

PART

1

**BASIC PRINCIPLES
OF QUALITY
MANAGEMENT**

CHAPTER

1

DRIVERS OF CHANGE

LEARNING OBJECTIVES

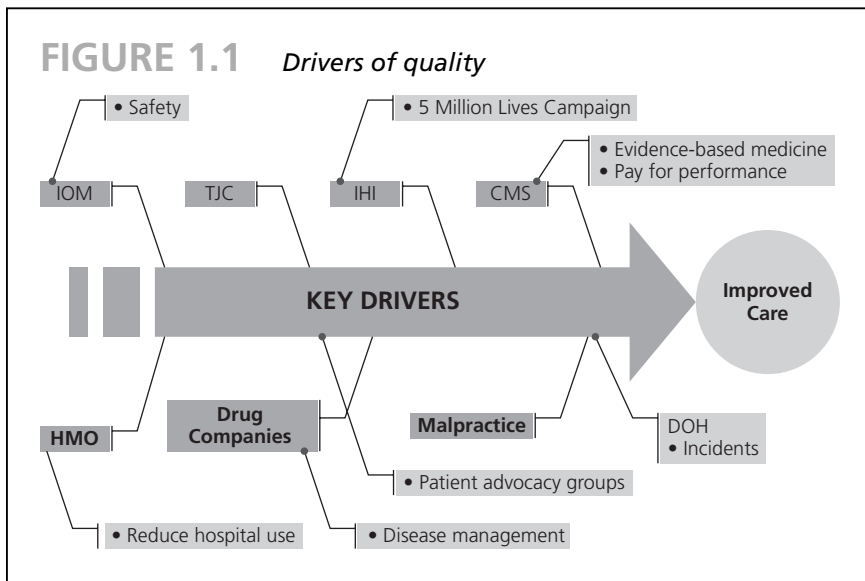
- Identify and describe the role of external drivers of quality improvements
- Identify and describe the role of internal drivers of quality improvements
- Understand the role of quality data and measurements in monitoring care
- Describe the link between quality care and financial rewards
- Explain the role of quality management in improving patient safety

4 Drivers of Change

There can be no quality control or performance improvement—no way to assess safety and value—without relying on objective data about the delivery of care. Data are becoming the common language used by those involved with health care to measure quality of care and successful processes and outcomes. With data, claims of providing “good” or “excellent” care have some reality; without data, such claims are simply rhetorical.

Data that revealed that almost 100,000 people die unnecessarily in hospitals every year have helped to focus the nation’s attention on medical mistakes and patient safety. Because there is so much information about the poor quality of care delivered in our hospitals, many forces outside the hospitals themselves, what I call external drivers of quality, have found it necessary to impose standards of safety and to link those standards to financial success in order to influence changes in hospital culture. These external drivers include governmental and regulatory agencies, professional medical organizations, insurers, the media, and the community (see Figure 1.1).

External drivers are working to change health care because many health care chief executive officers and chief financial officers (CEOs and CFOs) do not perceive quality outcomes and patient safety to be forces that shape a health care organization’s budget. However, each of these key drivers is influencing hospital care by linking quality to finance, and together their interactive efforts have become a force for change, especially in the areas of value-based purchasing and of waste. As economic forces shape market share and hospitals compete for patients, external pressure is helping to link quality and safety to financial success.



EXTERNAL DRIVERS

Leapfrog

The Leapfrog Group is an example of an organization determined to improve health care services and provide value for the health care consumer by monitoring safety and efficiency. Leapfrog was formed by a number of large corporations (General Motors, IBM, Sprint, and Toyota, among others) and agencies that purchase health care for their employees or are otherwise involved in the quality of health care. Due to their purchasing power these organizations wield a great deal of financial clout. Leapfrog attempts to influence quality and safety by rewarding those hospitals that meet certain safety standards. The idea is to force health care safety practices to “leap” forward to improve the delivery of care.

The Leapfrog Group collects data and ranks hospitals according to safety and quality standards developed by expert consultants; the data are published on the group’s Web site to supply consumers of health care (including Leapfrog members’ employees) with comparative information, much as *Consumer Reports* does, so they can be more informed in their choices. For example, Leapfrog recommends that employees choose hospitals that meet four standards proven to reduce the risk of error and to increase competent care:

- The hospital uses a computerized system to monitor medications, tests, and procedures. These systems reduce risks in the complex process of medication administration.
- The hospital’s intensive care unit (ICU) is staffed with a full-time specialist (an intensivist). Having a full-time gatekeeper reduces risk by more clearly determining who is in charge of the patient.
- The hospital has experience with high-risk procedures. Increased experience promotes standardization and decreases variations that lead to errors.
- The hospital has a high Leapfrog safe practices score. This score reflects adherence to twenty-seven procedures (“safe practices”) that the National Quality Forum and the Agency for Healthcare Research and Quality have endorsed as reducing or preventing medical errors.

In addition to promoting improved safety practices and reducing medical mistakes, the Leapfrog Group encourages transparency, the public reporting of quality and outcome measures. Those hospitals that report their outcomes score higher than those that do not. Those hospitals that comply with the Leapfrog goals often receive additional funding from insurance companies. By offering financial incentives to those hospitals that document quality, safety, and economic efficiencies, this powerful organization hopes to improve health care.

Insurers

Other private organizations are also taking it upon themselves to influence the way health care services are delivered. For example, the Health Insurance Plan of New York (HIP) is one of the largest insurers in the nation. HIP is giving bonuses to those physicians who meet specified criteria for effective communication and the delivery of compassionate care, as revealed through patient satisfaction surveys.

HIP is also collaborating with other health insurers to encourage the implementation and reporting of the Leapfrog measures, and it identifies those hospitals that participate in these activities in the HIP provider directory. Other major insurers, such as Blue Cross Blue Shield, are also developing patient safety programs and enlisting hospitals to participate and to report data on key quality and safety indicators. These insurers are conforming to the Centers for Medicare and Medicaid Services CMS position that insurers should reward good performance and refuse to reimburse poor performance.

Centers for Medicare and Medicaid Services

The Centers for Medicare and Medicaid Services, the agency that administers Medicare and Medicaid and reimburses hospitals for care expenses for patients in these programs, is in a unique position to mandate that hospitals follow specified safety standards. CMS has developed a set of initiatives, such as the pay-for-performance initiative, based on data, to track and trend medical errors. Rather than rely on physicians to report and review *adverse events*, the Office of Inspector General for the U.S. Department of Health and Human Services (HHS) reviews documentation in medical records to gather information about the delivery of care. This oversight protects the integrity of HHS programs (such as those administered by CMS) as well as the health and welfare of those served by these programs.

CMS, in partnership with other organizations, such as the National Quality Forum (NQF), the Centers for Disease Control and Prevention, the Food and Drug Administration, and the Agency for Healthcare Research and Quality, has compiled a list of adverse events related to medication errors, hospital-acquired pressure injuries, hospital-acquired infections, patient falls, and postoperative complications, that it has labeled *never events*. Data on never

ADVERSE EVENT An adverse event is harm that is the direct result of patient–health care services interaction, not disease. The harm is caused by errors and mistakes. Such harm includes any medical error that results in death, is life threatening, requires inpatient hospitalization or prolongs hospitalization, or results in persistent or significant disability or incapacity.

NEVER EVENT A never event is a serious or life-endangering medical error, such as surgery on the wrong patient. The National Quality Forum (NQF) deems such events to be ones that should never occur in a health care setting. In collaboration with consumers, providers, purchasers, researchers, and other health care stakeholders, the NQF has defined twenty-eight of these preventable errors that health care organizations are expected to report and take steps to correct. (See Chapter Six.)

events are reported to the public. Hospitals that show a lack of compliance with safety indicators for never events might face economic consequences, such as lack of payment.

CMS has also established a quality incentive initiative, pay for performance, offering participating hospitals whose data show that they are in the top decile of all hospitals that report compliance with standardized quality measures a 2 percent bonus on their Medicare payments. Hospitals in the second decile will receive a 1 percent bonus. In other words, hospitals will get paid for delivering good care.

The goal is to improve the quality and value of health care and to change the way care is delivered. Rigorous studies and research have concluded that certain factors have a positive impact on patient outcomes. The application of these factors to care is known as *evidence-based medicine*, and it is evidence-based medicine that is the basis of the pay-for-performance indicators. By financially rewarding organizations that can prove they are delivering quality care, the government is hoping to encourage changed practices, especially in the management of chronic diseases such as heart failure and pneumonia.

State Departments of Health

Departments of health (DOHs) at the state level are also attempting to change the delivery of health care, making it safer and more efficient—and less costly—by promoting transparency. For example, the New York State DOH Web site provides information to potential health care consumers about

RISK-ADJUSTED DATA The intent of risk adjusting is to make fair comparisons among patients across organizations. Risk adjustment is a statistical process that allows one to understand and compensate for data set variations that would otherwise prevent accurate comparison. By applying a formula, risk adjusters can identify patients with different risk factors that might affect their outcomes.

EVIDENCE-BASED MEDICINE Evidence-based medicine is the gold standard of care. Recommendations for treatment of specific diseases are based on expert advice about best practices, the most comprehensive and up-to-date research, and the results of clinical trials. Evidence-based medicine is the alternative to the isolated decisions of independent practitioners; it gathers knowledge and experience from the members of the medical community and then provides cumulative knowledge and experience back to the entire medical community.

physicians, hospitals, nursing homes, patient complaints, and cardiac surgery mortality rates. The rationale behind the transparency movement is to provide the buying public with information about health care choices. New York State publishes brochures explaining the *risk-adjusted* data in lay language, hoping to dispel some of the mystique that surrounds clinical phenomena such as cardiac bypass surgery. With accessible health care information, consumers can take responsibility for choosing where they want to go to be treated and hospitals can compete for market share by improving processes.

Joint Commission

The Joint Commission is an independent, not-for-profit organization that evaluates hospitals for accreditation by examining how well they meet specified standards designed to reduce risk to patients and ensure organizational accountability and efficiency. Without accreditation, hospitals do not receive Medicare reimbursements. Therefore hospitals that are not accredited will suffer financially. More than half of the Joint Commission standards are related to patient safety; Joint Commission surveyors expect hospitals to review data about medication, infection, transfusions, staff competence, fire safety, medical equipment, and many other factors.

The Joint Commission also requires that adverse events be reported and corrected and that organizations take steps to prevent harm by identifying vulnerable processes. It champions transparency of information about

SENTINEL EVENT Sentinel event is a term used by the Joint Commission to describe an unanticipated or unexpected medical error that results in serious physical or psychological consequences for the patient. The Joint Commission tracks such events in a database, with the intent of alerting health care organizations to problems leading to such events and of promoting preventive measures to avoid these problems.

quality and cost and has been in the forefront of changing the hospital culture so that patients are informed about bad outcomes. *Sentinel events* are tracked by the Joint Commission, and data relating to underlying causes, as defined through root cause analysis (see Chapters Two and Six), are published and shared with the nation's health care organizations. National Patient Safety Goals (see Chapter Five) have been defined by the Joint Commission, which assesses how organizations attempt to meet these goals during the accreditation review.

Institute for Healthcare Improvement

The Institute for Healthcare Improvement (IHI) is another agency that has brought the risks of hospitalization to public attention. Its initial Saving Lives campaign was a national effort to reduce medical errors that resulted in unnecessary death for 100,000 people. The goal of that campaign was to highlight awareness of patient safety and to encourage hospitals to voluntarily report data about improved processes and to share best practices on both regional and national levels. A new initiative, the 5 Million Lives Campaign, intended to prevent 5 million incidents of medical harm over a two-year period, was launched in December 2006. The IHI has defined twelve changes in care that would reduce patient harm, from preventing surgical site infections through appropriate antibiotic use to getting the board on board to improve oversight of patient safety. The IHI goal is that hospital governing boards should spend more than 25 percent of their meeting time on quality and safety issues.

Other Drivers

In addition to the organizations already discussed, many other agencies are monitoring quality standards and holding hospitals accountable for providing data about quality care. These organizations include the National Quality Forum (NQF), a group of public and private organizations working to promote measures of health care quality and improvement; the National Patient Safety Foundation (NPSF), an organization of health care professionals committed to making patient safety a national priority; and the Agency for Healthcare Research and Quality (AHRQ), the research arm of the Department of Health and Human Services, which is charged with improving safety and reducing the costs of health care services. The AHRQ supports research on evidence-based outcomes, quality, and cost.

These and other external drivers of quality, from governmental, business, insurance, and consumer groups, are changing medical culture, making the specifics of the delivery of services available to the public. Physicians can no longer hide, as they once might have, behind a wall of specialized language. This move toward transparency allows patients to understand the risks and benefits of any procedure.

The Public

The public eye has also become a force for change. The pledge to “do no harm” is no longer sufficient as a description of what patients want. That is the least of it. They don’t want to be struck with an antibiotic-resistant infection because a health care worker has not washed his or her hands. They certainly don’t want to have a wrong-site surgery or to be transfused with the wrong blood or to be administered incorrect medication or to fall. Public awareness is forcing health care institutions to maintain a high standard of quality or risk failing financially. Hospitals have to provide information to the public that details what value is exchanged for people’s health care spending.

Hospitals that participate in the national safety agenda and are willing to promote transparency have data about their provision of care published on Web sites that are available to the public. Leaders at these hospitals want the community to trust that the services at their hospitals are safe and reliable; not participating in these initiatives might be seen as suspect by the public.

Increased transparency regarding processes and problems encourages organizations to do proactive analyses of gaps in care, with the goal of discovering vulnerable areas in the care process. For example, the staph infection MRSA (methicillin resistant *Staphylococcus aureus*) has been in the news lately because it is drug resistant and rampant and is infecting and even killing people. By performing a root cause analysis (see Chapter Six), organizations can identify which patients have become infected and trace the source of the infection. Infection control specialists trained in epidemiology can recommend preventive actions to the medical board, such as clustering patients with infections in one area so that the infection doesn’t spread.

The New York State Committee to Reduce Infection Deaths recommends steps that a patient should take to protect against infection. One recommendation is to choose a surgeon with a low infection rate; such rates are now available to the public. The more information a patient has, the better care that patient will receive. Patients are encouraged to take a proactive role, reminding caregivers to wash their hands, requesting antibiotics prophylactically before surgery, reminding doctors to monitor glucose levels, and avoiding urinary catheters if possible.

Today, patients are encouraged to intervene for their own safety. Although this burdens the patient, other interventions have not been successful. Some hospitals have assigned nurses to watch each physician and remind him or her to wash his or her hands. Others have installed cameras to view which staff comply with hand-washing requirements and which do not. I know of one organization that rewarded doctors who washed their hands with superior parking lot spaces. Most of these ideas are doomed to failure in the long run because they are not really about health or the patient, nor are they intrinsic to the clinician.

It’s extraordinary that in today’s world lack of proper hand washing is the number one reason that patients become infected and that therefore poor hand

hygiene represents the greatest danger to patient safety. What prevents caregivers from washing their hands? Culture. Hand hygiene is perhaps not technical enough or medical enough or interesting enough to be taken seriously as a threat to health. If it were internalized that poor hand hygiene kills people, perhaps habits would change. Such an enculturation requires reeducation of staff and leadership commitment.

When patients are too ill to monitor their care, it behooves their families and loved ones to take charge and ensure that appropriate care is provided. When my son needed hand surgery, the surgeon explained that there was a 5 percent chance of infection and that such a rate was normal. Not for me. I left and found a surgeon who explained to me what precautions he took to have zero infections after surgery. Happily it was not an emergency situation, and I could afford the time to choose the best physician. My son couldn't do it, but I could. Family members should become active when patients themselves are unable to.

INTERNAL DRIVERS

The governmental and public movement to oversee the quality of care delivered in hospitals has come about in part because of the lack of oversight within hospitals. Physicians do not set standards of care for other physicians, nor do they monitor the treatment and outcome results of other physicians. If there is a poor outcome or an adverse event, the state department of health usually gets involved to review a particular physician's file and assess competency. Professional conduct committees are established for peer reviews. If it is determined that the physician delivered substandard care, action is taken, from suspending a license to delivering a rebuke to requiring reeducation.

However, there is no watchdog group internal to the hospital or health care organization to oversee, monitor, evaluate, and take action. The watchdog should be a quality management department (QMD), an objective entity that reports to the governance and the CEO. The QMD can focus on standards of care without being influenced by particular interest groups. Unfortunately, such a role is rarely assigned to a QMD because many administrators believe that the board should not be involved in "running the hospital."

Getting the Board on Board

Health care reformers realize that unless the governing board gets on board with the national safety agenda to improve the delivery of care, there is little chance of success or change in any health care organization. Traditionally, the governing board was responsible for the financial health of the organization; today its role has evolved to include oversight of patient safety and efficient and effective organizational processes.

In order for board members to understand the specifics of the clinical care they are charged to oversee, they have to be educated—by clinicians and by quality professionals. They need to have training in interpreting data as these data are presented to them, and they need to learn how to ask focused questions about poor outcomes. Primarily, they need to believe that medicine is neither magical nor too specialized for lay understanding.




To do their job, board members should insist on clear presentations of data and explanations and interpretations of data that enable them to evaluate care and processes for improvement. They need to understand their organization's numbers and what they mean, and how these numbers compare to national numbers. They also need to define for themselves their goals for patient care: how much infection can be tolerated as “normal”? What rate of surgical mortality is acceptable? What rate of pressure injuries is reasonable? The board can help the organization with defining its priorities and its philosophy of care.

Board members also need to be able to distinguish “good” care from “bad” and “excellent” from “acceptable.” These are value-laden terms. What exactly is meant by being the “best”? How is “best” defined? Board members need to be educated about quality indicators, quality data, and comparative analysis. They should also become familiar with analytical techniques, such as root cause analysis and failure mode and effects analysis (see Chapter Three). They are the eyes, ears, and voice of the community. They watch, they listen, and they need to let the organization know the direction in which to move.

The board of trustees, sitting at the top of the chain of accountability, by asking simple questions and by demanding coherent explanations rather than easy rationalizations, can increase the value of health care delivery. If the board asks clinicians to explain why people are dying, it expects the clinician to offer a better answer than that the patients are very sick. If the patients are dying from complications of surgery, board members want to know what the complications are, what causes them, how they can be avoided, and what the medical board is doing about improving the situation. If the board wants to know whether the ICU is being used to house terminal patients who get no benefit from high-tech treatment and, if so, why those patients are not in a palliative care setting, physicians should be prepared to explain. And if the explanations are not satisfactory, changes should be made.

Quality management professionals can help train board members to interpret data and ask effective questions of administrative and clinical leaders. Through education and with information, board members can quickly become competent to evaluate care and to recognize gaps in patient safety that require repair. No one is suggesting that board members perform surgery, only that they ask why an unnecessary complication, such as infection, occurs after surgery.

FIGURE 1.2 *Executive summary: Patient safety indicators*

Example	2006	2007	
Nosocomial pressure ulcer rate	1.01	1.06	
Patient fall index	3.75	2.82	
Patient medical and surgical restraint index	28.58	43.85	



Increasing rate or average - statistically significant performance decline



Statistically no significant change



Decreasing rate or average - statistically significant improvement

I have taught board members the fundamentals of measurement and root cause analysis, the requirements of corrective actions, the importance of compliance with evidence-based quality indicators, and the rationale behind the regulatory and governmental push for improved patient safety. Board members are pleased to gain the tools to do their jobs effectively.

Quality management staff should use data reports to educate the board about progress and problems in the delivery of care. Especially when tracked and trended over time and when compared to other institutions and against national benchmarks, measures of care can be effectively monitored.

Figure 1.2 is an example of an effective graphic representation of how a hospital is performing on specific patient safety indicators. These particular indicators are classified as never events. If the hospital were improving safety practices, each measure would be lower than it was the previous year. When presented with quality information in this format, a board member can quickly assess which areas require further improvement and which areas have successfully improved.

Enlisting the C Suite

Adopting the business model of referring to the CEO, COO (chief operating officer), CMO (chief medical officer), and CFO as the “C suite” focuses

attention on their roles as executives responsible for successful business practices and results. The product that their business is producing is medical care, and a good product is defined as good outcomes that result from efficient, effective, and safe care. The C suite represents the primary drivers of quality that are internal to a hospital or health care organization.

The chief medical officer provides the primary leadership for the clinicians. Together with the medical board of the hospital, the CMO sets standards of care and defines best practices. The Joint Commission defines the role that the medical board has in overseeing clinical quality. Medical board members evaluate clinical and technical competency through the credentialing and recredentialing process and determine appropriate treatment interventions. Included in their oversight responsibilities are evaluating surgical performance, approving new procedures, and analyzing new medications and adverse drug reactions, as well as evaluating the efficacy and cost of comparable drugs. (If the generic brand has the same efficacy and is less expensive, the medical board can suggest using it.) They review infection rates, infection sources, and interventions to reduce infections. They examine trends and target improvement efforts. They look at mortality rates, by diagnosis, disease, and complication, and try to provide education about appropriate care delivery. In sum, the medical board is responsible for every aspect of clinical care. Therefore, if the members take their role seriously and do their job effectively, they are the primary internal drivers of quality.

By joining forces, the board of trustees, the C suite, and the medical board can provide value to the patients and to the health care organization they lead. The quality management department supports the activities of the medical board by providing ongoing data analysis, tracking and trending outcomes, identifying gaps in patient safety, and defining best practices. Quality management can also help to educate the board and leadership in understanding public report cards and providing valid and accurate data to national groups. Together these groups set standards for quality. There is no way to understand the provision of care for 100 or 1,000 or 10,000 patients without an objective process analysis based on data.

When adverse events occur, quality management staff typically help clinicians to prepare their presentation of the occurrence to the medical board and also, if necessary, to the appropriate state or regulatory agency. The physician and quality management staff develop corrective actions which the medical board is expected to approve. If the adverse event requires a peer review to ascertain competency, the medical board assigns either internal or external physicians to review the case.

But many medical boards do not accept these responsibilities. Many physicians are not aware that they need to report an event—even when there has been no serious harm to the patient. Typically, they fix the problem and move on. However, if this gap in care is not identified, most likely it will happen again and

a patient could indeed be harmed. Many physicians do not realize that they have the responsibility to monitor quality of care or to establish standards.

With the push to transparency, there is no choice but to define measures, collect data, and be prepared to explain why the data show that care is not 100 percent optimal. If physicians dismiss the data as flawed, that makes little difference to an indignant public, who will be informed if one hospital's mortality rate is higher than the national average, for example, or if its infection rate is higher than the rate at a neighboring hospital. Rather than argue about the data, the medical board needs to institute improvements and let the public see improved results.

Every clinician should be informed about gaps and improvement efforts. When the medical board has information to deliver, communication to the medical staff can take place via grand rounds. In fact the Joint Commission has made effective communication among physicians a focus for continuing medical education (CME) credit. Improving procedures is part of medical education.

The medical board, the board of trustees, and the quality management department share responsibility for value, for providing safe care and efficient services with reductions in cost. For example, if data show that many patients require a specialized diet, the medical board, nutritional services, and quality management should develop policies and procedures, and also measures to monitor and evaluate the results of the procedures. Good processes result in improved outcomes. Constant feedback should be part of a deliberate improvement process; the Plan-Do-Check-Act (PDCA) cycle (see Chapter Four), for instance, is used by many industries to change processes and improve. Caregivers must communicate effectively for care to be efficient. For example, clinicians often overlook nutrition as an important medical intervention. But of course it is one. The dietician and those responsible for the delivery of food have to work collaboratively with the clinicians to ensure safe and efficient care.

Just think about it. If a patient is scheduled for surgery and there is no process to include dietary services in the information loop and the patient has food delivered because of this communication failure, that patient's surgery has to be postponed. If the operating room schedule is interrupted, the result is waste—poor value. If a patient who is diabetic or who has heart failure is fed an improper diet, the result can be a longer length of stay (LOS) and complications. The hospital loses money on each inappropriately long LOS—poor value. When care and services are in separate silos, a situation marked by a lack of coordination and communication, this pattern has to be changed to ensure safe and efficient services.

Driving Change with Quality Data

Quality control and performance improvement, safety, and value rely on objective data about the delivery of care. Everyone working in a health care environment, from the frontline caregivers to the members of the hospital's

board of trustees, should understand the value of data and become familiar with the basics of quality management. Data shape the definition of quality care as the outcome of appropriate interventions based on statistical evidence and the identification of best practices.

Most organizations do not school their staff on the basics of using data for defining quality care. This is unfortunate, because there is no better way to prove that outcomes are good (with low complication rates and quick recovery rates, for example) and processes are efficient and effective (so that they reduce waste by minimizing reoperation and readmission, for example). Data are critical not only for defining excellence but also for targeting opportunities for improvements. If staff are taught to use data to identify which processes require improvements, which processes are vulnerable to failure and to errors, where the gaps are in patient safety, and how efficiently resources are being used, the organization can make improvements.

With accurate and explanatory data, decision makers can make informed decisions about patient safety, resource management, and financial allocation. With the appropriate use of data, patients are safer and money is spent most effectively. Therefore, learning how to define measurements that formulate the data, creating databases to aggregate and analyze the data, and communicating the results of analysis effectively to the relevant people in the organization requires a conscious and deliberate process—as well as an understanding of the fundamental value of measures.

Driving Safety with Quality Management

A quality management department that employs a methodology can objectively and proactively evaluate care to sustain improvements over time and create a patient-focused culture of quality and safety. Such a department relies on the social sciences to explain structure, process, function, and roles, especially in communicating a problem identified as contributing to a poor outcome. Quality management processes rely on operational research to reduce defects in the delivery of care, incorporating the entire caregiving team, not only the primary physician.

As long as there have been healers of the sick, the idea of good care, or quality care, has been difficult to define. From the classical “do no harm” to Florence Nightingale’s pioneering work linking disease and treatment to the modern push for transparency with the public reporting of quality indicators, the public has looked for assurance from the medical community that patients will be safe.

People seek such assurance not only from the physicians who treat them but from the larger health care organization as well. Ernest A. Codman, a physician champion of quality in the early 1900s, was among the first to suggest that hospitals be held responsible for explaining, understanding, and improving poor outcomes. He took the unpopular position that the health care organization was accountable for providing quality care, and that if patients were harmed and

outcomes were poor, the organization should attempt to discover the reason and institute improvements. Codman realized that poor outcomes were often the result of a confluence of factors, many of them small or subtle mistakes in processes that eventually added up to a bigger problem. His notion was that by analyzing poor outcomes, future failures might be prevented.

Codman also believed in transparency in health care, long before it became a buzzword in the modern discourse about patient safety. He wanted to remove the veil of mystery that shrouded health care outcomes. He wanted the public to be informed so that they could make informed choices about where they wanted to be treated. His innovative ideas moved the concept of quality from process evaluation (asking whether a certain procedure was done or not done) to linking processes with outcomes or end results (asking whether the procedure resulted in good or bad outcomes).

Today, health care leaders recognize that quality care is defined along three dimensions: using evidence-based medicine as the standard of care, documenting that that standard has been met by the organization, and monitoring data extracted from documentation and other sources of information about processes and outcomes for various patient populations. These three dimensions provide the quality management department with the tools needed to evaluate the delivery of care.

Using Quality Data

Quality management is more than quality control or quality improvement or a method to comply with regulatory requirements. Quality management's objectives are to assess care, to identify problems and best practices, and to promote improvements, and all these actions require objective criteria—in short, data. Data are impersonal. Data can provide the definitions of good care and of poor outcomes.

Many businesses and organizations make use of quality data and measurements to enhance their performance and improve their profits. For some reason, health care has been slow to understand that it is a business and as such could benefit from good business practices. As with any business, positive publicity about good results brings increased market share; in the case of health care, good results bring patients into hospitals, whereas poor reports drive them elsewhere. Many physicians do not believe that poor hospital report cards can hurt their relationship with their patients. However, the cumulative experiences of the physician influence the survival of the hospital.

Decision makers have to become adept at understanding variables that relate quality, cost, resource utilization, waste, and satisfaction in order to provide value to the community of patients. Data should be used by leadership to understand factors that increase or decrease the use of expensive resources. Lowering costs and maximizing efficiency is good business and improves profits. There is no way to monitor care and cost without data.

18 Drivers of Change

For example, the reengineering movement was an administrative attempt to use efficiency models to change and improve hospital care. It did not work for many reasons, among them that the model was focused on budgetary concerns and had little regard for the clinical information required to understand the delivery of good care. Cost savings made without regard to quality information generally end up backfiring; they eventually require extra and unnecessary expenditures to repair problems arising from complications, maloccurrences, adverse events, poor publicity, organizational disruptions, and so on. The reengineering solution of reducing cost by redesigning the work flow that led to reducing nursing staff had a negative impact on clinical outcomes. The focus was on replacing nursing with a less expensive workforce rather than on providing quality care.

To ensure that quality of care is preserved while finances are reduced, quality data should be merged with financial data to appropriately evaluate resource priorities. Leaders should receive information about

- Clinical variables that indicate waste, such as reoperation rates, waiting times in the emergency department, and turnaround times in the operating room
- Overuse of hospital beds
- Clinical variables that indicate quality of care, such as infection rates, incident rates, complication rates, mortality rates, admission to the ICU postoperatively, and end-of-life measures
- Outcome indicators by disease, benchmarked against CMS measures

These variables, along with financial indicators, enable decision makers to understand the complex interactions involved in the delivery of quality care.

The Joint Commission supports data collection and analysis because these activities lead to improved care. The Joint Commission requires documentation about important aspects of care (such as infection rates and blood utilization), organizational management, and the environment of care. With established measurements, consistent standards of care can be defined, patient safety can be monitored, and improvements can be assessed over time. In order to receive accreditation, hospitals must be surveyed by the Joint Commission, which expects them to be able to prove that they are complying with quality standards. The proof is in the data and in their use. Data should be used to target and monitor improvements.

Health care leaders are beginning to realize that explanations of medical phenomena are not found by asking individual physicians about an individual patient's situation. Rather, medical care is better explained by analyzing aggregated data about patient populations. For example, how many patients over seventy-five years old were admitted with pneumonia during a specific time frame? How many pneumonia patients received education regarding

vaccination before discharge? On what day after admission were pneumonia patients switched to oral antibiotics? What was the average LOS for pneumonia patients? Policies should be based on these kinds of data and improvement efforts prioritized on the basis of those data.

Another example involves analysis of errors. The medical community agrees that no patient should have surgery on the wrong site. Wrong-site surgery is considered a sentinel event by the Joint Commission. If the data reported to the organizational leadership reveal zero events of wrong-site

EXAMPLE: SUICIDE

A sentinel event tends to draw the CEO's attention. However, it is generally looked on as a rare and random accident, rather than as a predictable result of faulty processes. Consider what happens when there is a suicide (which the Joint Commission names the second most prevalent sentinel event in hospitals). The CEO will get all kinds of assurances that this event was entirely unpredictable and one that fortunately occurs very rarely. However, if the event is analyzed in terms of what defects in care enabled the patient to come to harm, the CEO and others in decision-making roles will be able to determine the difference between a random accident and a broken process. Once the gaps in the process of care are revealed, steps can be taken to improve.

When my quality management department wanted to understand just such an event at one of the acute care hospitals in our health care system, we began to collect data on how many suicides and attempted suicides had occurred on medical units in our system over a period of years. The medical records of the relevant patients were examined. For every suicide event, two schematics were developed in the form of flow charts, one detailing what had actually occurred and a second outlining what should have happened to preserve the patient's safety. Analysis revealed that almost 12 percent of these medical patients had the comorbidity of alcoholism, a syndrome well known to be associated with an increased risk of suicide. Further analysis revealed that when these patients were initially assessed, their alcoholism was not diagnosed. Had it been, these patients might have received medication to prevent the progression of withdrawal symptoms, symptoms that were found to be implicated in acute care suicide.

The result of a three-year patient safety initiative was changed protocols and new tools for diagnosis of vulnerable patients entering the hospital through the emergency department for medical problems. Had the rare event been dismissed as a tragic accident and never analyzed, important improvements would not have resulted.

surgery, care is good. However, if the data show that wrong-site surgery has occurred, the care is considered substandard. The reason for the problem has to be identified and analyzed, new processes have to be introduced to improve performance, and the improvement efforts have to be monitored over time. When appropriately analyzed and presented coherently, data can be a force to change behavior.

SUMMARY

Hospitals are changing the way care is delivered due to

- Pressure from governmental and regulatory agencies to improve care
- Increased transparency, such as public reports of quality variables and outcome measures
- The introduction of financial consequences for poor quality
- Media exposure of risks to patient safety in hospital care
- Increased governance and leadership accountability for good outcomes



KEY TERMS

CMS

drivers of quality

evidence-based medicine

Joint Commission

pay for performance

public report cards

quality management

transparency



THINGS TO THINK ABOUT

Imagine that you have just been hired to oversee quality at a multihospital health care system. Your initial goal is to do a cost-benefit analysis of the quality processes in the organization.

1. Which personnel and staff will you contact to assess the quality of care?
2. Whom would you target to be accountable for the quality process?
3. How would you oversee compliance versus improvements?
4. How would you evaluate adding resources to the quality of care?