Chapter 9

Improving Quality in Health Care Organizations

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CHAPTER OUTLINE

- **Quality Improvement in Health Care**
- **Quality Measurement and Quality Improvement**
- **Approaches to Quality Improvement**
- **Getting to Higher Quality and Quality Improvement**
- **Applying Quality Improvement Frameworks**

LEARNING OBJECTIVES

After completing this chapter, the reader should be able to:

1. Explain the importance of quality improvement (QI) in health care
2. Define quality and performance measures for organizations
3. Differentiate the important issues in defining, measuring, and using quality and performance measures
4. Recognize the challenges of undertaking QI and QI implementation in HCOs
5. Distinguish among QI frameworks
6. Describe opportunities to apply QI tactics and strategies to support QI in HCOs
7. Assess conditions for QI change
8. Justify the need to manage for QI in health care
9. Explain the importance of people and focusing on people issues in QI efforts
10. Describe management roles to create high-performance, quality-focused organizations

KEY TERMS

Benchmarking
Clinical Practice Guidelines
Continuous Quality Improvement
High-Performance Work Practices (HPWPs)
Implementation
Lean
Outcome Measures of Quality
Process Measures of Quality
Quality Improvement (QI)
Quality Improvement (QI) Interventions
Quality Measures
Six Sigma
Structural Measures of Quality
Transactional Leadership
Transformational Leadership

IN PRACTICE: Sharp HealthCare and Their Quality Improvement Journey

Sharp HealthCare is a large, not-for-profit health system based in San Diego, California. With over 14,000 employees and 2,600 physician affiliates, the system is comprised of four acute-care hospitals, three specialty hospitals, and two medical groups, and also includes a wide range of other facilities and services. Given its location in a highly regulated state, Sharp faces particular challenges associated with corporate practice of medicine laws and the laws regulating nurse-staff ratios as they impact Sharp's abilities to employ and deploy health care professionals throughout their organization. Yet despite these challenges, Sharp HealthCare has received increased attention over the past decade as it has received national recognition for Magnet designation for nursing excellence at two of its acute-care hospitals, national designation as a Planetree hospital at another acute-care hospital, and the prestigious 2007 Malcolm Baldrige Award for Quality for the system as a whole.

Sharp's self-described quality improvement "journey" has been multifaceted and has touched the entire health system. In the late 1990s, Sharp had a solid reputation in the San Diego area, and patient satisfaction scores collected by the organization were high, indicating that there was not much to worry about. A change in system leadership, however, created an opportunity to focus on quality and quality improvement in a new way.

Curious about how they were doing, Sharp decided to convene some focus groups to find out how patients felt about their health care experience. Much to the surprise and chagrin of health system leaders, Sharp's patients told them the experience was not all that good, and health care in general left much to be desired from a customer perspective. Instead of confirming their belief that Sharp was well regarded by satisfied patients, these focus groups indicated many opportunities for improvement. The health system began to benchmark data against other health systems and contracted with Press-Ganey for patient satisfaction measurement. Patient satisfaction scores as measured by the new scale were in the lowest quartile.

Sharp's leaders used these data to spark employee interest in quality and performance improvement, and to motivate employees to address needed changes. Over the course of the next decade, Sharp made a substantial investment in **Lean** and **Six Sigma** methods as its selected approach to **performance improvement**, and built a QI focus into the culture of the organization. In addition, as an organizing framework for the QI journey, Sharp designed The Sharp Experience as a performance improvement initiative designed to help Sharp realize its mission-driven goal to be *the best place to work, the best place to practice medicine, and the best place to receive care.* Sharp's receipt of the coveted Baldrige Award for Quality in 2007 provided public recognition of Sharp's success in their QI journey. Now beyond Baldrige, Sharp continues to capitalize on opportunities for QI, and is currently driving improvements in patient safety, including "just culture," transparency, Team Training, standardized communication processes, handoff standardization, and design change to improve quality of care and patient safety throughout the health system.

SOURCE: Nancy G. Pratt, RN, MS, Senior Vice President, Clinical Effectiveness, Sharp HealthCare; Sharp HealthCare Web site (http://www.sharp.com)

CHAPTER PURPOSE

With the release of the IOM's report, *To Err is Human: Building a Safer Health System* (IOM, 1999), quality and patient safety reemerged as sentinel issues in health care delivery. The Institute's report prompted renewed effort to identify and implement **quality improvement interventions**, interventions designed to decrease medical errors and enhance patient safety. It also rekindled attempts to hold HCOs accountable for quality. Government agencies, accrediting bodies, employer groups, and other organizations have developed an ever-growing number of quality indicators and patient safety goals against which they intend to measure a health care organization's quality performance and improvement. Some states have implemented mandatory quality reporting systems for hospitals (Morrissey, 2002). Thus, health care organization quality is likely to remain under intense scrutiny for some time. This chapter outlines how HCOs can improve quality and patient safety through QI efforts, and describes the challenges and strategies for changing organizational systems to ensure that QI is an accepted part of organizational behavior.

QUALITY IMPROVEMENT IN HEALTH CARE

Most everyone agrees that high quality is an important characteristic of health care services. However, quality can be a difficult concept to define. Donabedian (2005) observed that although quality can be very broadly defined, it usually reflects the values and goals of the current medical system and of the larger society of which it is a part. According to Donabedian (1988), there are three major elements of quality: structure, process, and outcomes. *Structure* pertains to having the necessary resources to provide adequate health care; *process* focuses on how care is provided, delivered, and managed; and *outcomes* refers to changes in a patient's health status as a result of medical care.

Another definition of quality that is commonly used and widely accepted is contained in the influential report from the Institute of Medicine (IOM), *Crossing the Quality Chasm: A New Health System for the 21st Century*. This report defined quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (IOM, 2001). The report also discussed the six major aims for improvement in health care, built around the need for care to be: *safe, effective, patient-centered, timely, efficient,* and *equitable* (IOM, 2001). Health care organizations (HCOs), then, are challenged to provide care, or support the micro-systems that deliver care, that achieves these aims (Berwick, 2002).

Quality problems in the U.S. health care system are expressed in numerous ways, stem from different sources, and have different consequences for individuals and organizations. With respect to medical errors, for example, it is estimated that preventable medical errors cause between 44,000 and 98,000 deaths in hospitals each year (IOM, 1999). Further, although Americans receive only 55 percent of recommended treatments for preventive care, acute care, and care for chronic conditions (McGlynn et al., 2003), slightly more than 10 percent receive too much care; care that is not recommended or is potentially harmful (McGlynn et al., 2003). Additionally, poor quality can result in increased expenditures; research suggests that 20 to 30 percent of a typical organization's expenses are due to issues such as redundancy of effort, rework, error, inefficiency, persistent problems, and untrained employees (Leebov and Ersoz, 2003).

Quality Improvement (QI)

Quality Improvement (QI) is an organized approach to planning and implementing continuous improvement in performance. QI emphasizes continuous examination and improvement of work processes by teams of organizational members trained in basic statistical techniques and problem-solving tools, and empowered to make decisions based on their analysis of the data. Typically, these QI efforts are strongly rooted in evidence-based procedures and rely extensively on data collected about the processes and outcomes experienced by patients in organizations. Although QI practices were originally developed in the manufacturing sector, quality experts contend that QI methods can be successfully applied to service delivery. Juran (1988), for example, argues that although service outcomes are difficult to measure, due to the intangibility of the product and the interactive nature of service delivery, it remains conceptually feasible to identify customer requirements, to translate these requirements into behavioral routines and standards for

personnel, and to monitor these processes. Several HCOs report having measurable success in applying QI practices to clinical care processes (Gregor et al., 1996; Krein et al., 2004; Lynn, West, Hausmann, et al., 2007; Monteleoni and Clark, 2004; Pestotnik et al., 1996; Solberg et al., 2006; Ullman et al., 1996).

Like other systems-based approaches, QI stresses that quality depends foremost on the processes by which services are designed and delivered. The systemic focus of QI complements a growing recognition in the field that the quality of the care delivered by clinicians depends substantially on the performance capability of the organizational systems in which they work. While individual clinician competence remains important, many increasingly see that the capability of organizational systems to prevent errors, to coordinate care among settings and practitioners, and to ensure that relevant, accurate information is available when needed is critical in providing high-quality care. This systems-based perspective on QI emphasizes organization-wide commitment and involvement because most, if not all, vital work processes span many individuals, disciplines, and departments in all clinical settings.

QI Interventions

QI interventions vary widely (Lucas et al., 2007). On the one hand, *externally developed* QI involves looking outside the organization for new or redesigned practices—often evidence-based—to bring into the organization. The emphasis of the intervention is on the desired new practice. Many efforts to bring research into practice, such as guideline implementation, fall into this category. By contrast, in *locally developed* QI, the improvement process begins with a problem, but participants do not know what the improved practices will look like; solutions evolve through analysis and experimentation. In this case, the emphasis is on changing the process by which a service or product is produced. Still other QI initiatives are broadly predefined but allow for considerable flexibility and local tailoring. The chronic care model introduced through the Improving Chronic Illness Care Collaboratives is a good example of such an approach. The Chronic Care Model consists of six interrelated system components: effective team care; planned interactions among providers; self-management support; community resources; integrated decision support; and patient registries and other information technology (IT). Registries, decision support, provider communication, and information exchange for care coordination are all important QI enablers. Registries, for example, track groups of patients with specific chronic diseases, helping medical teams to make the most of each office visit and to follow evidence-based care guidelines. Although the model provides general guidelines and identifies specific elements that should be included in a care delivery system, the way in which these elements are adapted by primary care practices will vary as a function of available resources, the types of patients treated by the practice, the size of the practice, and experience with similar forms of QI.

In practice, QI interventions can also be described in organizational terms. Interventions can be described (1) by the *levels of organization* at which the intervention is targeted (e.g., individual level, microsystem level such as teams, work units or departments, or at the macrosystem level of the full organization); and (2) by the *scale of the intervention* (e.g., single medical center or clinics, multiple sites, or national rollout). Specifying the level and scale of QI interventions can help organizational members to better understand the nature of the QI goals, as well as the potential reach and impact of the QI intervention.

QUALITY MEASUREMENT AND QUALITY IMPROVEMENT

In order for organizations to focus on quality and QI in health care, they must understand how quality is measured and monitored. The following sections describe measures and measurement of quality and discuss some of the issues related to the definition and use of different quality and performance measures to drive QI efforts in HCOs.

Quality Measures and Measurement

Based on Donabedian's (1966) definition of quality in health care, three basic classes of **quality measures** have been specified: structural, process, and outcome measures. First, **structural measures of quality** are defined as based on aspects of an organization or an individual's actions that could impact overall quality or organizational performance. From a business operations standpoint, these structural measures are associated with

the capacity of an organization to promote effective work. Examples of structural measures of quality in health care are numerous and include indicators such as the number and type of beds in a given organization, the presence of shared governance structures, and the existence of a computerized provider order entry (CPOE) system with decision support features. Even the presence of certain organizational certifications or accolades can be used as structural measures of performance, including accreditation by the Joint Commission, or receipt of Magnet status in nursing. While structural measures of quality are often under the control of a manager or an organization, they are often seen as quite distal indicators of care quality.

Next, **process measures of quality** refer to indicators of the activities involved in carrying out work in an organization. Activities such as reviewing medical records to ensure completion of patient education, monitoring physician and nurse compliance with organizational standards for cleanliness, or evaluating the use of central lines are all examples of process metrics. Process measures are often favored over structural measures because they are perceived to be more closely linked to clinical care quality, and because they are still within the span of control managers have to influence and improve work processes.

Third, **outcome measures of quality** are metrics based on the results of work performed. In many ways, outcome measures can be considered measures of work process outputs. Examples of outcome measures in health care are numerous and include metrics such as health status, patient satisfaction, and mortality. Often outcome measures are viewed as superior to other classes of quality measures because clinical outcomes are of most concern and relevance to patients and the organizations in which they receive care.

Using Quality Measures

A key foundation of any QI effort is the ability to accurately measure quality and use those measures to identify problems, monitor progress, and formulate strategies to improve quality of care. Although this seems intuitive, a variety of technical, organizational, and management issues often impede the development and use of quality metrics in HCOs. Perhaps the most fundamental problem is that many managers and boards simply do not know what to do with quality measures even when they have access to them. Whereas measures of financial performance such as ROI (return on investment) and debt-to-asset ratio are immediately recognizable to most managers and board members, many quality measures remain strange and unfathomable to these same individuals. Often this reflects a lack of training in QI, which would enable managers to translate the measures into actionable changes in care processes. Instead, managers often delegate responsibility for quality performance shortfalls to individual clinicians or medical staff who are assumed to be either the source of knowledge about the problem or its cause, rather than linking the measures to failures in the systems that are the underlying root of the problem (Alexander and Young, 2010). For example, because of their lack of proximity to actual care delivery, managers may not understand the clinical processes and support infrastructure that affects quality indicators such as medication error rates or in-hospital mortality due to cardiac arrest.

A second problem that prevents more widespread use of quality measures is the nature of the measures themselves. The validity and attribution of many outcomes-based quality measures are vigorously debated. In the first case, for example, many clinicians place very little credibility in quality metrics derived from insurance claims data, citing a lack of clinical input in such measures and considerable "noise" in the data used to produce the measures. From a managerial perspective, it makes quality measures much more difficult than, say, financial indicators to motivate change in behavior. Similarly, some quality measures are rejected because they are seen to be affected by factors other than the care provided by the organization or its members. For instance, a patient's responsiveness to a particular treatment for heart failure will likely depend upon whether the prescribed treatment actually works (based upon the patient's genetics and biology), what other (comorbid) conditions that patient has, and whether the patient is compliant with the prescribed treatment, among other things. Thus, while the care provided could have been evaluated as successful based on structural or process measures (e.g., the physician was board-certified, the bed was available without delay, the medications were available and prescribed appropriately), the outcome measure might indicate poor quality of care if the patient suffered a heart attack or died while in the hospital.

Attempts to "standardize" for such extraneous factors often take the form of debates around so-called risk adjustment in quality metrics such as hospital mortality rates. In this case, simply counting the number of in-hospital deaths would inaccurately reflect the quality of the institution unless this rate were adjusted for the complexity and severity of cases treated by the hospital, the ages of the patients, and other risk-related factors. Because there is no standard way to adjust for these risk factors, the resulting quality measures may not be accepted by those who are being held accountable for them, and organizational members may be reluctant to assume responsibility for performance over which they feel they have no control.

A third problem centers on the focus of quality measures. As noted above, many outcomes-based measures are exceedingly difficult to assess and are subject to problems of lack of buy-in by key stakeholders. Other quality metrics focus on either process or structure and rest on the key assumption that if such processes or structures are in place, then better quality outcomes will result. Such measures avoid the problems of outcomes-based measures, but carry important assumptions about the link to actual patient outcomes. On the positive side, such measures are rarely subject to risk adjustment controversies, and data on which these measures are based are usually more readily obtainable and accurate. CMS and HEDIS now incorporate a range of process-based quality measures in their Hospital Compare and health plan performance reports.

Developing Quality Measures

The issues above notwithstanding, health care managers should attempt to follow several basic guidelines in developing quality measures for QI purposes. First, quality measures should be economical. They must be easy to create, and they should not place excessive burdens on the organization or its members for new data systems, time to collect and assemble the data, or time to analyze the measures once they are created. Quality reporting systems that are not economical tend to assume a life of their own and actually become diversions from the initial purpose of the system: a tool to improve quality. Such systems are also likely to collapse under their own weight if users consider them expensive and time-consuming.

Second, the data on which quality measures are based must be timely. This means that the process of data collection/abstraction, measurement creation, and measurement reporting needs to occur in as close to real time as possible. This makes the measures relevant to those who will act on them because they reflect the current situation. If quality measurement creation and reporting take an excessive period of time, or if the measures are based on data that are several months old, the measures will not be regarded as current, and it is unlikely that such measures will be used to direct changes in care processes.

Finally, and perhaps most important, quality measures must be actionable. Accurate performance measures tell HCOs where they are on quality standards, and to take action if they are not on track or if performance does not meet expectations. That is, the measures must contain clear signals for change. It is important to note that this does not mean that the measure(s) will tell organizations or their members what needs to be changed in specific terms. In fact, a key premise underlying QI is that quality improvements result through a team-based process of analysis and process redesign. However, quality measurement is an important component because actionable measures will provide clear signals about what constitutes acceptable versus unacceptable quality, and will provide clear indications as to whether quality is improving, declining, or maintaining at a steady state level. In practice, this means that the number of measures should be kept to a few key indicators that best reflect quality in order to avoid contradictory signals from too many measures. It also means that standards and operational definitions for the measures must be clearly defined and communicated to those who will use them.

Table 9.1 provides examples of quality measures that an organization might consider. The column showing Organizational Metrics highlights measures that could be derived from data an organization may already collect, thus in keeping with the goals for quality measures to be economical, timely, and actionable. For example, most HCOs collect data on employee satisfaction through an organizational survey, and results from questions on this survey could be compiled to create a quality measure that allows an organization to monitor employees' perceptions of the "quality of work life" in that organization. On the clinical side, the IOM's aims for improvement could be used as a framework around which to develop clinical quality measures. The column showing Clinical Metrics provides examples of how these measures could be developed using commonly available clinical and organizational data.

TABLE 9.1 Examples of Quality Measures

Organizational Metrics	Clinical Metrics (Institute of Medicine's Aims for Improvement—IOM 2001)
Quality of Work Life • Perceptions of work-life balance • Often derived from organizational survey	*Safe* • Standardized mortality rate for unit, for organization • Adverse drug events per doses (1,000) administered
Employee Satisfaction with the Organization • Willingness to refer a friend or relative to the organization • Willingness to seek care within the organization • Employee turnover rates	*Effective* • Lost days of work per employee • Growth in market share for organization • Statistics related to patient safety • Perceptions about quality of care within organizational culture
Financial Metrics • Margins, etc. • Bed days per 1,000 • Market share	*Patient-Centered* • Patient satisfaction with unit, with organization • Drill down into patient education statistics
Patient Satisfaction • With care, safety, providers • Willingness to refer friend/relative for care	*Timely* • Access to care as measured by waiting times, other process measures • Measurement of delays in care
Achievement of Strategic Goals • Alignment with balanced scorecard goals • Achievement of national patient safety goals • Participation in Institute for Healthcare Improvement (IHI) campaigns	*Efficient* • Cost per adjusted hospital admission • Operating margin as measured by cash from operations *Equitable* • Disparities in care access • Disparities in utilization • Disparities in referrals made

APPROACHES TO QUALITY IMPROVEMENT

All forms of QI share certain principles. QI approaches focus on making improvements that are systematic, guided by data, and efficient (Lynn et al., 2007). Key elements of QI approaches include continuous improvement, customer focus, structured processes, and organization-wide participation (Shortell et al., 1995). These approaches are often based on experiential learning, view improvement as part of the work process, and involve deliberate steps that are expected to improve care (Lynn et al., 2007). Often, an organization employs multiple QI approaches together. Table 9.2 presents a glossary of common terms and programs associated with QI in health care, and includes relevant Internet addresses when available.

TABLE 9.2 Glossary of Common Terms and Programs Associated with QI in Health Care

AIDET: A communication tool espoused by the Studer Group, designed to help clinicians establish trust with patients in order to improve compliance and clinical outcomes. AIDET is an acronym that stands for Acknowledge, Introduce, Duration, Explanation, and Thank You (http://www.studergroup.com/dotCMS/detailProduct?inode=110454).
Baldrige Award: A prestigious national award to companies in several categories, including health care, that recognizes demonstrated excellence in seven categories: leadership; strategic planning; customer and market focus; measurement, analysis, and knowledge management; workforce focus; process management; and results. Applications are reviewed by an independent Board of Examiners (http://www.baldrige.nist.gov/).
Benchmarking: A key feature of many QI approaches, **benchmarking** is the process of comparing an organization's performance metrics (e.g., quality, cost, operational efficiency) to those of other "best practice" or peer organizations.
Business Process Reengineering (BPR): Term used to describe efforts to radically review and reorganize existing work processes, or adopt new and innovative work processes, designed to improve customer value, organizational efficiency, and market competitiveness. A key to BPR is the development of organizational and management structures to effectively support the redesign (e.g., information technology) (see Hammer, 1990).
Clinical Practice Guidelines: Typically developed by expert panels, **clinical practice guidelines** synthesize evidence from the literature and make recommendations regarding treatment for specific clinical conditions (see IOM, 2001). The National Guideline Clearinghouse (http://www.guideline.gov) is a publicly available resource for evidence-based guidelines covering a full range of clinical conditions.
Continuous Quality Improvement (CQI): A participative, systematic approach to planning and implementing a continuous organizational improvement process.
Crew Resource Management (CRM): A technique from the aviation field that addresses errors resulting from communication and decision making in dynamic environments, such as teams, that has been adopted in the health care field to improve patient safety. CRM is among the evidence-based safety practices included in the Agency for Healthcare Research and Quality's document entitled "Making Health Care Safer: A Critical Analysis of Patient Safety Practices Evidence Report/Technology Assessment, No. 43" (**http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=erta43&part=A64100**).
Crucial Conversations: Refers to concepts and techniques articulated in Patterson et al. (2002).
Fortune "Best Places to Work: *Fortune* magazine's annual ranking of U.S. companies with greater than 1,000 FTEs that have been nominated as a "great place to work." Awards are based on results of employee surveys (in 2009, 81,000 employees surveyed across 353 companies) and a "culture audit" conducted in each company (http://www.greatplacetowork.com/).
High-Reliability Organizations: High-reliability organizations (HROs) are those that have incorporated a culture and processes to "radically reduce system failures and effectively respond when failures occur" (http://www.ahrq.gov/qual/hroadvice/hroadviceexecsum.htm).
High-Performance Work Practices (HPWPs): Workforce or human resource practices that have been shown to improve an organization's capacity to effectively attract, select, hire, develop, and retain high-performing employees.
Just Culture/Just Safety Culture: Term used to describe an organizational culture that encourages open dialogue to facilitate patient safety practices; often described in contrast to a "blame" culture (that focus on individuals, rather than systems, as the source of safety infractions). A just culture gives some "leeway to individuals, but is still premised on . . . accountability and bureaucratic control." More recently, scholars are advocating that just culture focus on organizational learning in the areas of quality and safety (Khatri, Brown, and Hicks 2009).

TABLE 9.2 Glossary of Common Terms and Programs Associated with QI in Health Care *(Continued)*

Lean: A management and operations improvement approach, often described as a "transformation" that focuses on eliminating waste across "value streams" that flow horizontally across technologies, assets, and departments (as opposed to improving within each). The intent of a Lean approach is cost-effectiveness, error reduction, and improved service to customers. The term "Lean" was originally coined by Jim Womack, PhD, to describe innovations in Toyota's manufacturing processes (http://www.lean.org).
Magnet Status: A prestigious external designation from the "Magnet" program, this status recognizes hospitals that demonstrate 14 characteristics that comprise an excellent working environment for nurses (e.g., nursing leadership, quality of patient care, level of nursing autonomy, staffing ratios, professional development) (http://www.nursecredentialing.org/Magnet.aspx).
Pay-for-Performance (P4P): Reimbursement for health care services that is designed to link payment incentives to quality and performance outcomes. Demonstration programs to test various approaches have been under way through the Centers for Medicare and Medicaid Services (see IOM, 2007).
Pebble Project: An initiative through the Center for Health Design, which works with partners to develop facilities that incorporate "evidence-based design" features that have been demonstrated to reduce errors, improve quality and efficiency, and improve work experience (http://www.healthdesign.org/research/pebble/).
Performance Improvement International: A consulting company that espouses a system-oriented, engineering-based performance improvement methodology, which uses performance indicators and root-cause analysis to reduce errors and improve performance (http://www.piionline.com/company/index.html).
Planetree: The Planetree Institute has developed a model of care that is a "patient-centered, holistic approach to healthcare, promoting mental, emotional, spiritual, social, and physical healing. It empowers patients and families through the exchange of information and encourages healing partnerships with caregivers. It seeks to maximize positive healthcare outcomes by integrating optimal medical therapies and incorporating art and nature into the healing environment." Planetree partners adapt the model to fit their unique circumstances (http://www.planetree.org/).
Quality Improvement Organization (QIO): The Centers for Medicare and Medicaid Services contracts with QIOs in each state to monitor, report on, and facilitate improvements in the appropriateness, effectiveness, and quality of care provided to Medicare beneficiaries (http://www.cms.gov/QualityImprovementOrgs/).
Six Sigma: A data-driven methodology for eliminating defects in any process by applying a consistent framework of DMAIC (define, measure, analyze, improve, control) to minimize variation and improve processes. Six Sigma was started at Motorola and has been widely adopted at other companies, including General Electric (http://www.isixsigma.com).
Studer Group: A health care consulting organization "devoted to teaching evidence-based tools and processes that organizations can immediately use to create and sustain outcomes in service and operational excellence." Additional ideas and methods are available from leader Quint Studer (e.g., Studer, 2003) through Web-based resources, a newsletter, and organizational consulting engagements (http://www.studergroup.com).
Studer Group "Pillars": A strategic organizing framework developed by the Studer Group (see above) for communicating strategy and performance improvement efforts, as well as holding employees accountable to organizational goals and standards. According to the Studer Group, these five pillars, tailored for an organization's vision, provide a consistent framework for organizations to set goals and develop metrics for key components of their business (http://www.studergroup.com/dotCMS/knowledgeAssetDetail?inode=109970).
Total Quality Management (TQM): A participative, systematic approach to planning and implementing QI in quality.

Two popular approaches to QI are *continuous quality improvement* and *Six Sigma*. **Continuous quality improvement** (CQI) is a QI approach that originated in the mid-1980s (Nichols, 1995). Blumenthal and Kilo (1998) wrote that CQI is a series of methodologies designed to improve quality and promote a vision of leadership. The CQI movement focuses on improving organizational processes, which in turn creates better quality. Through CQI, one applies scientific work processes using effective, straightforward techniques. As opposed to QI approaches such as clinical practice guidelines, CQI focuses on the use of generic analytic techniques that facilitate improvement of both clinical and nonclinical processes. CQI is also characterized by its encouragement of managerial reforms that are designed to bring about organizational change. Such reforms include the need to empower employees to learn and participate in the continuous improvement process.

Six Sigma is a QI strategy invented by Motorola in the mid-1980s. "Sigma" is a term used in statistics that measures variation. The premise for this strategy is that if you can measure the number of defects that occur in a process, you can systematically work to eliminate them, getting as close to zero defects as possible. The goal is to reduce variation by employing the DMAIC (define, measure, analyze, improve, control) system to improve processes (Adams et al., 2004). Although this strategy was first applied to manufacturing, it is relevant to the health care field as well. In health care, the number of defects might be the number of diabetes patients who do not receive an annual eye exam, per million diabetes patients. The principles of Six Sigma can be used in health care to ensure that we always provide effective care to those who could benefit, never provide ineffective services, and eliminate all preventable complications of medical care (Chassin, 1998).

CQI and Six Sigma differ in several ways. CQI is known as an "evolutionary" method of QI, which is often used when the problem is relatively minor and localized. CQI attempts to implement smaller, incremental improvements when a major redesign of processes is not thought to be necessary. In contrast, Six Sigma is known as a "revolutionary" QI approach, which is often used when more major improvements are necessary (Benedetto, 2003). Compared to CQI, Six Sigma often uses more advanced data analysis tools, incorporates financial results more explicitly, and is often performed under a tighter time frame (Kwak et al., 2006).

GETTING TO HIGHER QUALITY AND QUALITY IMPROVEMENT

The Challenge of Implementation

Although QI holds promise for improving quality of care, HCOs that adopt QI often struggle with its implementation. **Implementation** is the critical gateway between the decision to adopt the QI innovation and the routine use of the QI innovation, or integration of a new idea or practice into the operating system of the organization. For example, implementation occurs when clinical and nonclinical staff apply QI principles and practices routinely to improve clinical care processes. There are three general classes of success or failure in QI implementation: (1) widespread or unit/role-specific avoidance of the QI innovation (nonuse); (2) meager and unenthusiastic use (compliant use); and (3) skilled, enthusiastic, and consistent use (committed use) (Klein and Sorra, 1996). The frequency of the first two categories is disturbingly high. Recent studies estimate implementation rates of evidence-based practices to be less than 50 percent (Burstin et al., 1999; Li et al., 2004; McGlynn, Asch, and Adams, 2003). More importantly, QI programs are unlikely to be effective in improving quality of care unless they are fully implemented and become part of the standard operating routines of organizations.

Why is the level of QI implementation so low? In a general sense, implementation of most new, innovative practices is demanding on both individuals and organizations. It requires

DEBATE TIME

Health care systems are being challenged to increase value through both improvements in care quality and reductions in service delivery costs. Many different strategies can be deployed to address these issues, such as the process improvement techniques outlined by Six Sigma, Lean, and CQI, among others. For an organization deciding among the various alternatives, what should be considered? How much do you think it matters which QI approach is selected? What other factors could affect the success of a QI strategy?

a complex mix of sustained leadership, extensive training and support, robust measurement and data systems, realigned incentives and human resource practices, and cultural receptivity to change. Further, QI initiatives are often complex interventions that, by definition, evolve over time. Assuming that the intervention will immediately function exactly as planned is both unrealistic and impractical. Finally, the context in which improvement initiatives are implemented (i.e., the structures, processes, and culture of the larger organization and environment) can exert a powerful influence on the success of a QI initiative, independent of the initiative itself.

In addition, QI implementation in HCOs is particularly challenging due to the nature of the work, the workforce, and considerations related to performance measurement and control systems in this industry. These issues and their relationships to QI implementation are discussed further below. Table 9.3 is provided to highlight some of the key

TABLE 9.3 Health Care Organization Features, Implications, and Principles for QI Implementation Effectiveness

Industry Feature	Contribution to Implementation Failure	Key Principle for Implementation Success
Nature of work • High uncertainty • Risk of customer fatality • Hinges on clinician discretion	• Workforce aversion to the experimentation required for successful implementation	• Create opportunities for nonthreatening workforce experimentation and adaptation of innovation
Workforce • Interprofessional interactions governed by an established hierarchy • Strong professional identification, weak organizational identification	• Workforce aversion to the collaborative learning required for mastering increasingly interdisciplinary innovations • Little workforce interest in participating in organizational improvement efforts	• Frame implementation as a learning challenge • Increase the attractiveness of the perceived organizational identity and construed external image to generate interest in organizational citizenship behavior
Leader-workforce relations • Transactional exchanges are prevalent • Perceived conflict of goals between leaders and workforce	• Leaders and workforce unable to place collective goal (i.e., innovation implementation) above self-interest	• Incorporate transformational leadership processes for innovation implementation
Performance measurement and control systems • Underdeveloped • Performance/implementation not rewarded • Founded on calculus-based trust, not relational trust	• Difficult to detect implementation problems and thus make adjustments • Incentives do not favor implementation	• Involve workforce in development of system • Measure and reward implementation efforts

SOURCE: Adapted from Nembhard et al. (2009).

issues of concern and show how these issues are related to QI implementation success in HCOs.

The Nature of Work in Health Care

As discussed in other chapters of this textbook, work in health care is often distinct from work in other industries. Three areas of difference are particularly salient when considering the importance of quality and QI in health care: risk; work norms; and clinician discretion.

Risk (Aversion). Although many QI innovations are designed to improve quality in the long run, their implementation often increases the risk of failure in the short run while staff become familiar with the new practice. Early implementation efforts often result in failures, including damage to the QI innovation, damage to the organization's reputation, or harm to patients. Individuals' fear of failure limits their willingness to experience failure. However, willingness to experience failure is critical to improvement in many areas of health care delivery. Failures offer valuable insights on what does and does not work. "Controlled" failures are therefore instructive on how to improve existing care processes and avoid implementation failure. Despite health care workers' aversion to risk, it is important to try to create safe environments in which workers can strive to improve quality of care without debilitating fear (Nembhard et al., 2009).

Work Norms. The aversion to implementation that health professionals feel stems not only from the fear of failure in general, but also from the specific fear of causing harm to patients. When a behavior is consistent with existing norms, individuals deem it appropriate and are more likely to behave accordingly. Conversely, when behavior seems inconsistent, individuals refrain from participating. Unfortunately, to many health professionals, QI implementation appears inconsistent with occupational norms because it can lead to patient harm. For example, a clinician may resist using a single evidence-based procedure for diagnosing a tumor if she feels that the risk of harming the patient would increase if she does not perform a wider battery of tests. This potential violation is sufficient cause for many health professionals to resist QI implementation. A review of 76 studies identified concerns about harming patients as a primary reason for implementation avoidance (Cabana et al., 1999). Avoidance of a new practice is a natural response when it threatens deeply held norms (e.g., "do no harm").

Clinician Discretion. Outside of health care, workers do not have the same liberty to avoid implementation of new practices. By contrast, health care professionals' high level of discretion over implementation is related to their discretion over clinical practice. Because of their monopolistic and protected control over medical knowledge, health professionals are given unparalleled authority over clinical practice. Health care managers' authority pales in comparison because, unlike in other industries, most health care managers do not have the professional credentials of their workers (e.g., MD), and because most professional workers (e.g., physicians) are not bound by employment contracts to abide by manager dictum (Nembhard et al., 2009).

In other industries, managers' authority gives organizations an implementation advantage. Once managers articulate QI implementation as an organizational policy, workers are compelled to comply with implementation efforts. Health care managers do not have such authority because QI implementation often affects the clinical work of health professionals, who frequently decide against innovation implementation for the reasons described. Once professionals decide against an innovation, implementation failure almost inevitably occurs (Nembhard et al., 2009).

Workforce Characteristics and Implementation Challenges

Specialization. Burgeoning medical knowledge and the complexity of health care delivery have resulted in increasing specialization in the health care workforce. For example, physicians specialize in one of 120 disciplines including internal medicine, cardiology, adult cardiothoracic anesthesiology, hand surgery, pediatric endocrinology, and abdominal radiology. Other specialized health care professionals include nurses, therapists, nutritionists, phlebotomists, pharmacists, and so forth.

The high degree of specialization in health care means that each professional brings only partial knowledge needed to care for patients. In practice, the expertise of over 20 health professionals must be integrated to provide care for a single patient in a hospital. There is increasing recognition that these professionals must collaborate to be effective (IOM, 2004). Yet despite the imperative for collaboration, it is often missing from professional interactions, and its absence is a leading cause of quality problems. At a children's hospital in Boston, a five-year-old boy died from a seizure because he received no treatment. An investigation later revealed that his physicians had never communicated with each other about who was in charge of his care. Instead, each assumed another had taken charge, and each therefore removed himself from the boy's care, leaving no one to provide treatment.

The Physician Culture. Collaboration problems in the health care workforce result largely from the hierarchical, individualistic culture of medicine, which is deeply rooted in the socialization process for health professionals. Health professionals are socialized before employment through their specialty training programs, which often span a period of 10 or more years—a period longer than is required in most service industries. During training, professionals learn not only how to treat patients, but also how to view themselves and how to interact with others inside and outside of their profession. Physicians, for example, learn to be independent, authoritarian, autonomous, competitive, conservative, reactive, quick, detached actors. They learn to treat others in their discipline with respect and in high regard. They learn to treat individuals in other professions in accordance with the established medical professional hierarchy. In this professional hierarchy, specialists rank higher than primary care physicians, who rank higher than nurses, who rank higher than therapists, and so on. The lower an individual's professional rank, the less consideration given to that individual in clinical decision making. In practice, all individuals are mindful of the hierarchy, and feel a strong sense of professional identification—characteristics that affect not only quality of care, but also efforts to improve quality of care through QI, which depends fundamentally on team-based approaches to change rather than top-down control (Nembhard et al., 2009).

The Professional Hierarchy. Health care QI increasingly requires interdisciplinary teamwork, meaning its implementation cannot succeed without professionals from multiple disciplines collaborating both to develop new approaches to care and to learn to use them. Unfortunately, HCOs' hierarchical culture stifles organizational members' willingness to participate in the collaborative learning that is necessary for QI success. Collaborative learning is the iterative process of individuals or groups of individuals *working together* to improve their actions by incorporating new knowledge and understanding. It involves jointly analyzing information, openly discussing concerns, and consciously sharing decision making and coordinating experimentation. In turn, individuals must be willing to challenge others' views, acknowledge their own errors, and openly discuss failed experiments. These behaviors are interpersonally risky because they create the possibility for an individual to appear incompetent or belligerent and thereby potentially diminish that individual's reputation among colleagues (Nembhard et al., 2009).

Individuals take such risks only when they perceive a psychologically safe work climate. Unfortunately, the medical professional hierarchy has undermined the psychological safety of individuals whose professions fall lower in the hierarchy. Nurses frequently report that "it is difficult to speak up" and "nurse input is not well received." Moreover, they report negative consequences (e.g., punishment, rejection, embarrassment) of voicing concerns and suggestions to individuals of higher status and of participating in failed experiments. Hence, they shy away from collaborative learning situations such as QI implementation.

Professionals at the higher end of professional hierarchies shy away as well. A study of employee involvement programs in eight manufacturing plants showed that those in higher-status positions (i.e., supervisors) often resisted the implementation of these programs because they felt that these programs, which were premised on collaborative learning, undermined their control and authority. In some plants, this belief led supervisors to criticize the program, which then discouraged lower-status staff from participating. In the end, the programs failed because neither high- nor low-status staff would participate (Klein, 1984).

Professional Identification. Professional identification has effectively limited organizational identification (i.e., individuals' sense of alignment with the organization). This weak organizational identification negatively affects QI implementation in two ways. First, it limits the organization's ability to motivate the collaboration needed for implementation success. Collaboration among individuals who are otherwise pulled in different directions by professional allegiances is a function of group (e.g., organizational) identification. When this identification is weak, it is more difficult to motivate collaborative learning and successful implementation.

Second, weak organizational identification is problematic for HCOs' QI implementation because health professionals historically regard QI implementation as an additional and distinct activity from their core task of patient care delivery. When a workforce holds this view, the organization is dependent on its staff's positive, extra-role behavior—also called organizational citizenship behavior—to accomplish the "additional task." Staff are more likely to engage in this type of behavior when they strongly identify with the organization. For example, studies suggest that physicians who strongly identify with a hospital participated more in the hospital's committees (Dukerich, Golden, and Shortell, 2002). Similarly, physicians are more likely to implement new clinical practices when they feel aligned with the HCO (Nembhard et al., 2009).

Performance Measurement and Control Systems

Performance measurement and control systems collect data and reward specific behaviors and outcomes. Historically, performance measurement and control systems in health care have been underdeveloped. Few HCOs collect data regarding their own processes and performance. Unlike other service or manufacturing organizations, the most common quality data available to physicians come from third-party payers, which suggests a dependence on others for information about their own organizations. Whether received from external sources or self-collected, data often tend to be underutilized to inform organizational behavior (Nembhard et al., 2009).

The lack of well-developed performance measurement and control systems in health care reflects a number of factors. First, HCOs and their members often equate working hard to deliver patient care with delivering the best possible care. As a result, any instances of poor performance are seen as random and not subject to prevention or intervention. Thus, there is little perceived need to invest in performance measurement and control systems. Second, by not investing in these systems, professionals minimize their exposure to information that would challenge the belief that their effort was associated with the best quality care. Avoidance or use of "selective exposure" is a common strategy for minimizing cognitive dissonance (Festinger, 1962). Third, defining and developing valid measures of quality and performance in health care is inherently difficult because of the inherent nature of the work. Much debate remains about what should be measured (e.g., structure, process, or outcomes) and what constitutes a valid measure. Fourth, because HCOs and health professionals have been paid the same amount regardless of whether they provide high- or low-quality care, they have had little incentive to invest in costly measurement systems (Nembhard et al., 2009).

Implementation Policies and Practices

As described above, QI initiatives are often unsuccessful due to implementation failures. Klein and Sorra's (1996) innovation implementation model describes the determinants of the effectiveness for organizational implementation. They posit that the quality and consistency of the use of an adopted innovation (such as a QI approach) is a function of (1) the organization's climate for the implementation of the innovation, and (2) the employees' perceptions of the fit of the innovation to their values. The organization's climate refers to the shared summary perceptions of targeted employees concerning the degree to which their use of a particular innovation is rewarded, supported, and expected within the organization. Organizations can encourage innovation implementation by ensuring that employees have the skills necessary to use the innovation, providing incentives for using the innovation and disincentives for not using the innovation, and removing obstacles that prevent use of the innovation.

Implementation policies and practices (IPPs) refer to an array of organizational policies, practices, and characteristics that influence QI use (e.g., training, user support, incentives, recognition, end-user participation, and workload changes) and can be used to support innovation implementation. IPPs facilitate implementation by increasing employees' capabilities, motivations, and opportunities to put the innovation into use. IPPs can be classified into three interdependent categories: organizational infrastructure and support; QI tactics and strategies; and perception management.

Organizational Infrastructure and Support

Implementation policies and practices within this category range from how the organization is structured and financed to how the organization addresses learning. These distinct types of IPPs are each addressed individually below.

Organizational Structure. Increasing organization around clinical processes rather than traditional functional (or disciplinary) departments facilitates QI implementation by lowering organizational and professional barriers to clinical QI. Such clinical integration supports QI by creating a cultural mind-set that emphasizes meeting customer needs instead of accommodating professional needs, calling attention to processes of care instead of individual tasks, and promoting the formation of cross-functional, multidisciplinary teams to analyze and improve care delivery processes.

Financial Support. Developing robust information systems and reorganizing around clinical processes require significant financial resources (Greenhalgh et al., 2004; Cummings et al., 2007). Allocation of resources to QI efforts represents a key indicator of organizational commitment. The support of QI with hard resources may differentiate those organizations that are serious about QI from those that are simply mimicking the

latest trend. Hence, beyond the organization's general financial health, its specific investment in QI may be an important feature of a supportive organizational context. Although financial support is a key aspect of QI infrastructure, other resources such as training, education, physical space, and even time have been positively associated with QI implementation. For example, organizations that have "slack resources" that allow people to "squeeze" time to experiment with a new QI innovation without disrupting existing routines may lead to higher rates of implementation (Damschroder et al., 2009).

Organizational Culture. Culture comprises the fundamental values, assumptions, and beliefs held in common by members of an organization. It is often treated as if it is stable, socially constructed, and subconscious. Employees impart the organizational culture to new members, and culture influences in large measure how employees relate to one another and the manner in which they approach their "work." Although nearly all QI change efforts are targeted at "objective" aspects of an organization, such as work tasks, structures, and processes, many of these initiatives fail because there is no corresponding change in organizational culture. In other words, these changes often do not stick because they are inconsistent with prevailing values, understandings, and unspoken "rules" in the organizations. For example, organizational cohesion and adaptability to change are important features found in entrepreneurial-leaning organizations. By contrast, organizations with more formalized cultures may be less prone to adopt QI innovations because of the emphasis on maintaining rules and policies, low acceptance of new ideas, and continuance of the status quo. Cultural change is difficult and time-consuming, but any long-term commitment to sustainable QI needs to address this important aspect of organizational context.

MANAGING THE DISNEY WAY

The importance of quality and QI is not limited to health care. Even though other industries are concerned with different products and services, those in the health care industry can still learn valuable lessons by studying other companies and management techniques.

In his book, *If Disney Ran Your Hospital: 9½ Things You Would Do Differently* (2004), Fred Lee shares insights from his experience working for a short time as a Disney cast member. Lee develops his perspective by examining Disney and the Disney culture based on comparisons with his experiences in the health care industry, and specifically drawing on his perspective as senior vice president at Florida Hospital in Orlando.

Lee ties together his list of things hospitals could do differently by focusing on the importance of culture in organizations. Rather than emphasizing service, he notes, a focus on cultural excellence can tie together an organization and its employees' pursuit of common, valued goals. Disney's four areas of "quality focus" are prioritized: (1) safety; (2) courtesy; (3) show (i.e., the areas of Disney that create a "sensory impression"); and (4) efficiency. By clearly delineating these strategic priorities, employees have an accessible map by which to guide their actions.

The 9½ things Lee highlights as opportunities for hospitals to learn from Disney include the following:

1. Redefining the competition
2. Emphasizing courtesy over efficiency
3. Reducing reliance on patient satisfaction as a metric
4. Focusing on measurement for improvement
5. Decentralizing authority
6. Changing the concept of work
7. Harnessing the power of employees' imaginations to motivate them

MANAGING THE DISNEY WAY (*Continued*)

8. Creating a climate of dissatisfaction
9. Ending the use of competitive monetary rewards as a means of motivating employees
10. Closing the gap between knowledge and action

Lee acknowledges that being a manager in a hospital is considerably more challenging than being a manager at Disney, where customers want to be and where the lower-risk environment presents situations that can be standardized. Yet despite the obvious differences, Lee's list and accompanying discussion present intriguing opportunities for QI in hospitals that those working in the health care industry may wish to consider.

SOURCE: Lee (2004).

Leadership and Management Support and Engagement. Leadership refers to leaders at all levels of an organization who have a direct or indirect influence on QI implementation. In addition to high-level leaders, middle managers are important because of their ability to network and negotiate for resources and because they are often in a position to assign greater (or lesser) priority to QI relative to other organizational demands. Commitment, involvement, and accountability of leaders and managers have a significant influence on the success of QI implementation. Management support in terms of commitment and active interest leads to a stronger implementation climate that is, in turn, related to implementation effectiveness. Managers can be important conduits as they can help persuade stakeholders via interpersonal channels and by modeling norms associated with implementing an intervention. Managerial patience (taking a long-term view rather than a short-term view) allows time for the often-inevitable reduction in productivity that occurs until the intervention takes hold; this patience is also more likely to lead to implementation success. However, if the decision to adopt and implement is made by leaders higher in the hierarchy who mandate change with little user input in the decision to implement an intervention, then implementation is more likely to fail. Middle managers are more likely to support implementation if they believe that doing so will promote their own organizational goals, and if they feel involved in discussions about the implementation.

Governance Leadership. Governing boards have an important role to play in overseeing QI efforts and patient safety initiatives because they are the organizational entity legally accountable for quality of care. Beyond fulfilling their oversight responsibilities, boards can potentially play a leadership role by establishing quality and safety as organizational priorities, allocating resources to support QI efforts and patient safety initiatives, revising executive compensation and performance evaluation criteria, and fostering a corporate culture that values quality and safety. In HCOs, the governing board responsibility for quality is clearly delineated in statutory law, regulatory requirements, and accreditation standards.

The board's contemporary role in ensuring quality of care emerged from an expanding legal accountability. Hospital licensure law in all 50 states underscores the board's responsibility for quality and for overseeing the medical staff (Orlikoff and Totten, 1991). In addition, the federal government requires hospitals receiving Medicare reimbursement to comply with the quality-related regulations set forth in the Conditions of Participation in the Medicare Program (Anthony and Singer, 1989). Finally, the Joint Commission sets forth expectations and responsibilities for HCO boards (Joint Commission, 2005).

Although boards have a potentially valuable role to play, several features of board composition, structure, process, and context must be addressed to ensure the board's fulfillment of its responsibility for quality. First, few board members possess health care backgrounds or clinical expertise. Board members are often selected on the basis of their business experience, professional skills (e.g., legal, marketing, finance), community ties, personal values, time availability, or a combination of these factors. Although board members from manufacturing and service industries may be familiar with quality issues in their own organizations, they often report feeling confused about

IN PRACTICE: Research on High-Performance Work Practices in Health Care Organizations

Critical in providing high-quality care is the presence of a competent and capable workforce. Outside health care, a breadth of research suggests that innovative human resource (HR) practices (or, **high-performance work practices** [HPWPs]) can be an important element of efforts to improve quality and performance. These HPWPs include activities such as systematic personnel selection, incentive compensation, and the widespread use of teams, and they can help organizations in their efforts to attract and retain highly qualified employees.

Within health care, the question was raised as to whether the use of HPWPs could have a similarly important effect on quality of care and organizational performance. Subsequently, a research team funded by the Agency for Healthcare Research and Quality (AHRQ) designed a project to investigate the use of HPWPs, with particular interest in exploring potential links between the use of HPWPs and factors related to quality of care and patient safety in U.S. HCOs.

The team's first task was to undertake an extensive review and synthesis of the literature available—both academic and "gray" literature, such as reports and publications available outside peer-reviewed journals. Next, the team developed a preliminary model that outlined four key subsystems (or "bundles") of HPWPs, and delineated the relations among these subsystems as well as their potential organizational effects. Then, the team performed five case studies of U.S. HCOs that had been selected based on the HCOs' known success with HPWP implementation. The team conducted site visits in 2009, where they performed 71 interviews with key organizational and clinical informants and collected organizational documents related to the HPWPs that were in use. All the key informant interviews were recorded and transcribed for further analysis.

The team found that all four of the HPWP subsystems they had previously characterized as directly relevant to health care (organizational engagement, staff acquisition/development, frontline empowerment, and leadership alignment/development) were emphasized in the five case study organizations. They found substantial variation in what HPWPs were selected, and also noted innovative applications in the HCOs. The group also found evidence of links between the use of HPWPs and employee outcomes (e.g., turnover, higher satisfaction/engagement). While the team was unable to collect hard data, they noted that the key informants consistently reported believing that HPWPs made important contributions to both care system and organization-level outcomes (e.g., fewer "never events," innovation adoption, lower agency costs, and lower turnover costs), some of which were directly related to quality of care.

The results of this research provide preliminary evidence and examples of ways that HPWPs can be used to improve operations in HCOs. The results also suggest that HPWPs have promise with respect to their ability to impact quality and safety. The team concluded that HPWPs should be considered when addressing the challenges of performance improvement in health care, and suggested the need for further research to investigate which HPWP practices and combinations might have the greatest potential for health care QI.

SOURCE: McAlearney et al. (2010).

their responsibility for quality of care, ill prepared to evaluate quality of care, and uncomfortable taking action to rectify a quality problem (e.g., denying physician reappointment or disciplining an incompetent physician). Boards also face a disjointed quality committee system. In hospitals, for example, both board committees and medical staff committees are charged with improving quality of care and service. This dual committee structure complicates the board's ability to perform effective quality oversight. Third, many boards do not possess adequate *governance information systems*—that is, information systems designed to support governance work. Board members receive either too much information or too

little to monitor quality effectively. Moreover, they do not receive information in a format that makes it easy to discern what action they should take to rectify a quality problem or improve quality. Finally, boards spend much of their meeting time focused on financial issues; quality may not even appear as a regular agenda item in every board meeting.

To meet the challenges that have been identified for hospital governance, boards require training to strengthen capabilities around managing the hospital/physician interface and quality of care. Boards need to first engage in careful self-assessment of their own development and orientation relative to their responsibilities. As noted, many board members lack the experience and skills to effectively carry out the activities necessary to strengthen hospital/physician alignment and oversee quality of care. Board members also need to understand the cultural barriers that separate hospital management from physicians, and to determine who can take the steps to help close those barriers through the development and communication of a common vision and related strategies. Rather than the traditional hands-off posture taken by many boards, successful boards need members who are able to reach out to medical staff members and cultivate a culture that supports a quality-driven agenda that does not rely exclusively on structural arrangements to align the board with the organization.

Learning Climate. Developing a climate that promotes learning is a "core property" that health care organizations need for ongoing QI. Similar to culture, a positive climate creates a receptive context for change. Specifically, a learning climate is one with a set of interrelated practices and beliefs that support and enable employee and organizational skill development, learning, and growth. In a learning climate, stakeholders are not constrained by failure. A climate of psychological safety is promoted. Key characteristics of a learning climate that promotes QI implementation are that: (1) a compelling and inspiring reason for QI innovation use is clearly articulated; (2) leaders express their own fallibility and need for team members' assistance and input; and (3) leaders communicate to team members that they are essential, valued, and knowledgeable partners in the change process. Having the time and space for reflective thinking and evaluation is another important characteristic because it promotes learning from past successes and failures to inform future QI efforts. It is important to note that learning "climates" often vary across subgroups, and unit- or team-based expressions of these attributes may have a stronger influence than overall organizational learning.

MANAGEMENT LESSONS FROM MAYO CLINIC

Mayo Clinic is known worldwide for excellence in both quality of care and service. Founded in Rochester, Minnesota, over 140 years ago, Mayo Clinic has expanded to include additional hospitals in Rochester and new Mayo Clinic facilities in Jacksonville, Florida, and Scottsdale, Arizona. Leonard Berry and Kent Seltman, in an effort to learn more about the success behind this "100-Year Brand," undertook a study of Mayo Clinic's service culture and systems through interviews and observations of clinician-patient interactions. Their book, *Management Lessons from Mayo Clinic* (2008), describes their findings.

Throughout the book, Berry and Seltman provide multiple examples of the important roles of culture, teamwork, learning, communication, and professional integration in providing excellent care and succeeding with efforts to implement improvement interventions that can ensure quality and service. With respect to quality and QI, for instance, at Mayo Clinic, "quality is defined by clinical outcomes, safety, and service" (p. 229). While Mayo Clinic is consistently listed among the best when ranked by objective metrics assessing quality of care, the Clinic continues to strive for improvement. As explained by one leading Mayo Clinic physician, "No one is better positioned to break away from the rest of the leaders in clinical reliability than an integrated group practice that values teamwork, understands the dividends of a more horizontal, cross-functional team of nurses, technicians, doctors, pharmacists, and administrators, and has a century-long history of patient-centered care facilitated by a large contingent of systems engineers" (p. 229). With an attitude that "we can do better," physicians and administrators at Mayo Clinic work together in a learning environment, united by the Mayo Clinic core value of "the needs of the patient come first" that is embedded in the organization's culture.

SOURCE: Berry and Seltman (2008).

APPLYING QUALITY IMPROVEMENT FRAMEWORKS

QI Tactics and Strategies

Create Opportunities for Staff Experimentation and QI Adaptation

HCOs' members' reluctance to participate in QI implementation may be addressed by creating opportunities for them to experiment with QI innovations in nonthreatening ways. Nonthreatening opportunities (e.g., training, pilot projects, dry runs) create low-risk settings where failures have little or no consequence for patients. They enable staff to gain familiarity with the innovation, experience its benefits, and develop user competence. As a result, staff in such settings are less likely to view the innovation as posing high risks, and thus are less likely to resist its implementation.

When staff are not resistant, implementation success is more likely. For example, staff having time to train with a QI innovation is a positive predictor of implementation success. Similarly, units that used activities such as dry runs (with a dummy serving as the patient in clinical procedures) and pilot projects to implement innovative practices experience greater implementation success (Tucker, Nembhard, and Edmondson, 2007). Use of these activities facilitates implementation success not only by reducing risk-derived resistance, but also by fostering "attitudinal commitment," or commitment that generates staffs' active involvement in QI implementation.

Frame QI as a Learning Challenge

To counter the negative psychological and behavioral effects of the hierarchical culture of medicine with respect to implementation, QI innovations must be appropriately framed. Framing is the process of providing a lens through which to interpret a situation. Challenges can be framed in terms of performance or learning. Individuals or groups that adopt a performance frame view a new task as similar to current practice, while those that adopt a learning frame see the task as different and therefore an opportunity to explore new actions and relationships. Consequently, the behavior that follows from adoption of each frame differs. Teams whose leaders explicitly framed implementation as a learning rather than as a performance challenge were more likely to abandon existing interpersonal routines, including those premised on hierarchical interactions, and were more likely to adopt collaborative learning behaviors (Edmondson, 2003). Moreover, members of these teams (regardless of professional rank) felt psychologically safe and excited about offering their input (Edmondson, 2003).

Promote Organizational Identification

While professional identification may often conflict with the need for organizational identification associated with successful QI implementation in health care, such conflict is not necessary. There are at least two strategies for fostering the organizational identification needed for implementation success in HCOs: (1) increase the attractiveness of the perceived organizational identity, and (2) increase the attractiveness of the external image

IN PRACTICE: Pursuing Patient Safety through Safety Coach Training

Hospital Z recognized an opportunity to improve care quality through the empowerment of frontline staff to identify potential safety risks and to address those risks in real time. Using the organization's existing safety-coach structure, the hospital provided training on speaking up using a "crucial conversations" framework. A comparison of pre-post surveys revealed substantial improvements in the percentage of staff indicating that they "speak up and completely express their concerns" across all areas measured. For example, pre-training, survey results showed that 10 percent of staff indicated speaking up about observed use of shortcuts, compared with 36 percent post-training. Other comparisons pre- and post-training showed similar differences (e.g., speaking up about mistakes observed: 43 percent pre-training versus 16 percent post-training; about observation of poor competency: 33 percent versus 10 percent; about observation of poor teamwork: 26 percent versus 8 percent; about observation of disrespect: 21 percent versus 7 percent; and about observation of abuse of authority: 11 percent versus 4 percent).

SOURCE: McHugh, Garman, Song, and McAlearney (2010).

of the organization (i.e., the image held by those outside of the organization) (Dukerich et al., 2002). The former strategy builds on research finding that physicians feel stronger organizational identification when they perceive alignment between their goals and values and those of the organization. The second strategy reflects the finding that physicians' feelings about organizations with which they are affiliated are influenced by how outsiders view those organizations. Thus, the challenge for HCOs is to find ways to highlight the similarities between their goals and their workforce's values. Also, they must showcase their positive attributes (e.g., pro bono work, awards, new facilities) to enhance their external image and their affiliates' perceptions of them.

Applying these principles helped the Royal Devon and Exeter NHS Foundation Trust in England dramatically shift from weak to strong organizational identification (Bate, Mendel, and Robert, 2008). Until the late 1990s, identification with the Trust had been so weak that professionals refused to implement innovations that the Trust desired. Moreover, the Trust had a negative reputation due to high turnover in management and the perception that some physicians were "difficult." The turning point came shortly after a devastating incident in which 82 patients were given incorrect diagnoses, with 11 of them dying. At that point, the CEO decided to make organizational identification a priority and took actions to build identification without tampering with professional identity. For example, she instituted meetings between the executive team and the clinical directors to discuss issues of mutual interest, used quarterly reviews to link individuals across the organization who were working on similar issues, invited the staff to develop its own improvement projects, stressed the importance of interprofessional dialogue, and used "the incident" as a story that exemplified the need to unify as an organization. The Trust now has a positive reputation for organizational identification and QI.

Use Transformational Leadership Processes

Transformational leadership is defined as influencing followers by "broadening and elevating followers' goals and providing them with confidence to perform beyond the expectations specified in the implicit or explicit exchange

IN PRACTICE: The Sharp Experience

A noteworthy part of Sharp's QI journey has been Sharp's conceptualization and launching of "The Sharp Experience" in 2001. This internally branded program is described as "a sweeping performance improvement initiative" and is credited with helping Sharp to improve clinical outcomes, patient safety, and organizational and service metrics. The Sharp Experience is also explained as "what we call our Sharp culture" on the Sharp Web site (http://www.sharp.com), and it provides a central rallying point for employees and patients connected with Sharp.

Overall, the Sharp Experience was designed as an improvement initiative designed to transform the health care experience and make Sharp *the best place to work, the best place to practice medicine, and the best place to receive care*. As described in Sharp's application for the Malcolm Baldrige award, "The Sharp Experience infuses Sharp's Mission by reconnecting the hearts, minds, and attitudes of its almost 14,000 team members, 2,000 volunteers, and 2,600 affiliated physicians to purpose, worthwhile work, and making a difference. Sharp is creating the culture and discipline necessary to provide outstanding care and service."

As part of the Sharp Experience, all employees participate in periodic retreats for which the entire workforce is bused to the San Diego Convention Center for a program featuring internal and external speakers focused on the many dimensions of performance excellence emphasized at Sharp HealthCare. The Sharp Experience is now well entrenched within Sharp HealthCare, providing a platform for consistent organizational communication about organizational goals and achievements, and reportedly giving employees a sense of ownership and pride in Sharp as they are encouraged to continually recommit themselves to the organization and to health care.

SOURCES: Nancy G. Pratt, RN, MS, Senior Vice President, Clinical Effectiveness, Sharp HealthCare; Sharp HealthCare Web site (http://www.sharp.com)

agreement" (Dvir, Eden, Avolio, and Shamir, 2002). Transformational leaders provide vision and a sense of mission, communicate high expectations, promote intelligence, and provide personal attention to employees.

In contrast, **transactional leadership** is based on transactions between managers and employees, such as managers initiating and organizing work and providing recognition and advancement to employees who perform well while penalizing those who do not. Transactional leaders provide rewards for effort and good performance, watch for deviations from rules and standards or intervene only if standards are not met, and avoid making decisions (Bass, 1990).

With respect to QI implementation, transformational leaders use processes that effectively shift the focus of organizational members from their individual goals to collective goals such as QI implementation. By being intellectually stimulating, transformational leaders motivate the workforce to consider how individual goals overlap with collective goals. By being charismatic, they elicit positive feelings in organizational members, which lead members to commit to the leader's and the organization's goals. By modeling collaborative behavior, transformational leaders inspire organizational members to work as a collective. By being individually considerate, they ensure that individuals' developmental needs are fulfilled while working on organizational goals. The workforce often responds to this goodwill by working diligently towards the organizations' goals, including implementation (Gilmartin and D'Aunno, 2007).

The workforce also responds to the support for implementation that transformational leaders provide to them (e.g., allocating needed resources, removing organizational barriers such as existing institutional policies, soliciting and addressing feedback, and championing the work of members). This support greatly facilitates implementation success through legitimation, further motivating organizational members' commitment to implementation. Moreover, it cultivates a climate in which the workforce feels comfortable offering feedback to leaders about how to improve QI implementation. Lastly, leadership support helps maintain the momentum for change in the face of setbacks and performance declines, which are common in implementation efforts.

Given the demonstrated effectiveness of transformational leaders at eliciting targeted organizational members' commitment to organizational change goals such as QI implementation, HCOs are advised to use transformational leadership processes. The inclusion of this behavior does not necessitate the exclusion of transactional behaviors. Indeed, the transactional and transformational leadership styles are complementary, coexist well, and are equally needed to manage the dual challenges of QI implementation and addressing current organizational needs.

There are at least two strategies for increasing transformational leadership in HCOs. One strategy is to hire leaders who innately use transformational processes or who are equally strong users of transformational and transactional processes. Children's Hospitals and Clinics in Minnesota took this approach in hiring Julie Morath, who, during her interviews for the position of chief operating officer, explicitly talked about how she would create a culture of teamwork and safety at Children's (Edmondson, Roberto, and Tucker, 2005). In Morath's case, her reputation preceded her, and the change platform she presented in her job interviews reinforced her reputation as a transformational leader.

A second strategy is to train current leaders in the appropriate use of transformational leadership processes via leadership development programs. Many have debated whether individuals can be trained to be effective leaders and whether leader development programs truly improve the leadership capabilities of individuals. However, management research increasingly affirms the value of such training, especially for HCO leaders, including improvement in leadership style and communication skills in physician leaders. Leaders at all levels within the HCO should learn to use transformational leadership processes adeptly. Use of these skills at the senior level is important because transformational behavior cascades down the organization (see the preceding discussion of governance leadership). Staff tends to adopt the behavior and suggested behaviors of senior leaders with this style. When senior leaders with transformational styles commit to QI implementation, organizational members are likely to commit to this collective purpose as well. However, to enlist organizational members' sustained commitment to implementation, the implementation message must also come from transformational leaders who are closer to them in the hierarchy. These leaders' actions are even more salient and motivating.

IN PRACTICE: The Role of Leadership Development in Quality Improvement

Expanded use of leadership development programs in HCOs has been relatively recent, particularly in comparison with the use of leadership development programs in other industries (McAlearney, 2006, in press). However, formal leadership development programs are increasingly viewed as a means of helping HCOs to focus on organizational priorities such as quality of care and patient safety (McAlearney, 2010).

Study of leadership development activities in HCOs has highlighted several important opportunities for these programs to improve quality and patient safety in health care (McAlearney, 2008, 2010). First, leadership development programs are typically developed to increase the caliber of the health care workforce. By including education and training in QI techniques, these programs can help ensure that employees can understand and participate in QI activities deployed by the organization. Further, this attention paid to developing leaders who will be able to lead QI activities can help HCOs accelerate the QI process within the organization.

Second, leadership development programs can be used to focus organizational attention on strategic priorities. When quality and QI are included in the organization's strategic priorities, alignment of leadership development goals with organizational objectives can help ensure consistency of communication and clarity of organizational messages about quality as a priority. Through leadership development programs, emerging leaders learn how to emphasize organizational messages about quality in their management and leadership practices.

Finally, leadership development programs can be specifically designed to emphasize and reinforce an organization's culture, particularly cultures that value care quality. Mission, vision, and values are public indicators of what organizations value, and weaving quality into those statements creates an opportunity to focus on quality, since it is embedded in the culture. Leadership development programs can provide specific and focused opportunities to highlight the value of quality as it fits into the HCO's culture. Further, under those circumstances when increasing the amount of attention paid to quality-of-care issues involves a change in organizational culture, leadership development programs can be a particularly important component of the culture change effort.

Involve the Workforce in Performance Measurement and Control System Development

Successful QI implementation depends on the availability and timeliness of information that is used to identify problems and benchmark changes in care processes. Organizations that have developed their information systems and integrated both clinical and financial data have a stronger foundation upon which to build successful QI practices.

However, HCOs must overcome organizational members' distrust of performance measurement and data systems if they are to develop and sustain the systems they need for QI implementation success. To overcome these problems, managers need to increase the perceived fairness of these systems. For example, managers must (1) allow targeted organizational members an ongoing voice (but not necessarily control) in system development, maintenance, and evaluation; (2) share decision-making authority over aspects of the system of particular concern to targeted organizational members (e.g., whether individual performance will be publicly reported); and (3) foster regular communication and information dissemination between organizational leaders and staff (Nembhard et al., 2009).

Perceived fairness facilitates QI implementation in two ways. First, it enhances targeted organizational members' relational trust of and commitment to the organization and its systems. In turn, members cooperate with implementation efforts. Second, perceived fairness derived from involvement in the process causes targeted organizational members to feel personally responsible for implementation results. This feeling makes them more willing partners in implementation efforts, more accepting of comparisons on designated measures, and more willing to be rewarded accordingly.

Measure and Reward QI Implementation Efforts

HCOs may miss an important avenue for promoting QI implementation when they do not use performance measurement and control systems to appropriately reward implementation efforts. These systems should provide rewards (financial and otherwise) that reflect the nature of the work required for effective innovation. Health care innovations such as QI increasingly amplify the task interdependence among health professionals. In such instances, group-level incentives work best. These incentives result in higher performance for interdependent tasks because they motivate peer monitoring and increased willingness to work together to optimally perform the task. The next best performance is obtained by providing individual incentives for independent components of the task. Misaligned incentive structures (e.g., group incentives for independent work and individual incentives for interdependent work) produce the worst performance because they motivate behavior that contradicts the nature of the task.

Often, the best action for HCOs striving to implement QI innovations that rely on teamwork is to use group-level incentives. For example, Geisinger Medical Center in Pennsylvania provided rewards at the group practice level to encourage staff to abide by the "patient-centered medical home," a QI innovation that aims to improve the quality of care by establishing care coordination processes among patients' care providers (Paulus et al., 2008). Geisinger also provided individual-level rewards. By utilizing this combination of (first- and second-best) approaches at two pilot sites, it experienced a remarkable 20 percent decrease in hospital admissions in its first year of use (Nembhard et al., 2009).

CREATING HIGH-PERFORMANCE HEALTH CARE ORGANIZATIONS

In Jody Hoffer Gittell's book, *High Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Resilience* (2009), she synthesizes a decade of her research in the health care industry to emphasize the importance of what she conceptualizes as "relational coordination." Gittell explains, "While coordination is the management of interdependencies between *tasks,* relational coordination is "the management of interdependencies between *the people* who perform those tasks" (p. 15). Further, she notes, "relational coordination is the coordination of work through relationships of shared goals, shared knowledge, and mutual respect" (p. 23).

Gittell's studies of relational coordination and surgical performance, medical performance, and long-term care performance build upon her work investigating relational coordination and airline performance (her 2003 book, *The Southwest Airlines Way*, emphasized these concepts in airlines). Her conclusion across studies is that process improvements in relational coordination can help organizations to improve both quality-of-care and efficiency outcomes.

Acknowledging that there are major challenges in applying these concepts to the health care industry, Gittell recommends focusing improvement efforts on building high-performance work systems. Specifically, Gittell describes 12 work practices that HCOs can adopt or address in order to improve relational coordination:

1. Select for teamwork
2. Measure team performance
3. Reward team performance
4. Resolve conflicts proactively
5. Invest in frontline leadership
6. Design jobs for focus
7. Make job boundaries flexible
8. Create boundary spanners

CREATING HIGH-PERFORMANCE HEALTH CARE ORGANIZATIONS *(Continued)*

9. Connect through pathways
10. Broaden participation in patient rounds
11. Develop shared information systems
12. Partner with suppliers.

By adopting these work practices, her research results suggest that HCOs will be able to improve relational coordination and thereby improve the important outcomes of quality performance, efficiency performance, and job satisfaction.

As HCOs are known for both high levels of interdependency and less-than-perfect coordination of care and care systems, the opportunity to focus on process improvements that lead to better coordination is clear. Gittell's findings provide compelling preliminary evidence that focusing on people and the relationships among them in delivering care can be an important component of QI efforts.

SOURCE: Gittell (2009).

Build Evidence for QI

QI Intervention Source. Perceptions of key stakeholders about whether the QI innovation is externally or internally developed may influence the success of QI implementation. The QI innovation may enter into the organization through an external source such as through information from a formal research entity; as a market, system, or governmental mandate; or through another external source. Alternatively, a QI innovation may have been internally developed as a good idea, a solution to a problem, or from a grassroots effort. For example, using coated catheters to prevent infections may have been formally studied and reported in the literature, and a nurse may have decided that her organization needs to use these devices to help decrease infection rates. Stakeholders within the organization may regard this QI innovation as external (e.g., the literature for the Centers for Disease Control and Prevention strongly recommends using them) or as an internally developed QI innovation (e.g., the IV nurse team believes these offer the best solution to the problem). However, selection of an externally developed QI innovation coupled with lack of transparency in the decision-making process about implementation of that QI innovation may lead to implementation failure. Though there is empirical evidence of a positive association with an authoritative decision to use the QI innovation, there is also a negative relationship between full implementation or routinization of the QI innovation. On the other hand, key ideas that come from outside the organization and that are then tailored to the particular organization more often result in successful implementation.

Evidence Strength and Quality. Strength of evidence includes stakeholders' perceptions of the quality and validity of evidence supporting the belief that the QI innovation will have the desired outcomes. Sources of evidence may include published literature, guidelines, anecdotal stories from colleagues, information from a competitor, patients' experience, results from a local pilot, and more. Though there is no agreed-upon measure of "strong evidence," there is empirical evidence of a positive association with dissemination of the QI innovation if evidence is solid. However, the influence of solid evidence on implementation may be dependent upon the influence of other variables, such as relative advantage, cost, complexity, and congruence with existing practices. External and internal evidence, including experience through piloting, may be combined to build a case for implementing a QI innovation. Credibility of the developers of evidence, transparency of the process used to develop the intervention, and intentionally mapping out the implementation can be used to counterbalance negative perceptions of the QI innovation by potential adopters.

IN PRACTICE: Building Evidence Through Practice-Based Health Services Research

As emphasized in this chapter, increasing evidence suggests that success in achieving QI goals depends on implementation processes and contexts and not only on the nature of the QI intervention. Hence, to advance QI, additional research is needed to study what types of QI activities work, including considerations about where, when, and how they work. Researchers gain this understanding when they learn about the effects of introducing QI interventions in different practice contexts, as well as the effects of using different implementation strategies, thus contributing to the evidence base supporting future QI implementations.

Evidence of this sort typically comes from practice-based research. Federal programs fostering this type of research include the Quality Enhancement Research Initiative (QUERI) of the Veterans Administration (http://www.queri.research.va.gov) as well as the Accelerating Change in Transforming Networks (ACTION, http://www.ahrq.gov/research/ACTION.htm) and the Practice Based Research Networks (PBRNs, http://pbrn.ahrq.gov/portal/server.pt) funded by the Agency for Healthcare Research and Quality. Managers and policymakers alike can use the results of these research projects to inform decisions about QI interventions, helping to maximize the likelihood of QI success.

Keys to Successful QI Change-Perception Management

All QI change occurs in the context of organizational events and histories related to that change, which shape the likelihood that the change will be successfully implemented. These contexts are often socially constructed rather than objective and are perceived though the eyes of the organization members involved in or affected by the change. For example, full participation in a QI initiative requires a positive affective reaction to the QI innovation. Often, subjective opinions obtained from peers based on personal experiences are more accessible and convincing and are key in shaping both individuals' and groups' affective responses (more so than objective evidence requiring cognitive responses).

Perhaps most fundamentally, both the change and the reason for the change have to be understood. Individuals are reluctant to embrace change if they feel its purpose is unclear. This is a cognitive function that relies on knowledge of underlying principles or reasons for adopting the QI innovation. If this knowledge is not obtained prior to trial and individual adoption of a QI innovation, rejection and discontinuance are likely.

A second key principle affecting individual perceptions of a QI change is that almost all forms of change pose potential threats to security—whether job security, financial security, professional prerogatives, or feelings of self-worth. A proposed QI innovation or change that is perceived as threatening is less likely to be embraced. Change agents should therefore treat these perceived threats as real (rather than unfounded) and take appropriate steps to address them in the change process. This might take the form, for example, of a peer who can champion the QI change in conjunction with repeated assurances by management that such fears are heard (rather than dismissed as unfounded), and that the change will have positive benefits for patients, a goal to which all in the organization can subscribe.

The sequencing of QI can also shape perceptions of those who participate in the change or who are potentially affected by the change. Specifically, managers should attempt to avoid introducing a QI initiative too closely on the heels of another initiative. This may result in perceptions that change for change's sake is the perceived goal, and also does not allow sufficient time for the previous change to be effectively assimilated. Cognitively, individuals will have greater difficulty focusing on the new change because they are still mentally attuned to the previous one. Although too many changes too fast should be avoided, it is also important that managers deliberately connect a QI innovation with a previous change that has been perceived to be successful (or at least not harmful). This can lay a positive foundation for the new change, as perceptions are shaped by prior experience with

similar situations. Rather than having to sell the change from the beginning, QI leaders can benefit from the association with a prior experience.

Finally, planning for change should acknowledge the importance of this "perception as reality" perspective and incorporate the following elements. First, plans should fully consider stakeholders' needs and perspectives, with particular attention paid to costs and benefits. How others view the change and its perceived effects on them and the organization is an important basis for the planning process. Second, the complexity of HCOs and the differentiation along professional and occupational lines strongly suggest that organizations need to tailor strategies for appropriate subgroups within the HCO (e.g., delineated by professional, demographic, cultural, and organizational attributes). Third, and for similar reasons, individuals and subgroups will respond to different messages and channels, and some of these will be more or less effective in terms of shaping perceptions of change. Therefore, organizations should deliver information using appropriate style, imagery, and metaphors, and should identify and use appropriate communication channels. Finally, planning for QI change should not rely on faith alone to sustain the change. HCOs need to employ rigorous monitoring and evaluation methods to track progress toward goals and milestones to reinforce and validate the results of the change to organizational members and to provide them with targets/goals.

DEBATE TIME

When considering QI, some people believe that major opportunities for improvement can be realized by increasing clinicians' skills and competence. However, others believe that more opportunities for improvement can result from changes made to the organization and management of clinical care units. A third group believes that quality of care is tied to technology availability or to participation in teaching activities. What do you think? Where do you think the most emphasis should be put? In considering these questions, what conditions, factors, or variables might influence your decision?

SOURCE: Adapted from Shortell and Kaluzny (2005).

SUMMARY AND MANAGERIAL GUIDELINES

1. HCOs have strong imperatives to initiate and support efforts to improve quality of care and patient safety. Quality improvement (QI) interventions can be designed and implemented to address many of these issues. Address quality issues proactively by looking for opportunities to improve quality by detecting and preventing potential problems in processes of care delivery. Quality measures must be defined so that organizations striving to improve quality have a basis on which to evaluate improvement or identify problems. The development and deployment of such measures can affect how QI success is defined. Managers must recognize the problems and tradeoffs associated with different definitions of quality measures, and different approaches to quality measurement.
2. Undertaking QI efforts within an HCO can be challenging due to the uncertain nature of work in health care, as well as the professional makeup of the health care workforce. Set high standards by establishing "best practices" in one's own organization as well as using benchmarking to make comparisons with competitors and industry leaders.
3. The selection of performance measurement and control systems can affect how QI efforts proceed, and how achievement of improvements in quality is measured. Select such systems based on accurate and timely data, and develop incentives to improve quality based on work activities under the control of organizational members.

4. Specific implementation policies and procedures will directly affect the use of QI interventions in HCOs. Factors such as organizational structure, financial support, organizational culture, leadership and management support and engagement, governance leadership, and a learning climate are all critical elements of organizational context that will affect the implementation of QI. Focus energy on working smarter, and consider these factors when developing implementation policies and procedures.
5. Seven QI tactics and strategies hold particular promise for QI implementation efforts in HCOs: (1) creating opportunities for staff experimentation; (2) framing QI as a learning challenge; (3) promoting organizational identification; (4) using transformational leadership processes; (5) involving the workforce in performance measurement and control system development; (6) measuring and rewarding QI implementation efforts; and (7) building evidence for QI. Apply these tactics in combination when undertaking QI interventions in HCOs in order to maximize the likelihood of success in QI initiatives.
6. Focusing on the "people" processes associated with QI can help HCOs become high-performance organizations. Strive to develop a participative, team-oriented organizational culture that encourages input from professionals and other workers from all levels of the organization, and seek opportunities to cross-train staff to gain greater flexibility.
7. A crucial element of QI is focusing on organizational change issues and the management of participants' perceptions; if the reasons for QI are understood, if it does not threaten security, if it has involved those affected by it, if it follows a series of successful changes, if it is inaugurated after the previous change has been assimilated, and if it has been planned, there will be a much higher likelihood of successful QI within an HCO. Involve organizational members, particularly professionals, in the development, implementation, and monitoring of QI initiatives.

DISCUSSION QUESTIONS

1. Take the perspective of the CEO of a large health care system that owns its own managed-care health plan. Describe three major ways that you could improve the quality of health care in your organization. Critique your solutions regarding the extent to which your solution may cause other problems to surface (what kind?), and the extent to which you as the CEO should have the responsibility and power to implement these changes.
2. Using an HCO that you know well, provide three examples each of possible structural, process, and outcome measures of care quality. Would you expect these measures to be highly associated? Why or why not?
3. Consider a community hospital, a major teaching hospital, and a hospital in a large for-profit system. For each, list the major stakeholder groups (both internal and external). Indicate what kinds of quality criteria each group would be most likely to promote.
4. Hospital A and Hospital B both have as their major goal for this year the implementation of a QI program. Hospital A hired a consultant firm and sent its top managers to a program to learn how to change the corporate culture and to set up quality teams to investigate problems. They formed teams to plan strategies for meaningful QI in two specific areas: billing and use of the emergency room. Hospital B, lacking funds, tried to have study groups and use self-teaching but involved everyone from the CEO to the janitor. Which hospital do you think will succeed in implementing QI? Why?
5. Health System Q is located in the same geographic area as Health System P, its main competitor. While Health System Q touts its status as a community-based integrated delivery system, Health System P leverages its role as a research-intensive academic medical center. Both health systems have achieved Magnet designation for nursing, both have been listed among the "Most Wired" by HIMSS, and both have centers of excellence (or service lines) in the areas of cardiology, cancer, and women's health. You have heard that community members seem to favor Health System Q for most conditions, but appreciate having a local academic health system if they have problems that are out of the ordinary. You are considering a job with one of these health systems in the area of QI, and are trying to decide where your expertise will have the most impact. What factors would you consider in trying to evaluate which place might be better positioned to leverage your skills and move forward with QI efforts?

CASE: Moving Beyond Data Access to QI Action

After a considerable investment of both money and time, executives at Leman Healthcare were delighted that the new incident-reporting system at Leman was now fully operational. The incident reporting system had been deployed across the health care system; frontline and management staff as well as physicians in both inpatient and ambulatory settings had been trained and were able to use the incident-reporting system to access patient information, document adverse events, and report as required to senior management, risk management, and the QI department.

However, even with full system deployment, QI activities across the health system had not changed. The QI department had full access to the data warehouse that housed data collected through the incident-reporting system as well as data from the electronic health record (EHR) and other information systems, yet QI staff members were apparently not using these data. Instead, QI projects continued to follow historical patterns involving laborious efforts to develop queries and reports rather than use the new system's immediate reporting capabilities to supply information for managers and to drive process improvement projects both locally and across the hospital system.

Similarly, the potential for clinicians to use the newly accessible data was not being realized. Physicians were reluctantly compliant with requirements to use the incident-reporting system for documentation and reporting events, but the general consensus seemed to be that the system was just a way to point fingers at the medical staff. Despite efforts from the senior management team to work individually with clinicians to educate and explain the importance of error and near-miss reporting that would provide information to reduce errors, these physicians continued to view the incident-reporting system as a punitive tool, not as an opportunity for them to explore ways to improve their work.

Questions

1. Given this situation, what are the apparent barriers to using incident reporting systems for QI?
2. How can these barriers be overcome?
3. What steps would you propose to engage both clinicians and QI staff in enhanced QI activities?

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Chapter 10

Strategic Thinking and Achieving Competitive Advantage

Stephen L. Walston and Ann F. Chou

CHAPTER OUTLINE

- Strategic Management
- Values, Mission, and Vision
- Strategy and Health Care
- Evaluation of Organizational Environment
- Internal Resources: A Source of Competitive Advantage
- Use of Generic Strategies
- Conclusion

LEARNING OBJECTIVES

Upon completion of this chapter, the reader will be able to:

1. Understand concepts of strategy and strategic management
2. Learn the importance and the formulation of mission, vision, and values in strategy
3. Discern how strategic advantage can be different in health care
4. Perceive how strategy is developed and can evolve in organizations
5. Understand the concept and components of business models
6. Learn how to analyze the internal and external environments and the integration of these analyses into strategic planning
7. Recognize different generic strategic approaches and apply them in the health care setting
8. Acquire skills in strategy evaluation methods
9. Understand how strategy and strategic management applies to health care markets

KEY TERMS

Business Model
Buyer Power
Competitive Advantage
Barriers to Entry
Economies of Scale
External Environment
First Mover Advantage
Generic Strategies
Internal Environment
Market Structure
Market Niche Strategy
Mission
Monopolistic Competition
Monopoly
Oligopoly
Perfect Competition
Porter's Five Forces Framework
Portfolio Analysis
Product Life Cycle
Rivalry
Strategy
Strategic Group
Strategic Management
Supplier Power
SWOT Analysis
Switching Costs
Threat of Substitution
Values
Vision

IN PRACTICE: How Strategos Evolved

Strategy literally means "the art of the general," from the Greek word "strategos" that signified the planning of a military campaign. This concept of strategy has been discussed for thousands of years. Strategy, along with the concept of organizational structure, was refined and articulated to further military purposes. Military campaigns motivated the training of leaders to obtain competitive advantage on the battlefield. Generals often logged their experiences and wisdom to improve their army's prospects in the next battle. Some of the first recorded history in China from the period between 500 BCE and 700 CE documented significant treatises on warfare, the most familiar of which was Sun Tzu's *The Art of War* (Sawyer, 2007). In the Mediterranean basin, modern military strategy and tactics were developed under such leaders as Philip II (382–336 BC) and Alexander the Great (356–323 BC) of Macedonia and Hannibal (247–183 BC) of Carthage. Philip combined infantry, cavalry, and primitive artillery into a trained, organized, and maneuverable fighting force backed up by engineers and a rudimentary signaling system. His son Alexander became an accomplished strategist and tactician with his concern for planning, keeping open lines of communication and supply, security, relentless pursuit of foes, and the use of surprise. Hannibal was a supreme tactician whose crushing victories taught the Romans that the flexible attack tactics of their legions needed to be supplemented by unity of command and an improved cavalry. The Romans eventually replaced their citizen-soldiers with a paid professional army whose training, equipment, and skill at fortification, road building, and siege warfare became legendary. The Byzantine emperors studied Roman strategy and tactics and wrote some of the first essays on the subject.

The Middle Ages (1000 CE to 1500 CE) saw a decline in the study and application of strategy—with the exception of the great Mongol conqueror Genghis Khan. Medieval tactics began with an emphasis on defensive fortifications, siege craft, and armored cavalry. The introduction, however, of such new developments as the crossbow, longbow, halberd, pike, and, above all, gunpowder, began to revolutionize the conduct of war, changing strategies and tactics.

IN PRACTICE: How Strategos Evolved *(Continued)*

This notion of strategy applied exclusively to military and warfare until the advent of the Industrial Revolution, when the size of companies grew to a point that warranted more coordination and direction. In the twentieth century, the need for explicit strategy was initially emphasized by executives at large companies, such as Alfred Sloan of General Motors and Chester Barnard of New Jersey Bell (Ghemawat, 2001). During this time, eminent economists also sought to answer questions of the purpose of firms and the relationship between resource allocation and business success (Ghemawat, 2001).

Different perspectives of strategy have developed over time. Strategy has been seen as a deliberate, purposeful behavior that allows a firm to plan decisions that maximize opportunities while minimizing threats. This perspective of strategy allows for conscious action to take advantage of opportunities with a firm's own internal capabilities. Strategies are developed to guide behaviors and achieve organizational goals. Methods and means for achieving success are prescriptive, and often strategists seek to distill how strategy can be executed in the most efficient fashion. For example, Napoleon I had 115 specific principles, and the Confederate general Nathan Bedford Forrest had but one: "Get there first with the most men" (Wills, 1998). Another view of strategy presents an emergent or descriptive perspective. This perspective explains a firm's past actions by examining the patterns of decisions and past choices that reflect environmental changes, organizational learning, and innovations. Both views are necessary for successful strategic management and decision making. Scholars suggest that both deliberate action and nonlinear thought are needed to allow a firm the ability to establish routines and processes, while maintaining the ability to be flexible and adaptive (Burns, 2002; Ghoshal and Bartlett, 1995; Mintzberg et al., 1998).

Today, strategy and strategic management have become widely accepted. Courses about strategy are widespread in business schools, and strategic management is an integral part of leadership training. Yet, given its diverse nature, teaching strategy is a difficult task that involves instructing how to craft future-directed plans, while developing an intuitive insight and the ability to learn, adapt, and change (Burns, 2002). The concept and importance of strategy has proliferated beyond the field of business administration. A search for strategy on Amazon.com in April 2010 produced over 110,000 results. The varied nature of strategy is reflected by the diverse nature of these books, which include strategic maps, marketing, game theory, military, and managerial economics. Overall, the nature of strategy remains very complex, but widely accepted.

CHAPTER PURPOSE

This chapter informs the reader regarding an important aspect of management: strategy and strategic management. Understanding strategy and strategic thinking helps students and health care leaders improve their decision making. This chapter provides a foundation to understand the principles of strategy and strategic management and methods for their application.

STRATEGIC MANAGEMENT

Strategic management involves the creation, implementation, and overall direction for a firm. As such, it requires both internal and external management functions to facilitate the development, implementation, and monitoring of strategy within an organization. Steps in the process of strategic management may include: (1) goal formation; (2) environmental scanning; (3) strategy formulation; (4) strategy evaluation; (5) implementation; and (6) strategic control. Internally, strategic management involves the participation of everyone in the organization, especially the leadership. Organizational leadership and management play key roles in formulating strategies and integrating them into the organization's mission, visions, and goals and leveraging organizational mechanisms, cultures, and resources to support the strategic implementation as well as to conduct analyses and evaluation. Externally, strategic management enhances organizational success by anticipating possible changes in the environment in which the organization operates, and by enabling organizations to change and maintain their **competitive advantage**, the long-term market position and uniqueness that is not easily duplicable by rivals. Both external analyses and internal mechanisms are important in

the strategic management processes (Ginter, Swayne, and Duncan, 2002; Luke, Walston, and Plummer, 2004; Mintzberg, Ahlstrand, and Lampel, 1998; Schendel, 1994).

Environment

No organization is immune to influences that come from its **external environment** (the conditions, entities, and factors surrounding an organization that influence its activities and choices), and strategic management is a process that helps organizations respond appropriately to potential threats and opportunities. Strategic management has become increasingly important in health care. As an industry, health care is particularly sensitive to its environment, which undergoes rapid demographic, societal/cultural, economic, technological, political/legal, and global influences (Fahey, 1999; Walter and Priem, 1999). For the most part, health care organizations cannot directly control these factors in their environment. However, these factors have a direct impact on the competitiveness of these organizations.

One external factor that will have a direct impact on health care strategies is the demographics of our communities. Demographics are represented by population size, age structure, geographic distribution, racial/ethnic mix, and income levels (Fahey and Narayanan, 1986). The demographic trends in the United States are perhaps the most immutable factor affecting the demand of health care services. The U.S. population is getting older as well as more racially, ethnically, and geographically diverse. The Department of Health and Human Services estimates that more than a quarter of the U.S. population will be older than age 60 by 2050 (Figure 10.1). The population has also become more diverse in its racial/ethnic mix, where racial/ethnic minorities make up about 30 percent of the overall population in the 2000 census (Figure 10.2). In addition, there is no longer a racial or ethnic majority group in the state of California, and the trend is likely to continue in other states. As the 2010 census concludes, racial/ethnic minority groups will assume a larger proportion of the overall population.

The increased diversity will drive greater variations in strategies and force successful health care organizations to be agile and adapt to the cultural and demographic needs of their constituents. Culture, race, ethnicity, and primary language have been shown to be associated with access to care and compliance with prevention and treatment among patients. As our society becomes more diverse, strategies that would lead to culturally sensitive and linguistically appropriate care should be emphasized to ensure equity and quality across patient groups. Professional organizations like the American Hospital Association have encouraged their members to take

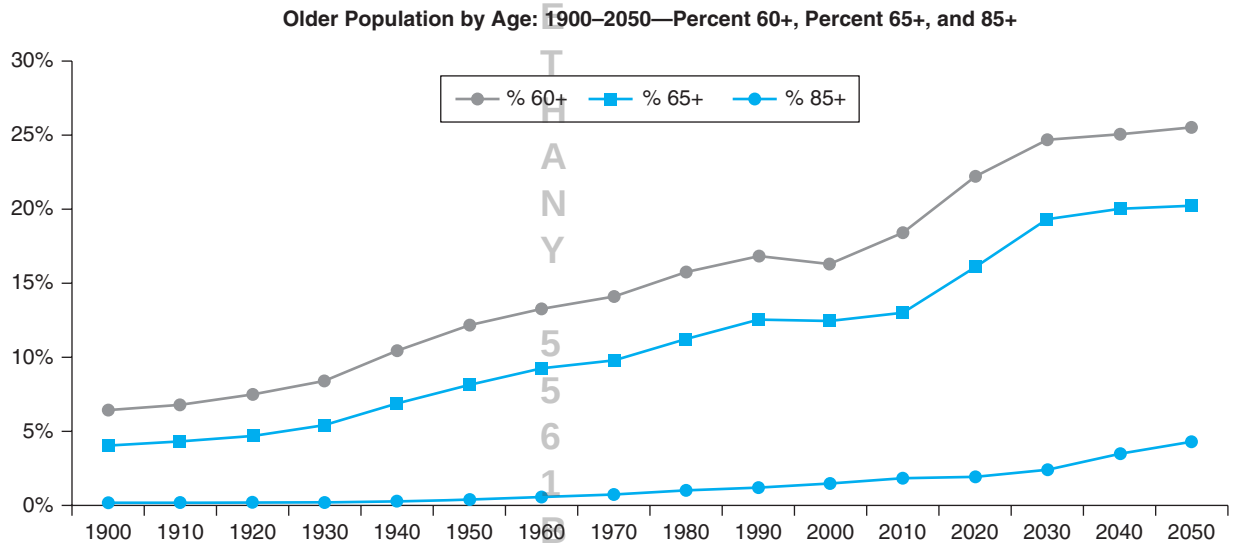

Figure 10.1 U.S. Population by Age 1900-2050.

SOURCE: Administration on Aging, Department of Health and Human Services. http://www.aoa.gov/AoARoot/Aging_Statistics/future_growth/docs/By_Age_Total_Population.xls

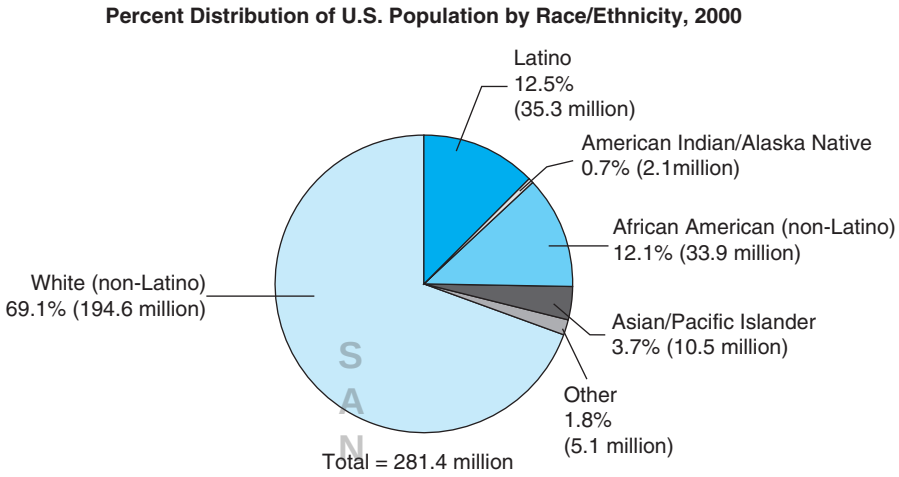

Figure 10.2 Percent of U.S. Population by Race/Ethnicity.
SOURCE: U.S. Census Bureau, Census 2000 Redistricting Data.

the lead in addressing these diverse needs (AHA, 2010). Health care organizations that evaluate patient satisfaction using instruments such as the Consumer Assessment of Healthcare Providers and Systems are systematically collecting information about possible racial and ethnic disparities in access to and experience with health care.

Moreover, patients have become increasingly more complex as many have multiple comorbidities due to the prevalence of obesity and chronic conditions. At the time when patients have become more difficult to manage, the health care industry also faces a workforce shortage of both clinicians and allied health workers, creating a supply-demand imbalance.

Economically, escalating insurance premiums and health care costs pose threats to the industry as these trends, if they continue, are unsustainable long term. Competition has also broadened to include global players. Due to high prices, patients have turned to other alternatives to meet their health care needs, such as purchasing medications across the border. Medical tourism to South America and Asia has seen a steady growth as Americans are going abroad for surgeries or procedures that they cannot afford in the United States.

Changes in the global health care markets as well as politics are also affecting foreign nationals who come to the United States for health care. For decades, the United States has attracted foreign medical tourists because it offers health care that has been perceived as cutting edge. In 2008, more than 400,000 non-U.S. residents sought health care services in the United States, which accounted for almost $5 billion and about 2 percent of total services rendered (Deloitte and Touche, 2009). To facilitate access, many large health care systems, such as Stanford Hospital & Clinics and Methodist Hospital in Houston, offer international offices that assist in arranging care. Although foreign visitors make up only a small percentage of the total patient volume, these patients typically pay full prices for their health care services and have therefore been an important source of revenue for many U.S. hospitals. However, the number of foreign patients has fallen steadily and substantially since 2001. This is due in part to the increase in global competition through improved quality of care, lower price, and greater travel restrictions imposed by the United States following the events of September 11, 2001 (Lee and Davis, 2009).

Health care as well is one of the most technologically innovative industries, but the technological advancement has also contributed to the escalating costs. Recently, the health care industry has placed greater emphasis on the adoption and utilization of health information technology (HIT). In particular, the Institute of Medicine has promoted the use of health information technology as a transforming strategy to reduce medical errors and improve quality (IOM, 2001).

In addition, health information technology has a large role in the federal health care reform of 2009, with a mandate for "meaningful use" of HIT among all providers. This also reflects the political environment for health care organizations and for the industry as a whole. Health care is a unique industry that is particularly susceptible to political and legal influences because the government has a complicated relationship with the industry as a provider, regulator, and payer.

In all, the health care industry exists in a very large, dynamic, complex, and challenging environment with many opportunities as well as threats. With an aging and diverse population making up a changing customer base, increased competition, technological innovations, and a changing political landscape, health care organizations must have a good grasp of the relationship between the larger environment and its future. Understanding their industry environment allows the organization to craft strategic actions that will more likely achieve the organization's mission, improve its profitability, and more appropriately establish a strong position in relation to competitors.

What Is Strategy?

> The formation of strategy is often not a rational process. Earlier decisions imprison statesmen within the logic of their choices and finally impose policies and actions that these leaders would have preferred to avoid. (Murray, Knox, and Bernstein, 1994)

Modifying the definition offered by Porter (1980), we identify **strategy** as the development of a broad formula prescribing a way in which a business competes and collaborates, sets goals, and establishes policies to carry out those goals in order to achieve the organizational mission. Strategy occurs at all levels of firms and organizations. It is a concept that has been readily embraced by organizational leadership and defined in many ways. Various other definitions have been suggested, ranging from cognitively directed, documented goals to unintentionally generated patterns of decisions. Strategy has been described as a plan or guide for future action, a pattern of past behaviors, the process of launching products into a particular market, the fundamental way an organization operates, a ploy or feint to outwit a competitor, etc. (Mintzberg, Ahlstrand, and Lampel, 1998). This chapter does not seek to evaluate the many suggested definitions, constructions, and purposes of strategy, which is covered elsewhere in this book. However, herein we focus on the purposeful aspects of strategy that address strategy in a practical sense and provide students and health care leaders with the knowledge and skills to improve their understanding and practice of strategy through intentional and cognitive decisions.

Strategies are important, requiring significant commitment of resources, and are often not easily reversible. Strategy can mean different things, but in general, strategy has these characteristics, where it:

1. Concerns both organizations and the environment
2. Is complex
3. Affects the welfare of the organization
4. Involves issues of content and process
5. Is not purely deliberate
6. Exists on different levels
7. Involves various thought processes
8. Involves the allocation of resources
9. Should be mission based (adapted from Chaffee, 1985)

Strategy ultimately is about making better decisions. Leaders are faced with many critical choices: where to invest, whom to hire, what services to offer, etc. Leaders who embrace strategic thinking and develop strategic skills make better decisions. Strategies assist organizations to choose wisely among the many available options. Strategic planning consists of making decisions that are concerned with positioning a firm relative to its competitors and the allocation of assets for current and future activity. Through strategic analyses and discovery, leaders come to better understand the chain of cause and effect. This directs resource allocation in terms of personnel and physical assets. Strategy does not create a blueprint for future decisions, as the future is full of uncertainties. Strategy must be flexible enough to allow for changing circumstances. However, strategic actions often commit resources that may be difficult to recover. Personnel are often fungible and can frequently and relatively quickly be transferred with minimal cost to new projects, products, and directives. However, most physical assets, such as hospital buildings and medical equipment, are difficult to transfer, requiring a long period of time from conception to implementation. For example, some health care systems are investing in proton therapy units that may cost over $125 million, despite the lack of evidence in the efficacy of the proton treatment (*Forbes,* 2009). Successful

strategies consider resource allocation by balancing the need for flexibility and capital asset investment. These choices represent decisions leaders must make after careful consideration of their situation and environment. Strategic planning must be flexible to accommodate the changing environmental conditions, and yet significant enough to sustain competitive advantage. Within these choices, strategy provides a unifying theme that provides coherence and direction to the actions and decisions of the organization.

Strategy has two very important functions. First, good strategies should improve decisions about resource allocation to yield long-term benefits for the organization. A large part of what leaders do is to make decisions of how to allocate finite resources. A good strategist can delegate limited resources to maximize outcomes. Second, developing strategies should challenge existing assumptions and be open to new possibilities. By doing so, leaders and managers can be aware of new realities to manage change effectively.

Often, our assumptions are based on facts and data that may well be outdated or sometimes based upon faulty information. For example, when asked about the location of Lima, Peru, relative to that of Miami, Florida, most people would believe that Lima is west of Miami. In reality, Miami is actually west of Lima (Figure 10.3). In health care, an example was demonstrated in the late 1980s and early 1990s when many assumed that HMOs would be the dominant model for health care delivery. Based on this assumption and early growth of HMO plans, many believed integrated delivery systems would be the type of organizational arrangement that would prevail in health care. This assumption drove the strategic plans of many systems to create systems of insurers, physicians, and hospitals. Some hospitals even redesigned their mission to become an integrated system. Yet, by the late 1990s, it was apparent that HMO's growth had dissipated, and PPOs began to dominate the health care market. Health care systems that did not update this assumption could have made significant strategic blunders, and many did.

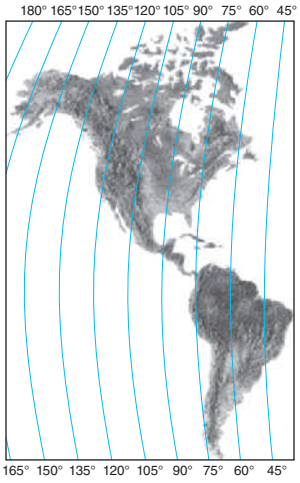

Figure 10.3 The Americas.
SOURCE: Delmar, Cengage Learning.

The Strategic Process

Successful strategies require direction, resources, and institutionalized processes. Too often, organizations believe that strategy is accomplished when direction is formulated. This, however, is only the first step in taking strategic action. Strategic thinking involves crafting direction that eventually evolves into goals and objectives. Strategies require action, which involves assigning responsibilities, assignments, expected outcomes, and follow-through. Many strategies fail as a result of improper or inattentive implementation. Poor implementation and inadequate follow-up can render the best strategic plan futile. In fact, developing strategies without corresponding implementation planning can create many organizational problems. For example, new strategies can raise expectations

UNDERSTANDING AND DISCOVERING OUR BIASES

When asked which city is farther west, Miami, Florida, or Lima, Peru, almost all would choose Lima. However, on a map or comparing the degrees of longitude, one would find that Miami is actually further west than Lima. Miami has a longitude of –80° 11' 37"; while Lima's longitude is only –77° 3' 0". Why do most individuals have this inaccurate knowledge? Generally, people perceive South America directly below North America, an incorrect fact. South America actually protrudes to the East of North America.

IN PRACTICE: How Fixed Assumptions Affected the Battle of Gettysburg—July 1863

The American Civil War had entered its third year of bloody conflict. During the first two years, the South, under the able direction of General Robert E. Lee, had won many battles, notwithstanding their being outnumbered and outgunned. By the summer of 1863, General Lee was confident that he could invade the North and defeat the Union Army to end the war. In mid-June, General Lee invaded Maryland and Pennsylvania with almost 72,000 troops. The Union Army, led by the newly appointed General George Meade, finally found the Confederate Army at the small town of Gettysburg, Pennsylvania. The Union Army consisted of almost 94,000 troops.

The battle commenced on the morning of July 1, with Lee's armies pushing the Union forces out of the town of Gettysburg and into the surrounding hills. However, darkness halted the South's advance. On the morning of July 2, Lee ordered attacks on both the right and left flanks of the Union forces. The battle swung back and forth, with the Confederates temporarily breaking the Union line but not gaining significant advantage before darkness fell on the second bloody day.

As the third day of battle began, Lee made one of the worst decisions of his career. Against the advice of Lieutenant General James Longstreet, Lee ordered 12,000 men to attack the center of the Union lines. To reach the Union troops, they would have to walk across almost one mile of open field. General Lee's mistake was not so much in tactics or strategies, but in not updating his assumptions and facts. Firearms had been used for about 500 years. However, they had been historically very inaccurate—so inaccurate that strategies called for troops to march until they could see the "whites" of their enemies' eyes, fire their weapon, and then attack with the bayonet, the most important part of the gun. This was because guns traditionally had smoothbores, or smooth insides of the barrels. This caused bullets to rotate randomly, much like a knuckleball baseball pitch. This diminished its accuracy and limited the distance at which it was effective.

Lee was trained in these classical tactics and did not update his strategies, given the advances in weapons. Until the eighteenth century, the standard infantry weapon was a smoothbore musket. However, by 1863, most soldiers had "rifles," such as the U.S. Springfield and the British Enfield that would spin the bullet in the barrel, which increased the range and accuracy from 50 yards to about 300 yards. Marching 12,000 soldiers across open ground enacted a terrible toll on these men, before they were close enough to engage the Union forces. Only about 300 men reached the center of the Union Army, and these were quickly killed or captured. As the battle quieted at the end of July 3, the Confederate Army prepared to retreat. Over 46,000 casualties occurred across the three days of battle. This was the "high-water" mark for the Confederacy, and the beginning of their end. Never again would they significantly challenge the North. Lee later commented that this attack was one of the worst decisions he had made as a commander, and his unchallenged assumptions may have been the reason that the battle and war was lost (Coggins, 1990; Eicher, 2001).

that can be dashed with inaction, resulting in employee cynicism and low morale.

Within an organization, strategic priorities should be elaborated, and projects with goals and objectives should be developed, implemented, and monitored for each area. Appropriate individuals should be assigned responsibility and authority for achieving strategic goals, and key performance indicators should be established to measure progress. A regular process of review and feedback should then be set. For instance, one of the strategic priorities of a large international hospital established to provide primarily tertiary services was to improve service capacity. This goal was further defined by measurable and actionable outcomes to: (1) reduce the non-tertiary patient load, (2) increase the efficiency and throughput of patients, (3) expand existing facilities, (4) better coordinate patient care with other institutions, and (5) expand off-site patient care services. Each outcome area was further segmented into specific objectives that had assigned staff with responsibilities, key performance indicators, and reporting timeframes.

Strategic planning processes must involve the right people. Often organizations struggle to involve the right set of people. The top executive should lead the strategic planning and exhibit his/her commitment by the dedication of time, resources, and intellect. Organizational boards, if appropriate, should also be involved in the strategic planning process and its monitoring. In many health care organizations, the board represents the community and has responsibility to assure that management actions and direction align with its mission and vision. This is a critical function of a board. Frequently, the board's direct involvement with strategic planning is coordinated by a strategic planning committee.

It is important to identify all stakeholders who should be involved and clearly define the terms of their involvement and responsibilities. Employees, medical staff, other organizations dependent on the services of the health care organization, and other stakeholders have a vested interest in the firm's strategic planning and may be asked to participate in the planning process. Lack of clarity in responsibilities and tasks can lead to frustration and withdrawal of key stakeholders, which will lead to greater impediments to creating and implementing the strategies.

Figure 10.4 illustrates the strategic management process that we will discuss throughout this chapter. Strategic management begins with a plan to plan, founded on organizational values, followed by mission formulation, strategic modeling, and implementation. The plan should outline steps to be taken, establish the committees and meetings, and the time frames involved should be explicit. It is also important to assess organizational resources such as personnel, facilities/physical assets (e.g., building, work stations, etc.), culture, organizational competencies, and external (political and governmental) support. Processes established can facilitate the implementation process. For example, is the entire process planned and monitored? How does the organizational structure and decision-making hierarchy affect implementation? The processes should also be established to facilitate the establishment or review of the organizational values, mission, and vision, to drive development of strategic analyses and objectives. Finally, clear communication channels to disseminate information and evaluation and feedback loops to continuously improve the implementation process should exist.

As stated above, the most difficult aspect of strategic action is the actual implementation of strategic plans. Organizations often spend an incredible amount of time and resources developing strategic plans. Yet, many of these plans do not get implemented. This waste of resources is caused by an inward focus on the need for the planning process and not understanding that the purpose of strategic thinking should be outcome oriented, where the organization improves its competitive position by achieving its mission and vision.

To facilitate implementation, health care organizations should seek to:

- Establish the competencies, capabilities, and resources needed to achieve strategic action. Firms should embed the organizational skills and allocate the manpower and resources needed to engage in strategic action through specific goals, projects, and programs.
- Identify responsibility and outcomes with definite timelines and key performance indicators. This should include managerial responsibility and related resources necessary to accomplish the targeted strategic objectives.
- Develop and promote policies that facilitate strategic action. Organizations should establish policies that encourage innovation and aid in change.
- Appropriately use information and operating systems to drive the strategies. Health care organizations generally have far too much data, but lack good information to drive strategic decisions. Strategic thinking requires accurate, timely information delivered to the decision maker.
- Tie rewards to the achievement of strategic action. Successful strategic-oriented firms are results oriented and motivate and celebrate achievement of strategic outcomes. Rewards and incentives should be tied to the strategic outcomes.
- Tie budgets to strategies. Too often strategic plans are divorced from organizational budgets. Strategies need to be integrated into annual budgets and be used to drive strategic action.
- Establish a monitoring and evaluation process that will communicate the progress and challenges implementing the strategies.
- Incorporate strategic action into annual evaluations. Annual employee evaluations should be tied into the organizational strategies. Especially, organizational values should be directly reflected in each evaluation. Employees and managers should determine how closely the employees are living the values in their work.

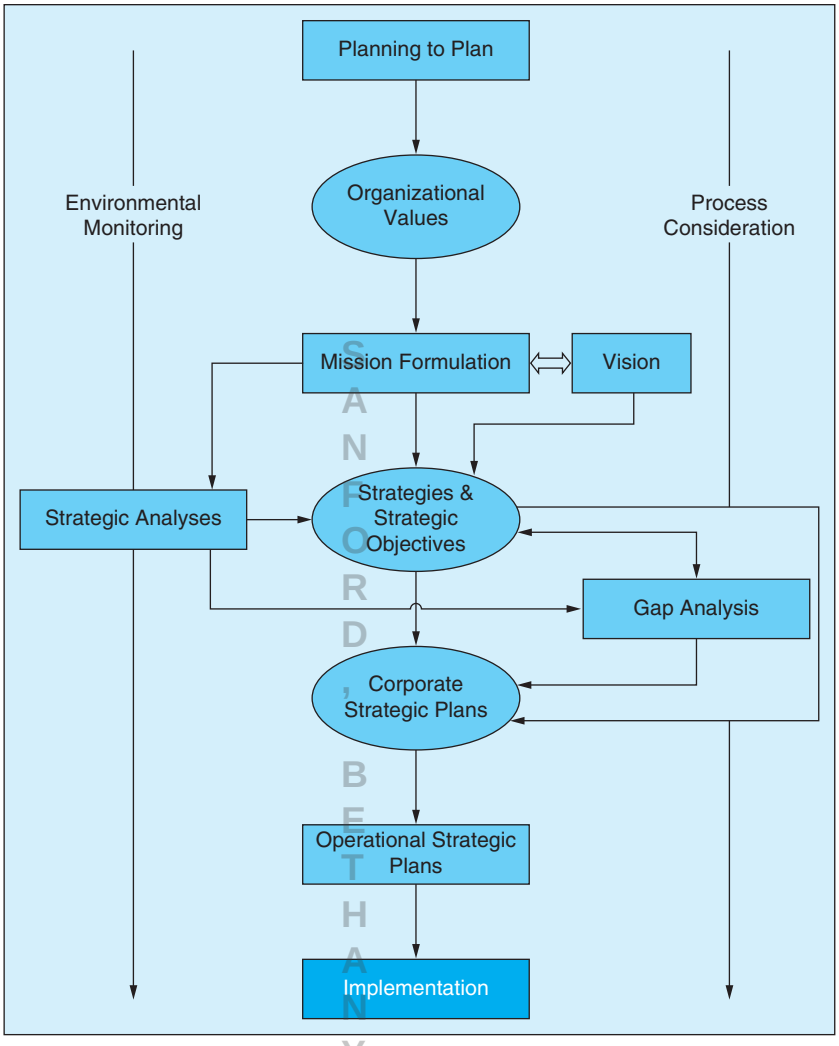

Figure 10.4 The Strategic Process.
SOURCE: Delmar, Cengage Learning.

VALUES, MISSION, AND VISION

Organizations can be effective with radically different strategies. Even similar organizations in geographic proximity may have different strategies that each produces spectacular results. How could this be possible? Frankly, as we will discuss, there is not a one right, optimal, or "one-size-fits-all" strategy, but effective strategies are created by matching internal abilities and resources to the external environment to meet the purpose for the firm's existence. Since organizations exist for many reasons, an effective and successful outcome may be different for different organizations. For example, a for-profit hospital may seek high financial returns, while a church clinic might define success by the greater number of patients they serve.

The definition of success should be based upon the important values and purposes of an organization. Each organization may have different values and stakeholders who

will influence their objectives and how they should define their success. Different organizational models may also be associated with different statements of values, mission, and vision as well as with differences in their approaches to strategy. This is especially the case in the health care sector, where strategies often differ significantly across for-profit versus not-for-profit organizations, academic medical centers versus community hospitals, rural versus urban facilities, multi-market systems versus single-market hospitals, and so on.

The basis of all successful strategies should originate with the organization's mission, vision, and values (Luke, Walston, and Plummer, 2004). These should be the foundation of organizational strategies. Too often, however, they end up as a written document sitting on a shelf or a plaque hanging on the wall and are disconnected from the strategic formulation and implementation. Strategy experts have observed that few organizational participants, including executives, demonstrate knowledge of elements of the organizational strategic plans (Collis and Rukstad, 2008). When this disconnect occurs, organizations frequently find themselves in trouble with their stakeholders. For example, HealthSouth, HCA, and Tenet, among many others, experienced indictments, huge fines, lower stock prices, and tarnished public images as a result of their actions in contrast to the stated mission, vision, and values. HCA paid almost $1.7 billion in criminal fines, civil restitution, and penalties in 2000 and 2003 to resolve fraudulent actions that violated their very visible mission and values statements that had been displayed ubiquitously in their hospitals (http://www.usdoj.gov/opa/pr/2003/June/03_civ_386.htm).

Values

What are values and why are they important? **Values** are the expression of the ethics that guide employees' actions. They should constrain how the mission and vision is accomplished. Certain behaviors, no matter how they accomplish the organizational mission, are unacceptable, and even if the mission is accomplished, if the values have been violated, the organization has failed.

In many organizations, one or more employees may have asked: "Is there any value in articulating our values?" In general, employees may be in the best position to observe whether or not an organization's expressed values have been incorporated into its culture. Employees might perceive that an organization's value statements are mere gestures, that they lack real purpose. The more observant might even fail to see a connection between the expressed values and an organization's intended strategy.

Formalized, written organizational values are important for a number of reasons. For one, they serve as an ethical compass, the absence of which could leave an organization without a viable rudder to direct its strategies. During times of stress, especially, an organization lacking such a compass might feel pressure to deviate from standards and take decisions contrary to normal ethical practices. Pressure to achieve goals may also generate personality conflicts that could motivate individuals and groups to act in inappropriate and unethical ways. Written values serve as visible reminders of the organization's commitment to basic beliefs.

Failure to embed values also subjects an organization to the risk of contingent ethics—values that shift with the circumstances. Written values assist in grounding organizational ethics over time. They keep those values from fluctuating based on the situation. Put another way, values and ethics should endure and not fluctuate based on current encounters or challenges. Strategies will (and should) change over time. However, values should not.

Thomas Watson Jr., former chairman of IBM, expressed the need for common beliefs upon which a business should be founded: "I believe that any organization, in order to survive and achieve success, must have a sound set of beliefs on which it premises all of its policies and actions" (Watson, 1963).

In theory, organizational values represent the sum total of individual values held by each person affiliated with an organization—the stakeholders. In practice, however, the values of top executives almost always exert the greatest influence on an organization's prevailing tone and practices. More generally, it is the role of the CEO, other top executives, and the board of directors to formulate an organization's values and to assure that they are lived throughout the organization. As a consultant once said, "Values should not be just written on a wall, but to be effective they must be written on the hearts of employees." Organizational leaders are responsible to move the values from the wall and into the hearts of their employees.

Expressed values can also be the means by which an organization shapes the attitudes of its members toward selected categories of stakeholders. This is especially important in health care, given the diversity and importance of different stakeholders. A good example of this can be found in the value statements offered by All Saints Healthcare System, a hospital

system based in Racine, Wisconsin. All Saints is a member of the Wheaton Franciscan System, a Catholic multi-hospital system. Four of their expressed values (retrieved August 14, 2010, from http://www.mywheaton.org/about/mission_vision_values.asp) are:

> *Respect:* We value each person as sacred, created in the image and likeness of God, which gives worth and meaning to each person's life.
>
> *Integrity:* We value honesty, words and actions that build trust.
>
> *Development:* We value personal and professional growth that combines the physical, emotional, spiritual and relational aspects of life and work.
>
> *Excellence:* We value superior performance in our work and service.
>
> *Stewardship:* We value our responsibility to use human, financial, and natural resources entrusted to us for the common good, with special concern for those who are poor.

Note how these values craft expected behaviors toward patients and the poor. Assuming that these values are inculcated within the system's culture, one should expect the provision of excellent care and that the poor are treated with dignity by this system. Furthermore, the location of their facilities and financial policies should reflect these values. One might expect their hospitals to be located near lower socio-economic areas to provide generous discounts from billed charges to the poor.

How Should Values Be Established and Evaluated?

Values should be established and evaluated based on the values and expectations of key shareholders.

- *Obtain key stakeholders' expectations for the organization.* In some organizations, the owners might be the only group truly deemed to be important. For others, multiple groups including owners, customers, employees, and suppliers might be influential enough to be included in a search for values. One way to identify key stakeholders is to identify those groups that would suffer the most if the organization ceased to exist. The organization can conduct surveys and interviews to see what values are believed to be important. They should seek to answer questions such as (1) For what do they want the organization to be known? (2) What makes them proud to be affiliated with the organization? And (3) Who are the heroes of the company and why?
- *Identify common values among stakeholders.* Commonly expressed values should be identified and related values merged to express the ethical base of the organization's purpose. A firm should seek to identify those values that set them apart and make them distinctive.
- *Values should be visible and tangible to employees.* Organizational values must be visible and tied to performance. The values should be clearly incorporated into employees' (including the CEO's) evaluations, and the employees should be appraised as to how well they are living the values. The firm should also link the values to measurable strategic outcomes, as reflected in satisfaction scores, error rates, availability of mental health care for the homeless, and other such indicators.
- *Values should be memorable.* Values should be in terms that stakeholders will understand and can remember. As a rule of thumb, there should be no more than 5 to 7 values.

Mission

A **mission** should be the foundation of strategic direction. The existence and enactment of a company mission should be critical to a firm's success. A mission keeps management focused on what their primary purpose is. Authors have suggested that a mission should address the reason for being and why you do what you do (Ginter, Swayne, and Duncan, 2005; Luke, Walston, and Plummer, 2004). It is a key indicator of how the organization views its stakeholders. As such, it should be a direct outgrowth of its values. A mission provides the reason for the company's existence and forms the basis for strategy. It should guide the firm to focus its energies and frame its choices of strategy and commitments of resources. A mission should be the solid base upon which strategic direction is established that drives resource allocation.

What should be included in a mission? Most successful statements have measurable, definable, and actionable content. They contain as well an emotional appeal that stakeholders can recognize and act upon. Key components should include the definition of product or service, the standards employed, and the population or segment served by the organization. A mission should describe what the organization does or its scope. What does it do? What are the boundaries beyond which it will not venture? They should also reflect the organization's values through expressed standards and objectives. In health care,

IN PRACTICE: How Values Dictate Actions and Outcomes: The Mongol and Arab Conquests

The values an organization holds can directly influence their behavior and outcomes. Two different peoples conquered huge swaths of the known world across different centuries with different outcomes, demonstrating how values can readily dictate actions and outcomes. The Arab or Muslim armies emerged in 632 CE, as the Arab Peninsula was unified. By 732 CE, the Muslims controlled land from Spain to India. The Muslims were skilled warriors, but held deeply rooted values that dictated how war was to be conducted. Muslims felt a deep need to share Islam with others. Historically, Muslim travelers and traders have peacefully spread the religion to Africa, China, Malaysia, and Indonesia. The sharing of Islam was a primary objective of the Arab armies even during conflict, which was reflected by the army's values and actions.

War was strongly discouraged (see Al-Baqarah 2:190 in the Quran), but necessary against oppressive nations and for self-defense. Muslims, when engaged in war, were never to fight against noncombatants, especially women and children. Trees were not to be harmed. Justice was to be highly valued, as during peace. Medical assistance was to be available to all, regardless of religion or creed, even enemies. Captives were to be shown mercy, fed, and allowed to gain their freedom through ransom, labor, or on their word. When a people were conquered, they were still allowed religious freedom and, generally, had more freedoms and opportunities. As a result, most of the conquered converted to Islam, over time, achieving their primary mission (DeWeese, 1994).

In contrast to the Muslim expansion, the Mongol Empire arose during the thirteenth and fourteenth centuries. At its height, it covered lands from China, Russia, India, and the Middle East. The Mongols lacked a religious motive, but were a warlike people who enjoyed hunting and conquest. The original Mongol leader, Genghis Khan, is reputed to once have asked and then answered, what was the greatest joy in life. He stated that "The greatest joy a man can know is to conquer his enemies and drive them before him. To ride their horses and take away their possessions. To see the faces who were dear to them bedewed with tears, and to clasp their wives and daughters in his arms." (Prawdin and Chaliand, 2005)

Yet, the Mongols had a strict sense of honor and loyalty. The Mongol "mission" was conquest and win. They were very intelligent and used superb tactics and strategies. They gained accurate knowledge of their enemies prior to attacking, used superior technology and tactics, and were highly mobile. The Mongols were extremely ruthless in battle, but also displayed extraordinary military discipline. Resistance was met by ruthless annihilation. Captured enemies might be killed, enslaved, or used as a human shield in subsequent battles. Cooperative territories received relatively benevolent rule that included religious tolerance. When a Mongol army first approached a city, the city's residents were often given an opportunity to surrender and pay tribute. If rejected, the city would be ransacked and destroyed. Everyone and everything was likely to be attacked, including armies, animals, women, and children. For instance, Bagdad, the capital of the then-existing Muslim empire, was destroyed in 1257 CE. As many as a million people were estimated to have been killed (Frazier, 2005). Total destruction occurred to many cities, including Kiev and Moscow among others. The Mongols expanded their empire to the gates of Vienna, Austria, but the empire began to unravel in less than two centuries. Ironically, most of the Mongol controlled areas eventually converted to Islam.

these standards often include wording such as "providing world-class services" or "setting the community's quality standards." The mission should represent the essence of the organization's competitive advantage. What will the organization do differently, or how can it perform better than others? The mission statement may also target a specific customer base. Organizations may state in their missions that they serve a special demographic segment, like women or children, or a nation or region.

Missions are expressed in many ways. Some are short and others lengthy. Mission statements should be long enough to be distinctive and guide an organization's strategies, but

short enough that employees can comprehend and apply them. If a mission statement is too long, it may not be readily communicated to organizational participants or used effectively to drive strategies. Collis and Rukstad (2008) suggest that a mission statement should contain no more than 35 words.

Business also should avoid using nondescript, generic statements like "providing the highest quality of care for the lowest possible cost," or "maximizing shareholder wealth by exceeding customer expectations," which in some derivation often appear in many mission statements. A hospital stating that its mission is "is to provide the highest possible quality" expresses a virtually meaningless declaration. Another example of an ambiguous mission is one expressed by a large health care system that claimed that its mission was to "remain at the forefront of health care delivery." What does this mean—the forefront in clinical technology, in market share, in quality, in innovation?

Missions should also be crafted to express the core function and purpose of the organization's existence. One large, sophisticated health care organization had the following as its mission:

> [The] Center provides medical services of a highly specialized nature and promotes medical research and education programs, including postgraduate education training, as well as contributes to the prevention of disease.

After extensive discussion, the leadership agreed that the purpose and reason for the medical center's existence was to provide highly specialized health care and education and research existed to support the delivery of specialized care. As a result, they altered their mission to this:

> [The] Center provides the highest quality specialized health care in an integrated education and research setting [for the nation of ...].

Although the differences may seem subtle, they are important. The hospital's primary purpose and the reason for its existence were to provide tertiary and quaternary care to its service population. In the context of their strategic development, education and research were to be instituted chiefly to support the primary mission and not to be developed in an isolated, self-supporting manner that had occurred before.

A mission should also not be too restrictive. During the early 1900s, the railroads in the United States fell on hard times because they had narrowly defined their mission as providing rail service, rather than being in the transportation business. The railroad companies remained committed to transportation on two rails, while much transportation shifted to roads and air. Likewise, hospitals that narrowly define their mission to be in the acute-care business might encounter competitive difficulties in markets in which more integrated services are demanded. However, organizations establish many different kinds of missions. For example, HealthTrust, Inc., a company formed in 1987 from Hospital Corporation of America, used a narrow, succinct mission that they were the "Hospital Company" that focused exclusively on hospital care. If strictly followed, the company would not have been able to expand into rapidly growing outpatient and non-hospital care.

In contrast to the railroads and HealthTrust, Xerox has more broadly defined itself as "The Document Company," and its mission as "to help people find better ways to do great work—by constantly leading in document technologies, products and services that improve our customers' work processes and business results." Note that Xerox does not portray itself as a copier company, but expands and widens its purpose to be a "document company." As such, they can provide both electronic and hard-copy documents that serve to improve their customers' business.

In summary, a mission must "call employees to action." A mission should direct the organization to focus its energies in certain products, standards, and market/geographic segments. The mission statement should express why the organization exists and motivate employees to action. The organizational mission should both constrain and guide strategies and tactical actions.

Vision

A **vision** is a statement about what the organization wants to become. It focuses on the future. The vision should resonate with members of the organization and help them feel proud, excited, and part of something much bigger than themselves. A vision should challenge and stretch the organization's capabilities and image of itself. It gives shape and direction to the organization's future. Better vision statements describe

DEBATE TIME: Missions

Missions can be written in many different ways. Which of the following could you as an employee understand and use in your work? What could be done to improve each? What is the value of a long versus a short mission? The first is an academic medical center, the second and third are hospitals owned by a religious order, and the last is a major pharmaceutical firm.

1. At [Name], our mission is leading health care.
2. Through our exceptional health care services, we reveal the healing presence of God.
3. As a Christian health center, our mission is to improve the health of the people in the communities we serve.
4. We, the management and employees, are striving for entrepreneurial success. Entrepreneurial success starts with people. Our goal is to operate a worldwide business that produces meaningful benefits for consumers, our market partners and our community. Through efficient research and development, production and marketing of pharmaceutical and chemical specialties, we want to extend opportunities to our customers. To achieve this, we focus our endeavors on business areas where we can achieve a competitive advantage through the excellent quality of our products, systems and services. Our objective is to establish permanent business relationships and not merely short term success.

   On the basis of these principles, we operate as an independent and profit oriented enterprise. We expect a high level of performance from each other, and reward this accordingly. We wish to secure an acceptable return on capital for our investors.

   We respect the cultural distinctions and national interests of all countries in which we operate. We strive to achieve positive recognition for our company within the community. [Company] attaches particular importance to its responsibility for safety. We have an obligation to respect the environment.

   We will deal honestly and constructively with one another. We regard open communication, both internal and external, as a fundamental prerequisite for reaching an understanding of our common goals and for giving meaning to what we do. We shall not be constrained by borders between business areas or countries. All employees, male or female, have equal opportunities to develop their careers. All of us make a personal contribution to the company's entrepreneurial success through our mutual initiative, creativity and sense of responsibility.

outcomes that organizations would like to see that may be 5 to 10 years in the future, or further.

A vision should describe the desired future state of the organization, while the mission provides a description of the existing purpose and practice of the firm. A vision to be effective should align with the organizational values, be realistic, be written in concise and understandable language, describe a desirable future, and be clear.

A large, international hospital set as its vision to "become a world-leading institution of excellence and innovation in health care." This required that they prioritize services and designate key centers of excellence for service delivery, and assure that necessary resources would be allocated to these services. On the other hand, there are times when organizations create a vision that may be too complex to be useful for mapping the organization's future. An eastern U.S. health care system crafted its vision to:

> [C]reate a new standard of community health care, one that combines the personalized, caring environment of the finest community hospital with a commitment to providing the most advanced medical technology and capabilities available to it.

This vision is lengthy and has mostly unrealizable outcomes. A more succinct example is a hospital in the western United States that set as its vision to:

> be the premier regional health care provider to the residents of its service area

Finally, an academic medical center in the southern United States seeks to

> be recognized as a leading medical center in [the state] and one of the best in the nation. We will be at the forefront of clinical services, medical research and education. With our physician and university partners we will create, teach, and deliver tomorrow's breakthroughs in medical science.

In summary, a vision should motivate and direct an organization. It and the mission should be the foundation of all strategic plans and activities. Leaders should seek to only craft strategies that help fulfill the vision and mission. These two items should be the first and last discussion items of every strategic thinking process. Initially, the vision and mission should be reviewed, the environment analyzed, strategies formulated, and at the end, leaders should confirm that the work aligns and promotes the organizational vision and mission.

STRATEGY AND HEALTH CARE

The concept of strategic management often centers around achieving competitive advantage over the organization's competitors in the market. There are a number of definitions describing competitive advantage. The organization may achieve competitive advantage by an increase in market power as a result of its actions (Luke, Walston, and Plummer, 2004), improved performance that distinguishes itself from the competition (Porter, 1980), and the implementation of a value-creating strategy not simultaneously implemented by current or potential players (Barney, 1991). Each suggests a competitive business environment of winners and losers in which firms struggle to gain an advantage over their market competitors. In such environments, markets award winners as a result of their relative superior service, pricing, and product innovation that provide consumers greater value. Organizations gain competitive advantage by exploiting their internal strengths in relation to environmental opportunities. As we will discuss, the sources of competitive advantage have been suggested to come from external positioning (Porter, 1980) or organizational resources and capabilities (Barney, 1991).

What Is Competitive Advantage in Health Care?

Health care, as mentioned, is a very diverse industry containing for-profit, highly competitive pharmaceutical and insurance companies and community-oriented, not-for-profit service providers. Strategic advantage for for-profit firms frequently is based on a "win-lose" perspective. Strategic gain and success depends on finishing ahead of competitors in terms of market share, earnings, or another comparative figure. Health care organizations, especially those that are not for profit and whose mission involves service to vulnerable or disadvantaged populations, may not prioritize gaining a strategic advantage over their competitors as a top organizational goal.

The financial objectives of many health care sectors have evolved over time. Historically, hospitals, nursing homes, and health insurance plans were mostly established for charitable purposes. However, since the 1980s in the United States, health care providers more often have become for-profit businesses. For example, only about 60 percent of hospitals, 30 percent of nursing homes, and 40 percent of health enrollees are managed by not-for-profit companies in the United States today (Alliance for Advancing Nonprofit Health Care, 2009). Health care systems outside the United States, in contrast, exist with greater collaboration than competition. Strategic management literature has suggested that U.S. health care firms focus more on competition for patients than those in other countries. Collaboration appears to be the norm among health care providers in many nations (Commonwealth Fund, 2004). Collaboration and shared responsibility are engendered to reduce duplication and create more efficient care delivery.

Health care experts have argued for and against fostering competition among health care organizations (Hansen, 2008; Muscalus, 2008; Mutter, Wong, and Goldfarb, 2008). Although sufficient income has to be generated by all organizations to survive, fierce competition may not be as effective in health care. Given the high costs associated with the provision of health care, intense competition may simply lower the organization's profits and decrease the quality of service, without reducing the market share of the competitors.

Intense competition also may result in increased duplication and redundancy of services. Actions taken by one organization are frequently copied by competitors, regularly leading to service overcapacity and inefficiencies. For example, in Indianapolis, no hospital dedicated to heart disease existed prior to 2002. However, soon after one hospital announced the construction of a freestanding heart hospital, all other hospitals in the area began development plans for their own heart hospitals. This resulted in three freestanding heart hospitals and one heart hospital that was incorporated in

an existing hospital. This duplicated services and increased costs, but did not provide competitive advantage for any organization. A similar instance occurred in the same city a few years earlier, when St. Vincent's Hospital and Community Hospitals announced their merger. Quickly after this announcement, other major players, Methodist Hospital, Riley Children Hospital, and University Hospital, decided to merge and formed a system called Clarion. Ironically, the planned St. Vincent–Community Hospital merger fell apart at the last minute, while the efforts to form Clarion were completed.

Evolving Strategies

Strategies often evolve and change according to environmental pressures. The pace of change is often dictated by the life cycle of products as well as the uncertainty and "turbulence" in the market. The speed of innovation is extremely rapid for some products and slower for others. Organizations associated with products with short life spans have to move rapidly and form strategic plans of short temporal dimensions. Their strategic plans may cover as little as six months or a very limited number of years. Personal computers and cell phones are two products that have and are experiencing rapid product innovation, requiring short-term strategies.

New technologies can dramatically change the need and provision of services. In health care, rapid technological breakthroughs in the 1900s in pharmaceuticals drastically changed the provision of care of tuberculosis and ultimately closed most tuberculosis hospitals. Also in the 1990s, discoveries in laparoscopic and other tools allowed a significant shift to outpatient surgeries. Likewise, with the use of antiviral cocktails, HIV/AIDS has become a chronic condition that patients live with and manage (using medications) on their own, rather than an acute condition for which patients must be hospitalized. Each required a recognition and evolution of strategies for organizations that were to survive and prosper.

A number of factors affect uncertainty in the environment and therefore strategic planning for an organization:

- Political/legislative changes
- Technology innovation
- Changing customer demand

The pace of change and uncertainty in health care has been spurred on by numerous legislative proposals that have been considered in the past two decades. As the U.S. government funds over half of health care, and as many of the current health care reform proposals would increase this percentage, the strong political influence in health care in the United States will surely continue. Likewise, technological innovation is rapidly progressing, causing uncertainty. For example, synthetic biology promises to radically change how drugs are discovered, vaccines are produced, and treatment provided (Ball, 2004).

The concept of a business model is a helpful way to see how a firm is organized, creates value, and compares itself to its competitors. A **business model** makes up the core elements of a firm and how it is organized to deliver value to its customers and generate revenues. Many health care users today call for fundamental changes in the business model of health care (Crean, 2010; Lin, 2008; Perkins, 2010). The business model of health care is predicted to have dramatic changes in the future (Jackson, 2008). Health care firms face the challenge to identify when new technology or other factors make conditions right for newer, more efficient ways of providing value, and to modify their business models accordingly.

Business models contain four components, each of which continue to influence one another as the organization begins, evolves, and progresses:

1. Customer Value: A value proposition that better meets a customer's needs in terms of product differentiation, cost, and/or access/availability.
2. Inputs: The combination of resources used to provide the product or service.
3. Processes: The sequence and method resources are combined to deliver the product or service.
4. Profitability: A financial mechanism to recover enough revenue to sustain the provision of the product or service.

Figure 10.5 illustrates the components of a business model where they constantly interact to produce services and evolve. Any or all of these components can be altered to address new challenges.

Customer Value

Different business models provide different forms of value to customers. Customers have differing desires and needs. Some value ease of access and availability, others want low cost, while others seek higher quality. An innovative business model will seek to address those unmet needs. This is usually the first component that is addressed in developing a new business

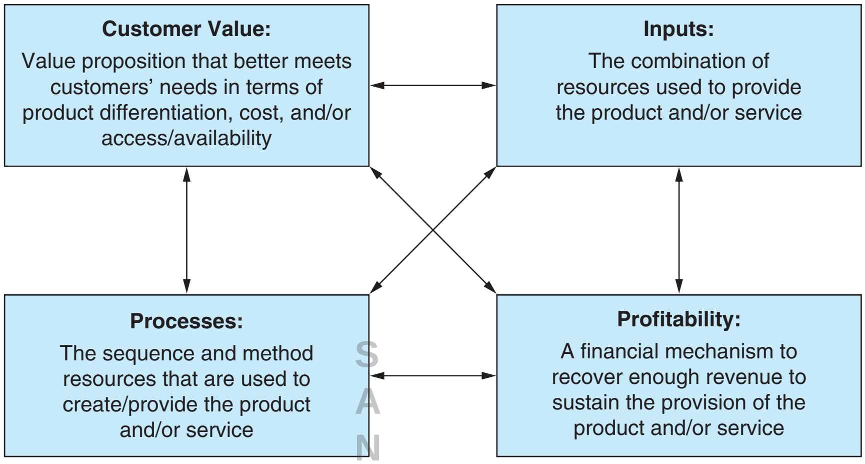

Figure 10.5 Components of a Business Model.
SOURCE: Delmar, Cengage Learning.

model. For example, retail clinics and generic drugs offer lower prices, while home health provides greater convenience.

Inputs

The combination and mix of resources used significantly affects the business model. Resources include people, materials, and machines. Companies choose how much and what type of each that will be used. New technology that supplants people is often incorporated into a new business model for the delivery of the product or service. The mix of personnel includes what licenses and skills are used. For example, clinics may utilize nurse practitioners or family practitioners. Anesthesia may be done by nurse anesthetists or anesthesiologists.

Processes

An organization is composed of many different processes that are ordered to simplify decision making and increase efficiency. These include admissions, financial, and service processes, among many others. Processes can vary. Some hospitals will admit patients directly to their inpatient or outpatient room and may have standardized protocols called clinical pathways to direct how physicians should treat certain conditions. Others simply have patients check in at a centralized location and then transported to their rooms and allow physicians to treat patients as they wish.

Profitability

Any organization must generate enough revenues to sustain itself. Some mechanism, be it direct payments, insurance, donations, or other means must be found to generate adequate revenues to cover the cost of operation. Enough customers must be found who derive value from the product or services. At the same time, inputs and processes must cost less than the revenues generated. For example, some religious organizations generate revenues from donations, governmental facilities from governmental allocations, and insurance companies from premium payments, and hospitals obtain almost half their revenues from Medicare.

Business models change as both internal and external pressures cause companies to seek different ways to compete and survive. Some argue that the business model of today's leading pharmaceutical companies must change (Pesse, Erat, and Erat, 2006; PricewaterhouseCoopers, 2010). Most large pharmaceutical companies have traditionally owned all functions from research and development through to commercialization. Historically, the business model of this large, complex firm hinged on the ability to do everything within the corporate walls, from identifying promising new molecules in research and testing them in large clinical trials, to generating revenues from sales with extensive marketing and a large sales force who market directly to physicians.

This model relied extensively on "blockbuster" drugs, where a small number of drugs accounted for a very large portion of the pharmacuetical companies' overall revenues. For example, when the patent for Prozac, a widely prescribed antidepressant drug, expired, it accounted for 20 percent of sales for Eli Lilly, the pharmaceutical company manufacturing the drug. Within a year after losing the patent, sales from Prozac dropped over $2 billion a year for the company (Harris, 2004).

It has been predicted that by 2020, there will no longer be a sufficient number of blockbuster drugs to support the current size of drug companies, and that the escalating costs of research and development, including using genetics and biotechnology, in drug discovery will lead to new business models where the drug companies will narrow their core services, increase their alliances, and pursue collaborative agreements (PricewaterhouseCoopers, 2010). Revenue generation will continue to switch from direct sales to physicians to negotiated insurance company contracts, formularies, and governmental agencies based on effectiveness and cost, rather than flashy marketing.

IN PRACTICE: Shifting Business Models – Access to Videos

Renting and watching movies at home have long been a favorite pastime for many on a Saturday night. Twenty years ago, there were thousands of "mom-and-pop" stores that rented videos. Over time, most of these were consolidated into national chains, such as Blockbuster or Hollywood Video. Renting movies requires one to physically visit the store and rent a movie from the inventory on the shelves. The customer had a few days to return it or pay a late fee. A different business model emerged for movie rentals in the 1990s. Direct rental companies sprang up that offered thousands of movie titles and allowed customers to hold movies for any length of time (up to three movies) for a flat monthly charge. Netflix was founded in 1997 by Marc Randolph and Reed Hastings, who had worked together at Pure Software. The site was launched in April 1998 with an online version of a more traditional pay-per-rental model ($4 per rental plus $2 in postage; late fees applied). Netflix introduced the monthly subscription concept in September 1999 without postal charges, and it dropped the single rental model in early 2000. Since then, it has built its reputation on the model of flat-fee, unlimited rentals with no due dates, late fees, shipping or handling fees, or per-title rental fees.

Netflix developed and maintains an extensive recommendation system based on ratings and reviews submitted by customers. The company believes this gives it an edge in competing with online newcomers like Blockbuster Video. On October 1, 2006, Netflix offered a $1,000,000 prize for the first movie recommendation algorithm that could beat its existing algorithm. The Cinematch systems improved the matching between recommendations and customer ratings by more than 10 percent.

Unlike most online on-demand entertainment services, such as Movielink, Netflix's offerings cover a vast range of DVD movies, television series, and games with 80,000 titles. Particularly, Netflix has become noted for its extensive collection of documentary films, Japanese anime, and independent films, titles that are usually hard to find in traditional rental shops. Indeed, in 2008, Netflix offered instant Internet viewing of 10,000 movies and television episodes and a DVD inventory of 100,000 titles (Hansell, 2008).

A competing business model, Redbox, began in 2002, using re-branded kiosks manufactured and operated by Silicon Valley–based DVDPlay. The initial launch included the 140 McDonald's restaurants in the Denver test market. Each kiosk can hold up to 500 DVDs with 70–140 titles, updated weekly. DVDs cost $1 to rent and must be returned the next day or another $1 would be charged. After 25 days, the customer then owns the DVD. Customers can also reserve DVDs online, made possible by real-time inventory updates on the company's website. Redbox Automated Retail LLC was initially funded by McDonald's Ventures, LLC. McDonald's still owns 47 percent of Redbox, with another 47 percent owned by Coinstar. The company surpassed Blockbuster Inc. in 2007 in number of U.S. locations and passed 1 million rentals in February 2008. As of April 2007, the kiosks averaged 49.1 rentals per day and $37,457 a year in revenue.

The Hospital Business Model

The delivery of medical services has changed rapidly, affecting the way of doing business for many stakeholders and players in the industry. With better technology for diagnosis and treatment and various organizational arrangements for care provision, patients can more readily act as their own advocates, and the increasingly consumerist attitude has led to demands for more privacy, access, and lower costs. The health care workforce has also undergone continuous changes, where nurse practitioners and physician assistants can prescribe certain medications, perform physicals, and other duties in many states. Primary care physicians are now managing patients with mental health needs, where they would traditionally have been referred to psychiatry. Within the industry, new business models have sprung up to include retail health clinics in chain stores (health clinics located in retail stores, supermarkets, and pharmacies for uncomplicated illnesses), medical tourism (travel beyond international borders to obtain health care), specialty hospitals, alternative medicine, and patient-centered medical homes (Berry and Mirabito, 2010; Society for Healthcare Strategy, 2008).

A traditional hospital business model has dramatically overestimated the needs of an average patient while missing some basic concerns. National reports have raised questions about the quality of care provided in hospitals (Institute of Medicine, 2001), and rapidly escalating prices have caused many consumers to seek alternatives. Many hospitals, however, have refined their business models to include outpatient clinics, emergency or urgent care, and expand product lines such as providing physical therapy. In the current environment, hospitals must continue to adapt their business model, which should consider customer value, inputs, processes, and revenue generation, to compete more effectively.

Customer Value

Traditional hospitals' business models originated in the late nineteenth century as hospitals became the hub for clinical training and scientific research, and the repository of expensive medical technology. Hospitals became the center for the most sophisticated acute-care medical treatment. Hospitals, by having the best technology and medical personnel available, could seek to treat almost any medical problem. Hospitals were initially the only medical facilities that possessed the technology to diagnose and treat serious illnesses. The unpredictability of the medical problems dictated that hospitals needed to employ many specialists to provide value to a wide variety of consumers. Patients gained value by having access to quality care at reasonable costs. The erosion in customer value due to escalating costs has led consumers to access care in alternative settings (LaPenna, 2010).

Inputs

Inputs included highly professionalized health care personnel such as physicians, nurses, respiratory therapists, physical therapists, pharmacists, dieticians, laboratory technicians, and others. Hospitals also use large quantities of supplies, drugs, and support personnel. New, alternative models vary their inputs to use much less expensive manpower, as in medical tourism, or use innovative technology, such as telemedicine, to transmit health information.

Moreover, inputs vary by the type of hospital. Most community hospitals do not employ their own staff, whereas academic medical centers tend to do so. HMOs, depending on their organizational arrangements, either had staff physicians or contract with individual physicians or medical groups.

Processes

Jobs have become segregated according to professional expertise, and processes have been developed to dictate how patients are admitted, treated, and released. In health care, work has been "functionally" organized into departments based on skill sets. New business models simplify and change processes to eliminate costly processes and redundant testing. Electronic medical records allow providers to have access to prior patient records, and some procedures are simplified. In addition, many hospitals have employed hospitalists, a physician who coordinates all patients' inpatient care needs, to ensure continuity of care and reduce the likelihood of errors that often occur with multiple handoffs.

Revenue Generation

In the past, many hospitals were supported by wealthy donors and government funding. With the advent of health care insurance in the mid-twentieth century, insurance payments have become the primary source of hospital revenues, with a small number of people who pay out of pocket. The government, as an insurer, became the biggest payer to hospitals. In 2001, the government accounted for 58 percent of all hospital revenues (Cleverley and Cleverley, 2003). Hospitals are still mostly paid on a per use basis, in that payment received and service utilization have a linear relationship.

A few hospitals owned by HMOs, such as Kaiser Permanente, function contrary to this model, and all revenues are generated by prepayment for the HMO premiums. Hence, within a HMO system, the hospital is a "cost center," and revenue and service utilization would have an inverse relationship.

EVALUATION OF ORGANIZATIONAL ENVIRONMENT

A critical aspect of strategic planning and strategic thinking is to understand the organization's external and **internal environment** (the conditions and elements within an organization, including employees, management, and culture, that affect the firm's choices and activities). It is important to understand existing and projected environments, as they form the basis of our assumptions and impact the subsequent allocation of resources and strategic direction. Assumptions are propositions that are taken for granted; often with limited evidence (*Merriam-Webster*, 2004). For example, in the past two decades, assumptions were made that hospital care would be rare, being supplanted by outpatient services, that HMOs would control health insurance, and that only integrated health care systems could be successful. Each was shown to be false (Burns and Pauly, 2002). Those organizations that clung too long to such assumptions suffered. Periodic scanning of the organizational environment is essential to uncover changes and to validate our assumptions. Scanning the environment provides updated information to adjust our assumptions. Organizations should periodically scan the environment to identify changing factors and challenge their assumptions. This scanning should involve examining both the external and internal environments. Frequently, the analyses of the external market have focused on external competition; while the internal assessments have focused on an organization's unique resources and capabilities (Burns, 2002).

External Evaluation

No organization is immune to the influences of its external environment. The nature of customers and structure of the market directly influence how organizations must compete. Health care is particularly susceptible to the external conditions, including technological innovations, changing customer demands, and governmental regulations. In scanning the external environment, health care organizations should evaluate the following factors:

Customers

Who are the firm's customers? Are there specific segments by age, gender, income, or geographic locations that use the company's services? Which are increasing? Which are decreasing? Organizations should consider completing customer (patient) origin studies to define what geographic locations their customers come from. For example, the patient origin analysis in Table 10.1 shows that more than half of patients were coming from the Central Region, the

TABLE 10.1 Hospital Patient Origin Study – 2007 by Region and Gender

Gender	Eastern Region	Western Region	Central Region	Northern Region	Southern Region	Unknown	TOTAL
Female	1299	903	5497	1176	1400	397	10672
Male	1054	956	4721	1402	1641	550	10324
TOTAL	2353	1859	10218	2578	3041	947	20996
Encounter	**Eastern Region**	**Western Region**	**Central Region**	**Northern Region**	**Southern Region**	**Unknown**	**TOTAL**
Female	12.2%	8.5%	51.5%	11.0%	13.1%	3.7%	100.0%
Male	10.2%	9.3%	45.7%	13.6%	15.9%	5.3%	100.0%
TOTAL	11.2%	8.9%	48.7%	12.3%	14.5%	4.5%	100.0%

percentage growing from 48.7 percent in 2000 to 57 percent in 2005. While the Central Region saw an increase in the number of patients; the number of patients from the Eastern and Western regions declined significantly. The change in patient volume provides important strategic information to determine adjustments in the development of strategies. These data may trigger questions for further evaluation (e.g., whether other health care facilities have opened in the other regions, whether physicians have changed their referral patterns, which strategic actions are succeeding or failing, etc.).

Competition

Understanding the competition can also be critical. Organizations should ask the following questions: Who is the competition? What is the nature of competition? What is the level of cooperation and trust among firms? Is the competitive landscape changing? Are there niche players who only compete for segments of the business? Are there new market entries? Are there new exits? Which products and services are more competitive? Are there clusters or competitive strategic groups that compete intensely?

Other Factors

Health care organizations should also seek to identify other key factors like key referral sources (e.g., key physicians and insurance groups), consumer perceptions of their organization, capacity of competitors (e.g., bed occupancy rates), and price sensitivity for different services and how these may change over time. These factors should have the potential to significantly affect the organization if changed.

Market Structure

Strategies often vary according to **market structure**. The nature of competition is directly related to the structure and degree of fragmentation of a market. Markets can be categorized, as illustrated in Figure 10.6, into fragmented and consolidated markets. The most fragmented market is **perfect competition**, which is characterized by many buyers and sellers, and many products that are similar and undifferentiated. Markets in perfect competition have few **barriers to entry** (the existence of obstacles that prevent competitors from attempting to enter an industry or market) and prices are generally the means of competition. Markets for agricultural commodities (wheat, corn, soybeans, etc.) often come closest to a perfect competition. Products are homogeneous. Product and pricing information is known by all, and each individual seller has little or no effect on market prices and must sell at the going rate. Firms often earn only minimal profits. Generic drugs can be considered as close to perfect competition in health care. One generic drug is often seen comparable to another (of the same prescription) and the choice is frequently dictated by price.

The next level of market fragmentation is **monopolistic competition**. This market structure is characterized by a large number of small firms that have similar, but not identical products. There is relative free entry and exit, and knowledge of prices and technology is common. Competition is relatively vigorous, but each firm, depending on the degree of their differentiation, has some control over their prices. General examples would include restaurants and clothing stores. In the United States, physician services are a health care example of monopolistic competition. There are many physicians but minimal competition based on price. Physicians may be differentiated by their office locations, training, and personal relationships with their patients.

An **oligopoly** is a market dominated by a few large companies. The degree of market concentration is very high, with only a few firms dominating the market. Barriers to entry and exit exist; firms are interdependent in that they must take into account the reactions of their competitors when they make decisions regarding pricing and resource allocation. Firms in oligopolies rarely compete on price, but seek to "brand" and differentiate their products on non-price characteristics.

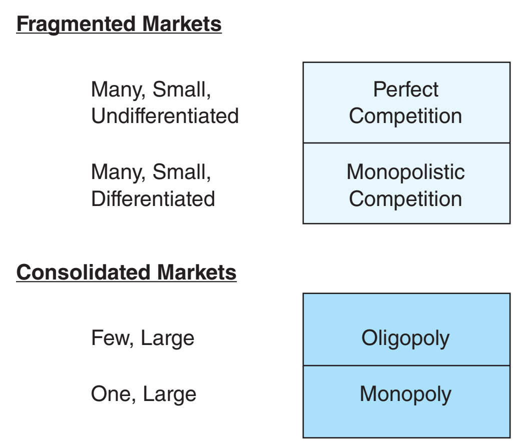

Figure 10.6 Market Structure.
SOURCE: Delmar, Cengage Learning.

Air travel is an industry where oligopolies exist in both the production of large aircraft (Boeing and Airbus), and air carriers in the United States (United, Delta, American, and Southwest). Many hospital, pharmaceutical, and insurance markets are also oligopolies where firms seek to differentiate themselves and compete in areas of access, quality, and values.

Monopolies are fully consolidated markets with only one firm. Monopolists lack competition, as they produce goods or services for which there are not close substitutes. Monopolies often lack incentives to be efficient and maintain high prices. Much of their strategic efforts go into creating barriers to entry to keep potential competitors out of their markets. Water and electric services are often monopolies. Likewise, in many markets, hospitals are monopolies. Most studies have suggested that markets with high hospital concentration (close to monopoly conditions) have also had higher prices (Federal Trade Commission, 2004).

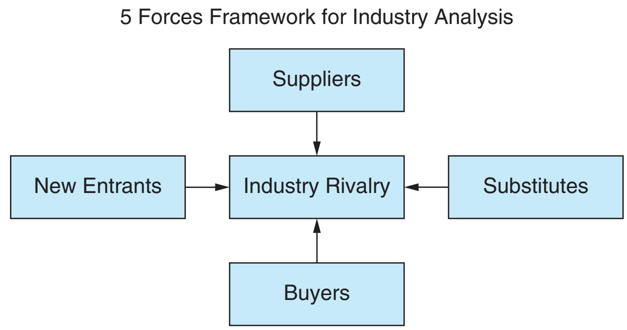

Figure 10.7 The Five Forces Model for Industry Analysis.
SOURCE: Delmar, Cengage Learning.

The Five Forces Framework

Porter's Five Forces Framework has often been employed to understand the competitive forces in industries (Figure 10.7). The forces are five common threats from the environment: (1) the threat of new entrants; (2) the threat of substitutes; (3) the bargaining power of suppliers; (4) the bargaining power of buyers; and (5) the threat of rivalry. At the center is the intensity of rivalry or competition. Porter (1980) suggests that firms gain competitive advantage by exploiting weaknesses in these five forces, or by adopting strategies that modify these forces and reduce competitive pressures. Together, these forces determine the market structure as previously discussed. As intensity of forces increases, the industry environment becomes more hostile, and overall industry profitability declines. On the other hand, weaker forces allow the creation of monopolist conditions, which can enhance overall industry profits.

DEBATE TIME: Monopoly Power

Monopoly power invokes a negative connotation because being the sole player in the market allows the monopolists to extract higher prices. However, many hospitals in the United States are monopolies. Often times, they exist that way simply because the market in which they operate cannot support another facility, although they can also achieve the monopolistic position through other means. Norman Regional Hospital (NRH), a 288-bed facility, is the only hospital in Norman, Oklahoma. Norman is a growing suburb of Oklahoma City, and the third-largest city in the state with a population of 110,000. NRH's mission is to "provide quality and compassionate health care services and education to our regional community in a responsive, efficient, and safe manner," which is further encouraged by its vision to "improve the quality of life in our regional community." While the number of hospitals in other suburban communities has grown and competition is intense in the state, NRH remains the only hospital in Norman. How has it maintained its monopoly position? In the 1980s, NRH worked with the city of Norman to pass legislation that requires any hospital desiring to enter the market to receive city permission or a "certificate of need." With competitors unable to meet this criterion, NRH has effectively remained the only player in town. NRH has claimed that its quality and costs are much better in the absence of competition. Why do you think NRH can make this claim? Do you agree? To judge their quality and costs, you can go to http://www.ucomparehealth care.com or http://www.hospitalcompare.hhs.gov

Rivalry

Competitors (rivals) in a market compete for customers and market share. **Rivalry** influences the strategies of firms and determines the overall profitability of the industry. Many factors affect the rivalry in a market. The number and type of firms are significant factors. In an industry where new rivals can enter relatively easily, increasing the number of firms, or where firms can grow in size via merger and acquisition, the industry tends to be more competitive, and firms are less likely to enjoy high average profitability. Rivalry is likely to occur in markets where competitors differ substantially from one to another. For example, markets that have public, community, and private hospitals will face more competition because they offer consumers more choices. Likewise, competition increases as a market becomes less concentrated, or firms control a more equal share of the market. The existence of one (or a few) dominant firms also diminishes rivalry. Hospital markets in the United States exhibit wide variations in their market structures. However, many are monopolies or oligopolies (Luke, Walston, and Plummer, 2004). The pharmaceutical industry has also become more concentrated. The top 10 pharmaceutical companies control almost 59 percent of the world's pharmaceutical sales.

Porter (1980) has suggested that nonmarket structural characteristics also affect the intensity of competition. These include how easily organizational assets may be used outside the industry (asset specificity), amount of fixed costs, degree of product similarity or differentiation, and available excess capacity. Products that are perceived as similar by the consumer become price competitive and stimulate rivalry. In contrast, greater product differentiation means that the organization can charge more for product, thereby extracting higher profits and dampening rivalry. Excess capacity also increases rivalry because it usually results in lower prices, lower profit margins, and therefore a less attractive industry.

Finally, the nature of the sales process can also influence the level of competition. If sales are based on large, infrequent orders, firms will compete more intensely. Similarly, if sales transactions are not very observable and understandable, rivalry will be higher (Burns, 2002).

Threat of Substitution

The extent and degree of product/service substitution influences the propensity of customers to switch to alternatives. The strength of substitution is tied to customer perception on how well the substitute can match the quality and price characteristics of the original product. Relative price performance, **switching costs** (the cost incurred when a customer changes from one supplier or product to another), and the buyer's propensity to substitute are additional factors that increase the **threat of substitution** (Porter, 1980). In health care, we frequently see the substitution of generics for brand-name drugs. Managed care companies now commonly develop drug formularies and have also created a tiered copayment system, with non-formulary brand-name drugs incurring the highest copayment to encourage the use of the generic drugs. The use of laparoscopic surgery is another example where a less invasive procedure is preferred over traditional open cases for gall bladders, hernias, and appendectomies. Likewise, medications have now all but replaced surgery for treatment of peptic ulcer disease (Kotler, Shalowitz, and Stevens, 2008).

Buyer Power

A firm's buyers or customers always seek to drive down price and improve quality. Their ability to do so, known as **buyer power**, depends on how much they purchase, how well informed they are regarding the product, and their willingness to experiment with alternatives (Mintzberg, Ahlstrand, and Lampel, 1998). As with rivalry, a buyer's bargaining power is partly dependent on market structure. If, as in the defense industry, there are only one or a few buyers for a given product, the buyer(s) can exert strong influence on the firm's behavior. In health care, medical clinics often will seek to not allow any one insurer provide them a significant portion of their patients. Likewise, hospitals will strive to have more than one or more supplier of important medical goods and equipment.

Supplier Power

Supplier power is the opposite perspective of buyer power. Contrary to buyers, suppliers desire the ability to increase price and minimize quality. Suppliers gain power by the degree of importance of their product or service, when there are few suppliers, and the cost of switching to another supplier is high. For example, there are many vendors of health information systems, but the cost for a company to switch from one system to another is very high, which increases supplier power. On the other hand, some pharmaceutical companies are the only source for special drugs, and are therefore in a position to extract higher prices. For example, the price set by Alexion Pharmaceutical for a year's supply of Soliris, a drug for a rare immune disorder, is $409,500 (Herper, 2010).

Threat of New Entrants

New entrants threaten markets by potentially decreasing incumbents' market share and increasing price competition. The extent of barriers to entry will influence the number and size of firms within a given market. Some of these barriers are naturally occurring, where others can be enhanced by existing firms as a competitive strategy to maintain and strength their market position (Kotler, Shalowitz, and Stevens, 2008). These barriers include:

- *Economies of scale and high capital requirements.* Incumbent firms might enjoy economies of scale and benefits of learning that may allow existing firms a price and production advantage over new entrants. **Economies of scale** occur when the average cost per unit lowers from increased volumes. High economies of scale tend to exist in industries with significant fixed costs. As volumes increase, the high fixed costs are spread out and the average price per unit declines. For example, hospitals and pharmaceutical companies have very high fixed and capital costs. A firm desiring market entry in these two industries will be at a cost disadvantage to start, as their initial cost per unit will be much higher than that of their competitors until sufficient market share can be achieved. The high amounts of capital required to set up a new facility (e.g., manufacturing) or high research and development costs (e.g., pharmaceuticals) may also impose a barrier for potential new entrants.
- *Access to key resources or distribution channels.* In markets that have scarce, critical resources or high distribution costs, lacking access to key resources or distribution channels can be a significant barrier to entry. In regard to health care providers, this barrier may be the lack of skilled, specialized personnel. Clinics and hospitals, especially in rural areas, often have difficulty recruiting physicians, especially specialists, to their workforce.
- *Government restrictions.* Legal barriers often present barriers to entry. Government restrictions may limit entry through patents, copyrights, and/or requirements for licensure. Industry regulation also causes potential entrants to gain government approval before they can begin offering products or services. Many U.S. states still require "certificate of need" for hospitals, which requires hospitals to obtain state approval prior to initiating a large capital expenditure. Drugs, likewise, must be thoroughly tested and approved by the FDA before they can be sold.
- *Branding.* Marketing advantages are also enjoyed by incumbents as a result of their reputation. Some firms have successfully used their reputation to lower the barriers to entry. For example, many reputable U.S. providers, such as Harvard International, Cleveland Clinic, and Johns Hopkins, have leveraged their "brand" to enter the health care markets in the Middle East (PR Newswire, 2007; The Economist, 2008).
- *Exclusive and/or long-term agreements.* Incumbents with long-term agreements, especially those that are exclusive, create strong barriers to entry. Many managed-care plans establish exclusive arrangements for the provision of psychiatric and chemical dependency problems, making entry into this type of service delivery very difficult (Kotler, Shalowitz, and Stevens, 2008).
- *Excess capacity and threat of retaliation.* If current firms have excess capacity, they are often willing to use price reductions as a strategy. Even the threat of entry will frequently motivate existing firms to lower or maintain low prices. Along with this, incumbents with a credible history of aggressive retaliation will pose an additional barrier to new entrants.

Evaluation of the Rival Positioning

A company should know and understand its competitors. Determining who is a competitor can be an interesting and sometimes complex process. The concept of "strategic groups" was initially coined by Hunt in 1972, but further developed by Porter in 1980. A **strategic group** is a concept to identify organizations within an industry that have similar business models and/or strategic orientations so that they directly compete with each other. For example, in the restaurant business, there are many different classifications of dining, from fast food to fine dining. McDonalds clearly competes with Burger King and Wendy's, but does not compete with a fine, five-star restaurant. These groups can be distinguished, based on factors such as:

- Price/quality
- Geographic coverage
- Degree of vertical integration
- Product breadth
- Use of distribution channels

INTERNAL RESOURCES: A SOURCE OF COMPETITIVE ADVANTAGE

Internal resources are a key component of strategic advantage. Resources are of critical importance to ensure the successful implementation of strategies (Barney, 1991; Wernerfelt, 1984).

An organization is a combination of resources, both tangible and intangible. Tangible resources include physical assets, such as equipment, buildings, and technology. According to Barney (1991), these resources may be further classified into three categories: (1) physical capital resources, which include technology, plant and equipment, geographic location, and access to raw materials; (2) human capital resources, which include personnel skill sets, training, experience, judgment, intelligence, relationships, and insights of all organizational participants; and (3) organizational capital resources, which include the organization's formal structure, reporting hierarchy, and formal and informal processes such as planning, controlling, and coordinating systems, as well as informal relations among groups within, between, and among organizations in its environment.

Internal resources are strategically important and may offer sustained benefits in the face of competition. However, to have lasting importance, these resources must be valuable, rare, difficult to imitate, and lack substitutes (Barney, 1991). Obviously, a resource should be valuable to be strategic and needs to be integral to improve a firm's effectiveness and efficiency. A resource should also be rare enough to generate demand and hard to replicate. For example, for many firms, human capital is the critical resource, which can be rare and hard to duplicate. Finally, even if a resource is valuable, rare, and hard to imitate, it may not provide a sustained strategic advantage if it can be easily substituted. Physical assets are less likely to provide sustained strategic advantage, but advantage must be found in the combination of physical, human, and organizational resources. Physical assets are far too easily imitated, and substitutes can be found. For instance, the purchase of the latest imaging machine can easily be imitated by competitors and this service duplicated. Sustained strategic advantage comes when the intangible resources that are hard to duplicate, such as organizational culture, are combined with the tangible (Mintzberg, Ahlstrand, and Lampel, 1998). Culture has been suggested as the most effective and durable barrier to imitation, as it generates unique outcomes and is very difficult to replicate (Barney, 1986). Of course, a positive organizational culture is also very difficult to create. Organizations with strong cultures innovate more, have greater patient satisfaction, and are more able to achieve their goals (Bellou, 2007).

Evaluating Organizational Capabilities

A value chain analysis can help organizational management evaluate the use of organizational resources and capabilities. Organizational capabilities and delivery capacity can be examined to determine what added value each step produces. Organizational capabilities refer to an organization's skill in combining its resources to produce goods and services. Capabilities can range from simple tasks in daily operations, to complex processes. These capabilities collectively are the activities of an organization's value chain. In other words, these capabilities are organized in a chain of activities that gives the product or service more added value. Traditionally, value chains have primary activities, which include inbound logistics, operations/production, outbound logistics, marketing and sales, and service/maintenance. In examining the use of capabilities, the costs and value drivers for each activity can be examined.

In health care, a value chain assumes a systems approach where there are two subsystems: service delivery and support activities (Figure 10.8). The service delivery subsystem is further divided into pre-service, point of service, and post-service, illustrating where the service is delivered. The support activities consist of organizational infrastructure, culture, resources, and technology. These subsystems support the service delivery system by ensuring the availability of an inviting and supportive environment, as well as a service-oriented culture, sufficient resources and financing, a highly qualified staff, and appropriate information technology (Ginter et al., 2005).

Another common tool for evaluating organizational competitiveness is through a **SWOT analysis**. SWOT (strengths, weakness, opportunities, and threats) is a common analytical tool for evaluating organizational capabilities and to enhance organizational effectiveness and strategic direction (Figure 10.9). The SWOT analysis enables members of the organization to assess all aspects of the organization. These encompass the strengths and weaknesses of the internal organization's capabilities and activities in the areas of organizational culture, structure, access to resources, staffing, operations, external relationships, information technology capacity and function, administrative processes, clinical control processes, and organizational decision making. Through this exercise, organizations may identify areas where they can grow through the agreed upon opportunities and mitigate sources of major threats (Bourgeois, Duhaime, and Stimpert, 1999; Luke, Walston, and Plummer, 2004). Based on results of internal analysis, organizations may develop strategies that would respond to the assessment of their internal strengths and weaknesses, as well as the external opportunities and threats that are present. SWOT analyses are frequently used, as they are very easy to initiate and can involve many participants or stakeholders.

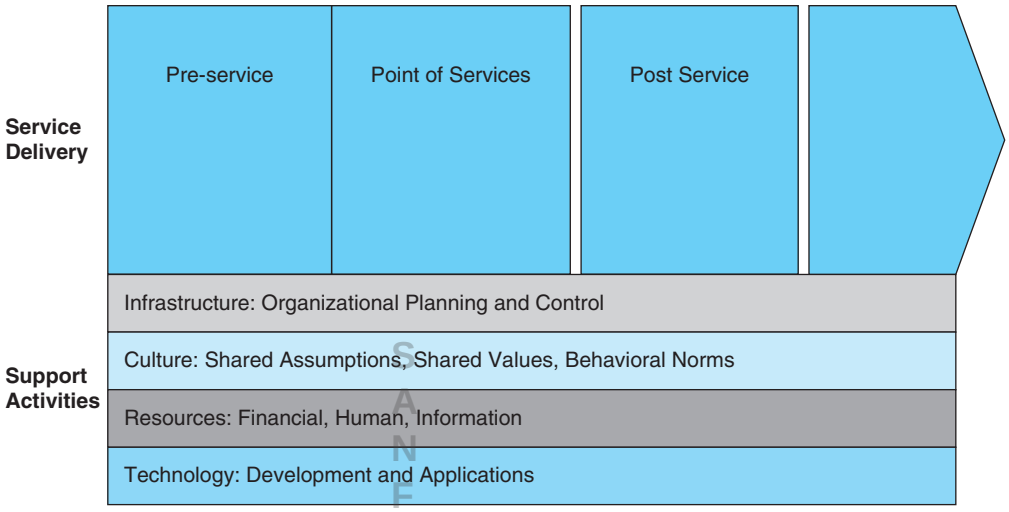

Figure 10.8 Value Chain.
SOURCE: Adapted from Ginter et al. (2005).

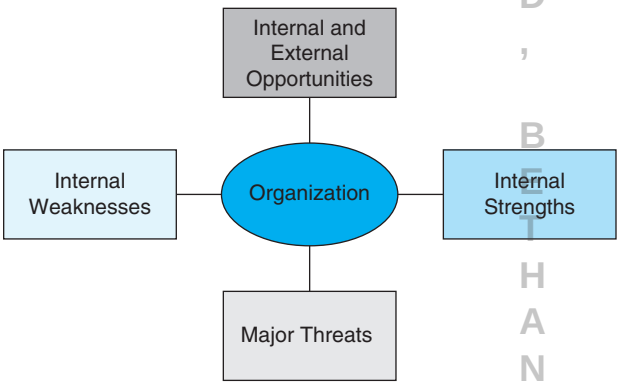

Figure 10.9 SWOT Analysis.
SOURCE: Adapted from Bourgeois et al. (1999).

However, SWOT has several limitations in that it does not provide trend information, often includes erroneous information, and may not provide clear direction at its conclusion.

USE OF GENERIC STRATEGIES

Porter (1980) suggested that a firm could obtain strategic advantage by concentrating on either cost or uniqueness/differentiation, and either on a broad or narrow market. These strategies have become known as **generic strategies** whose application is shown in Figure 10.10.

Low Cost Leadership

This generic strategy calls for being the low-cost producer in an industry for a given level of quality. Some firms have been successful as low-cost leaders. Wal-Mart and Aldi Stores are known for their low prices and acceptable quality. Both companies work on their inputs and processes to maintain very low prices. Generic pharmaceutical companies and retail health clinics also seek to gain strategic advantage from their cost advantage. Factors that allow low cost to work include:

- Vigorous price competition among rivals
- Similar products from rival sellers (products hard to differentiate)
- Most use product in similar ways
- Low switching costs
- High bargaining power with large buyers
- Barriers to entry are low and new entries use introductory low prices to attract buyers

A challenge for any firm in establishing a low-cost position is to assure an acceptable level of quality for its consumers. Quality preferences will vary according to the income, education, and cultural norms of consumers. However, for some products,

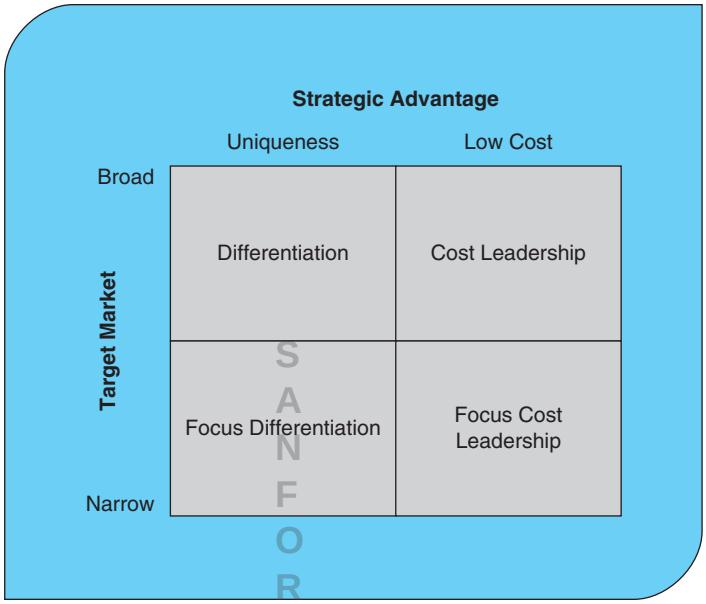

Figure 10.10 Generic strategies.
SOURCE: Delmar, Cengage Learning.

such as health care, the quality requirements are very high for the vast majority of consumers. Most health care providers that seek a low-cost position have extreme difficulty attracting desirable patients. In the mind of consumers, low cost is tied to low quality for providers in health care. Patients would much rather pay a higher price to obtain high quality.

The challenge of a low-cost position in health care is also related to how insulated many consumers are from the actual cost of health care. Patients with insurance are also mostly protected from the high costs of care, as a result of relatively low fixed deductibles and co-insurance. Rather than having to pay the full charges, insured patients pay a fixed deductible and then generally only a small percent (coinsurance) on charges that have been discounted to the insurance company. Some services, however, are less likely to be covered by insurance, and low pricing can be an effective strategy. Hospitals will often set low prices for normal obstetrical deliveries, physicals, and plastic surgeries. Especially in college towns, hospitals find that prospective parents often shop for best prices. Health care providers may seek to have low-cost positions in these market segments, but realize that patients are not very price sensitive in many other services.

Differentiation

A differentiation generic strategy requires that the firm provide a product or service that offers unique attributes. These attributes must be valued by customers and perceived to be better than those of the competitors' product. The value may allow the firm to charge a premium price for the product or service. Product differentiation may also be accomplished through products, services, personnel, channel, and image (Kotler, Shalowitz, and Stevens, 2008). Firms may incorporate features that raise product performance or add to what buyers commonly value, such as reliability, durability, ease of use, convenience, cleanliness, safety, and low maintenance. To be perceived as unique, some health care systems are changing facilities to provide "healing gardens," constructing additional hallways to reduce noise, and adding gourmet chefs and room service (Landro, 2007). Organizations can also differentiate products by improving customer service processes, such as simplifying ordering and delivery, and providing maintenance and repair. A company's personnel can also make a difference in their competence, courtesy, reliability, and communication skills. Many health care organizations, including the Mayo Clinic, have initiated

service excellence programs that focus on improving the interaction of their employees with patients and families (Frey, Leighton, and Cecala, 2005). Channel differentiation can also distinguish a firm. The extent of coverage, expertise, and performance can be a significant advantage. Health care providers seeking to set up referral clinics in key areas, pharmaceutical firms offering multiple means to deliver medication to patients, and insurance companies forming networks that offer the widest scope of providers all exemplify differentiation strategies.

Image also can be a powerful way to differentiate a product. When competing products or services are similar, buyers may obtain value based on the company's image. A favorable image takes a significant amount of time to build, but can be destroyed very quickly (Armstrong and Kotler, 1999). Image in health care has also become more important. Some health care systems spend millions of dollars per year in advertising. For example, hospitals in Boston, Massachusetts, spent about $20 million on advertising in 2005. "Unlike most advertising, hospital promotions don't trumpet sales or special pricing deals. The focus is on image" (Rowland, 2006). If a strong image and brand name exists, it can potentially be transferred to related products and businesses. For example, entities have partnered with universities because their image has been established in a positive manner. Harvard University has a very recognizable and strong image worldwide. It has used its name to go into related businesses of consulting and publishing with Harvard Medical International, which is a subsidiary of Partners Healthcare System in Boston. Likewise, Hospital Corporation of America pays to use the University of Oklahoma (OU)'s name at the OU Medical Center in Oklahoma City.

Focused Strategies

Focused strategies, or **market niche strategies**, constitute another category of generic strategies. As shown in Figure 10.10, a focused strategy can be based on either differentiation or cost. The key for a market niche (targeted to a narrow market segment) or focused strategy is that it should be based on some important characteristic, such as population, product line, geographic regions, and political boundaries. Specialist hospitals are an example of organizations that compete in certain market niches. Competitive advantage is achieved by matching an appropriate strategy to the target market and defining the focus as unique/differentiated or low cost.

Other Aspects of Strategies

First Mover Advantage

The **first mover advantage** is a recognized strategic move to gain advantage by being the initial occupant of a market segment or product. This advantage comes from the ability to obtain heightened visibility, technological leadership, or control of crucial resources. First movers often receive extensive free publicity and gain public name recognition and visibility. Sometimes the first mover becomes so prominent that the product becomes associated with the first mover. For example, Kleenex has become synonymous with facial tissue and Xerox with copies. Likewise, in 1954 the first man to break the four-minute-mile barrier, Roger Bannister, has been honored and remembered in athletics, although he placed fourth in the 1952 Olympics and his record lasted just 46 days (Bascomb, 2005).

First movers can also use breakthroughs in research and development to provide strategic advantage. Sustained advantage can be obtained by moving quickly down the learning curve. Apple, for example, has excelled in introducing new technological breakthroughs with their iPhone, iTouch, and iPod. Likewise, pharmaceutical and biotech companies acting as first movers may gain strategic advantage for their innovation through patents and new drugs.

If first movers can gain access to crucial resources and capabilities, they can potentially block other market entrants or place them at a competitive disadvantage. Such crucial resources might be access to patents, superior physical locations, and more competent staff that can be used to solidify their position.

On the other hand, first movers may not be able to sustain their initial gains. Later entrants may be able to imitate or gain a "free ride" on their investments. Also, late movers have the advantage of not sustaining risks of creating new markets and are able to follow set industry standards. Many firms have moved rapidly into a new product with strong financial backing, but lost to later entrants. For example, Prodigy Communications was the first mover in online shopping; Dumont led in selling televisions; Chux was the first mover in disposable diapers; and Ampex in video recorders. All were surpassed by later movers (Shilling, 2007).

Product Life Cycle

All products and services go through phases or life cycles that relate to their level of costs and sales, which have strategic implications. **Product life cycles** occur because of the inherent limited life of any product, as a result of technological advances and adapting consumer preferences. As seen in Figure 10.11, there are four life cycle stages. In the Emerging Stage, there may be only a few firms initially as the technology is developed and explored. Competition remains low, as there may be few substitutes. Sales and profits also remain low in this stage. The Growth Stage sees increasing market entry by competitors as sales grow rapidly. The product has now proven a success, and customers are rapidly adopting it. The Maturity Stage tends to be the most profitable. Sales increase at a slower rate. Competing products at this stage become more similar, which increases the difficulty of differentiating individual company products. Strategically, companies seek to maintain or expand their market share. In the last stage, Declining, the volume of sales drops substantially and firms merge to increase the market concentration, as competition pushes down profit margins. The U.S. health care industry has been characterized as being in the mature stage with significant competition and governmental regulation (Kepros et al., 2007).

Level of Concentration & Competition

Life Cycle Stage	Concentration	Competition
Emerging	High	Low
Growth	Decreasing	Increasing
Mature	Increasing	Moderate to High
Declining	High	High

Figure 10.11 Life Cycle.
SOURCE: Delmar, Cengage Learning.

Portfolio Analysis

In the 1970s, consulting firms developed various methods for analyzing the strategic position of firms. One very popular method is the **portfolio analysis**. This method compares the value of the strategic business units (SBUs) of firms. Components of companies are categorized by their competitive market position and the environmental attractiveness. Various derivations of this concept exist as the BCG's Growth-Share Matrix, which places components of the firm into named quadrants, and the GE/McKinsey Nine-block Matrix. The strategic purpose behind these analyses is to understand which parts of the firm should receive greater capital investment, which should be underfunded, and which perhaps divested (Ghemawat, 2001). These tools assume that economies of scale, market power, and other strategic advantages are directly related to higher relative market share, and that market growth provides the greatest opportunity for firm expansion. Each portfolio tool seeks to:

1. Evaluate the financial viability of a firm's strategic business units
2. Provide direction for strategic decisions among the strategic business units
3. Indicate which businesses should be divested, acquired, and supported
4. Assist in balancing the firm's portfolio between cash producing and cash consuming units (Luke, Walston, and Plummer, 2004)

A company can examine its SBUs by their competitive position and environmental attractiveness (Figure 10.12). This leads to placing the SBU into one of the four quadrants. Such placement then suggests what strategic actions should take place for each SBU, as mentioned above.

Portfolio analysis can be beneficial, especially when funds are scarce. Many health care companies have used it to evaluate and prioritize services to maintain strategic direction (Bess and Bess, 1990).

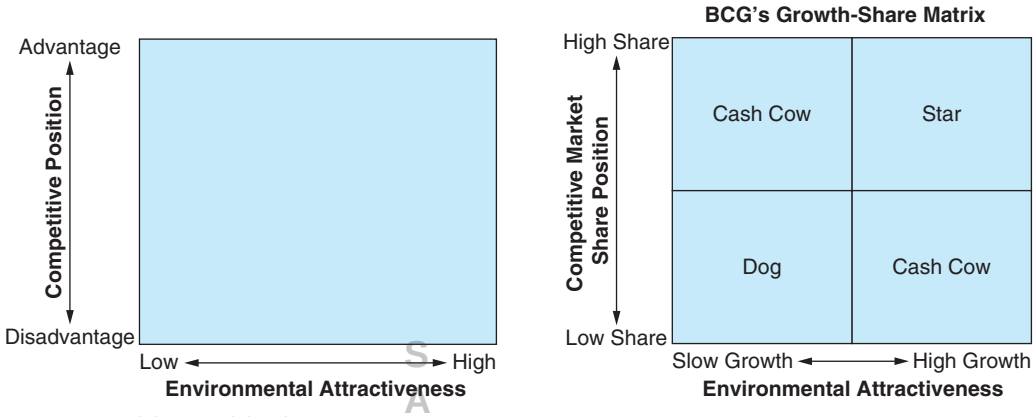

Figure 10.12 Competitive Positioning.
SOURCE: Delmar, Cengage Learning.

SUMMARY AND MANAGERIAL GUIDELINES

1. Understand the importance of mission and vision and their relationship to strategy and strategic management. All strategic actions and direction of a firm should be driven by its mission and vision. Leaders should seek to make their mission and vision meaningful by incorporating them into decision making processes.
2. Establish values that are meaningful and that guide actions within the organization. Values should be directly tied to performance and be reflected in annual evaluations.
3. Realize that strategy is more than creating a written plan for the future. Strategy encompasses the ability to analyze the environment, understand potential futures, and allocate resources to strategically position the firm. It involves strategically managing personnel and assets to direct the organization through uncertain times.
4. Understand that good strategies are not static, but evolve over time based upon the experiences and preferences of leaders. Successful organizations must be adaptable, learn from their experiences, and have the agility to evolve.
5. See how a firm's competitive position can change with the change of any of the four components of a business model. The concept of a business model allows leaders to understand the factors that can be individually or jointly altered to improve the competitiveness of an organization. Likewise, it provides a method to analyze competitors to discern how they differ and what potential advantages they might have.
6. Managers should understand different methods for analyzing the firm's environment. Porter's Five Forces Framework provides two means for examining the organization's environment and those factors that affect the level of competition.

DISCUSSION QUESTIONS

1. Find the mission and values statements for four different hospital types. Do their missions and values reconcile with your expectations for the type of organization? Look at a religiously based organization. Does their mission and values reflect their religious teachings and mission? Now examine a for-profit hospital. Does their mission and values include the need to increase their owners' value and maximize their earnings? Why do you think the missions and values are structured as they are?

2. Health care in the United States has been traditionally a mixture of not-for-profit and for-profit organizations. Do you think that markets where more for-profit firms exist would be inherently more competitive? Why or why not?
3. Business models describe four components of how an organization is organized. They can show comparative differences in a competitive analysis. What is the relationship of strategy and business models?
4. An important aspect of strategic planning is analyzing the internal and external environments. Recently, a large organization completed their environmental analyses only using a very extensive SWOT process. They then used the strengths, weaknesses, opportunities, and threats generated by this process as their environmental analysis. What would be the value of using this technique only? Should other methods also be used? How could data trends be used?
5. There are many firms that have positioned part or all of their products as low cost. Low costs are also commonly thought to equal low prices. Are low costs necessarily the same as low prices? Could a firm have low costs and still have high prices?
6. Large pharmaceutical companies have prospered by owning their discovery, production, and marketing assets and have traditionally made significant portions of their profits from a small number of "blockbuster" drugs. How is the pharmaceutical companies' business model predicted to change? What are the forces that are influencing this change?
7. Porter recommends generic strategies of low cost or differentiation. Is it possible to obtain both at the same time? In health care, is low cost a reasonable strategy? If so, in what circumstances might this be an acceptable strategy?
8. To sustain a competitive advantage, an organization must have resources that are valuable, endure over time, are hard to imitate, and are difficult to find substitutes for. What are some of the common resources in health care that could convey sustained competitive advantage? How do these differ for the different segments of the health care industry? For hospitals? Insurance companies? Pharmaceutical companies? Equipment manufacturers?

CASE 1: A Strategic Imperative to Merge in an Oligopolistic Market?

In June 1995, George L., CEO of Mack Hospital, was surprised and angered. That morning, his major competitors, Cassid Hospital System and St. Mark's Hospital, had announced plans to merge. Until now, their market area had been an oligopoly, divided into four major quadrants, each area mostly controlled by one of the four major hospitals located in that respective location.

Mack Hospital was by far the largest hospital in the metropolitan area, and the nation, with over 900 beds in service. It was located just off the intersection of two of the busiest freeways just outside of the western portion of the community and dominated the western market. Although centrally located, the hospital had 17 outpatient and ambulatory surgical centers in the suburbs. It also owned and ran a physician-hospital organization (PHO), a network of five community health centers, and an IPA-style HMO, called M-Plan.

St. Mark's Hospital was a religiously affiliated hospital. It had a main hospital with over 700 set-up beds and a satellite smaller hospital, located in the affluent northern part of the community. St. Mark's also owned a network of primary care physician practices and a PHO, and was part owner of a HMO and PPO. The hospital has also joint ventured with its large cardiology groups to provide catheterization laboratories for each group. These two cardiology groups accounted for about 50 percent of St Mark's revenues.

Cassid Hospital System was located in the eastern area and had just over 500 set-up beds. It also owned physician practices, a PPO, and a PHO. They have the only CEO in the area that graduated with an MBA and was seen as highly aggressive.

The last major hospital was St. Francis, another religiously affiliated system that was not affiliated with St. Mark's. They were located in the far south of the community. St. Francis was located in a poorer section of the community and provided just

over 400 set-up beds. It also was a part owner in the PPO and HMO that St. Mark's owned and owns primary care physician practices and a PHO.

Other, less dominant hospitals existed, including a 300-bed public hospital in the center of town that had rundown facilities and was the safety net hospital, the only children's hospital in the state also located in the center of the community, a university hospital next to the medical school and children's hospital, and a for-profit women's hospital located in the northern part of the city.

Physician referrals within the community had become increasingly influenced by physician affiliations with PHOs and health systems and their respective financial incentives. Their market also had about 13 percent more hospital beds per 1,000 population than the U.S. average, and its inpatient utilization was about 22 percent higher. Most of the bed capacity was located in the urban core. The community also had about 6 percent more primary care physicians and 17 percent more specialty physicians per 1,000 population than the national average. (Source: Center for Studying Health System Change, 1997)

George L. approached his CFO, Clyde B., and asked, "What in the world are those guys at St. Mark's and Cassid thinking? How can they think they can get away with coming together like that? When they combine their hospitals they will effectively control more than half the metropolitan area. We cannot stand for that!"

Until now, this division of the market had served the hospitals well. Charges were high compared to national averages (one report indicated their average charges were about 30 percent above their neighboring state's charges). They had also been able to keep most major HMOs from deeply penetrating the marketplace. However, in the past three years, managed care had been making progress in influencing the market. About 15 to 20 percent of the commercial insurance market is enrolled in HMOs, but until now, most of these had been owned by one of the top area hospitals. Recently, however, a former BlueCross plan had begun to garner greater market share and threatened the existing, hospital-owned HMOs. Almost all of the area hospitals have been reasonably profitable and had relatively strong financial positions, but had been deteriorating.

2000 to 2003 Net Operating Income/Margin for Area Hospitals (Million)

	Beds	2000	2001	2002	2003
Mack	900	$11.6/1.9%	$12.5/2.0%	$9.7/1.5%	$9.1/1.4%
University	450	$27.8/7.6%	$4.2/1.2%	$1.1/0.3%	$0.1/0.0%
Cassid System	500	$8.5/5.1%	$–1.1/–1.5%	$2.3/1.9%	$1.2/1.3%
St. Francis	400	$1.8/0.4%	$2.4/1.1%	$–3.4/–2.4%	$–1.8/–0.8%
St. Mark's	700	$16.1/2.9%	$22.1/3.5%	$28.2/4.2%	$12.1/2.1%
Safety Net	300	$–88.5/–33.3%	$–38.4/–21.8%	$–44.3/–27.2%	$–55.2/–29.6%
Children	220	$5.5/2.2%	$4.8/1.9%	$–1.3/–0.3%	$1.3/0.8%

George continued the conversation with his CFO. "If they are going to come together, we will have to do something to protect ourselves. What about combining Mack with the children's and university hospitals? This would still make us the biggest hospital system in the U.S. with the capacity to provide almost every type of medical service and allow us to leverage the new HMOs and keep Cassid's and St. Mark's HMO products from further penetrating our market. Don't you think that we could also get some operational efficiencies this way?"

Clyde was not too certain that this was a good idea. "But, the children's and university hospital are almost downtown and just four miles from Mack! They are also academic facilities and, having worked in one before coming here, I can tell you that

physicians and administrators there will have a totally different culture and practice style than we have here. Besides, both hospitals are making money, so why would the state (who owns them) allow them to merge with us? This sounds like a huge headache, but I guess we can't merge with a loser like the safety net hospital or a weak system like St. Francis, though they would let us capture the southern part of our area."

George continued unabated, "Clyde, if they merge we just can't remain by ourselves! Get to work on developing a merger option with these two hospitals."

Comment: As in this case, hospitals in oligopoly markets most often divide up their market and do not directly compete against each other. This case demonstrates what can occur when members of an oligopoly deviate from their traditional behaviors. Strategies sometimes become reactive.

Questions

1. Why is George concerned if the merger of St. Mark's and Cassid occurs?
2. What are the advantages and disadvantages for considering merging with the children's and university hospital?
3. What would happen if the merger of St. Mark's and Cassid did not occur, yet Mack announced their merger? Would Mack be stronger or weaker?

CASE 2: PhyCor, Inc.

Physician Practice Management Companies and PhyCor, Inc. Physician practice management (PPM) firms grew very rapidly in the late 1980s and early 1990s. PPMs promised to infuse physician practices with needed capital and provide significant cost savings and increased revenues through economies of scale and improved management. They also promised to allow physicians to negotiate better contracts with the emerging HMOs and PPOs. However, by the end of the century, all of the major PPMs had gone out of business or significantly downsized, with their valuations a tiny fraction of prior capitalization. Some, such as MedPartners, declared bankruptcy. Others saw their valuation plummet to almost nothing. What went wrong? This case examines the history of PPMs and the story of PhyCor, one of the prominent players.

PPMs were created in response to the lack of retained earnings and marginal management that existed in many physician practices and the growth of HMOs and PPOs. As a result of increased managed care, physician organizations/medical groups experienced increased costs and lower net revenues. HMOs and PPOs also demanded large discounts from physicians. Capital was also needed to buy out senior partners, install information systems, and change their structures and governance. PPMs with significant venture and Wall Street capital backing purchased prestigious medical groups, consolidated independent practices, and acquired staff clinics being divested by HMOs. Consolidation of PPMs left three large companies by the early 1990s.

Many of the physician practices signed 30- to 40-year management services contracts with the PPMs. These most often specified that physicians would receive a split of revenues after payment of clinic expenses. The lower cost of capital, centralized purchasing, and greater bargaining leverage with insurer organizations were to lower costs and increase revenues.

Phycor, Inc., incorporated in 1988, became by 1995 a medical network management company that managed multispecialty medical clinics and other physician organizations, provided contract management services to physician networks owned by health systems, and developed and managed independent practice associations (IPAs).[1] The company also provided health care decision-support services, including demand management and disease management services, to managed care organizations, health care providers, employers, and other group associations.

[1] IPAs are networks of independent physicians who contract together to provide medical services to individuals whose health care costs are covered by health maintenance organizations (HMOs), insurers, employers, or other third-party payors of health care services.

At PhyCor's affiliated clinics, the company implemented a number of programs and services in order to promote growth and efficiency, which included strategic planning and budgeting that focused on, among other things, revenue enhancement, cost containment, and expense reduction. The company negotiated managed care contracts; entered into national purchasing agreements; conducted productivity, procedure coding, and charge capturing studies; and assisted the clinics in physician recruitment efforts. It maintained information processing systems that expanded the clinics' accounting, billing, receivables management, scheduling, and reporting systems capabilities. The company also provided quality improvement initiatives designed to enhance the quality of patient service delivery systems at its affiliated clinics through the maintenance and measurement of performance standards and collection and review of patient evaluations. In addition, it provided operational support through a better practices resource group that focused on assisting clinics or departments within clinics in defining and executing patient services and revenue and expense savings opportunities. Under the terms of existing service agreements, the company typically provided each physician group with the equipment and facilities used in its medical practice, managed clinic operations, employed the clinic's non-physician personnel, other than certain diagnostic technicians, provided capital for expenditures, and received a service fee equal to the clinic expenses it had paid plus percentages of operating income of the clinic (net clinic revenue less certain contractually agreed-upon clinic expenses before physician distributions) plus, in some cases, percentages of net clinic revenue.

PhyCor, which called itself the "Physicians' Corporation" came a long way in five years. PhyCor's revenue soared from $1.2 million in 1988, $136 million in 1992, and $240 million in 1994. It ranked fifth in 1992 on Fortune's list of rapidly growing public companies. The company's long-range goal was to have clinics across the United States.

In 1994, the company owned 22 group practices employing almost 1,200 doctors in 15 states. In 1997, following its disclosure of difficulty in integrating some of its smaller physician practices into bigger groups, the company stock price plummeted. Between September 1997 and September 1998, Wall Street's valuation of the 15 largest PPM firms fell by 64 percent, while the entire industry lost as much as half of its commercial value.

Phycor was undeterred, but wanted to take advantage of the market conditions to gain competitive advantage. They offered $8 billion in stock and debt to buy its much larger competitor, MedPartners Inc., in October 1997. PhyCor's shares fell by more than 10 percent after the deal was unveiled, while MedPartners stock fell even further (45 percent). After a short time PhyCor scuttled its planned purchase of MedPartners, blaming differences on how to run the business of managing physicians' practices. In December 1997, PhyCor also announced that it signed an agreement to purchase Seattle-based CareWise, Inc., a nationally recognized leader in the health care decision-support industry/services, and the company acquired Ontario-based PrimeCare International Inc. on May 1998. The 2,200 general practice and specialty physicians under PrimeCare's management and its Desert Valley Medical Center became part of PhyCor's 20,000-plus physicians and 61 clinics in 29 states.

In 1998, citing industry turmoil, PhyCor announced that they planned not to buy any clinics through 1999. It was a dramatic turn for PhyCor. The company revised downward its earnings estimates for the second half of 1998. PhyCor and other physician practice management companies were plagued by earnings shortfalls, plummeting stock values, and reports of dissatisfied physicians. The PPM companies struggled with declining Medicare rates and an inability to continue growing earnings through acquisitions. The PPMs had also relied too heavily on capitation, a method of payment for services in which doctors or hospitals are paid a fixed amount for each patient, which paid too little. PhyCor stock was down about 74 percent in 1999. The company planned to sell many of its health care clinics, and sold eight such clinics during the fourth quarter, reducing its total number of clinics with the purpose of generating cash and resulting in a smaller company with clinics that were stable and had the ability to grow. Earnings for PhyCor dropped sharply in the last quarter and for the year due to shutdown of several clinics. J. C. Hutts, chairman and CEO of the company, commented, "While we are disappointed by the loss reported in the first quarter, our EBITDA was consistent with our early pronouncements. Our focus this year at PhyCor is to maximize our cash flow. We have identified several assets that we regard as non-strategic and have begun a process to sell these assets for cash."

5 years price chart

SOURCE: © 2001 Stockpoint Inc. 7.17.2001

PhyCor, which then operated about 48 medical groups with 3,076 physicians in 23 states and managed independent practice associations with nearly 25,000 physicians, had been restructuring or terminating service agreements with nearly all of its multispecialty clinics across the country as it attempted to improve its ailing financial situation. Management contacted most of its 27 clinics to discuss the repurchase of clinic assets from the company by the respective physician groups in connection with the restructuring or termination of the service agreements. Proceeds from the sale of assets were used to retire outstanding debt. The company reported a net loss of $452 million, compared with net earnings of $3.7 million during the same period a year earlier. Analysts said PhyCor paid too much for clinics in some markets that then produced too little revenue, and it suffered from lower reimbursement payments from insurers and from weak productivity at some clinics. As a result of the charges, the company no longer satisfied the minimum net tangible asset listing requirements of the NASDAQ Stock Market and was delisted.

Questions

1. What was PhyCor's initial strategy and business model?
2. What do you think went wrong with this strategy and business model?

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