About the Authors
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About the Center for Healthcare Governance
The Center for Healthcare Governance is a community of board members, executives and thought leaders dedicated to advancing excellence, innovation and accountability in health care governance. The Center offers new and seasoned board members, executive staff and clinical leaders a host of resources designed to progressively build knowledge, skills and competencies tailored to specific leadership roles, environments and needs. In partnership with the American Hospital Association.
Hospital Patient Safety and Quality Monitoring: A Resource for Governing Boards and Trustees
Preface

Modern day American hospitals are far more complex entities than the charitable health care institutions of the past – providing services to a diverse group of patients in communities they serve, participating in actively building community awareness for better health, providing for economic growth, and meeting increasing demands from regulatory agencies and payers to demonstrate performance improvement. In addition, hospitals are now being required to demonstrate compliance with recognized standards of care and practices from different regulatory agencies and payers.

Even though today’s hospital governing boards have responsibility for the quality of care provided in the institutions they govern, there is less agreement concerning their specific roles and responsibilities for this function. Recent legislation (the Sarbanes-Oxley Act1) provides actionable guidance for boards for financial oversight, but there is no such guidance for boards in overseeing the quality or safety of care their hospitals provide. Furthermore, due to the diverse performance domain requirements of health care institutions and the current environment of increased accountability for governing boards, board members (trustees) need to be more vigilant than ever before in overseeing all of the activities of the hospital, including monitoring the quality and safety of care.

While hospital board members do not direct daily operations or indicate to physicians and other health care providers how to treat their patients, they do need to monitor the quality and safety outcomes of care based on key indicators and metrics of performance. Unlike the past, today there is a wealth of quality and safety data; the challenge is in synthesizing and making it available in formats that support review of progress toward meeting quality and safety improvement goals by the governing boards of hospitals.

This monograph is intended to provide board members with a comprehensive overview of the quality and patient safety journey in health care and to discuss examples of quality and safety indicators and performance measures that can be made available at the governing board level to drive effective oversight.

Sanjaya Kumar, MD, M.Sc., MPH
President & CMO, Board Chairman; Quantros, Inc.

1 On July 30, 2002, President George W. Bush signed into law the Sarbanes-Oxley Act of 2002, which added many new—and revised many existing—provisions of the federal securities laws. To protect the interests of investors and, more generally, the public, this federal law establishes the status, duties, composition, powers, rules, and reporting of Boards for all public companies that are subject to securities law.
Overview of Hospital Quality Improvement and Safety Initiatives

The Quality to Safety Journey

In 1965 two events reframed the relationship between hospitals and physicians and became the foundation for the current focus on quality and safety in health care. The first was the landmark legal decision in *Darling vs. Charleston Community Memorial Hospital*, which placed ultimate responsibility for the quality of patient care on the governing board. The second was the passage of the Social Security Act of 1965. It established Medicare, a health insurance program for the elderly; and Medicaid, a health insurance program for the poor. Through this legislation a third party, the federal government, entered into the physician-hospital relationship. Medicare and Medicaid became major payers for the medical care provided to their beneficiaries, and consequently wanted to assure that dollars were being efficaciously spent. As a result, programs to assure appropriate utilization of resources, procedures and hospital/physician services were implemented and the term “quality assurance” was born.

The initial focus on improving quality at hospitals was to identify and weed out poor practitioners, those that caused poor quality and were deemed to be responsible for medical errors and patient injury. We can easily classify this as the
“punitive culture period.” The hospital and medical staff tried to assure the quality of care and safety of patients largely through education, re-training, and disciplining of practitioners to whom “adverse events and/or outcomes” were attributed. Systems-based thinking and interplay of multiple factors in the causation of “adverse events” had not yet evolved.

At the same time tremendous strides were being made in understanding the human body, illness and injury causation, disease management, and the environment of care and its administration. Health care increased exponentially in complexity, and new interdependencies and relationships developed that influenced the provision of quality care in the hospital setting. Infusion from other industries (automotive and aviation) regarding quality and safety improvement methods and their application to the health care industry began to emerge among early adopters. No longer was a focus on the individual practitioner effective in adequately overseeing the quality or safety of care. Instead the focus became more appropriately placed on the multitude of human, technical, medical device/product/equipment, and environment of care factors that have to work together effectively to result in required care being provided, without unanticipated adverse outcomes.

Health care professionals concerned with quality and patient safety began to study, advocate, and embrace advances in the science of health care quality improvement, fostering the modern quality movement and the evolution of pay-for-performance. In addition to health care industry advocates, new legislation on safety (both at the state and federal levels) is being approved. The Patient Safety Bill was signed into effect by President Bush on July 28, 2005. This bill allows clinicians to report medical errors anonymously. The information will be collected into databases maintained by patient-safety organizations and analyzed for insight about how to reduce mistakes.

Today, safety has become synonymous with improvements in quality, better clinical care performance, and reduction in adverse outcomes. Partly due to pay-for-performance initiatives and partly due to better understanding of the science underlying quality and safety improvement initiatives and interventions, the health care industry is moving rapidly from just improving quality and safety as a “good

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2 Legislation - S. 544, the Patient Safety and Quality Improvement Act of 2005 - passed the US Senate on July 21, 2005 and the US House on July 27, 2005, and was presented to President Bush on July 28, 2005 for approval.
objective” to making both an essential component of the health care system’s overall strategy. This in turn requires that hospital governing boards become active and involved participants in quality and safety oversight activities.

**Drivers of Quality and Safety**

Early quality theorists and advocates such as W. Edwards Deming promulgated the basic components of the knowledge and models that form the foundations for continuous quality improvement programs (total quality management) across a wide spectrum of industries. A primary premise of these models was the importance of providing key data on specific measurements of work processes identified for improvement. Data was used to establish pre-intervention baseline performance and then to trend improvement over time.

Following Deming, Avedis Donabedian became known as the father of quality assurance in health care when he published “Explorations in quality assessment and monitoring” in the 1980s. He articulated seven pillars of quality: efficacy, efficiency, optimality, acceptability, legitimacy, equity, and cost. Donabedian also addressed issues
such as access, completeness, measuring and evaluating quality, accuracy of medical records, observer bias, and patient satisfaction (Best et al., 2004) that have become the components of balanced scorecards and strategic quality indicator dashboards today. The Institute of Medicine (IOM) in 2001 published its report *Crossing the Quality Chasm* that highlighted similar key attributes of quality initiatives: safety, effectiveness, patient-centric care, timeliness, efficiency, and equity in providing services.

During this era, quality assurance and improvement principles from the manufacturing industry were also being translated to health care. Joseph Juran, known for the development of quality control in Japan, developed a model for quality called the Juran Trilogy:

Managing for quality is accomplished through:

- the management of quality planning,
- use of quality control theory, and
- use of quality improvement methods.

Juran’s Trilogies has become the *de facto* model for quality improvement initiatives within the American health care industry. Based on this model, many health care organizations have implemented Total Quality Management” (TQM) or Continuous Quality Improvement (CQI) programs to improve quality and patient safety and reduce adverse care outcomes. Quality Circles and Work Improvement Teams were created to focus and conduct the required quality improvement work within groups of professionals made responsible for quality and performance improvement activities (Langley, 1996). These professionals reported to Quality Councils and organization-wide Quality Committees on their findings, progress, and ongoing activities.

This new approach to quality improvement focused on the hospital as a system and acknowledged the interrelationships of providers; however the focus remained on health care professionals and not on the patient. Also, during this evolutionary phase, early adopting hospital governing boards started to oversee hospital performance based on key quality measures. However, much work remained – standardized quality, safety, risk, outcomes, and process improvement measures were needed across
health care settings in order to establish benchmarks (internal and external) and to compare performance across like institutions. Also, trustees were not yet active participating members of quality committees or councils.

The next impetus for change in the health care improvement arena was the Institute of Medicine’s (IOM) first report on health care quality and safety called *To Err is Human — Building a Safer Healthcare System* released in 1999. For the first time, the effects of the health care industry on the patient, its customer, was viewed as the measure of quality. The number of needless deaths and patient injuries made headlines, with the report estimating that as many as 98,000 Americans die every year because of medical errors. From this report, patient safety emerged as the top priority in the pursuit of clinical quality and began to change the quality conversation at hospital board meetings from assuring quality and the return on investment from it to the systems needed to improve patient safety.

Following this landmark report, the health care industry began to seek guidance from other industries on improving safety and understanding how best to measure, monitor, and trend safety metrics. The nuclear, road transport and aviation industries have become key resources to health care organizations because of the major improvements they have made in monitoring safety that have directly translated into saved lives. These industries understand the extreme complexity of the work involved and have utilized human factors science: the power of sharing data, analyzing investigational information from mishaps, and fine-tuning the art of representing and presenting data to understand how humans act and interact with their environment and their impact on safety and quality issues. Human factors science is about understanding the imperfection of humans and building systems to accommodate identified imperfections (see What is Human Factors Science? on page 8). From these industries new processes, procedures, and methodologies have evolved to significantly reduce errors and accidents, focusing on prevention (avoidance from recovery based on near miss and “good catch” data).
In addition, some hospitals and health care consulting groups have adopted a rigorous, data-driven decision making process from the manufacturing industry called Six Sigma. Companies such as Motorola, Kodak, Sony and General Electric claimed great savings from implementing Six Sigma projects. The premise of this process is to eliminate defects to improve efficiencies and results to the level of six sigma: an error/defect rate of 3.4 in 1,000,000. While this is a laudable goal, the current error rate in the average health care organization is 1 per 1,000; high reliability health care organizations have rates of 1 per 10,000. The nuclear power industry has used Six Sigma to eliminate errors through the use of automation and robotics, taking the human element out of the process. However, in health care it is the involvement of professionals and patients, addressing issues related to human factors science, people-to-people-to-environment interaction, technology adoption, and inclusion of non-professionals in the care process, that affects the achievement of defect-free care.

Studies from other industries have also prompted health care quality and safety improvement professionals to move away from conducting boutique projects to initiating and integrating wider evidence-based initiatives that are multi-disciplinary and involve the overall system. The impact of an intervention on the patient’s quality of care and safety is now being taken into consideration.
Measurement Alignment for Health Care – Focus on Quality and Safety

Key to improving patient safety is understanding the number and types of events occurring within the health care setting. Studies have shown that leaders and managers may be aware of only 4–5 percent of the actual adverse events and errors taking place. Improving knowledge about these occurrences depends on establishing an environment that encourages reporting, and does not focus on placing blame. James Reason, whose sentinel 1982 book *Human Error* provided an in-depth analytical framework of human error, looked at errors as failures in a system and developed the “latent failure model of complex system failure.”

This model has helped organizations understand how an error reaches the patient and the importance of moving the focus of improvement away from the nurse or physician who had the last interaction with the patient – known as the sharp end of an error—to the multiple process failures that caused the error. The current patient safety movement focuses on developing a “culture of safety” to help organizations be mindful of the many factors affecting quality and safety in the health care environment.

### Adverse Events

Many adverse events attributed to inadequate nurse staffing.

- **Errors reported to JCAHO**
- **Fraction due to inadequate nurse staffing**

Source: JCAHO, 2002
A number of prominent regulatory, consumer-based, and payer-focused organizations, such as the American Hospital Association (AHA), the American Nurses Association (ANA), the National Quality Forum (NQF), the Joint Commission (JCAHO), the Leapfrog Group, and the Centers for Medicare and Medicaid Services (CMS), have all developed quality and safety initiatives and programs that focus on helping hospitals reduce errors (see Major National Quality and Safety Initiatives chart on pages 10 and 11).

The AHA’s Hospital Quality Alliance program collects information on clinical outcomes for four major diagnoses—heart failure, acute myocardial infarction, pneumonia, and surgical infection prevention—and makes this information publicly available via its website. The AHA initiative involves the same common hospital
admission diagnoses that are part of the Joint Commission on Accreditation for Healthcare Organization’s (JCAHO) ORYX program. The Joint Commission and the Centers for Medicare and Medicaid Services (CMS) also have worked over the last two years to completely align their clinical outcome indicators, reducing the data collection burden on hospitals. CMS’s National Voluntary Hospital Reporting

### Major National Quality and Patient Safety Initiatives

<table>
<thead>
<tr>
<th>Agency</th>
<th>Program</th>
<th>Quality</th>
<th>Safety</th>
<th>Outcomes</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leapfrog Group</td>
<td>1. Hospital Rewards Program 2. Safety Survey</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>National Quality Forum (NQF)</td>
<td>1. National Clinical Quality Standards 2. Patient Safety Taxonomy</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>American Nurses Association (ANA)</td>
<td>1. NDNQI Program 2. MAGNET Program</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Agency for Healthcare Research and Quality (AHRQ)</td>
<td>Several Federally Funded Research Programs</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
Initiative went further and imposed a small percentage reduction in reimbursement for each Medicare patient for non-volunteering hospitals. Leapfrog is promoting three primary quality initiatives: computerized physician order entry, use of hospital Intensivists, and evidenced-based hospital referrals.

Increasingly, a number of measures are being included in physician profiles and reimbursement-based incentive programs prompting more and more physicians to become involved in their hospital’s quality and patient safety strategy and to actively participate on key committees. Physician champions and leaders are driving key strategies at a much more rapid pace then seen in the past decade.

**Evidence Based Medicine – Fad, Fashion or Reality**

Another strong influence on safety and quality has been the emergence of evidence-based medicine. The proliferation of patients, problems, medical studies and journal articles; the lack of physician time to stay current and abreast of the newest and most effective treatment modalities; and the increasing access of patients to medical and treatment information via the Internet has pushed evidence-based medicine into wide acceptance. Rather than the traditional approach of physician practice based upon personal experience, medical school training, avoiding difficult issues, and reading only what is familiar, which results in wide geographic variation in medical practice, this approach focuses on utilizing the clinical evidence with the greatest implications for the most appropriate and potentially successful treatments.

Wide distribution of high-quality clinical evidence helps reduce the geographic differences in care and promotes public reporting of clinical outcomes for common clinical conditions. Trustees need to be aware that the “art of medicine” is practiced as physicians customize and individualize their patient’s care. However, this “art” is practiced for the most part in the physician’s office. Only a very small percentage of each physician’s patients are admitted to the acute care hospital. In fact, most hospital admissions are related to the 10 most common diagnoses, such as congestive heart failure, diabetes, and acute myocardial infarction. It is for these most common hospital admission diagnoses that the “evidence” is strongest for a standardized approach for treatment. And it is for these patients, who make up 80 percent of those hospitalized, that utilization of evidence-based medicine will predicate improved patient outcomes. Trustees need to ensure that evidence-based medicine is being practiced in their hospitals.
Era of Pay-for-Performance

CMS took its public reporting initiative a step further with the introduction in October 2003 of a three-year, pay-for-performance pilot program with hospitals in the Premier system. Under this program Medicare will provide approximately $7 million annually in bonuses to hospitals that provide superior care to beneficiaries (Hospital Quality Incentive Demonstration Project – HQI). The objective is to provide strong financial incentives to get the attention of managers and governing boards to focus on implementation of systems and processes that will use best practices and reduce errors. In this voluntary program, about 300 Premier hospitals are submitting data on 35 quality measures for patients with five medical conditions: acute myocardial infarction, heart failure, pneumonia, coronary artery bypass graft (CABG), and hip and knee replacement.

<table>
<thead>
<tr>
<th>No.</th>
<th>Organization</th>
<th>Type</th>
<th>State(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Aetna</td>
<td>Private HMO</td>
<td>National</td>
</tr>
<tr>
<td>3.</td>
<td>Anthem Blue Cross Blue Shield</td>
<td>Private Payer for Healthcare Services</td>
<td>NH, OH, IN, KY, VA</td>
</tr>
<tr>
<td>4.</td>
<td>Blue Cross Blue Shield (BCBS)</td>
<td>Private Payer for Healthcare Services</td>
<td>IL, MA, MN, MI, MO, NY, CA</td>
</tr>
<tr>
<td>5.</td>
<td>Bridges to Excellence</td>
<td>Consumer Based Coalition</td>
<td>Participants that enroll in program</td>
</tr>
<tr>
<td>7.</td>
<td>Cigna and Promina</td>
<td>Private HMO</td>
<td>CA, GA</td>
</tr>
<tr>
<td>8.</td>
<td>Empire Blue Cross</td>
<td>Private Payer</td>
<td>Partnership with Leapfrog Employers</td>
</tr>
<tr>
<td>9.</td>
<td>Employer Coalition on Health</td>
<td>Private Industry Consortium</td>
<td>UTD</td>
</tr>
<tr>
<td>10.</td>
<td>Harvard Pilgrim Health Care</td>
<td>Private HMO</td>
<td>MA</td>
</tr>
</tbody>
</table>

UTD = Unable to Determine

Adapted from Rosenthal, et al., 2004 Health Affairs Journal
A report card of the performance of participating hospitals will be posted on the Internet in 2005, and hospitals that perform in the top 10 percent will receive a 2 percent bonus on their Medicare payments for targeted services. In addition, this demonstration project baseline will be the clinical performance threshold for all hospitals. In other words, hospitals that do not demonstrate improvement above this baseline level will have their Medicare payments adjusted downward. Other private payers and organizations also have started pay-for-performance programs. Health Affairs listed 32 such programs in 2004. Today, there are over 100 such programs. Some high profile examples appear in the table on page 13.

Consumers and Providers at the Crossroads

Efforts such as the CMS HQI Project and increasing public demand for hospital data have increased industry pressure to make quality of care information available publicly to consumers. Many purport that increasing public access to quality data will enable consumers to make more informed choices about their health care and providers. In addition to reports from for-profit rating organizations such as HealthGrades, many health care organizations report survey data on patient satisfaction and their own clinical and process outcome data for common diagnoses and procedures on their Internet websites. In addition, many states have mandatory reporting of adverse clinical events and mortality statistics for specific surgical procedures and overall hospital mortality. In 13 states, these data are publicly available. Hospitals can use these reports to develop their own comparative benchmarks and quality initiatives. However, many hospitals and physicians discount the value of making such data public, criticizing the sources of the data and the accuracy of the information.

The continued focus on quality and patient safety measures has led public agencies to assist the health care industry by providing direction and standardization. A subsequent Institute of Medicine report from 2001, Envisioning the National Health Care Quality Report, noted that reliable indicators of quality are needed that follow trends over time, identify disparities across regions and providers, and cover multiple dimensions of care.

The Agency for Healthcare Research and Quality (AHRQ) worked to address this need for multidimensional, accessible and standardized quality indicators. Beginning in 2001 and with subsequent releases in 2002 and 2003, AHRQ released new quality
indicators organized into three modules: prevention quality indicators, inpatient quality indicators, and patient safety indicators.

The latest entry into the patient safety and quality landscape is Boston-based Institute for Healthcare Improvement led by Don Berwick, MD. At the December 2004 IHI National Improvement Forum, Dr. Berwick launched an 18-month campaign to save 100,000 patients from medical errors and poor care. In his plenary speech, he motivated hospitals to “elect quality” and use campaign strategies to achieve results. With the mantra “some is not a number, soon is not a time” IHI is engaging hospitals in an action-oriented campaign to implement evidenced-based strategies that have been demonstrated to improve patient outcomes and will translate into saved lives. Citing little progress in improving patient safety across the U.S. health care system since the release of the first IOM report in 1999, IHI set a clear goal to save lives, and is providing hospitals with assistance through coaching, guidelines, and networking (Leape, 2005).
Making a Business Case for Improving Patient Safety and Quality

The IOM Report *To Err is Human*, asserted that medical errors kill between 44,000 and 98,000 people each year. Medication errors alone are responsible for 7,000 deaths annually. This type of error occurs in 7.3 percent of all hospital admissions.

In addition to understanding the importance of improving quality and safety in hospitals to help prevent patient injury and reduce overall mortality and morbidity, it is important for trustees to understand the financial cost of poor quality and safety, as well. The financial cost (direct and indirect) has been calculated and reported for a variety of medical errors. Some examples are:

- Adverse drug events result in average increased costs of $4,700 per admission (Bates et al., 1997).
- Complications increase cost to an average of $16,023 per discharge (*AJMC*, 1995).
- Treatment costs for hospital-acquired infections range from $20,000 to $50,000 (*Modern Healthcare*, June 1999).
- Pressure ulcers increase the cost per case by $2,000 and add four additional hospital days (*Advances in Wound Care*, 1999).
Nationally, current health care spending is estimated at $1.6 trillion annually. Expenses involved secondary to medical errors (both direct and indirect costs) are estimated at 5 percent or $80 million of the $1.6 trillion. Assuming a 200-bed acute care hospital has an annual operating budget of $100 million and applying the same 5 percent estimated costs due to medical errors, the result is excess expenditures of $5 million to the hospital or a cost-per-bed due to error of $25,000 per year or $70 per day. Board members should be aware of the costs of errors within their organizations and understand how the cost of error translates into costs for legal defense and risk management, as well.
The Need for a Data-Driven Infrastructure

In a second Institute of Medicine report, Crossing the Quality Chasm: A New System for the 21st Century, published in 2001, patient safety issues were connected to a broader view of quality. The report included ten rules to guide redesign of the health care system (see page 20). Trustees should discuss with senior leadership if and how these rules are being incorporated into their organization’s efforts.

Central to this report is a discussion of the use of the Internet and information systems to support clinical care, administrative and financial transactions, public health, professional education, and research.

The report highlighted the need for data on errors and use of information systems to analyze their causes. It encouraged hospitals to identify and learn from errors and stressed the importance of systems that make incident reporting easy and allow for anonymous reporting while providing timely feedback. The IOM reports have increased awareness of the strong linkage between information technology (IT) infrastructure and patient safety.
Health care institutions need to become data-driven and more data savvy in order to continuously assess, monitor, and evaluate error rates and manage the workflow associated with reported occurrences. Clinicians have always relied upon data, preferably good clinical evidence that supports treatment decisions, and have taken an epidemiological approach to prescribe a course of treatment or therapeutic regimen for patients. This same approach should apply to hospital efforts to improve patient safety and reduce risk. There is a strong need to institute a data-driven infrastructure in hospitals to track, monitor, and trend information from medical errors that impact or could have compromised patient safety. Trustees should not wait for Sarbanes-Oxley-type legislation to direct them to focus on patient safety as a priority.

Detection or identification of events is the first step in error (patient safety) management. It is important that reporting rates be high because unintended hazards, risks, or behaviors that are not detected can have disastrous consequences. However, most agree that managers in the health care system are aware of only a small percentage of the actual problems and errors, only the “tip of the iceberg” as noted in the Iceberg

10 Rules for Redesigning Health Care

Private and public purchasers, health-care organizations, clinicians, and patients should work together to redesign healthcare processes in accordance with the following rules:

1. Care based on continuous healing relationships
2. Customization based on patient needs and values
3. The patient as a source of control
4. Shared knowledge and the free flow of information
5. Evidenced-based decision making
6. Safety as a system priority
7. The need for transparency
8. Anticipation of needs
9. Continuous decrease in waste
10. Cooperation among clinicians

Source: Crossing the Quality Chasm: A New System for the 21st Century, 2001

Detection or identification of events is the first step in error (patient safety) management. It is important that reporting rates be high because unintended hazards, risks, or behaviors that are not detected can have disastrous consequences. However, most agree that managers in the health care system are aware of only a small percentage of the actual problems and errors, only the “tip of the iceberg” as noted in the Iceberg

3 Epidemiology is the study of patterns of disease: who has disease, how much disease they have and why they have it.
of Ignorance graphic included here. Voluntary incident reporting rates average less than 5 percent.

For overall error reporting to be effective it needs to identify not only adverse events, and those that cause patient harm, but no-harm and near miss events as well. Such a system has been legislated by the state of Pennsylvania, with mandatory reporting of both “serious events and incidents” (near misses).

**Establishing a Data-Driven Quality and Safety Reporting Program**

The first step in the development of a data-driven infrastructure is for the hospital to leave paper-based systems and move to electronic error reporting. The improved ease of use and support for anonymous reporting results in an improvement in the number of medical errors and near miss events reported. Some hospitals have shown a four-to six-fold increase in patient safety event reporting by hospital staff following implementation of an enterprise wide web-based error reporting and follow-up system. However, voluntary incident reporting gives us a very small picture of what
is taking place in our environment. In fact, it has been shown that when harm does occur, incident reports are filled out only 2–4 percent of the time by hospital staff.

Obtaining data needs to be a layered approach — manual chart review using adverse event triggers, IT surveillance of outlier patients or patient characteristics, and voluntarily submitted incidents. All these data collection methods have benefits which are critical for improving patient care. Near miss data are difficult if not impossible to capture in a chart review process since adverse events did not happen. Allowing staff to report such data is critical to understanding latent failure points in the system.

Trustees should be aware that the selection of an information system to support quality and safety improvement should consider hardware and software requirements, the amount and cost of data storage, the availability of comparative benchmarks, and the ease of access to the data and frequency of reports. An electronic error reporting system may not be any better than paper-based ones if the hospital cannot access real-time data and easily drill down to investigate or easily see trends. Use of the Internet also needs to be considered. The explosive growth of the Internet and the number of organizations with access has opened up many new promising applications that have implications for the roles of consumers, clinicians, and organizations in the delivery of health care services.
Value and Use of Quality and Safety Data

Use of a computerized error reporting and management system provides the organization with a comprehensive database of adverse events and near miss occurrences. This is a rich source of information that can provide great value in two areas: the ability to predict the number of events with harm, and the ability to analyze the data to focus on improvement in systems that will provide the most benefit to the organization.

A major goal of patient safety management is to increase error identification and reporting in order to decrease harm to patients. A computerized error reporting system will increase the number of reports available to meet this goal. Key to achieving this goal is to know about no-harm events in order to uncover systems
and processes that caused the event before they repeat – the next time with harm to a patient. A review and analysis of data from a large adverse event database was completed focusing on events that caused patient harm and those that didn’t. Focusing on medication errors alone, a very close correlation was found between the events that caused patient harm and those with no harm, almost a 1:1 relationship. The scatter plot graphic below shows that no-harm adverse events are consistently (over 3 years of data) 15 percent of the number of harmful events reported.

From a risk management perspective, this tight correlation allows predictability for the number of harmful events from a known number of no-harm events. Thus, if an organization has reported 100 no-harm events each month, the 100 can be multiplied by 15 percent to predict the number of harmful events that occurred to patients, which would be 15. Hospitals can apply this finding and review the trend of no-harm adverse events reported over a year to find the average per month, and then obtain the

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4 Quantros, Inc. has an active database of over 350,000 adverse events from clients who utilize its safety and risk management system.
average cost in liability for adverse events that caused patient harm. This information can be valuable to organizations that are self-funded for liability insurance, or for those that are not in working with their insurer to more accurately budget for potential liability. As part of their fiduciary responsibility, trustees should understand the underlying factors driving budgeted liability insurance costs.

Review and analysis of data on errors and near miss events also enables the organization to establish a baseline level for types of events and causal factors from which to assess and evaluate efforts at system improvement. For example, a cause and effect analysis of all significant surgical adverse events showed that only 5 categories of causes accounted for 75 percent of the system failures found. These included patient management, communication, administration, documentation, and behavior. In addition, the study concluded that the traditional medical peer review processes, which include standard morbidity and mortality review, identified only 37 percent of the system failures related to patient management. (Morris 2003).

Other benefits of analyzing error data include establishing best practices, providing benchmarks and best possible rates, determining contributing factors to adverse events (see Examples of Adverse Clinical Events chart on page 26), and showing how the near miss reporting rate compares to the actual event reporting rate. These data also provide the basis for establishing patient safety measures.
<table>
<thead>
<tr>
<th>Error Type</th>
<th>Error Cause</th>
<th>Contributing Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Error</td>
<td>Intravenous medication overdose</td>
<td>Human Factor – Knowledge Deficit: Error in rate set, nurse not able to program IV pump correctly</td>
</tr>
<tr>
<td>Medication Error</td>
<td>Patient received 10 times insulin dose</td>
<td>Human Factor – Education Deficit: Physician order used “u” as abbreviation for units, misread as 0</td>
</tr>
<tr>
<td>Adverse Surgery Event</td>
<td>Total Hip Replacement surgery started on wrong hip</td>
<td>Human Factor – Protocol Non-Compliance: Surgeon reversed hip X-Ray in OR, fixated on the wrong side, time out forced procedure to stop</td>
</tr>
<tr>
<td>Adverse Clinical Event</td>
<td>Chest tube placed in wrong lung</td>
<td>Human Factor – Protocol Non-Compliance: Physician reversed chest X-Ray when preparing for CT insertion, relied solely on X-Ray to locate pneumothorax</td>
</tr>
<tr>
<td>Transfusion Error</td>
<td>Patient almost received blood transfusion of wrong blood type</td>
<td>Human Factor – Protocol Non-Compliance: Husband and wife typed for blood in ER after auto accident, tagged with initials and last name, husband’s blood type sent for wife.</td>
</tr>
</tbody>
</table>

*Source: AHRQ Web M&M - www.webmm.ahrq.gov/case*
Emergence of Board Quality and Patient Safety Committees

The role of hospital governing boards in ensuring quality of care and patient safety is of increasing importance as public reporting of quality data and pay for performance activities becomes more prevalent. However, many trustees, especially community leaders, are uncertain about exactly what they need to do to fulfill their responsibilities. The National Quality Forum (NQF) addressed this issue by recommending a “Call to Responsibility” for hospital governing boards. The NQF developed a framework of principles that apply to all hospital boards and included references to the importance of quality and safety (National Quality Forum, 2004). Specifically, trustees can begin to take a more active role in ensuring quality by beginning with a focus on patient safety. This begins with recognition that safety is a subset of quality and that the infrastructure needed to ensure safety is basically the same needed to ensure quality. Creating a Board Quality & Patient Safety Committee sends a clear message that both are important to the organization, but membership on the committee must not be limited to trustees alone (see suggested committee members and roles below). Clinical professionals and hospital administrators bring expertise that is critical to the committee’s successful function and execution of improvement strategies. A sample description of a Quality Committee’s responsibilities appears on page 29. For more examples visit www.americangovernance.com.
Safety and Quality Measures and Metrics for Boards

The JCAHO, CMS, NQF, Leapfrog Group, and the Agency for Healthcare Research and Quality (AHRQ) have all worked since 2000 to address the need for multi-dimensional, accessible indicators for both patient safety and quality. The AHRQ indicators were developed through a five-step process from literature review to public release of documentation. These are measures that screen for adverse events that patients experience as a result of exposure to the health care system. The indicators have also been adopted by the NQF and Leapfrog. Examples of some of the JCAHO, CMS, and AHRQ Patient Safety and Quality indicators are included in the table beginning on page 31. These provide a broad overview of areas of the hospital and types of patients to give trustees a barometer with which to measure the status of patient safety within the organization.

Note that the potential dashboard measures of safety, risk management, quality and performance improvement, and accreditation compliance (listed in the table titled Sample Quality, Safety and Compliance Indicators for Boards) were filtered from a review of nearly 25 hospital

<table>
<thead>
<tr>
<th>Position/Title</th>
<th>Role/Committee Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trustee members</td>
<td>Those interested in quality/safety, to bring board’s perspective</td>
</tr>
<tr>
<td>Chief of the Medical Staff</td>
<td>To represent the Medical Executive Committee, and the organized medical staff</td>
</tr>
<tr>
<td>Vice President of Quality</td>
<td>To provide education and focus on strategic quality initiatives</td>
</tr>
<tr>
<td>Hospital CEO</td>
<td>Ex-officio member, providing senior leadership perspective</td>
</tr>
<tr>
<td>Hospital Operating Officers: COO, CNO, CFO</td>
<td>Focus on hospital operations for patient care areas, pharmacy, and regulatory body responsibilities</td>
</tr>
<tr>
<td>Medical Staff Leaders: Hospital Epidemiologist/ Infectious Disease specialist, Cardiac Surgeon, Neonatologist etc.</td>
<td>Provide the medical expertise to assist the committee in understanding safety/quality for the highest risk/problem prone specialties</td>
</tr>
<tr>
<td>Patient Safety Officer</td>
<td>Education and focus on the safety issues of the hospital</td>
</tr>
</tbody>
</table>
The Quality and Satisfaction Committee functions as an oversight committee for the PHC Board of Directors in evaluating and monitoring various aspects of quality and patient safety. Components of the oversight function include assessing clinical outcomes, patient safety, risk management, environment of care, patient & clinician satisfaction, credentialing of various professionals and accreditation and licensure. This committee annually assesses the effectiveness of its contributions to improving performance and patient safety.

Key functional areas include:

• **Process/clinical quality improvements**
  1. Monitor and make recommendations related to performance improvement projects
  2. Review and provide input to PHC wide quality indicators
  3. Monitor progress on ORYX/Core Measures
  4. Review each hospital specific required review functions

• **Patient safety**
  1. Review and provide input to PHC wide safety indicators
  2. Receive Sentinel Event reporting
  3. Sharing of lessons learned as a result of a near miss/really bad thing or sentinel event.

• **Patient & Clinician satisfaction**
  1. Monitor and make recommendation related to patient satisfaction survey results
  2. Monitor and make recommendations related to annual physician satisfaction survey

• **Risk management**
  1. Receive biannual reports on risk management activities
  2. Be made aware of developments in risk management areas that may impact various ministries

(continued)
and integrated health system dashboards, as well as from interviews with health care administrators, consultants, and hospital board members.

As long as the hospital is able to compute the measures/indicators/metrics, those selected for presentation in reports, dashboards, and scorecards can be decided upon by the Board Quality & Patient Safety Committee in consultation with clinicians and management.

Measures selected for inclusion should reflect the issues deemed most critical for review by hospital board members, for example areas of greatest risk to patients and the organization or diseases having a significant impact on the hospital’s patient population. While the list is intended to serve as a menu of measures for boards to select from, some measures are appropriate for inclusion in any hospital board
### Sample Quality, Safety and Compliance Indicators for Boards

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>No.</th>
<th>Measure/Indicator</th>
<th>Type and Proposed Report Display</th>
<th>Description and Selection Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>1.</td>
<td>Safety Event Summary</td>
<td>Percent Rates Bar chart for a period with percent change for prior period</td>
<td>This composite measure report allows view of overall Patient Safety Events identified (Actual and Near Miss), Visitor Events, Employee Events, and events not involving any person (such as loss of power, bomb threat etc.).</td>
</tr>
<tr>
<td></td>
<td>2.</td>
<td>Patient Falls per 1000 patient care days</td>
<td>Ratio Spider or Radar Chart for a given period Statistical Process Control Chart</td>
<td>Patient falls are measured and reported to NDNQI - the Magnet hospital data base. This is important because the rate reflects processes in place to both identify patients at risk of falling, and systems in place to prevent falls. May be reflective of how adequate the nurse staffing is for patient care.</td>
</tr>
<tr>
<td></td>
<td>3.</td>
<td>Medication Errors per 1000 patient care days</td>
<td>Ratio Spider or Radar Chart for a given period Statistical Process Control Chart</td>
<td>This is important because the rate reflects processes and protocols in place and may be reflective of how adequate the nurse staffing is for patient care.</td>
</tr>
<tr>
<td></td>
<td>4.</td>
<td>Nosocomial (hospital-acquired) Pressure Ulcer Prevalence Rate - Number of decubitus ulcers per 1000 discharges for patients with a length of stay (LOS) greater than 4 days</td>
<td>Ratio Spider or Radar Chart for a given period Statistical Process Control Chart</td>
<td>This measure is intended to flag the prevalence of decubitus ulcers (pressure ulcers) and includes patients with longer than a 4-day LOS. The rate may reflect the nurse staff level (for patient discharges for patients with a length of stay (LOS) greater than 4 days Statistical Process Control Chart).</td>
</tr>
<tr>
<td></td>
<td>5.</td>
<td>Nosocomial Surgery Site Infection rate</td>
<td>Percent Rate among eligible patients Trend chart over time</td>
<td>Surgical site infections increase mortality, readmission rate, LOS, and cost for patients. They reflect use of appropriate care that includes use of antibiotics, hair removal, post-operative glucose control and normothermia.</td>
</tr>
<tr>
<td></td>
<td>6.</td>
<td>Hospital codes per 1000 discharges</td>
<td>Ratio Spider or Radar Chart for a given period SPC Chart</td>
<td>This indicator reflects a failure to recognize a patient’s deteriorating condition, which leads to a code. Data from Cleveland Clinic demonstrated the futility of codes in the hospital, with only a 14% survival rate.</td>
</tr>
</tbody>
</table>

quality and safety dashboard. These measures appear in bold type throughout the list. Following the table is a sample radar chart on page 38 showing one way of displaying quality and safety data that allows trustees to compare the hospital’s performance across several indicators for a given period of time.
<table>
<thead>
<tr>
<th>Focus Area</th>
<th>No.</th>
<th>Measure/Indicator</th>
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<th>Description and Selection Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>7.</td>
<td>Birth Trauma Rate - Injury to neonates</td>
<td>Percent Rate Spider or Radar Chart for a given period Statistical Process Control Chart</td>
<td>Measures the rate of neonatal injuries in infants born alive in a hospital. In newborns with a discharge diagnosis of birth trauma, studies have shown 25% of neonates sustain a significant injury to head, neck or shoulder. This measure reflects the safety of labor and delivery care. These injuries also are the highest compensable adverse events for hospitals.</td>
</tr>
<tr>
<td>Safety</td>
<td>8.</td>
<td>Nosocomial Infection Rates per 1000 discharges - Reportable to CDC’s NNIS Program</td>
<td>Ratio Spider or Radar Chart for a given period Statistical Process Control Chart</td>
<td>Nearly $5 billion are added to U.S. health costs every year as a result of infections that patients get while they are hospitalized for other health problems. The Centers for Disease Control and Prevention (CDC) previously reported that nearly 2 million patients annually get an infection while being treated for another illness or injury, and nearly 88,000 die as a direct or indirect cause of their infection. The economic costs of these infections result largely from the extra days the patient has to stay in the hospital.</td>
</tr>
<tr>
<td>Safety</td>
<td>9.</td>
<td>Never Events - Such as Wrong Side Surgery, Death Secondary to an Adverse Event, Wrong Patient Surgery, Wrong Surgical Procedure Performed, Foreign Object Retained Following Surgery, Intra-Operative or Post-Operative Death in ASA Class II Patients etc.</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These events are not supposed to occur at all. They are high-publicity events and good indicators of whether recovery and protocols are in place and being complied with. These are now included in the 2005 NQF listing of serious reportable events.</td>
</tr>
<tr>
<td>Safety</td>
<td>10.</td>
<td>Patient death or serious disability associated with use of medical products/equipment/devices/biologics</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These events are not supposed to occur at all. They are high-publicity events and good indicators of whether recovery and protocols are in place and being complied with. These are now included in the 2005 NQF listing of serious reportable events.</td>
</tr>
</tbody>
</table>
### Sample Quality, Safety and Compliance Indicators for Boards (continued)

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>No.</th>
<th>Measure/Indicator</th>
<th>Type and Proposed Report Display Type</th>
<th>Description and Selection Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>11.</td>
<td>Infant Discharged to the Wrong Person</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These are now included in the 2005 NQF listing of serious reportable events</td>
</tr>
<tr>
<td></td>
<td>12.</td>
<td>Patient Death or Serious Disability Associated with Patient Elopement for more than 4 hours</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These are now included in the 2005 NQF listing of serious reportable events</td>
</tr>
<tr>
<td></td>
<td>13.</td>
<td>Patient Suicide or Attempted Suicide Resulting in serious Disability</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These are now included in the 2005 NQF listing of serious reportable events</td>
</tr>
<tr>
<td></td>
<td>14.</td>
<td>Any Care Management Adverse Event Resulting in Death or Serious Disability, for example from Medication Error, Hemolytic Reaction, L&amp;D Death or Disability, etc.</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These are now included in the 2005 NQF listing of serious reportable events</td>
</tr>
<tr>
<td></td>
<td>15.</td>
<td>Environmental events associated with death or serious disability, such as electric shock, wrong or contaminated gas for patient, burn injury, etc.</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These are now included in the 2005 NQF listing of serious reportable events</td>
</tr>
<tr>
<td></td>
<td>16.</td>
<td>Any type of criminal events, such as someone impersonating a healthcare provider, patient abduction, sexual assault, physical assault resulting in disability or death, etc.</td>
<td>Counts Composite integrated safety/risk meter</td>
<td>These are now included in the 2005 NQF listing of serious reportable events</td>
</tr>
<tr>
<td>Focus Area</td>
<td>No.</td>
<td>Measure/Indicator</td>
<td>Type and Proposed Report Display Type</td>
<td>Description and Selection Rationale</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Quality</td>
<td>17.</td>
<td>Acute inpatient mortality rate - Number of acute inpatient deaths/inpatient discharges</td>
<td>Ratio</td>
<td>This is the only required rate to be reported as part of IHI’s 100K Lives campaign. The rate can be analyzed to determine preventable deaths. It is an overall quality and safety measure, and is important when followed as a trend over time.</td>
</tr>
<tr>
<td>Quality</td>
<td>18.</td>
<td>Failure to Rescue rate</td>
<td>Ratio</td>
<td>This is a different type of indicator because it reflects different aspects of quality care and patient safety - it measures the effectiveness in rescuing a patient from a complication rather than preventing a complication.</td>
</tr>
<tr>
<td>Quality</td>
<td>19.</td>
<td>Ventilator Pneumonia rate</td>
<td>Ratio</td>
<td>Important measure because ventilator-acquired pneumonia is the leading cause of death among hospital-acquired infections. It also prolongs the overall LOS and LOS in ICU and adds an average of $40,000 to the cost of each of these patients’ care. It is preventable with a group of nursing interventions.</td>
</tr>
<tr>
<td>Quality</td>
<td>21.</td>
<td>AMI Episode of Care Composite Bundle Measure</td>
<td>Percent Rate</td>
<td>Suggested by IHI as part of their 100 K Lives Campaign</td>
</tr>
</tbody>
</table>
### Sample Quality, Safety and Compliance Indicators for Boards (continued)

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>No.</th>
<th>Measure/Indicator</th>
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<th>Description and Selection Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>22.</td>
<td>Heart Failure (HF) Episode of Care Process Measures (HF 1-4)</td>
<td>Percent Rates Can be included in Dashboard Reports, Bar Charts, Trend Charts, and SPC</td>
<td>Part of JCAHO and CMS National Healthcare Quality Measures for Heart Failure (HF). Also recognized and adopted by the NQF for their National Clinical Quality Standards measure set.</td>
</tr>
<tr>
<td></td>
<td>23.</td>
<td>HF Episode of Care Composite Bundle Measure</td>
<td>Percent Rate Can be included on Composite Quality Meter and in Scorecards</td>
<td>Included by Quantros using similar methodology as for other conditions suggested by IHI.</td>
</tr>
<tr>
<td></td>
<td>23.</td>
<td>Surgical Infection Prevention (SIP) Episode of Care Process Measures (SIP 1-3)</td>
<td>Percent Rates Can be included in Dashboard Reports, Bar Charts, Trend Charts, and SPC</td>
<td>Part of JCAHO and CMS National Healthcare Quality Measures for SIP. Also recognized and adopted by the NQF for their National Clinical Quality Standards measure set.</td>
</tr>
<tr>
<td></td>
<td>24.</td>
<td>SIP Episode of Care Composite Bundle Measure</td>
<td>Percent Rate Can be included on Composite Quality Meter and in Scorecards</td>
<td>Suggested by IHI as part of their 100 K Lives Campaign</td>
</tr>
<tr>
<td></td>
<td>25.</td>
<td>Pneumonia (PN) Episode of Care Process Measures (PN 1-7)</td>
<td>Percent Rates Can be included in Dashboard Reports, Bar Charts, Trend Charts, and SPC</td>
<td>Part of JCAHO and CMS National Healthcare Quality Measures for PN. Also recognized and adopted by the NQF for their National Clinical Quality Standards measure set.</td>
</tr>
<tr>
<td></td>
<td>26.</td>
<td>PN Episode of Care Composite Bundle Measure</td>
<td>Percent Rate Can be included on Composite Quality Meter and in Scorecards</td>
<td>Suggested by IHI as part of their 100 K Lives Campaign</td>
</tr>
<tr>
<td>Focus Area</td>
<td>No.</td>
<td>Measure/Indicator</td>
<td>Type and Proposed Report Display Type</td>
<td>Description and Selection Rationale</td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>27.</td>
<td>Coronary Artery Bypass Graft Indicators (Process and Outcome of care)</td>
<td>Percent rate, ratios, and counts Can be included on Composite Quality Meter and in Scorecards</td>
<td>Most of the indicators have been suggested by the Surgical Thoracic Society (STS).</td>
</tr>
<tr>
<td></td>
<td>28.</td>
<td>Nursing Sensitive Care indicators</td>
<td>Percent rate, ratios, and counts Can be included on Composite Quality Meter and in Scorecards</td>
<td>These have been compiled by the NQF.</td>
</tr>
<tr>
<td></td>
<td>29.</td>
<td>Safety Culture Readiness</td>
<td>Percent rate, ratios, and counts Can be included on Composite Quality Meter and in Scorecards</td>
<td>These measures are based on AHRQ’s Safety Culture Assessment Survey released in February 2005.</td>
</tr>
<tr>
<td></td>
<td>30.</td>
<td>AHRQ Quality of Care Indicators from Administrative Data Sources</td>
<td>Percent rate, ratios, and counts Can be included on Composite Quality Meter and in Scorecards</td>
<td>These are based on AHRQ’s standardized algorithms released in 2003.</td>
</tr>
<tr>
<td></td>
<td>31.</td>
<td>AHRQ Healthcare Services Utilization indicators from Administrative Data Sources</td>
<td>Percent rate, ratios, and counts Can be included on Composite Quality Meter and in Scorecards</td>
<td>These are based on AHRQ’s standardized HCUP algorithms released in 2001.</td>
</tr>
<tr>
<td></td>
<td>32.</td>
<td>MAGNET Program indicators</td>
<td>Percent rate, ratios, and counts Can be included on Composite Quality Meter and in Scorecards</td>
<td>These are based on the American Nurses Association’s NDNQI program started in 2002.</td>
</tr>
</tbody>
</table>
### Sample Quality, Safety and Compliance Indicators for Boards

<table>
<thead>
<tr>
<th>Focus Area</th>
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<th>Description and Selection Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td>33</td>
<td>JCAHO Overall Standards Compliance Rate</td>
<td>Percent Rate</td>
<td>Based on the compliance with standards included in the Accreditation Manual from the JCAHO for Hospitals.</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>Restraint Use rate</td>
<td>Percent Rate</td>
<td>This rate is reported to measure how patient-focused nursing staff is in reducing the rate of restraint use, which can lead to patient falls, and other patient injuries. There has been a national campaign by JCAHO to see this rate reduced in every hospital.</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>National Patient Safety Goal (2005) Compliance Rate</td>
<td>Percent Rate</td>
<td>Based on JCAHO published goals for that given year.</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>Leapfrog Group Compliance</td>
<td>Percent Rate</td>
<td>Based on Leapfrog Group survey for healthcare facilities.</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>Other Regulatory Agency Compliance – FDA, CLIA, OSHA etc.</td>
<td>Percent Rate</td>
<td>Based on each agency’s standards.</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>State Department of Health and Hospitals compliance</td>
<td>Percent Rate and Count of Occurrences</td>
<td>Based on each state’s standards.</td>
</tr>
</tbody>
</table>
ANY HOSPITAL QUALITY INDICATORS
Patient Care Services Division & Acute Care Services*
4th quarter 2000

Avoidable Lic Staff Turnover Rate

Staff Injury Rate

* RN% of Staff

* Actual Hrs of Care per Pt

Actual data results

* = Acute Services specific only

Pt Satisfaction Nursing Care - Kept informed - Promptness - Attitude - Attention to work - Friendliness - Skill of nurse

* Staff Satisfaction

* Physician Satisfaction - Delay in care - Care error rate - % Satisfied with nurse knowledge

4th qtr 00 report
A key role for a health care organization’s governing board and senior leaders is to emphasize the need for improved patient safety and clinical quality by beginning to develop a culture of safety throughout the organization. Such a culture does not perpetuate the assignment of individual blame, and encourages open reporting of medical errors and near miss events. Prior to the 1999 IOM Report, medical errors were primarily blamed on individuals. The current tort system in the U.S. continues to seek and assign such culpability for the purpose of collecting damages. Changing the culture requires support from the board and senior organization leadership for new behaviors in response to medical errors. These include encouragement and rewards to staff to report errors and near misses, and an expectation that errors should be reviewed and analyzed with a focus on the complexity of care processes and systems that can be changed to improve safety.

Additional actions that trustees should support to help establish culture change include:

- Assess the organization’s current culture in regard to patient safety. This will provide a baseline to help appropriately focus improvement efforts and to facilitate comparison to demonstrate actual change. It is important for hospitals
to use a measurement tool developed specifically for assessing the safety culture within the health care industry, such as AHRQ’s Hospital Survey on Patient Safety Culture. Ongoing measurement will help a hospital or health system recognize and sustain changes in the culture.

• Emphasize improvements that serve as the building blocks for a safety culture, including:
  - Improvements in physician-to-nurse communication.
  - Better teamwork and communication in high-stress and high-risk clinical areas such as Operating Room, Emergency Department, Labor and Delivery, and Critical Care.
  - Establishing debriefing processes to mitigate future risk and identify system failures after an adverse event or near miss.
  - Teaching the organization about Human Factors science (fallible human performance in complex systems) so that all staff can identify areas that contribute to error and make changes to avoid them.
  - Adopting successful strategies from industries outside of health care that have greatly improved safety in that industry.

• Implement a medical error reporting system that supports a safety culture.

• Encourage staff to share “stories” about medical error.

• Develop a patient safety dashboard of measures that will enable hospital trustees to fulfill their role in overseeing, maintaining, and improving safety and clinical quality levels across the organization.

• Revise hospital governing board structure to add a Patient Safety Committee as a subcommittee of the Board’s Quality Committee or revise the Quality Committee to a Quality and Patient Safety Committee.

Conclusion
The governing board’s role in ensuring quality and safety of care is now becoming much more important both as governing boards enter a new era of heightened performance and accountability and health care moves into an environment of incentives and pay-for-performance. Public reporting of quality, compliance and safety data, and rewarding performance that meets requirements and penalizing performance that does not, are becoming more prevalent and pervasive.
Governing boards that effectively discharge their responsibility and accountability for quality and safety oversight, understand the quality and safety journey in health care and the variety of indicators and measures of performance needed to get a comprehensive view of a health care organization’s quality and safety performance. They also understand and support the need for hospitals to develop an information system infrastructure that can produce quality and safety reporting that not only provides a clear, concise overview of performance, but also helps identify opportunities for improvement.

Ensuring that their hospitals have comprehensive quality and safety management and reporting systems that identify problems and resolve them, participating regularly through both the full board and board committee structure to review and question performance patterns and trends, and working with clinical and executive staff to develop a culture of quality and safety organization-wide are important ways boards can help their hospitals and health systems keep quality and safety at the forefront of the organization’s priorities.
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Joint Commission on Accreditation of Healthcare Organizations, 2005 Hospital Accreditation Standards, Oakbrook Terrace, IL, 2005.


National Quality Forum. “Hospital Governing Boards and Quality of Care: A Call to Responsibility;” December 2, 2004


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