CHAPTER 5

Entering the Quality Improvement World

CHAPTER OBJECTIVES

At the conclusion of this chapter, the learner will be able to:

- Compare and contrast examples of quality care theories, models, and approaches.
- Analyze the impact of the blame culture.
- Examine the impact of a culture of safety on continuous quality improvement.
- Appraise the process for assessing and planning to implement a culture of safety.

OUTLINE

KEY TERMS

Accountability
Blame culture
Code of silence
Consonant culture
Cultural competence
Culture
Culture of safety
Dissonant culture
Healthcare disparity
Healthcare equity
Healthcare inequality
High-reliability organization
Just culture
Lean approach
Linguistic competence
Organizational culture
Rapid cycle model
Reliability
Science of improvement
Six Sigma
Social determinants of health
STEEEP®
Triple aim

Introduction

In 2015, Dr. Gandhi, Chief Executive of the National Patient Safety Foundation (NPSF), looked back over the development of patient safety and quality since *To Err Is Human* (IOM, 1999) was published (IHI, 2015b). This review has relevance to this chapter as we begin to examine the continuous quality improvement (CQI) world—what it is and approaches that might be taken to provide a framework for the CQI work that is done by individual healthcare providers and healthcare organizations (HCOs). Dr. Gandhi notes that the first focus was to convince us we had a problem—we lacked the level of quality care we should have. This effort is ongoing, but the focus now is more on answering the questions, how do we improve and what type of **culture** and leadership are needed to accomplish improvement? Since 1999, the culture has changed, engaging the staff, including frontline workers, and incorporating health informatics technology (HIT). Change has been discussed and will continue to be a theme throughout this text. Engaging staff begins with knowledge; a major goal of this text is to provide more information and resources for nurses, and as noted earlier, healthcare professions education must include more content about CQI and its relationship to HIT. This is an expanding area, providing us with more data, better analysis methods, and more timely communication. This chapter discusses issues related to the current focus.

Creating a Vision of Quality Care: Theories, Models, and Approaches

There are many references that could be used to introduce this section about the vision of quality care. Since this text focuses on nurses and their engagement in CQI, we will turn to the *Quality Chasm* report *Keeping Patients Safe: Transforming the Work Environment of Nurses* (IOM, 2004a). Looking at the title of the report, there are two critical messages: (1) The patient is mentioned first, and (2) the term *transforming* is used. These choices communicate a message of positive change focused on patients. The nurse's work environment is also included in the title, and this consideration is critical if we are to meet required patient outcomes. The 2004 report makes five recommendations that nursing must consider (IOM, 2004a):

- Implementing evidence-based management
- Balancing tension between efficiency and reliability
- Creating and sustaining trust
- Actively managing the change process through communication, training, feedback, sustained effort and attention, and worker involvement
- Creating a learning organization

As noted in the discussion about the healthcare professions core competencies in other sections of this text, these competencies do not separate out safety from quality. Safety is a "central aim of quality" (The Joint Commission, 2015), a part of quality care. Typically, HCOs do have a structural component such as an organizational unit (e.g., department, service) focused on quality improvement, and that work includes safety for staff and patients. In the end, quality must become a systemwide attribute—so much a part of the system that it is never thought of as a separate aspect of an organization.

Current quality improvement frameworks/models tend to emphasis the six dimensions of quality care noted in the earlier *Quality Chasm* reports (IOM, 1999, 2001). The dimensions are safety, timeliness, effectiveness, efficiency, equity, and patient-centeredness (STEEEP). Even with these dimensions, quality is not a static concept (Powell, Rushmer, & Davies, 2009). The dynamic (changing) nature of health care is demonstrated in the various current models of quality improvement. There are key similarities but also some differences in these models. Some of the models were developed specifically for health care, and others are borrowed from other industries and then adapted as needed and applied to health care. Quality improvement is also viewed as a journey, implying movement and change; data are collected, and when needed, changes are initiated (Storme, 2013). According to the Health Resources and Services Administration of the U.S. Department of Health and Human Services (HHS), "An organization that implements a quality improvement program experiences a range of benefits," including the following (HHS, HRSA, 2011b, p. 6):

- *Improved patient health (clinical) outcomes that involve both process outcomes (e.g., provide recommended screenings) and health outcomes (e.g., decreased morbidity and mortality).*
- *Improved efficiency of managerial and clinical processes.* By improving processes and outcomes relevant to high-priority health needs, an organization reduces waste and costs associated with system failures and redundancy. Often quality improvement processes are budget-neutral, where the costs to make the changes are offset by the cost savings incurred.
- *Avoided costs associated with process failures, errors, and poor outcomes.* Costs are incurred when nonstandard and inefficient systems increase errors and cause rework. Streamlined and reliable processes are less expensive to maintain.
- *Proactive processes that recognize and solve problems before they occur ensure that systems of care are reliable and predictable.* A culture of improvement frequently develops in an organization that is committed to quality because errors are reported and addressed.
- *Improved communication with resources that are internal and external to an organization, such as, funders and civic and community organizations.*

> A commitment to quality shines a positive light on an organization, which may result in an increase of partnership and funding opportunities. When successfully implemented, a quality improvement infrastructure often enhances communication and resolves critical issues.

Dailey (2013) offers a useful description of quality, saying, "Quality is a concept. It expresses people's perceptions of what makes something seem better or worse in some way that can only be measured by proxy, comparison, or using some abstract metric." The following are principles on which quality is based (Galt, Paschal, & Gleason, 2011, p. 8):

1. Healthcare professionals are intrinsically motivated to improve patient safety because of the ethical foundation, professional norms, and expectations of our respective disciplines.
2. Organizational leaders are responsible for setting the standards for achieving safety at the highest level and in response to societal expectations.
3. Consumers are becoming increasingly aware of healthcare safety problems and are not accepting of it.
4. There is substantial room for improvement of healthcare systems and practices that will result in a reduction in both error potential and harm.

There are a variety of models and theories that apply to quality improvement. HCOs typically use one of them, a combination, or adapt one or two to serve as a guide for their quality improvement program. The following discussion describes some of the common models and theories.

Science of Improvement

According to the Institute for Healthcare Improvement (IHI) (2015c):

> The **science of improvement** is an applied science that emphasizes innovation, rapid-cycle testing in the field, and spread in order to generate learning about what changes, in which contexts, produce improvements. It is characterized by the combination of expert subject knowledge with improvement methods and tools. It is multidisciplinary—drawing on clinical science, systems theory, psychology, statistics, and other fields.

It requires clear goals, which implies a plan and measurement. The science of improvement focuses on three questions that the HCO should ask (IHI, 2015c).

1. *What are we trying to accomplish?* This question focuses on assessment, description of issues, and development of goals and a plan.
2. *How will we know that a change is an improvement?* This question is based on using the plan as a guide to identify outcomes and measurements required.

3. *What changes can we make that will result in improvement?* This question considers changes/interventions/strategies that will lead to improvement.

The **rapid cycle model** is associated with the science of improvement and related to these three key questions. The approach is used to pilot test small changes recommended by frontline staff and actively engage staff in the CQI process, recognizing that small changes can impact the HCO with positive outcomes. The plan-do-study-act (PDSA) model is used to respond to needs and move toward improvement. PDSA is discussed in other sections of the text. Using this approach emphasizes frontline staff identification of needs for change and actively engages staff; there is then less need to "force" changes on staff (Powell et al., 2009).

Improvement capability needs to be considered to ensure that the science of improvement focuses on CQI to reach improvement outcomes. Efforts include the following (IHI, 2015a):

- Building science-based improvement capability at individual, organizational, and system levels
- Arming future doctors and nurses and others preparing for careers in health care with quality improvement knowledge and skills before they enter the workforce
- Expanding the capability of middle managers and other operational leaders to use advanced improvement methods to guide and support frontline improvement
- Developing learning networks to accelerate implementation, spread, and scale-up of innovative approaches to improve health outcomes
- Providing a clear road map for how organizations applying the lean approach and Six Sigma (discussed later) can use the science of improvement to accelerate results
- Providing individuals, professional groups, organizations, and whole systems with the right "dose" of improvement capability to drive results

The Triple Aim

In 2008, the IHI proposed a framework for CQI, which is called the **triple aim** (Stiefel & Nolan, 2012). Since its development, it is now used globally, and it had an impact on the Affordable Care Act of 2010 (ACA). It is also a critical part of the National Quality Strategy (NQS), which is discussed in multiple chapters of this text (Whittington, Nolan, Lewis, & Torres, 2015). The triple aim is to (1) improve the patient experience of care (including quality and satisfaction), (2) improve the health of populations, and (3) reduce the per capita cost of health care (IHI, 2015d). **Figure 5-1** describes the triple aim framework as it relates to STEEEP.

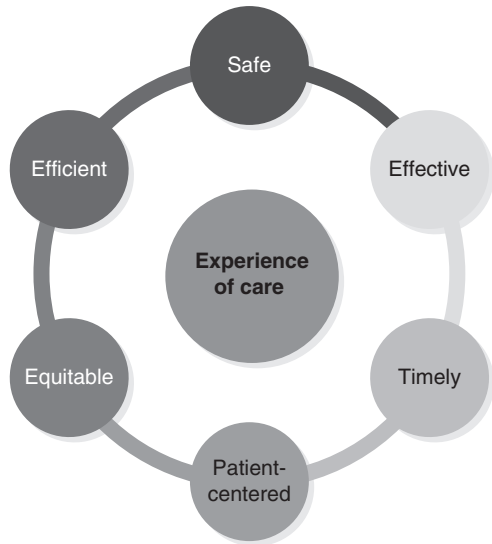

Figure 5-1. Triple Aim: Experience of Care

The triple aim framework acknowledges that all three aims must be pursued together, as they are interdependent, and HCOs should clarify responsibilities for these aims. Meeting these aims requires a systems approach to change.

The triple aim considers constraints that require a balance in the CQI process; for example, when considering costs and who gets care, there should be equity of care. As Berwick, Nolan, and Whittington (2008) state, "The gain in health in one subpopulation ought not to be achieved at the expense of another subpopulation. But that decision lies in the realms of ethics and policy" (p. 760). Diversity and disparities in health care remain a critical concern, and when one gets into this area, ethics becomes even more important. Berwick and colleagues comment that the United States has the technical methods for data collection, measurement, and analysis to monitor and improve care to meet the triple aim, but the biggest barrier is whether or not there is drive to make changes in HCOs and maintain them.

Structure, Process, Outcomes Model

The *Quality Chasm* reports' definition of quality care incorporates the model of healthcare quality described many years ago by Donabedian (1980). This model, described in **Figure 5-2**, focuses on three aspects of the healthcare delivery system: structure, process, and outcomes. Most types of healthcare settings have used this model to understand and evaluate quality. Structure focuses on how the organization is organized—the system and its parts, including its facilities, finances, supplies

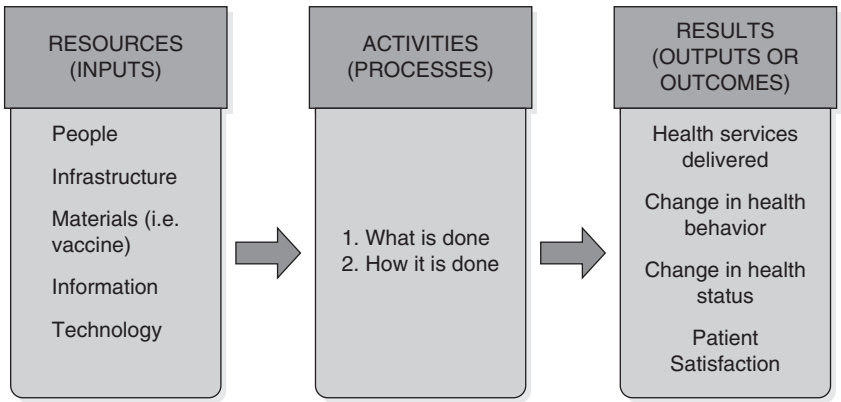

Figure 5-2. Inputs/Structure, Processes, and Outputs/Outcomes
SOURCE: Explorations in quality assessment and monitoring by DONABEDIAN, AVEDIS Reproduced with permission of HEALTH ADMINISTRATION PRESS in the format Republish in a book via Copyright Clearance Center.

and equipment, informatics (hardware and software), staff and staffing, clinical expertise, and so on. Process considers how the parts interact and function and also the interaction with patients and healthcare providers, including assessment and diagnosis, coordination, patient education, delivery of care, and use of HIT. Outcomes should indicate that care meets the STEEEP criteria and should include long-term outcomes to improve functioning and quality of life (Lawless & Proujansky, 2006). As stated by Donabedian, (1988), "Good structure increases the likelihood of good process, and good process increases the likelihood of good outcomes" (p. 1147).

CQI: A Systematic Approach

CQI is the approach that is now recommended for all HCOs and providers. Sollecito and Johnson (2013) define CQI as "a structured organizational process for involving personnel in planning and executing a continuous flow of improvements to provide quality healthcare that meets or exceeds expectations" (p. 4). They go on to define the following characteristics of CQI (Sollecito & Johnson, 2013, pp. 4–5):

- A link to key elements of the organization's strategic plan
- A quality committee made up of the institution's top leadership
- Training programs for personnel
- Mechanisms for selecting improvement opportunities
- Formation of process improvement teams
- Staff support for process analysis and redesign; staff engagement and commitment

- Personnel policies that motivate and support staff participation in process improvement
- Application of the most current and rigorous techniques of the scientific method and statistical process control

The goal of CQI is to improve or streamline activities, which should be a continuous process. This model focuses on data, leadership, and active participation from all relevant staff levels. Applying CQI means the HCO manages its performance, motivates improvement among staff, and learns from its experiences. As the Health Resources and Services Administration (2011) explains, "It is an ongoing effort to improve the efficiency, effectiveness, quality, or performance of services, processes, capacities, and outcomes." The following key strategies are often used in CQI (Draper, Felland, Liebhaber, & Melichar, 2008, p. 3):

- Having supportive hospital leadership and keeping them actively engaged in the work
- Setting expectations for all staff—not just nurses—that quality is a shared responsibility
- Holding staff accountable for individual roles and responsbilities
- Inspiring and using physicians and nurses to champion efforts
- Providing ongoing, visible, and useful feedback to engage staff effectively

The main elements of this model are to first know the customer (patient) well and connect this understanding with the daily functions of the HCO. Secondly, there is need to develop the HCO culture through leadership emphasizing commitment, pride in the HCO, and use of scientific thinking. The third element is to use organized methods to collect and analyze data and make decisions based on this measurement (Berwick, 1999). Empowerment of staff is critical, as is controlling variation. Healthcare professionals usually like to be in control, which sometimes makes coping with patient variations difficult, impacting reliability and quality. In a systematic review focused on quality improvement models, the authors note the following strengths of CQI:

> It emphasizes determining and meeting the needs and wishes of patients or customers; it aims at a holistic approach to quality improvement based on identifying the underlying causes of poor performance; it emphasizes fact-based management and scientific methodology and may therefore be culturally compatible with the values of health professionals; and it emphasizes the need to improve quality on a daily basis. (Powell et al., 2009, p. 27; Shortell, Bennett, & Byck, 1998)

Culture of Accountability

HCOs want to effectively use evidence-based practice (EBP) and evidence-based management (EBM) to support individual staff in learning and engaging in CQI.

To do this, HCOs must adopt a culture of accountability (O'Hagan & Persaud, 2009). **Accountability**, or being responsible for what you do and the outcomes, should be integrated into the HCO and supported in performance requirements, orientation and staff education, and ongoing performance measurement. Increasing staff accountability means staff are more tuned into value and costs such as working toward reducing overuse, misuse, and underuse of resources. Change is present and should be dealt with routinely by staff.

STEEEP®: Pursuit of Excellence

STEEEP® is a framework that is based on the six aims identified in the *Quality Chasm* series (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) (IOM, 2001). This framework was developed and trademarked by Baylor Scott & White Health (Texas). It integrates Kotter's change model, discussed in this text, and applies PDSA (Baylor Scott & White, 2014; Mayberry, Nicewander, Qin, & Ballard, 2006). It is based on four principles: Develop a strong customer focus, apply CQI, engage staff, and use data to improve decision-making. A performance improvement team is used to ensure accountability and improvement. Resources on the website for this framework provide support to implement the framework (Baylor Scott & White, 2014). The implementation plan includes the plan itself, organization or structure to meet the plan, communication, required education, motivation strategies, and measurement and review of performance.

The Lean Approach to Quality Improvement

The **lean approach** in healthcare quality improvement focuses on value to the customer, the patient, with efforts made to reduce waste in time, effort, and cost—doing more with less (Litvak & Bisganon, 2011; Powell et al., 2009). This approach was adopted from Toyota and later applied to healthcare delivery. As the Health Resources and Services Administration (2011a) explains, "This model defines value by what a customer (patient) wants. It maps how value flows to the customer, and ensures the competency of the process by making it cost effective and time efficient" (p. 8). The ACA and other government requirements now focus more on value and cost. This leads to a more lean perspective and strategies (Johnson, Smith, & Mastro, 2012).

A concern that staff may have with this model is its emphasis on reducing costs, and this might have major implications for staffing and the work environment (Powell et al., 2009). It might also develop healthcare systems that are more structured and less flexible. To avoid this response, HCOs need to assess themselves periodically to ensure that they are not overemphasizing reducing cost and failing to view the larger perspective and needs. A published review of 34 studies on the use of the lean approach with Transforming Care at the Bedside (TCAB), examined the impact of eliminating non-value-added activities on direct

care or time at the bedside (Brackett, Comer, & Whichello, 2013). The review concludes the following:

> Although Lean and TCAB processes may be effective in the improvement of specific outcomes, there is no direct relationship with the implementation of these processes and time spent at the bedside. Furthermore, it is evident that organizations must be in a position to commit valuable time and resources to the implementation of these strategies. (Brackett et al., 2013, p. 13)

If the lean model is used, leaders need to be open about its purpose and allow staff time to discuss their fears, which may not be based on reality. The typical wastes within HCOs that need to be assessed are unnecessary motion, unnecessary transportation (movement of supplies, equipment, people, information throughout the HCO), defects and errors, waiting, inadequate inventory, processing waste, overproduction, and unused human potential (Six Sigma, 2015). Within every process, there are opportunities to eliminate lean waste. The acronym DOWNTIME illustrates these wastes; for example, waste during the hospital discharge process may exist in these eight forms (HHS, AHRQ, 2011):

- ***D****efects, or failure modes*. Examples: omission of discharge order, omission of follow-up appointment, incorrect selection of medication, failure to provide discharge prescriptions, incomplete discharge instructions, failure to assess patient comprehension, and omission of home medical equipment order
- ***O****verproduction*. Example: overproduction of printed discharge teaching sheets that are not individualized or that become outdated
- ***W****aiting*. Examples: wait times for patient information prior to discharge; staff waiting for medications for discharge patients
- ***N****on-value-added processing*. Examples: rework and redundancies
- ***T****ransportation*. Example: too few wheelchairs creating discharge delays
- ***I****nventory*. Example: over- or undersupply of medical treatment supplies needed to prepare patients for discharge
- ***M****otion*. Examples: having to go to another location to retrieve discharge materials instead of having them nearby or at the point of service;stooping, stretching, pulling, or pushing inappropriately
- ***E****mployee (i.e., underutilizing or not using staff-based knowledge)*. Example: not including staff members who perform the actual work as part of the problem-solving process

The lean approach does not support use of workarounds, a subject discussed in other chapters, and looks to resolve problems at their root (Brackett et al., 2013). In doing this, it is believed that inefficient processes can be improved.

Six Sigma

Six Sigma is a measurement-based strategy, and it is another approach that began outside of health care. It includes three key elements (Fallon, Begun, & Riley, 2013, p. 265): (1) Measure work output, (2) apply the process throughout all departments in an organization, until it eventually becomes part of the organization's culture, and (3) maintain a goal of no more than 3.4 errors per 1,000,000 operations. This framework focuses more on statistical methods that are used to identify and remove errors (Kelly, Johnson, & Sollecito, 2013). A defect is "an outcome that does not meet the requirements of its customers" (Ramaswamy & Barker, 2013, p. 548). Reducing process variability increases opportunity to reduce defects. Examples of defects might be long wait times for an appointment, long wait time in the emergency department for inpatient admission, medications not arriving on time from the pharmacy, and communication barriers. CQI projects are conducted using DMAIC (define, measure, analyze, improve, control) and DMADV (define, measure, analyze, design, verify) to guide development of new processes (HHS, HRSA, 2011a, p. 8). These methods are discussed in other chapters. Some HCOs combine the lean model with Six Sigma, calling it Lean Six Sigma, with both models using small changes tested over time, focusing on analyzing processes and use of mapping to achieve improvement.

High-Reliability Organization

High-reliability organizations (HROs) have become more common in health care. HROs are HCOs that use a three-step approach to high reliability (Nolan, Resar, Haraden, & Griffin, 2004). The six dimensions of quality health care are integrated into HROs. What is **reliability?** It is the state of being failure-free that develops in an environment over time; *over time* is a critical aspect, as it is not a one-time viewpoint of quality, but rather consistent, effective performance, which ties in with CQI. The concept of "over time" also applies to the HCO and individual patient trajectories. Reliability is measured by the following formula:

Reliability = Number of actions that achieve
the intended result ÷ Total number of actions taken

HROs are *mindful* organizations in that they are concerned about processes, how they work, and their results" (Nolan et al., 2004, p. 3). Average or low-performing organizations are typically described as bureaucratic and reactive (with managers and leaders focused on self), risk averse, and oriented around control and lack of information at the managerial level (Ettinger, 2006, p. 125). To implement and retain reliability requires concentrated effort. Leaders in HROs commit to actively developing and maintaining CQI (Fallon et al., 2013). **Table 5-1** provides information about critical characteristics of HROs.

TABLE 5-1 Characteristics of High-Reliability Organizations

Characteristic	Description
Preoccupation with failure	Everyone is aware of and thinking about the potential for failure. People understand that new threats emerge regularly from situations that no one imagined could occur, so all personnel actively think about what could go wrong and are alert to small signs of potential problems. The absence of errors or accidents leads not to complacency but to a heightened sense of vigilance for the next possible failure. Near misses are viewed as opportunities to learn about systems issues and potential improvements, rather than as evidence of safety.
Reluctance to simplify	People resist simplifying their understanding of work processes and how and why things succeed or fail in their environment. People in high-reliability organizations (HROs) understand that the work is complex and dynamic. They seek underlying rather than surface explanations. While HROs recognize the value of standardization of workflows to reduce variation, they also appreciate the complexity inherent in the number of teams, processes, and relationships involved in conducting daily operations.
Sensitivity to operations	Based on their understanding of operational complexity, people in HROs strive to maintain a high awareness of operational conditions. This sensitivity is often referred to as "big picture understanding" or "situation awareness." It means that people cultivate an understanding of the context of the current state of their work in relation to the unit or organizational state—i.e., what is going on around them—and how the current state might support or threaten safety.
Deference to expertise	People in HROs appreciate that the people closest to the work are the most knowledgeable about the work. Thus, people in HROs know that in a crisis or emergency the person with greatest knowledge of the situation might not be the person with the highest status and seniority. Deference to local and situation expertise results in a spirit of inquiry and de-emphasis on hierarchy in favor of learning as much as possible about potential safety threats. In an HRO, everyone is expected to share concerns with others, and the organizational climate is such that all staff members are comfortable speaking up about potential safety problems.
Commitment to resilience	Commitment to resilience is rooted in the fundamental understanding of the frequently unpredictable nature of system failures. People in HROs assume the system is at risk for failure, and they practice performing rapid assessments of and responses to challenging situations. Teams cultivate situation assessment and cross monitoring so they may identify potential safety threats quickly and either respond before safety problems cause harm or mitigate the seriousness of the safety event.

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Other chapters discuss CQI measurement and improvement interventions/strategies in more detail; however, to provide a better description of HROs, one might ask what would this organization do to meet the three-step approach? The Agency for Healthcare Research and Quality's Patient Safety Network (2015) explains, "HROs cultivate resilience by relentlessly prioritizing safety over other performance pressures." These HCOs use systems thinking throughout the organization, with recognition that the HCO is not static and change is ongoing. The goal is to create and maintain an environment "in which potential problems are anticipated, detected early, and virtually always responded to early enough to prevent catastrophic consequences" (HHS, AHRQ, PSNet, 2016).

The following are recommended levels of interventions/strategies to develop and maintain an HRO (Nolan et al., 2004).

1. Prevent failure (a breakdown in operations or functions).
2. Identify and mitigate failure (identify failure when it occurs and intercede before harm is caused, or mitigate the harm caused by failures that are not detected and intercepted).
3. Redesign the process based on the critical failures identified.

Accomplishing these strategies requires HCO leadership, an active safety culture, and an effective process of improvement initiative that supports reliability. Since reliability was first used in non-healthcare industries, this is another example of applying methods and approaches used by other industries.

In an HRO, management and staff might use standardization, for example, by using checklists and actively providing staff feedback. The HCO also uses structured communication methods with patients and staff such as calling patients to remind them of appointments or making sure communication is clear when using abbreviations and numbers to avoid errors. The organization might apply failure modes and effects analysis (FMEA) as a method to improve structure and processes. FMEA is discussed in other chapters.

Chassin and Loeb (2011) discuss the complex nature of care delivery and its impact on reliability: "As new devices, equipment, procedures, and drugs are added to our therapeutic arsenal, the complexity of delivering effective care increases. Complexity greatly increases the likelihood of error, especially in systems that perform at low levels of reliability" (p. 563). HROs are driven to ensure that the organization functions at its best level despite this complexity. Many new approaches to improve care have been developed and applied. In this text, many of these approaches are discussed. The field requires more collective mindfulness, with every individual, the HCO as whole, and all its parts working to identify potential failures that can lead to adverse events. One approach supported by the IHI emphasizes that "applying reliability principles to health care has the potential to help reduce 'defects' in care or care processes, increase the consistency with which appropriate care is delivered, and improve patient outcomes" (Nolan et al., 2004, p. 3). Connecting reliability to

several of the *Quality Chasm* reports' healthcare system aims, the following are important to consider: "effectiveness (where failure can result from not applying evidence), timeliness (where failure results from not taking action in the required time), and patient-centeredness (where failure results from not complying with patients' values and preferences)" (Nolan et al., 2004, p. 3).

The Agency for Healthcare Research and Quality: Quality Improvement Process

The Agency for Healthcare Research and Quality (AHRQ) is the major agency in the HHS that guides national efforts toward improving quality. The NQS, discussed in other chapters, is the current major initiative that it is expected to guide efforts to meet this goal. The AHRQ not only sets a model or framework, but also works with stakeholders in implementation efforts to improve care (Dixon & Shofar, 2006). The agency is also concerned with ensuring that evidence from research is implemented into practice when appropriate—to fill the gap in knowledge (EBP and EBM). With the expansion of research and the concern for use of best practice evidence falling through the cracks, this in itself is a major effort. The AHRQ supports the development of HROs and the CQI process based on STEEEP.

The AHRQ focuses its CQI process on various healthcare settings, such as the hospital. The process uses administrative and clinical data to assess quality, identify problems or concerns that require more examination, and determine what needs to be monitored over time (HHS, AHRQ, 2014). When implementing the CQI process, the AHRQ recommends applying the following, which are not only supported by the government but also healthcare professional groups (HHS, AHRQ, 2015a):

- *Place a priority on encouraging communication, engagement, and participation.* Include the stakeholders involved with or affected by the changes required by your CQI work. Look for ways to help them embrace the changes and begin to take ownership of them.
- *Start your implementation of improvements with small-scale demonstrations.* Small-scale demonstrations are easier to manage than are large-scale changes. They also allow you to refine the new processes, demonstrate their impact on practices and outcomes, and build increased support by stakeholders. Some HCOs refer to this as pilot testing.
- *Keep in mind and remind others that CQI is an iterative process.* You will be making frequent corrections along the way as you learn from experience with each step and identify other actions to add to your strategy.

Stop and Consider #1

There are multiple theories and models about quality improvement that an HCO can choose to apply.

The Blame Culture and Its Impact

The *Quality Chasm* reports noted that were there problems not only with the quality of care, but also with responses to errors. The reports indicated that HCOs emphasized a work culture that focused on blame.

Organizational Culture

Organizations have their own cultures, and the culture impacts how the organization is structured and functions. **Organizational culture** is the values, beliefs, traditions, and communication processes that bring a group of people together and characterize the organization. The culture also impacts teams and teamwork within the HCO. As explained by Heathfield (2012), "Culture is a powerful element that shapes your work enjoyment, your work relationships, and your work processes. But, culture is something that you cannot actually see, except through its physical manifestations in your workplace."

An organization's culture is complex. There is the overall organizational culture, such as the culture of a hospital. Then within an organization, there are differences in culture within its units, divisions, or departments and with staff groups, such as nurses, physicians, nonclinical staff, management, and so on. Ideally, all should reflect the overall organizational culture, but this is typically not the case. Lack of an overall organizational culture may actually lead to conflict if there are major differences in values, attitudes, and behaviors. Sometimes these differences are due to differences in leadership style, and sometimes it comes more from the staff. Organizational culture does change over time and is influenced by changes in high-level leadership and the organization's vision, mission, and goals. Communication is a critical element in an organization's culture, and it is complex, with many levels and a great number of staff and services. Organizational culture includes language, decision-making, symbols, stories and legends, and daily work practices (Heathfield, 2012).

Organizational culture may be described as consonant and dissonant. A **consonant culture** implies that the organization's culture is effective. A **dissonant culture** acts as a block to effectiveness and thus has a negative impact on the development of a collaborative team environment. How does one identify a dissonant organization? The following characteristics of a dissonant culture were identified in Sovie (1993) and were described again in Jones & Redman (2000, p. 605). Added to these characteristics are comments about the current relevance of the characteristics:

- *Focus on serving the providers and not the patients.* This focus would be in conflict with the movement today to increase patient-centered care.
- *Lack of clarity about individual and department expectations.* Staff who do not know what is expected may become frustrated, and this lack of clarity may also impact staff burnout, productivity, and outcomes.

- *Failure to regularly measure quality of services.* There is more measurement of quality today with the increased emphasis and concern about problems in quality of care; however, the effectiveness of the measurement and response varies. We have need for much improvement and development of more effective measurement.
- *Lack of patient involvement in decision-making.* Patient-centered care requires patient involvement in decision-making; however, we have much to do to improve. Some providers are not as committed as they should be to ensuring patient participation, or there may be other barriers to patient involvement.
- *Limited concern about employee satisfaction.* This can be a major problem and lead to problems of staff frustration and burnout, recruitment and retention issues, lower productivity, and a culture that is not seen as caring of staff.
- *Limited education/training programs for employees.* This can lead to the same problems noted for employee satisfaction but may also have a major impact on quality of care and increasing errors.
- *Frequent turf battles.* This is clearly a sign of an organization that is not functioning well, demonstrating lack of cohesiveness (i.e., no clear vision, mission, and goals), poor communication, and lack of collaboration.
- *Failure to recognize staff accomplishment.* This leads to poor relationships between upper and middle management and staff, decreasing trust and commitment to the organization.

Improving the culture so that the organization is a place where people want to work makes a major difference in how the organization functions and its outcomes. However, this is not something that is solely in the hands of upper or even middle management. All staff must work to improve the organization's culture. This requires taking risks, being clear about perspectives, and communicating needs and goals effectively. Effective teams exist in effective organizational cultures.

Description of a Blame Culture

The publication of *To Err Is Human* led to significant consideration of the approach HCOs had been taking toward errors (IOM, 1999). The report suggested a tendency of HCOs to examine errors with a focus on assigning blame to individuals. This approach results in what is often referred to as a **blame culture**. It is clear that this approach has not worked; errors continue to rise and quality care continues to decrease. The blame culture has led to a work environment in which staff fear blame when "things go wrong." Being assigned blame may lead to punishment, such as forcing staff to attend a medication administration course or identifying staff "at fault" in some way. There are situations where individuals are the reason for an error, but many errors are system errors, and individual staff are merely

involved in the system. Effective CQI requires that both system and individual factors be considered.

Stop and Consider #2
The blame culture impacts nursing practice and continuous quality improvement.

Culture of Safety

Following the identification of a healthcare system that uses a blame culture to respond to errors in HCOs, the *Quality Chasm* reports and other experts recommended a change to a culture of safety, also known as a no blame culture or a just culture.

Description

Bashaw, Rosenstein, and Launsbury (2012) describe a **culture of safety** as

> a system of shared accountability that supports the safest hospital environments for patients, staff, and visitors. Organizations that adopt the just culture model accept that errors will occur, with or without negative outcomes. Each type of error is equally important to disclose because error identification and reporting promote trust, transparency, high-quality care, and patient safety across disciplines . . . . [A culture of safety] embraces system failures, errors, and weaknesses for the purpose of turning them into opportunities for improvement and learning" (2012, p. 38)

A related term is **just culture**. According to the AHRQ's Patient Safety Network, this culture recognizes that

> many individual or active errors represent predictable interactions between human operators and the systems in which they work. However, in contrast to a culture that touts "no blame" as its governing principle, a just culture does not tolerate conscious disregard of clear risks to patients or gross misconduct (e.g., falsifying a record, performing professional duties while intoxicated). (HHS, AHRQ, PSNet, 2015)

This culture supports staff behaviors throughout the HCO that result in "safe, reliable, and productive performance," meeting four critical dimensions of a culture of safety (Drenkard, 2011, pp. 28–29):

- A strategic focus at the top levels in the organization on cultural improvements and error reduction
- A comprehensive assessment of past, present, and future human performance leading to a prioritized improvement plan

- Systematic implementation of improvement initiatives using proven prevention, detection, and correction methods
- An appreciation that maintaining a strong safety culture is a lifelong endeavor for the organization

Some refer to the culture of safety as a no blame culture because the focus moves away from individual blame; however, this reluctance to assign blame can go too far. This type of work culture should not imply that there is no individual accountability (Wachter & Pronovost, 2009). Healthcare providers are still responsible for following their professional standards and regulatory requirements, such as their states' Nurse Practice Acts and HCO standards, policies, and procedures, and need to acknowledge when they lack knowledge or expertise. The goal is to develop leadership and staff commitment to quality care. Within this culture, strategies are used to increase staff self-awareness; improve staff education about quality, errors, and error reporting to improve performance; and meet standards set by healthcare professions, government, accreditors, and insurers. Meeting these objectives requires effective communication and interprofessional teamwork.

The American Nurses Association (ANA) entered the discussion about just culture in 2010 when it published a position statement on this topic (ANA, 2010). The goal was to understand the concept and implications for nurses. The ANA supports the use of just culture in HCOs and initiatives to support its use. There is recognition that a threatening and punitive approach to errors results in limited staff reporting of errors. The ANA position statement emphasizes system errors but does not negate the importance of individual accountability. A culture of safety or just culture views errors from three perspectives (ANA, 2010):

1. Human error, which refers to inadvertently making an error or doing something that should not have been done
2. At-risk behavior that may lead to errors
3. Behavior that does not consider standards and expectations

The focus should be on reducing errors in an environment that is open and allows staff to discuss issues. Nurses should be actively involved in the culture of safety and serve as leaders. Nurses should have input into the HCO structure, processes, and outcomes—for example, ensuring staffing levels for more effective care, participating in policy and procedure development that is based on EBP, engaging in CQI responsibilities as an individual provider, and participating in HCO-organized CQI activities. Individual staff need to feel comfortable reporting concerns, which relates to the staff's sense of accountability for system improvement. The overall result for the HCO should be "an organization-wide mindset that positively impacts the work environment and work outcomes" (ANA, 2010, p. 6). **Figure 5-3** describes data published in 2015 that the AHRQ collected to better understand hospital patient safety culture.

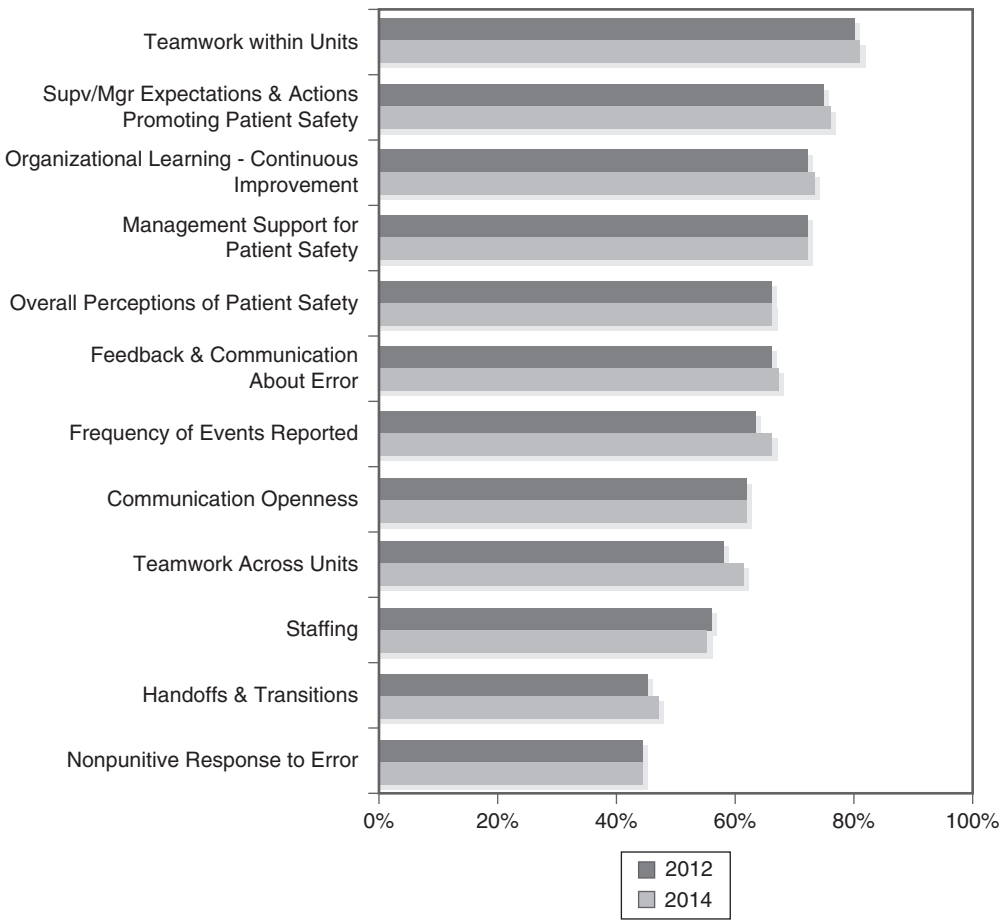

Figure 5-3. Hospital Patient Safety Culture Survey Results

SOURCE: Reproduced from Agency for Healthcare Research and Quality. (April 2015). 2014 national healthcare quality and disparities report: Chartbook on patient safety. AHRQ Publication No. 15-0007-2. Retrieved from http://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2014chartbooks/patientsafety/2014nhqdr-ptsafety.pdf

System and Individual Concerns

An example of system concern can be found in a 2015 AHRQ decision to update its Hospital Survey of Patient Safety Culture, which was developed in 2004. After feedback and further development, a pilot test of the revised survey was conducted in 2016. There are also surveys for nursing homes, ambulatory outpatient medical offices, community pharmacies, and ambulatory surgery centers. The AHRQ provides a database so that HCOs can compare their data with data from similar HCOs. Using this comparative approach provides information about the HCO's strengths and helps to identify opportunities for improvement of the patient safety culture. The following describes the objectives for the 2015 changes and provides

examples of how this initiative considered multiple factors that might lessen the blame focus in the survey questions (HHS, AHRQ, 2015b):

1. Shift to a just culture framework for understanding responses to errors.
2. Reduce the number of negatively worded items.
3. Add a "Does not apply/Don't know" response option.
4. Reword complex and/or difficult-to-translate items.
5. Reword items to be more applicable to physicians and nonclinical staff.
6. Align the Hospital Survey on Patient Safety Culture with the other AHRQ patient safety culture surveys.
7. Reduce survey length.
8. Develop a supplemental item set.

The development, implementation, and revision of this survey offered through the AHRQ illustrate the importance of having a culture of safety in HCOs and assessing the culture routinely.

The North Carolina Board of Nursinga culture of safety assessment instrument, the Complaint Evaluation Tool (CET), is an example of the impact of individual nursing concerns and recognition of the importance of a culture of safety (Burhans, Chastain, & George, 2012). Why did a board of nursing develop this type of tool or even have interest in a culture of safety? Regulation and performance are associated with one another. Traditionally, when errors and performance concerns have been reported to a board of nursing, the response has been similar to the blame culture found in some HCOs, with individual nurses identified at fault for the error followed by some type of punitive measure. The purpose of the CET is different. As explained by Burhans and colleagues (2012), its purpose is to

> provide a standard by which the employer and the [board of nursing] can work collaboratively and communicate openly in reviewing practice errors or deficiencies. It also provides a framework to apply expectations for accountability and behavioral choices consistently, while treating nurses respectfully and fairly. (p. 44)

The CET identifies several views of human error. A human error may result in situations when a staff member has no prior supervisory issues related to practice. It may also occur when the staff member demonstrates required knowledge, skills, and ability, and in these cases the event could be described as accidental or an oversight. The third descriptor for human error is there was no policy, standard, or requirement that staff should have followed, and the error is considered to be unintentional. A rating scale is used to rate at-risk behavior and reckless behavior.

A culture of safety requires that HCOs be transparent systems that report errors and openly discuss and consider types of errors, analysis of errors, and steps taken to prevent errors (IOM, 2001). This transparency not only communicates that

it is acceptable to be open about errors so that they can be understood and care improved, but it also leads to individual staff learning more about safety and how to prevent errors—how to identify and analyze errors in a manner that leads to a more effective healthcare system. Each nurse is tuned in to practice actions as they occur and is focused on assessing quality outcomes.

Dangers of a Code of Silence

As noted earlier, ANA and other organizations joined in on the need to examine the HCO culture and its connection to patient and staff safety. In 2005, the American Association of Critical Care Nurses and the Association of periOperative Registered Nurses joined with VitalSmarts® to conduct a study. The conclusions from the study note that tools and warnings about safety are helpful, but if staff do not feel safe in speaking up even when staff know something is wrong and do not get others to act to improve, then the culture will not really be changed. This **code of silence** exists in our HCOs and acts as a major barrier for improvement, setting up a work environment that is not positive or healthy for the staff. Recognizing that nurses need to assume greater responsibility and leadership in CQI includes standing up and speaking out when an organizational culture requires improvement.

Diversity Within a Culture of Safety

As noted in other parts of this text, the *National Healthcare Quality Report* and the *National Healthcare Disparities Reports* are now combined into one report (*NQD*). The *NQD* is an important data resource used to track quality care and disparities. A culture of safety needs to consider the impact of diversity on its functioning and the outcomes. The World Health Organization (2015a) defines the **social determinants of health** as the

> conditions in which people are born, grow, live, work, and age, including the health system. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels, which are in and of themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities.

This definition recognizes the importance of culture and diversity. Other key definitions that help to understand culture and disparities include the following:

- **Health inequality** is the difference in health status or in the distribution of health determinants between different population groups (WHO, 2015b).
- **Healthcare disparity** relates to "differences in the quality of health care that are not due to access-related factors or clinical needs, preferences, and appropriateness of interventions. These differences would include the role

of bias, discrimination, and stereotyping at the individual (provider and patient), institutional, and health-system levels" (IOM, 2003, p. 32).

- **Health equity** is attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally, with focused and ongoing societal efforts to address avoidable inequalities, right historical and contemporary injustices, and eliminate health and healthcare disparities (Healthy People, 2015).
- **Cultural competence** is a set of congruent behaviors, attitudes, and policies that come together in a system or agency or among professionals, enabling effective work in cross-cultural situations (HHS, OMH, 2015).
- **Linguistic competence** is the capacity of an organization and its personnel to communicate effectively and convey information in a manner easily understood by diverse audiences, including persons of limited English proficiency, those who have low literacy skills or are not literate, and those with disabilities (HHS, OMH, 2015).

What can we do to improve? We need to develop partnerships with stakeholders to arrive at best strategies to improve and decrease health inequities. HCOs and healthcare professional education programs need to integrate cultural and linguistic competencies in health professions education and in practice, including adding this information to position descriptions and performance evaluation.

Health literacy has become a critical component of quality improvement frameworks due to the need to respond to healthcare disparities problems. The *Health Literacy* report discusses three intervention points in its framework describing the impact of health literacy on health outcomes and costs (IOM, 2004b). The first intervention point is multifactorial: Culture and the society in which a person lives and works impact ability to understand, think, and respond. Factors such as age, ethnicity, gender, race, socioeconomic status, education, native language, and so on are important to consider. The second intervention point is the health system, and the third is the education system. Health literacy impacts the health system: patient–provider interactions and communication, individual patient and HCO outcomes, access to care, and so on. The education system and its outcomes are crucial to individual literacy and numeracy skills, which impact health literacy. The following are examples of interventions or strategies that may be used to improve health literacy; healthcare diversity within communities, HCOs, and the healthcare delivery system in general; and health outcomes (HHS, OMH, 2011, pp. 1–2).

1. Develop and disseminate health and safety information that is accurate, accessible, and actionable.
2. Promote changes in the healthcare system that improve health information, communication, informed decision-making, and access to health services.

3. Incorporate accurate, standards-based, and developmentally appropriate health and science information and curricula in child care and education through the university level.
4. Support and expand local efforts to provide adult education, English language instruction, and culturally and linguistically appropriate health information services in the community.
5. Build partnerships, develop guidance, and change policies.
6. Increase basic research and the development, implementation, and evaluation of practices and interventions to improve health literacy.
7. Increase the dissemination and use of evidence-based health literacy practices and interventions.

Barriers to a Culture of Safety

Developing and maintaining a culture of safety or a just culture is not easy. Barriers exist in all HCOs. A lack of understanding of the meaning of a culture of safety or just culture is a significant barrier. Key leaders within the HCO need to understand it to ensure that it is communicated effectively to all staff, and all need to be committed to the culture of safety. It is easy to emphasize sharing this concept with clinical staff; however, all staff within the organization (e.g., staff from housekeeping, office support, dietary, maintenance, informatics technology) need to be engaged or efforts will fail.

It is also easy for some staff to view a just culture as an opportunity for the individual staff member to relinquish accountability for his or her actions, and this is not the case. This misperception can represent a major barrier. We still must be able to ask staff to explain what they did and why. There are times when a staff member's performance, not the system, may be the reason for an error, even though most events are system-based.

Many staff members may feel that the HCO's culture is fine and does not need to be changed, or that things have been done one way for so long that there is no chance the HCO will actually change. In some situations, surface changes are made, but underneath, the HCO still has a blame culture. HCO factors such as major budgetary problems, lack of effective leadership or too many management positions in flux, inadequate staffing levels and/or inadequate expertise, major organizational changes such as merging with other organizations, the addition or elimination of services, the need for major facility improvements such as renovation, and so on impact changing organizational culture.

The central feature of a culture of safety is the recognition that events or incidents are opportunities for improvement. We know there will be events that are not acceptable, but this does not mean we treat all who might be involved negatively. Dekker (2007) recommends the following strategies to better ensure

a just culture or culture of safety and other strategies that have been recognized as important:

- Focus the culture on concern for system factors that impact CQI; however, recognize there is need for accountability and times when cause may relate primarily to individual performance.
- Remove all penalties that have been associated with events or incidents.
- Monitor stigmatization of staff who are involved in these events; prevent stigmatization when possible.
- Provide support to staff involved in an event.
- Institute debriefing; if already using it, then evaluate it and make changes as needed to support a culture of safety or just culture.
- Develop an effective quality improvement program with staff committed to a culture of safety or just culture and ensure that it is demonstrated in actions throughout the HCO.
- Include the culture of safety or just culture as an important part of staff orientation, orientation for healthcare professions students who are at the HCO for clinical experiences, and routine staff education.
- Ensure that staff know their rights and responsibilities related to events or incidents.
- Include implementation and engagement in the culture in all position descriptions and performance appraisal.
- Build trust at all levels of the organization.
- Identify clear descriptions of roles and responsibilities, including who makes decisions when events or incidents occur.
- Integrate local, state, federal, and healthcare professional requirements and standards into the culture of safety or just culture. Clearly demonstrate how this integration is accomplished.
- Determine the HCO policy and procedure for patient disclosure, and consult with HCO legal experts as needed.

Leadership to Support a Culture of Safety

Leadership is required for effective CQI. This includes developing and maintaining a culture of safety. Leadership in an HCO includes the board of directors, senior management, and all other levels of managers. Assessing the effectiveness of a culture of safety is not easy to accomplish; for example, in a systematic review of 4,239 references, only 16 studies could be selected for review. More research is required to better assess effectiveness (Parmelli et al., 2011).

Clear communication has a positive impact on the culture of safety. Leadership within an HCO must ensure that communication at all levels is clear and should ensure improvement when necessary. This includes formal procedures such as

incident reporting, sharing of feedback (from management to staff and vice versa), and a transparent HCO. The culture of an HCO cannot be changed without effective communication and leadership. Part of this effort must be a discussion with all staff about the need for a culture of safety, their views of what this culture might entail, management and staff roles and responsibilities, and methods that will be used to ensure that a culture of safety is maintained over time. Leaders in the HCO need to drive this effort and maintain it.

Stop and Consider #3

A culture of safety requires much effort to implement and maintain.

Conclusions

Weston and Roberts (2013) offer a summary of the current trends in healthcare CQI:

> Quality and performance improvement initiatives are driving significant changes in the U.S. healthcare system. In anticipation of the full implementation of national health reform over the next several years, the pace of these changes has been increasing. The goals of these quality initiatives mirror the National Quality Strategy's three aims, which include better care, Healthy People/Healthy Communities, and ACA.

There are many theories and models used to describe quality improvement, several of which are discussed in this chapter. Along with greater development of approaches to CQI, the culture of safety or just culture is now a critical aspect of CQI and the CQI process. This is a change from the view of the blame culture, moving away from individual blame to greater consideration of system factors.

Apply CQI

Chapter Highlights

- There are many visions of quality improvement; some integrate multiple views of quality.
- The science of improvement focuses on innovation, rapid-cycle testing of change, and lessons learned from changes.
- The triple aim (to improve the patient experience; improve the health of populations; and reduce the per capita cost of health care) is now used in many of the quality improvement models/theories.
- Models built around structure (how organizations are organized as a system), process (how organization functions), and outcomes (results) were

introduced in the 1980s and continue to influence quality improvement models/theories.
- CQI emphasizes a systematic approach that is ongoing.
- STEEEP® is based on the triple aim and the *Quality Chasm* reports. The focus is on customers/patients and CQI; data are important in making decisions.
- The lean approach emphasizes value and cost.
- Six Sigma is a measurement-based strategy.
- High-reliability organizations emphasize reducing operation failure and errors to reduce harm. Redesign of processes is used when necessary.
- The blame culture led to a healthcare work environment in which individual staff members were blamed for errors and system issues were not effectively addressed in improving care and reducing errors.
- A culture of safety or just culture is now recommended to replace the blame culture. Though it still recognizes individual accountability, it turns the focus to systems.
- Diversity (patients and staff) is an important factor in a culture of safety.
- Leadership is required to guide the development and maintenance of a culture of safety.

Critical Thinking and Clinical Reasoning and Judgment: Discussion Questions and Learning Activities

1. Compare and contrast the examples of theories and models described in this chapter. Summarize your comparison in a visual format such as a figure, table, poster, and so on. Discuss your visual with a group of your classmates.
2. What is your opinion of the change from a blame culture to a culture of safety or just culture?
3. Assess a clinical organization in which you are working, or previously worked, for clinical experiences. How would you describe its culture of safety? If it is not a culture of safety, why does it not meet the criteria for this type of culture? Is it a culture in which you would like to work? Why or why not?

Connect to Current Information

- Graphics of models of improvement
  http://www.bing.com/images/search?q=graphics+of+models+of+improvement&qpvt=graphics+of+models+of+improvement&qpvt=graphics+of+models+of+improvement &FORM=IGRE

- AHRQ improvement resources
  http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/index.html
  http://www.hrsa.gov/quality/toolbox/methodology/qualityimprovement/
- Surveys on Patient Safety Culture (AHRQ)
  http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/index.html

EBP, EBM, and Quality Improvement: Exemplar

Collier, S., Fitzpatrick, J., Siedlecki, S., Dolansky, L., & Less, M. (2016). Employee engagement and a culture of safety in the intensive care unit. *Journal of Nursing Administration, 46*(1), 49–54.

This article describes a study that focuses on the relationship between employee engagement and the culture of safety in an intensive care unit.

Questions to Consider

1. What is the design used for this study, including research question(s), sample, interventions, data collection, and analysis?
2. What are the results of the study?
3. How might you apply these results to a clinical setting to engage staff and improve care?

Evolving Case Study

After conducting a survey about the hospital culture and CQI, your hospital has moved to developing a culture of safety. There are broad guidelines for this change, but ultimately each unit must make the adjustment. As nurse manager of the obstetrical service, you are confronted with where to begin. Your services cover predelivery admissions, labor and delivery, nursery care, postpartum care, and clinics. It is a very busy specialty with overworked staff, and there is a problem with registered nurse retention and turnover. You have been manager for 2 years. Errors have increased by 10% in the 2 years, and staff have become more reluctant to report incidents through the required system. They complain that when staff make errors they are penalized. This complaint is also common within other areas of the hospital. You go to the following website to get information and resources: http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/esrd/cultureofsafety.html.

Case Questions A

You first need to understand more about the change.

1. What is a culture of safety, and how does it compare to the current culture?
2. How will you demonstrate and convince your staff that this change is real and will make a positive difference?

Case Questions B

After you understand the problem better, you move to planning.

1. Develop a plan to foster a culture of safety. Specify tools you will use and the reason for their use. Develop your process. (See online resources and the chapter content for help.)
2. How will you engage staff in the development of the plan and its implementation? Be specific.
3. How will you assess your outcomes? Be specific.

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