist work to stabilize the patient while one of the circulating nurses checks the medical record. Ms. Rodriguez suffers cardiovascular collapse and is ultimately resuscitated but suffers significant severe neurologic injury.

After reviewing the medical record, the team realizes the nature of the problem. Ms. Page is devastated. The media swarms onto the campus of the medical center, asking difficult questions, but do not receive what they perceive as satisfactory answers from the leaders of the institution. Clinicians and hospital administrators don't interact with Ms. Rodriguez's family in a way that makes them feel that they understand what happened, so they retain an attorney to represent them. The media stir up public outrage about this tragic mistake. Leadership in the organization begins to look for someone to blame for the incident, and Ms. Page seems like a good candidate.

Eventually, hospital leadership goes before the press and public and commit to eliminating medical errors in their facility and improving safety. They hire a consultant, launch some safety initiatives that target medication errors, and feel confident their work is making a difference. However, the root causes of the event that occurred in the OR are still present in the organization: lack of communication, lack of teamwork, lack of patient involvement, lack of reliable processes, lack of organizational emphasis on safety and reliability, and the inability of the organization to continuously learn from its mistakes. Although the implemented safety initiatives may improve medication safety in the organization for a short time, they serve only as a Band-Aid for a deeper, more long-term problem.

What if this operating room scenario or one like it occurred in your organization? Would the response have been the same? Does your organization and its senior leadership value and commit to a culture of safety? reliable systems? teamwork and communication? Is the accountability system in your organization structured to protect the hardworking nurse like Ms. Page, who inadvertently makes a mistake because of a series of system errors? Or is it designed to identify fault and place blame? Does your organization have a systematic approach to responding and learning when errors occur? Does your organization have an open and honest disclosure process? Are patients involved in their care? Do they have a voice within the organization? If your answer to any of these questions is "no," you are not alone. However, you are also nowhere near where you need to be in providing safe and reliable health care.

#### ALL WORK AND NOT ENOUGH GAIN

In the United States and elsewhere, hospitals and health systems are struggling to improve quality, reduce the current unacceptable levels of harm, engage physicians in improving safety, and deal with regulatory and operational pressures. For many care systems, the current cost structure and dynamic is not sustainable. Quality and safety are increasingly tied to financial incentives and disincentives. The recent Institute of Medicine (IOM) report, *Best Care at Lower Cost*,<sup>1</sup> notes that more than a decade since the IOM's report *To Err Is Human*,<sup>2</sup> we have "yet to see the broad improvements in safety, accessibility, quality, or efficiency that the American people need and deserve."<sup>1(p. ix)</sup>

Recent studies assessing harm and adverse events indicate that roughly one in three hospitalized patients in the United States have something happen to them that you or I wouldn't want to happen to us; with 6% of hospitalized patients being harmed seriously enough to increase their length of stay and go home with a permanent or temporary disability.<sup>3</sup> A majority of these events are judged to be avoidable or ameliorable—meaning that the outcome could be changed if the care team was aware quickly and took action to resolve the issue.<sup>4</sup> Yet it has been estimated that only 14% of adverse events are reported into reporting systems,<sup>5</sup> which reflects the woeful lack of systems designed to proactively seek near misses and adverse events for learning and improvement. We have also come to appreciate that high levels of harm occur in ambulatory care, particularly in diagnostic errors and adverse medication events. More than 50% of medical malpractice claims stem from outpatient care.<sup>6</sup>

The substantial gap between the kind of care that is often provided and safe and reliable care occurs despite the best intentions and unflagging efforts of skilled, dedicated practitioners and administrators. There have been some successful individual efforts to address the issue of safety, although much of the work has been fragmented, focused on specific areas only, and not sustained beyond the short term.

## ADDRESSING THE ROOT OF THE PROBLEM

The primary reason for the lack of progress is that organizations are not addressing the root of the safety problem. Yes, decreasing error is important, but it cannot happen without an environment that supports a systematic approach to creating and maintaining reliable processes and continuous learning. In other words, before an organization can realize sustained improvement, it must commit to designing reliable processes that prevent or mitigate the effects of human error, and establish a culture in which teamwork thrives, people talk about mistakes, and everyone is committed to learning and improvement. When an organization achieves an environment of reliability and continuous learning, then patient safety becomes a property or characteristic of the organization and, by definition, the organization starts to reduce errors.

#### MAKING SAFETY AN ORGANIZATIONWIDE IMPERATIVE

So how do you achieve an environment in which reliable processes exist and continuous learning is an intrinsic value? It doesn't happen by just telling employees to try harder to be safe. It requires a systematic approach that addresses the fundamental ways in which providers interact and provide care. Such a systematic approach involves four critical components<sup>7</sup>:

1. A strategy, which focuses on reliability and continuous learning. This strategy represents an organization's basic values and vision as well as its goals.

2. A structure, which consistently supports the strategy and helps integrate it into the accepted way of doing business. Such a structure builds the appropriate framework, designates the appropriate resources, and defines the reporting relationships that effectively support the strategy.

3. An environment or culture that supports the structure and ensures the proper execution of deliverable outcomes to meet strategic objectives, such as reduced error and enhanced patient safety

4. Clear outcomes and associated metrics that are visible, both internally to the people doing the work and externally to the market and the public. These outcomes and metrics help drive consistent improvement within the organization.

#### A ROAD MAP FOR SUCCESS

The Essential Guide for Patient Safety Officers provides a road map to enable health care organizations to create the necessary strategy, structure, environment, and metrics to improve the safety and reliability of the care they provide. On the basis of the Institute for Healthcare Improvement's Patient Safety Executive Development Program—a synthesis of patient safety experts' collective experience—and our experience and that of the other contributors, each chapter focuses on a different stop along the map, as follows:

• The Role of Leadership—Effective leadership is critically important at all levels of a health care organization. High-performing organizations teach, embed, and reinforce effective leadership behaviors. It is also essential to have systematic processes that support dialogue, learning, and improvement between frontline providers and senior leadership.

• Assessing and Improving Safety Culture—Safety culture provides valuable insights as to what it feels like to be a unit secretary, nurse, physician, or other caregiver at a clinical unit level. Feeling valued and having the psychological safety to speak up and voice concerns and learn from errors all have a tremendous impact on the quality of care and the social dynamic among caregivers. Safety culture is measurable and can be deployed as a powerful mechanism to engage caregivers in positive behavioral change.

• Accountability and the Reality of the Human Condition—Error and avoidable harm are prevalent in health care today, and fear of blame and punishment is a major obstacle to learning and improvement. High-performance organizations are characterized by fairness and high degrees of accountability. Applying a consistent and fair algorithm to evaluate errors and adverse events that is reinforced by senior leaders is essential for learning and improving care.

• Reliability and Resilience—Consistent, measurable processes of care delivery are foundational to achieving the desired process and outcome measures. Habitually excellent organizations do the basics very well, which provides a foundation for innovation and learning. High degrees of variation, in which clinicians "do it their way" without transparent metrics, leads to inconsistent care and high rates of harm.

• Systemic Flow of Information—Few health care organizations have built process to support robust dialogue between the wisdom of bedside caregivers and senior leaders who are trying to navigate a complex operating environment. Clinicians experience basic system failures every day that are frustrating and wasteful and that get in the way of optimal care. Capturing and acting on these insights drives better care, improves efficiency, and builds organizational trust.

• Effective Teamwork and Communication— Progressively more and more literature is now showing that effective teams deliver better care, to the benefit of not just patients but caregivers. Building teamwork across an organization is intentional work, not just a project, making the difference between sustainable value and "flavor of the month."

• Using Direct Observation and Feedback to Monitor Team Performance—There is a robust science used in numerous industries to observe performance and the associated team behaviors, and provide feedback for learning and improvement. Observation and feedback have been used quite effectively in medical simulation and clinical care environments to provide insights that help drive better care.

• Disclosure—In the aftermath of patient harm or unintended consequences, patients and providers need to be able to talk openly and honestly. This is a learned skill; fear of looking incompetent or getting in trouble often precludes dialogue that is both candid and respectful. Open, honest disclosure needs to be an organizational priority.

• Ensuring Patient Involvement and Family Engagement—We are learning more and more about the benefits of delivering care that is truly centered on the patient and family. Organizations that engage the voice of the patient, listen and learn and incorporate these insights into continually improving the care process will not only deliver better care but are more likely to be successful in a rapidly changing health care environment.

• Using Technology to Enhance Safety—Health care is a sociotechnical process, with skilled humans continually interacting with technology and information systems. Technology can deliver much value if carefully assessed, implemented, and monitored, but if not, technology can negatively affect work flow and increase the risk of patient harm.

• Measurement Strategies—Improvement requires measurement and continuous learning associated with specific skills that are teachable and must be embedded throughout the organization. Measurement strategies are an essential, foundational component for the delivery of safe and reliable care.

• Care Process Improvement—A sample of the many practical methodologies that have been successfully applied within health care to drive improvement and positive change is provided. Key to all are the studying of the process targeted for improvement, the identification of areas of risk and waste, and the determination of opportunities for improvement.

• Building and Sustaining a Learning System—Caring for patients is an extremely complex process, as reflected by the many interrelated topics addressed in this book. A practical framework is essential to support a systematic approach to increasing the quality and safety of patient care. In the absence of such a framework, it is not possible to sustain continual learning and improvement. Successful safety work is not a series of projects but the integration of work so that it is visible, measurable, and sustainable. That is the overall aim of this book.

#### SUMMARY

This book is designed to help anyone in an organization improve the safety of care provided to patients—from the patient safety officer (or other senior leader) to frontline staff who are charged with improving the provision of care. It details the critical steps involved in enhancing patient safety throughout an organization and ensuring the reliability of care. A full reading gives a clear understanding of what is involved in creating and sustaining a culture of safe and reliable care. You will be armed with tips and tools from other organizations that have engaged in these efforts to apply to your own organization.

Some of the concepts discussed within this book may seem simple in theory, but they can be quite challenging to implement, and dependent on organizational support and a strategic approach to improvement. It takes a commitment from all levels to systematically drive this work and achieve success. By incorporating the different elements discussed in this book into everyday work, organizations can continuously improve, enhance, and achieve patient safety.

The editors acknowledge their colleagues who continue to teach us and advance their understanding of safe care delivery; Richard Bohmer, Donald Kennerly, Gary Kaplan, Aileen Killen, Lucian Leape, Tami Minnier, Paul Preston, Bob Wachter, and Michael Woods deserve special mention. The editors thank Steve Berman, Jane Roessner, and Kathleen B. Vega for their assistance in the development and writing of this book.

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### **Chapter One**

# The Role of Leadership

Doug Bonacum, MBA, BS; Karen Frush, BSN, MD; Barbara Balik, RN, EdD; James Conway, MS

G overnance and leadership are ultimately responsible for quality and safety.<sup>1,2</sup> The most important factor in achieving safe patient care at a system level is overt, palpable, and continuous commitment from organization leadership to set an aim, create a strategy, establish a structure, and foster an environment that encourages, supports, and requires safe and reliable care. Such a strategy, structure, and environment cannot exist without the collaborative commitment of senior administrative leaders, boards of directors, and physician and nursing leaders. Performance improvement and enhanced safety may occur in small areas or individual units through a grassroots approach, but improvement cannot be sustained or spread throughout an organization without the active participation of organizational leaders.

Partnering with formal and informal leaders, particularly senior executives and the organization's board of directors, to achieve safer care is an essential part of a patient safety officer's role. This chapter will assist you and your leadership partners in achieving safer care outcomes.

As discussed in the Introduction, achieving safety is not a one-time or short-term effort. Major progress requires a multifaceted leadership approach,<sup>3</sup> implemented and revisited over time, which includes activities such as assessing a culture for safety,<sup>4</sup> ensuring the technical and cognitive competence of each individual, responding to data, striving for high reliability,<sup>5</sup> embracing transparency,<sup>6</sup> fostering communication and teamwork,<sup>7,8</sup> setting meaningful goals,<sup>9</sup> and sharing outcomes.

The following are eight essential leadership steps to achieve safe and reliable health care<sup>2</sup>:

- 1. Establish, oversee, and communicate system-level aims starting at the governance and executive leadership level.
- 2. Identify harm, design and implement improvements, and track/measure performance over time.

- 3. Assess the culture for safety and act to close any gaps.
- 4. Understand the science of improvement and reliability—strive to be a high-reliability organization (HRO).
- 5. Foster transparency.
- 6. Create a Leadership Promise.
- 7. Engage physicians and nurses, especially those in executive and formal leadership roles.
- 8. Hire for what you aspire to become.

#### ESTABLISH, OVERSEE, AND COMMUNICATE SYSTEM-LEVEL AIMS

Leaders must establish a portfolio of system-level aims aligned with the organization's mission, vision, and values. These aims form the foundation for communicating what is important, creating operational and administrative alignment, and facilitating accountability at each level in the organization. The level of performance expected in systemlevel aims is often not what the organization presently views as possible (for example, eliminating health care–associated infections), requiring new ways of thinking and acting that stretch beyond the comfort level of those in operations.

The effective leader listens to the concerns and opinions of those who feel unreasonably stretched by the pursuit of aggressive system-level aims, and then clarifies the roles of those individuals and provides the resources necessary to foster success. Measurement systems that track the pathway to performance are established, and the leader routinely reviews progress along the pathway, transparently communicates about that progress, and consistently holds the organization accountable for its progress. Achievements are celebrated and deficits are studied and remedied.

An example of a "SMART" system-level aim that has been transformational for many organizations was the Institute for Healthcare Improvement's 100,000 Lives (5 Million Lives) Campaign,<sup>10,11</sup> which benefited from having <u>Specific, Measurable, Achievable, Relevant, and Time-</u> bound goals. For each topic area or "plank," the campaign provided how-to guides, which described key evidencebased care components and how to implement the interventions and recommended measures to gauge improvement.<sup>11</sup> Leaders who accepted the 100,000 Lives challenge answered the call of "if not now, when?" and "if not you, who?" and in doing so, inspired their organizations to achieve great things. The effective leader listens to the concerns and opinions of those who feel unreasonably stretched; sets clear expectations; provides any needed resources, including education and training; and establishes ways to measure performance. After goals are established, effective leaders are steadfast in expecting accountability.

#### IDENTIFY HARM, DESIGN AND IMPLEMENT IMPROVEMENTS, AND TRACK/MEASURE PERFORMANCE OVER TIME

Tightly coupled with the leader establishing and communicating system-level aims, there must be a cascading set of measures that align from front office to front line. Leaders call for data associated with these measures to be current and transparently posted to increase accountability for performance, promote dialogue during rounding and day-to-day operations, and get the patient/family member more engaged and involved in his or her own care.

At the board level, important measures are typically large-scale system outcome measures such as mortality, global rates of harm, readmission rates, and serious safety events. At the frontline level, measures must also include those that are grounded in process reliability. For example, the board may want to know the "days since the last health care–associated infection" as a measure of the system-level aim, "Eliminate health care–associated infections." The service-line aim is to eliminate catheter-related infections across the geriatric service, and the geriatric intermediate care unit's frontline aim is to reduce catheter-associated urinary tract infections.

## ASSESS THE CULTURE OF SAFETY AND ACT TO CLOSE ANY GAPS

Creating a healthy organizational safety culture typically requires a shift in the way that clinicians, patients, administrative staff, and leadership view the health care organization and their respective roles in it. For the organization to be successful, leadership must encourage, support, and drive change from both the top down and the bottom up. The common and inaccurate belief that a health care organization is a collection of smart, hard-working individuals trying really hard to provide safe care must be challenged. Effective leaders understand and promote the evidence-based view that a health care organization is a complex set of teams of professionals, patients, families, and leaders who work together to systematically provide the most effective care in the most efficient way.

One of the first steps in changing a culture involves assessing the culture in its current form at all levels. Teamand unit-level data are essential to this endeavor. As discussed further in Chapter 2, cultural assessment involves looking at a variety of data—both quantitative and qualitative—that measure culture, including staff perceptions of safety, teamwork, management, stress recognition, and job satisfaction.

Other data that can also reveal information about your organization's culture, include reports or lack of reports about potential safety issues that come into a spontaneous reporting system; analyses or lack of analyses of near misses; and stories of concerns from caregivers gleaned during rounding processes, such as Executive WalkRounds<sup>12</sup> and/or direct observation in care settings.<sup>13</sup> As described in Chapter 2, organizations have recently begun looking for and establishing correlations between unit-level outcomes and culture data. Not surprisingly, units with high teamwork and safety climate scores tend to perform better on almost all measures that matter, including efficiency, patient injury, and staff turnover rates.<sup>14</sup> Sharing these results with staff provides additional motivation to change.

While these activities are discussed further in later chapters, they are mentioned here to reinforce the point that leaders must commit to using a variety of types and sources of data to learn about an organization, its culture, its strengths, and its weaknesses. A prioritized action-oriented plan can then be developed to deal with any weaknesses and measure performance moving forward. As recently reported, the 9 ICUs (out of a total of 23 ICUs) in 11 hospitals in the state of Rhode Island that completed action plans to address culture survey results later demonstrated higher improvement rates in five of the six survey domains.<sup>15</sup> Leaders must become experts in looking for trouble and be open to seeing problems, particularly those that may exist beyond a leader's primary attention. Avoiding the temptation to judge problems as rarities is difficult but very important.

Effectively interacting with data involves not only analyzing and responding to them, but also considerable effort in ensuring that the most useful data are collected. It is important to note that more data are not necessarily better and can just get you lost in the analytic process. The key is to select focused, actionable data, and then develop focused and actionable performance improvement plans to address deficits.

The clearer your organization can be on what data will be most relevant to assess the organization's culture, determine areas of improvement, and drive action, the better.

#### UNDERSTAND THE SCIENCE OF IMPROVEMENT AND RELIABILITY

Health care is a complex endeavor. The processes of health care can and should be designed to anticipate and mitigate human error and ensure that processes occur the way they are designed and achieve the outcomes they need to achieve. In other words, processes must be designed so they are reliable. As discussed in Chapter 4, designing reliable processes that support safe practice and mitigate human error involves critical assessment of current processes, careful planning, and the use of the science of reliability (*see* page 33).

Leaders must learn that the science of reliability is essential to their role. They must understand and accept the science behind this work and expect others-including other leaders, physicians, and staff on the front line-to learn about it. Most health care leaders and professionals did not learn the science of reliability in their professional education, thus it is likely they may not even know it exists. Even so, it is the responsibility of leadership to understand and apply reliability science to the daily work of the organization. What this means practically is that leaders should require (1) timetrended data to be used to assess process performance over time; (2) work flows to be simplified and standardized through application of performance improvement strategies, such as the Model for Improvement (see Chapter 12, page 125), coupled with the application of rapid-cycle "small tests of change"16 (see Chapter 4); and (3) that when an individual cannot adhere to standard work, the issue and relevant circumstances be brought back to a process owner for dialogue and learning. To accomplish this, leaders must commit to organizationwide training on these concepts.

While reliable processes are one component of a reliable organization, there are other aspects involved in embedding reliability at the cultural level, an activity that is essential to working toward functioning as an HRO.

At their most basic level, HROs experience fewer accidents despite typically operating in "risky" and complex environments.<sup>17</sup> The operational attributes of HROs that allow them to perform at this level, as defined by Weick and Sutcliffe, are (1) reluctance to simplify, (2) deference to expertise, (3) preoccupation with failure, (4) sensitivity to operations, and (5) commitment to resilience.<sup>5</sup>

Examples of HROs in which the aforementioned attributes are apparent include commercial aviation, naval nuclear power, aircraft carrier operations, hazardous chemicals manufacturing, and aeronautical industries. Such industries achieve reliability because they actively seek to know what they don't know, design systems to make available important knowledge that relates to a problem to everyone in the organization, learn in a quick and efficient manner, aggressively avoid organizational arrogance or the belief "errors cannot happen here," train organization staff to recognize and respond to system abnormalities, empower staff to act, and design redundant systems to catch problems early.<sup>18</sup> In other words, an HRO expects its organization and its subsystems, regardless of how reliably they are designed, to fail, and the HRO works very hard to avoid known sources of failure while preparing for unexpected failures, so that the organization can minimize both the frequency and impact of future failures.5

Those looking to migrate their organizations toward HRO status should begin by clarifying the leadership role involved, committing to regularly assessing stories that provide a window to understand the organization's culture reviewed annually—and implementing a set of expected behaviors, activities, and initiatives that other organizations have used to successfully drive change. Many of these behaviors, activities, and initiatives are described throughout this book.

#### FOSTER TRANSPARENCY

Transparency in health care involves openness in communication, the routine production and wide-scale distribution of unblinded performance data, acknowledging and reporting error, offering an apology when harm occurs, defining accountability at all levels in the organization, and committing to system improvement. A transparent organization does not try to hide mistakes, but acknowledges that errors occur and works to fix the systems that ultimately cause those errors. Such an organization accepts that it is not perfect, and continuously works to identify areas of improvement.

A culture is transparent only if its leaders define, rolemodel, and cultivate that transparency. There are many ways to do this, including the following:

• Openly discuss failure. Talk about, discuss, and analyze issues, errors, and risks with frontline staff, medical staff, patients, families, and the public.

• Establish an environment of psychological safety in which everyone is comfortable speaking up. Each individual, and what he or she has to say, must be treated with respect at all times, and disrespectful actions can't be tolerated by leaders. Psychological safety is essential for open communication to occur, for when individuals believe that they or their suggestions are being criticized, they will cease to contribute to the discussion. (*See* Chapter 6 for further discussion about psychological safety.)

• Share data-both good and bad-on performance with frontline staff, medical staff, patients, families, and the public. When appropriate, leaders should establish an expectation that staff members produce their own trended and annotated data to demonstrate their ability to improve and sustain performance over time. When data relate to a process improvement project, leaders should routinely confer with the process owners concerning progress in and possible barriers and obstacles to meeting goals. When implementing new initiatives, it is critical to share the results and show if a process does, in fact, improve patient outcomes and increase efficiency. To sustain physician and staff involvement in improvement, they must believe that improvement is being realized and the process does work. For example, when implementing a new insulin protocol, data, including graphs, should be provided to show the extent of possible reductions in episodes of hyper- and hypoglycemia. To reinforce a sense of commitment, people need to know that their work and efforts are worthwhile. We must recognize their achievements and specially highlight their good work all the time.

• Provide avenues for feedback, such as Executive WalkRounds<sup>12</sup> (*see* Chapter 5). Respond to feedback with communication and examples of improvement in a timely manner to encourage further feedback.

• Develop leadership skills across the organization for transparency, so the ability to consistently share data, safely learn from failures, and reinforce an accountability model is a foundational organizational property at all levels.

• Be consistent when responding to close calls and adverse outcomes with a leading edge focus on what happened and not who did it. Leaders should establish an accountability system to differentiate between system issues, human error, and at-risk behavior (for example, a violation of safe practice) and apply that system consistently across the organization regardless of outcome.<sup>19,20</sup> (*See* Chapter 3 for a further discussion of accountability.)

• Although the following points are not directly related to transparency, active work in these areas is important in supporting a transparent culture:

— Foster teamwork and effective communication across the organization. (*See* Chapter 6 for a further discussion of teamwork and communication.)

— Involve and develop the capacity of all stakeholders in improvement, including frontline staff, medical staff, patients, and families.<sup>21,22</sup> Involve patients in their care through multidisciplinary rounds, transition reports, and eliminating visiting restrictions; talk openly and honestly with patients and families when things go wrong; apologize; and ensure ongoing support for patients and families who have been harmed.<sup>23</sup> (*See* Chapters 8 and 9 for more information.)

Many organizations are fearful of transparency, as they believe it will reveal flaws and increase lawsuits. The concern is that if the organization exposes its weaknesses, people will capitalize on those weaknesses to the detriment of the organization. However, there is research that shows that this is not what typically happens. In fact, being transparent often increases trust with patients and families. When one hospital in the Pacific Northwest was open and honest about a high-profile medical error, the public responded positively to the organization, believing that the organization was working to provide the most appropriate care and, when it failed, was open and honest about it. When Paul Levy, former CEO of Beth Israel Deaconess Medical Center in Boston, openly discussed a wrong-site surgery error on his weekly blog, it stirred a spirited discussion within the medical community<sup>24</sup> but also resulted in appreciation from the public for his openness, honesty, and transparency.

Being transparent also has the benefit of improving employee morale and engagement in improvement efforts. Sharing data about strengths and weaknesses excites and motivates staff to participate in improvement efforts. It reflects a commitment to be candid and continually improve.

#### **CREATE A LEADERSHIP PROMISE**

One specific action that organization leaders can do to help verbalize their commitment to transparency and high reliability is to create a Leadership Promise. This is a document that clearly delineates the role of the leader in safety, reliability, and performance improvement. Sidebar 1-1 on page 6 is an example of one organization's Leadership Promise. Compacts between physicians and health care systems can also be helpful in terms of clarifying expectations and increasing joint accountability. In addition, asking all staff to sign a pledge to adhere to specific behavioral performance standards can set a tone regarding the seriousness of the behaviors and facilitate both recognizing excellence and correcting nonconformance.

#### ENGAGE PHYSICIANS, NURSES, AND OTHER CLINICIANS

#### Getting Physicians on Board

To transform complex health systems, physicians must be engaged as leaders in their health care settings, in both formal and informal roles,<sup>25</sup> and at the institutional, service-line, and frontline levels.<sup>26</sup> Gosfield and Reinertsen define this future state as "physicians working together systematically, with or without other organizations and professionals, to improve their collective ability to deliver high quality, safe, and valued care to their patients and communities."<sup>27(p. 5)</sup> When physicians share their personal passion, expertise, and responsibility, there is a high likelihood that improvement efforts will be stronger and more accepted as the "way to do the work." Organizations with stronger physician leadership have been shown to be more successful in delivering change.<sup>26</sup>

Without physician engagement, safety improvement efforts will be flawed in their design, have trouble getting off the ground, and/or have difficulty being sustained. Physicians have a huge impact on the quality of care delivered, clinical variation, and resource consumption, not only in their own practices but across the continuum of care experienced by patients. Effective physician relationships with governance, leadership—including specifically nursing leadership—frontline nurses, pharmacists, patients, families, and others are essential for the consistent delivery of safe, high-quality care. Any changes in the way care is designed and delivered require physician participation and acceptance either as individuals or as a professional body.<sup>27</sup>

Engaging physicians in improvement initiatives has historically been a challenge for physicians and for health care organizations. In the past, physicians were largely excluded from the improvement process. In the division of labor, hospital leaders have viewed performance improvement as their responsibility and that of their administrative, nursing, and other clinical (largely nonphysician) staff. When physicians were consulted, it was often after the initiatives were identified or at the end of a process design. Physicians may serve in unpaid administrative roles in health care organizations, and because of time constraints and their need to focus on their first priority (direct care of patients), they often lack the time, energy, or motivation to get involved in performance improvement initiatives.

In many instances, the quality and safety priorities for health care institutions and physicians have been and continue to be out of alignment. Although many physicians give generously of their time to support their community hospitals, they have little additional time to spare for the organization's quality and safety agenda. When the priorities of the hospital and physicians come into conflict, it can strain relationships, thereby undermining collaborative problem solving and performance improvement efforts.<sup>28</sup>

The challenge, and therefore the solution, to this issue lies in developing and inspiring physician leaders to expand their sense of responsibility beyond individual patients to the health care organization—and its ability to provide better care. The physician culture is largely based on personal responsibility for patient outcomes and contributes to physicians' attachment to individual autonomy. Physicians are taught that "If we work and study hard enough, we won't make a mistake." This leads them to believe that if a mistake does happen, it is their—or some other person's—fault. This cultural element puts physicians in conflict with a now emerging systematic approach to patient care that entails shared, as well as individual, accountability. Physicians often fail to see their role in a larger system, the many components of which may come together to form high-risk situations

#### Sidebar 1-1. Not on My Watch

Following is one organization's Leadership Promise. It is a written document that organizations can use to help verbalize a leader's commitment to safety and reliability.

I am at the helm of a medical center that intends on providing the safest hospital care in the United States by the end of the year [fill in year]. We will do this by eliminating all preventable death and injury to our patients as we continue to pursue a workplace free of injury to our staff. In partnership with our physician and union leaders, our safety aim is routinely communicated to every employee and physician, and more recently, to our patients.

I actively oversee a three-year plan to achieve our goal that builds off of the great work we've already begun. By *actively oversee*, I mean that I receive monthly progress reports and require corrective action plans to close identified gaps. In concert with this activity, I personally track a small number of hospitalwide patient safety measures that are routinely updated and made fully transparent to our staff and to our members; these measures include hospital risk adjusted mortality, a global harm rate generated by use of the IHI Global Trigger Tool, bundle compliance for bloodstream and surgical site infections, as well as ventilator-associated pneumonia (VAP) and never events.

I have tied our patient safety aim to other hospitalwide initiatives, including improving flow, eliminating workplace injuries to our staff, and improving service. In the process, my CFO has become a true patient safety champion, realizing that safe, reliable care is no accident, and no accident is good for our bottom line. In addition, each member of my senior leadership team is required to cosponsor a patient safety improvement initiative. This helps them better understand the complexity of providing safe, reliable care, and allows them to better connect their activities to our aim.

Each week, I personally spend about four hours on matters directly related to the provision of safe, reliable care. During this time, I:

- Conduct Executive WalkRounds and review reports indicating the status of issues that staff have identified during our time together
- Review all significant events and sign off on each one with a statement that says I have reviewed the case and that it appears the corrective action plan will significantly reduce the risk of recurrence . . . of course, I'm not the only one who makes this certification, but I am the last one. I also make sure that lessons learned from both our own, and other medical centers' events, are shared with our frontline practitioners. After all, they are the ones who have a need to know.
- Spend 10 minutes at new employee and physician orientation to make clear, in no uncertain terms, my views of patient safety and my expectations of them. I also let them know that my door is always open to safety and how they can contact me.
- ✓ Follow up on reports of unsafe practitioners and make sure that we are not only addressing identified issues of competency, but identifying issues related to collaboration, respect, and organizational values
- ✓ Visit with our member-driven, patient safety advisory council and hear directly from our members what's concerning them and what's going well
- ✓ Act as an executive sponsor of improvement initiatives related to eliminating unwarranted variation in work flow and process . . . medicine is complex enough without having eight different ways of doing the same thing.
- Review resource requests concerning patient safety that have been denied at lower levels in the organization. I agree with most of the decisions made, but want everyone to understand, the buck stops here with respect to patient safety.
- ✓ Visit with one of our performance improvement teams on the floor to hear and see specifically how their work is going. We currently have initiatives related to eliminating preventable infection, medication, and birth-related injuries. They are all on 90- to 120-day performance improvement cycles and so I see remarkable progress every week.

By far, the hardest thing I do is to meet with patients/families who have suffered a significant, preventable injury while in our care. It may also be the most meaningful thing I do.

On an annual basis, I ensure that the current state of the organization's patient safety culture is measured. In between, I am driving the creation of a just culture by demanding a brief on every patient safety–related event where part of our response strategy has been to use discipline. I'm all for accountability . . . and to ensuring that our response is "Just."

As more and more patient safety demands are placed on the organization by state, federal, and accrediting bodies, I sponsor a review of our staffing and structure to ensure that we have the resources in place to do what's needed. I periodically update my own knowledge of patient safety and demand that my executive team does the same. This year, [fill in the blank] members of our team are attending the IHI Annual Forum.

As well as I think we generally do here, I recognize that to go from where we are to where we want to be is going to require a relentless commitment on my part to improve patient safety. Only I can productively direct efforts to foster the culture and commitment required to address the underlying systems causes of medical error and harm.

Preventable Death and Injury? Not on My Watch . . . Not in My Region . . . Not in My Organization!

Source: Doug Bonacum. Adapted and used with permission.

that can result in harm to patients. This personal responsibility approach to patient outcomes continues to reinforce a blaming culture.

Compounding this cultural bias, and specifically related to patient safety, is the fact that most physicians rarely see data for the adverse events in which they were involved. Medical staff organizations and hospitals have not historically developed expertise in identifying harm, and even when they do, most physicians do not receive direct feedback on their care.

Fortunately, among physicians and health care leaders, there is a growing and shared understanding that there is too much harm, much of it preventable; there is both shared and individual accountability and responsibility; and the solution lies in collaborative performance improvement efforts and true engagement of physicians in a shared quality agenda.

#### So how can organizations engage physicians?

Achieving Clinical Integration with Highly Engaged Physicians offers six comprehensive steps to achieve physician engagement: (1) discover common purpose, (2)reframe values and beliefs, (3) segment the engagement plan, (4) use "engaging" improvement methods, (5) show courage, and (6) adopt an engaging style.<sup>27</sup> For example, for "discover common purpose," a key element in engaging physicians is to match improvement goals with things physicians value. Physicians care about initiatives that affect their patients' health outcomes, such as fewer infections, lower mortality, and other indicators of safe care. Like other members of the health care team, they seek to "first, do no harm" and make sure that the care provided to patients is appropriate and effective. In addition to improved patient outcomes, physicians value their time. For most physicians, time is a rare commodity. They are juggling multiple patients with complicated conditions in many settings with multiple payers, and they need to make decisions in a time frame that is at best short. Physicians will embrace change that improves efficiency and saves time for their patients and for them. Processes that result in less wasted time, fewer hassles, reduced bottlenecks and delays, and minimized rework will gain their support. In some cases, the importance of time can trump the importance of patient outcomes. In other words, if an effort improves outcomes but costs more time, physicians, regardless of their motivation, may be unable to comply with the improvement effort. Demonstrating shortand long-term clinical, financial, and service outcomes may be necessary.

Physicians also want to see data. Visions and goals, no matter how captivating, are generally of limited value to them. If organization leadership can show physicians that new processes are making patient outcomes better and giving the physicians more time, then physicians will be more likely to support performance improvement efforts, thus enhancing the probability that such efforts will be successful.

It's important to note that by mirroring organizational performance improvement objectives with those of physicians, your organization does not have to sacrifice its own quality goals. For example, if you pursue better patient outcomes and increased physician time, you decrease length of stay, enhance efficiency, and improve financial performance. In other words, organizational outcomes will improve as a by-product of patient outcomes and time efficiency.

Following are some practical considerations when working to involve physicians:

• Physician quality has historically been associated with peer review, which is generally perceived as a punitive process, not an opportunity to learn. Reframing the conversation as an opportunity to improve the quality of care provided is essential. Teaching about system error and having a model of accountability is key to supporting this cultural shift.

• Physicians enjoy contact with the board of trustees not only as members but as invited guests. Find opportunities to have governance and medical staff meet, not to hear reports but to engage in productive conversations.

• Physicians, like all of us, love to give opinions create a physician advisory group to do patient safety work. But be ready to shut up and listen. There is no group that will end quicker than one that doesn't lead to action and improvement.

• Formal recognition can play an important role in the life of most physicians and can include celebrations and recognition programs. Recognizing physician involvement and leadership in performance improvement and patient safety can reinforce the importance of physician input.

• Paying physicians less than what they would earn is often acceptable; what is critical is to acknowledge that their time is valuable. Consider paying physicians four to eight hours a month to be "Patient Safety Champions." The Essential Guide for Patient Safety Officers, Second Edition

• Don't waste their time. Physicians have a strong aversion to "task forces for life." Physicians are very action oriented—they want to see results.

• Physicians respond to clinical data more than opinion. Measure and obtain clinical and survey data that will withstand scrutiny. When the data lose credibility, so do leaders, and recovering that credibility is very difficult. Measure items that physicians have identified as important to them.

• Consistently reinforce the message that effective teamwork is critically important for delivering safe, highquality care.

• In debates and disagreements, always focus on what's best for patients. That helps anchor the conversations around a common goal.

There is growing evidence that cultural barriers can be dismantled and collaborative practice enabled by appealing to "the better angels" by doing the right thing, by showing the data, and by defining strategy around the patient's needs.<sup>28(p. 58)</sup>

### Following the 80/20 Rule to Drive Improvement and Develop Physician Leaders

When trying to engage physicians, it is difficult to work with every physician in the hospital and ensure their comprehensive support and involvement. In all likelihood, 80% of your organization's medical staff rarely steps foot in the hospital. While essential members of your community, these are not the individuals on whom you should initially focus your efforts, unless there is someone with a very special interest. It is the 20% of staff members who spend the majority of their time working in the hospital—the hospitalists, residents, full-time staff, and medical staff members who regularly practice in the hospital—who have a clear, vested interest in improving clinical care. They also are firmly grounded in what works and what doesn't and what should be improved.

Within that 20%, you should identify those individuals who embrace change and value performance improvement. These champions can help colead initiatives, address issues, and generate support and engagement of others. But first, you need to invest in these potential leaders, positioning them for success. Considerable efforts have been taken to understand the key competencies of physician leaders, and organizations should familiarize themselves with them.<sup>29,30</sup>

There are significant barriers to physician leadership; for example, formal systems frequently hamper the development of such leadership, and leadership capability among physicians is not systematically nurtured. Yet perhaps even more important, many clinicians have deeply held beliefs about leadership as "low value" and do not view it as core to their professional identity.<sup>26</sup> Early on in their new positions, leaders need skills training, such as in performance improvement and conflict resolution. They also need mentors and other support to learn from others, including time to network with others, support for conferences, and support for site visits. In addition to facilitating connections among physicians themselves, there is great opportunity when you provide effective partners for physicians with whom they can work to achieve outcomes, such as nurse coleaders.

When the 20% of physicians are on board, the remaining critical mass of practitioners will learn from their experiences and even add to the initial improvement work. Physician leadership will be viewed as putting physicians at the heart of shaping and running clinical services so as to achieve excellent outcomes for patients and populations, not as a one-off task or project but as a core part of the physician's professional identity.<sup>26</sup>

#### Make Physicians Partners, Not Customers

Along with aligning priorities with physicians, leaders must work to shift physicians' perspective on their role in the organization. As previously noted, many hospital leaders believe that physicians are important customers who make care decisions while the organization leadership runs the finances and facilities. Likewise, physicians often believe they must have complete autonomy for everything and take personal responsibility only for the patients they take care of directly.

These viewpoints are not productive for the organization, physicians, or patients. To provide the most effective and safe care, patients, families, and the community should be the only customers of a health care organization, and physicians should be partners in providing care to them.

Organizational leadership must set expectations for this perspective shift and support those expectations by consistent practice. Leaders should work with physicians who understand that the patient is the only customer and want to build systems together to support patient needs. Most physicians went into medicine because they want to provide care for people and thus should support the idea of putting the patient at the center of the work.

Unfortunately, some physicians may not like this perspective shift, and in those cases leaders must respond consistently. Physicians who are not willing to give up autonomy for a systematic approach should be encouraged to practice elsewhere. Consider the following scenario:

At the quarterly meeting of the Board Quality Committee, a community board member asks about the medical record delinquency data. The Medical Director says "Yes, we have one or two serial offenders, but one of them is our key trauma surgeon. His op notes and D/C summaries are always months behind. But if we suspended his privileges, as called for in the bylaws, our trauma program would pretty much shut down."

In your institution, what would happen next? Ideally, the trauma surgeon should be held accountable to the same standards as everyone else and disciplined accordingly if he is not willing to change his behavior. If you do not have a single standard—one set of rules—it is very hard to preserve accountability and have a culture that is perceived as fair. This is a key point.

#### **Engage Nurses and Other Clinicians**

Organizations that are going to be successful need to invest in a skilled, stable nursing workforce. A simple measure of stability is your organization's annual rate of voluntary nursing turnover. Ideally, it should be close to zero, such as the 0.4% rate at the Dana-Farber Cancer Institute in Boston.<sup>31</sup> With a United States national average at around 10%, where is your organization?<sup>32</sup>

When one skilled nurse leaves an organization, not only does it cost as much as \$88,000 to replace him or her, according to one report,<sup>33</sup> but new hires are often not experienced enough to provide the same level of safe, reliable care. Putting brand new graduates in ICUs, operating rooms, and other high-acuity areas without a few years to develop expertise can be more than costly—it can be dangerous. Having skilled people at the bedside is essential for safe care and organizational health.

What are the keys to a healthy nursing environment?

• Creating and maintaining an environment that requires and attracts better-educated nurses, acknowledges their value, and supports ongoing learning

• Eliminating occupational injuries to nurses (and all staff) as a palpable way of communicating that these profes-

sionals are an invaluable resource and cannot provide the best possible care to patients when they themselves are not at their best

• Creating a staff professional development program and a nursing leadership structure that provides skilled nurse leaders and managers to support frontline nurses

• Fostering collegial nurse-physician relationships and having zero tolerance for destructive behaviors (such as lack of civility, disrespect, and disruption) both among nurses and between nurses and physicians<sup>34</sup>

• Committing to programs that help build organizational excellence in nursing, such as the American Association of Critical Care Nurses Healthy Work Environments Standard and the American Nurses Credentialing Center (ANCC) Magnet Recognition Program

All of these responsibilities fall directly within the purview of senior leaders.

### HIRE FOR WHAT YOU ASPIRE TO BECOME

Although the military has proven through processes such as boot camp that it is possible to rapidly shape another's attitudes and behaviors in alignment with an organization's aspirations, successful companies like Southwest Airlines have found it equally effective to hire the right people in the first place. If your hiring and credentialing process isn't grounded in finding and selecting candidates-physicians, nurses, other clinicians, support staff-who share the organization's core values, possess a desire to serve, have good communication skills, exhibit an eagerness to work in teams, have a commitment to excellence, and communicate an appreciation for feedback, then becoming a reliable and safe organization will take much longer and be much harder than it otherwise should. Although orientation, ongoing training, and daily reinforcement of safety values are essential ingredients in going from good to great in this area, why not give yourself a head start and "get the right people on the bus" to begin with?35

#### **INVOLVE BOARD LEADERSHIP IN SAFETY**

Physicians and nurses aren't the only groups that are critical to patient safety efforts. Another crucial stakeholder is your organization's board of directors. According to Donald Berwick, then president and CEO of the Institute for Healthcare Improvement (IHI), "Historically, boards have assumed that they are responsible for the fiscal integrity, reputation, and lay management of the hospital, but that responsibility for care lies with the clinical staff, not with the board. For many boards, medical care, itself, is remarkably foreign terrain. Yet, in a time of increasing corporate accountability, consumer voice, and system complexity, this view will no longer suffice, if it ever did. A large share of the accountability for the safety and quality of care rests firmly in the board room. . . . [Cultural changes that support patient safety] require leadership, . . . and in the final analysis, defining the organization's strategic intent and priorities is the responsibility of those who govern the organization."<sup>36</sup>

As Berwick implies, the first step in involving the board in safety and quality efforts is the simple recognition that it is the board's duty in the first place.<sup>37</sup> Better patient outcomes are associated with the following<sup>37</sup>:

• The board spends more than 25% of its time on quality issues.

• The board receives a formal quality performance measurement report.

• There is a high level of interaction between the board and the medical staff on quality strategy.

• The senior executives' compensation is based in part on quality improvement (QI) performance.

• The CEO is identified as the person with the greatest impact on QI.

According to IHI, to assume a major leadership role in improving clinical quality and reducing harm, there are six things all boards should  $do^{36}$ :

1. Set aims. Set a specific aim to reduce harm this year. Make an explicit, public commitment to measurable quality improvement—such as reducing unnecessary mortality and harm—establishing a clear aim for the facility or system.

2. Get data and hear stories. Select and review progress toward safer care as the first agenda item at every board meeting, grounded in transparency, and putting a "human face" on harm data.

3. Establish and monitor system-level measures. Identify a small group of organizationwide "roll-up" measures of patient safety, such as facilitywide harm or risk-adjusted mortality. Update the measures continually and make them transparent to the entire organization and all of its customers.

4. Change the environment, policies, and culture. Commit to establishing and maintaining an environment

that is respectful, fair, and just for all who experience the pain and loss as a result of avoidable harm and adverse outcomes—the patients, their families, and the staff at the sharp end of error.

5. Learn . . . starting with the board. Develop your capability as a board. Learn about how "best in the world" boards work with executive and physician leaders to reduce harm. Set an expectation for similar levels of education and training for all staff.

6. Establish executive accountability. Oversee the effective execution of a plan to achieve your aim to reduce harm, including executive team accountability for clear quality improvement targets.

The Joint Commission emphasizes the importance of organization leaders' communicating about safety and quality. Through its Leadership standards, The Joint Commission requires organization leaders—including members of the governing body, senior managers, and leaders of the organized medical staff—to communicate with each other on a regular basis with respect to issues of safety and quality.<sup>38</sup>

Obtaining this level of leadership may be challenging, but in its absence, change will be difficult to effect and even more difficult to sustain. Consider beginning the process by engaging each leadership group (the board of directors, CEO, and physician and nursing leaders) in a conversation regarding their level of awareness of the issues, how they view their accountability in this arena, whether they think the organization has the capacity for change, and what explicit actions might be taken to close performance gaps. Consider creating a program in which every new board member and senior leader needs to spend two to four hours shadowing a frontline caregiver. This is a critical perspective they all need. Consider having a patient safety-focused retreat for senior leaders with outside speakers. Often it is easier for external experts to deliver the message of quality and safety and push for significant commitment and improvement.

In an article related to this topic, Frankel, Leonard, and Denham state the following: "Awareness is the first critical dimension... Leaders must be aware of performance gaps before they can commit... Accountability of leaders for closing performance gaps is critical... leaders need to be directly and personally accountable to close the performance gaps... however, [leaders] will fail to close [performance gaps] 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 'dark green dollars' of line-item budget allocations."<sup>39(p. 1706)</sup>

To determine if your organization leadership is ready to be effective in achieving safety, initially assess board and senior team performance; and work with the CEO to develop his or her own Leadership Promise using the one provided earlier in this chapter as a guide. Finally, evaluate whether you have respected physicians and other leaders who are or are willing to act as champions of change. They must be willing to publicly commit their support among their peers and express the importance of various efforts. They must also be willing to openly deal with resistance from their colleagues in a constructive manner and insist on a professional culture that won't tolerate nonprofessional behavior. Clear board and CEO support and commitment on these last two points is critically important for success.

In summary, committed, capable, and engaged leadership is essential to systematically improving care and building a culture that makes improvement sustainable.

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