Chapter 9

Improving Quality in Health Care Organizations (HCOs)

Jennifer L. Hefner and Ann Scheck McAlearney

CHAPTER OUTLINE

- Quality Improvement in Health Care
- Approaches to Quality Improvement
- Performance Measurement in 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 using quality and performance measures
4. Identify the challenges of undertaking QI and implementing QI in health care organizations (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

Access
Benchmarking
Clinical Practice Guidelines
Continuous Quality Improvement (CQI)
High-Performance Work Practices (HPWPs)
Implementation
Lean
Outcome Measures of Performance
Patient Experience Measures
Performance Improvement
Performance Measures
Plan–Do–Study–Act (PDSA) Method
Process Measures of Performance
Quality Improvement (QI)
Quality Improvement (QI) Interventions
Six Sigma
Structural Measures of Performance
Transactional Leadership
Transformational Leadership

• • • IN PRACTICE: Sharp HealthCare and Its 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 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 approaches 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 its 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. Most recently, Sharp HealthCare was recognized as "Most Wired" in 2016, was ranked 16th Best Employer in America by Forbes out of 500 large employers, and was recognized as a 2017 World's Most Ethical Company.

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

CHAPTER PURPOSE

With the release of the Institute of Medicine's (IOM's) report, *To Err Is Human: Building a Safer Health System* (2000), 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 (QI) interventions**, interventions designed to decrease medical errors and enhance patient safety. It also rekindled attempts to hold health care organizations (HCOs) accountable for quality. Government agencies, accrediting bodies, employer groups, and other organizations have developed an ever-growing number of performance measures and patient safety goals against which they intend to measure a health care organization's quality performance and improvement over time. Table 9.1 presents a sample of two types of these metrics—organizational measures and clinical measures. One five-hospital Academic Medical Center recently claimed that it reports 1,600 unique measures to 49 different sources (Murray et al., 2017). In many cases these measures are publicly reported, on websites such as the Centers for Medicare and Medicaid Services (CMS) Hospital Compare, and they are also used by groups such as Healthgrades, Leapfrog, and *U.S. News and World Report* to rank top performers on domains such as clinical processes, patient outcomes, and patient experience ratings. This chapter outlines how HCOs can

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

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

Almost everyone agrees that high quality is an important and desirable 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 in health care 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" (Institute of Medicine Committee on Quality of Health Care, 2001). The report also discussed the six major aims for improvement in health care, which emphasize the need for care to be *safe, effective, patient-centered, timely, efficient,* and *equitable*. HCOs, then, are challenged to provide care, or support the microsystems that deliver care, in a manner that achieves these aims (Berwick, Nolan, and Whittington, 2008).

The current consensus in the scientific literature is that quality is a multidimensional concept including both patient experiences of care as well as clinical quality measures such as readmission and adverse events (Lehrman et al., 2010; Price et al., 2014). The CMS acknowledges

this by linking value-based purchasing penalties to a variety of performance measures across these dimensions. Measures include Donabedian's elements of structure, process, and outcomes. Recently, there has been a move toward public reporting of these measures and ranking hospitals to identify top performers. However, there is a lack of consensus around how to define quality in order to achieve this goal. Healthgrades, the Leapfrog Group, *U.S. News and World Report*, Press Ganey, and CMS Hospital Compare all publish a yearly list of top performers in which they score hospitals using different methodologies and, by extension, different definitions of quality. Pressure from this public reporting, as well as given the spread of payer reimbursement incentives and penalties, is driving HCOs to focus on improving their scores across measures and dimensions of quality. The key to success in this effort is quality improvement.

Quality Improvement

Quality improvement (QI) is an organized approach to planning and implementing processes driving 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 who are empowered to make decisions based on their analysis of the data. Typically, 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. Table 9.2 presents a glossary of common terms and programs associated with QI in Health Care.

Similar to 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 (Elder et al., 2008). 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.

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.

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

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).
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).
Pay-for-Performance (P4P): Reimbursement for health care services which 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 (https://www.healthdesign.org/research-services/pebble-project).
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.errorfree.com).
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/).

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

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).
Total Quality Management (TQM): A participative, systematic approach to planning and implementing QI in quality.

QI Interventions

QI interventions vary widely (Chassin and Loeb, 2011). *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 interventions are broadly predefined but allow for considerable flexibility and local tailoring.

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 clinic, multiple sites, or national rollout). Specifying the level and scale of QI interventions can help organizational members better understand the nature of the QI goals as well as the potential reach and impact of the QI intervention.

Quality Improvement Interventions

Within the QI frameworks discussed above, a variety of interventions can be employed to alter the behavior of health care providers within an organization. Common interventions include audit and feedback, reminders, pay-for-performance (P4P), continuing medical education, clinical decision support (CDS), practice facilitation, and incident reporting systems. Table 9.3 presents a summary of the effectiveness of each of these interventions based on findings from systematic reviews available in the scientific literature.

Most of these QI efforts show small to modest improvements in adherence to evidence-based clinical practice. However, there is less evidence linking these improvement strategies to patient outcomes. When aiming to change clinical processes to meet performance metrics, HCO managers should select the intervention strategy that best fits with the target metrics and is most widely supported by a multidisciplinary QI team of "frontline" staff and clinicians. For example, if the goal is to increase adherence to asthma guidelines, then continuing medical education may be an appropriate first intervention, followed by CDS if the HCO has resources to incorporate CDS into its electronic health record (EHR) system. If EHR resources are scarce but managerial engagement is high, audit and feedback of individual providers or units may be an effective alternative strategy.

Table 9.3 Quality Improvement Interventions and Evidence for Their Effects

QI Interventions	Effect	Systematic Review Citation
Audit and Feedback	Small improvements in professional practice	Ivers N., Jamtvedt G., Flottorp S., et al. (2012). Audit and feedback: Effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews, 6*, CD000259.
Reminders	Modest improvements in professional practice	Cheung A., Weir M., Mayhew A., Kozloff N., Brown K., & Grimshaw J. (2012). Overview of systematic reviews of the effectiveness of reminders in improving healthcare professional behavior. *Systematic Review, 1*, 36.
Pay for Performance (P4P)	**a)** Varying improvements in professional practice; best outcomes when adapted to hospital characteristics **b)** No widespread effect on health outcomes **c)** Varying effectiveness in professional practice and insufficient evidence on effect of patient outcomes	**a)** Stavropoulou C., Doherty C., & Tosey P. (2015). How effective are incident-reporting systems for improving patient safety? A systematic literature review. *Milbank Quarterly, 93*(4), 826–866. **b)** Mendelson A., Kondo K., Damberg C., et al. (2017). The effects of pay-for-performance programs on health, health care use, and processes of care: A systematic review. *Annals of Internal Medicine, 166*(5), 341–353. **c)** Flodgren G., Eccles M. P., Shepperd S., Scott A., Parmelli E., & Beyer F. R. (2011). An overview of reviews evaluating the effectiveness of financial incentives in changing healthcare professional behaviours and patient outcomes. *Cochrane Database of Systematic Reviews, 7*, CD009255.
Continuing Medical Education	Small improvements in professional practice	Forsetlund L., Bjorndal A., Rashidian A., et al. (2009). Continuing education meetings and workshops: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews, 2*, CD003030.
Practice Facilitation	Moderately robust effect on evidence-based guideline adoption within primary care	Baskerville N. B., Liddy C., & Hogg W. (2012). Systematic review and meta-analysis of practice facilitation within primary care settings. *Annals of Family Medicine, 10*(1), 63–74.
Clinical Decision Support	Improvement in preventive services, appropriate care, and clinical and cost outcomes with strong evidence for clinical decision support system (CDSS) effectiveness in process measures	Murphy E. V. (2014). Clinical decision support: Effectiveness in improving quality processes and clinical outcomes and factors that may influence success. *Yale Journal of Biology and Medicine, 87*(2), 187–197
Incident-Reporting Systems	Evidence indicates that improved definitions of "incident" and management at the clinical team versus organizational level would improve effectiveness	Stavropoulou C., Doherty C., & Tosey P. How effective are incident-reporting systems for improving patient safety? A systematic literature review. *Milbank Quarterly 93*(4), 826–866.

• • • IN PRACTICE: Million Hearts Initiative

Heart disease and stroke are responsible for over 800,000 deaths annually in the United States and contribute an estimated $316.6 billion in health care costs and loss of productivity (Department of Health and Human Services, 2017). To address both human and monetary costs, the Department of Health and Human Services (DHHS) and other governmental and private sector partners launched the "Million Hearts Initiative" in 2011 (U.S. Centers for Medicare & Medicaid Services, 2017). This initiative was developed to provide standardized guidance on clinical and community interventions that could be implemented to prevent one million heart attacks and strokes by 2017.

The program is based on the "ABCS" (appropriate aspirin use, blood pressure control, cholesterol management, and smoking cessation) of cardiovascular management. Tools were developed to help practices understand and implement a standard practice for screening and managing patients with cardiovascular disease.

In 2015, the DHHS announced additional programming, the "Million Hearts: CVD Risk Reduction Model." This is a value-based payment model that awards payments to providers who successfully reduce their patients' risk of heart disease. Outcomes of the program are only beginning to be published, but there are initial reports of its effectiveness. Ritchey et al. (2017) estimated a reduction in 115,000 heart attack and strokes between 2012 and 2013. They suggest that while the Million Hearts Initiative cannot be the sole factor reducing these events, there is evidence to indicate suggest that efforts being made throughout the country as part of this initiative have positively impacted the risk of death by cardiovascular disease.

Additional evidence of the program's success is found in the California Medicaid program (Implementing a Quality Improvement Collaborative to Improve Hypertension Control and Advance Million Hearts among Low-Income Californians, 2014–2015). The organization partnered with nine managed-care programs to improve hypertension management in its patient population using Million Hearts Initiative guidelines. This programming was associated with a significant improvement of blood pressure control in seven of the nine managed care programs.

The effectiveness of the Million Hearts Initiative in preventing one million heart attacks and strokes has yet to be determined. However, it does appear that providing standardized practice guidelines to providers can have a population-level impact on health care outcomes.

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.

Continuous Quality Improvement

Continuous quality improvement (CQI) is a QI approach that originated in the mid-1980s. 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. Due to these elements, CQI is often described as a cultural mindset. Two prominent CQI approaches are **Six Sigma** and the **Plan–Do–Study–Act (PDSA) Method**. In the following sections, we outline these two approaches, describe the steps, and present commonly used tools.

Six Sigma

Six Sigma is a QI approach invented by Motorola in the mid-1980s. "Sigma" is a term used in statistics that indicates variation. The premise for the Six Sigma 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 Six Sigma 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. Six Sigma is known as a

data-driven approach to QI. As such there are a number of tools associated with this method, commonly referred to as the Six Sigma Toolkit. In the Define and Measure stages, tools such as the process flowchart, a tree diagram, and a value stream map can be used to collect data about the processes under study. In the Analyze phase, a cause and effect matrix (fishbone diagram) is a tool that can be used to identify the root causes of a problem. In the Improve and Control phases, there are additional sets of tools that can be used to implement and measure improvement.

Plan-Do-Study-Act

The Institute for Healthcare Improvement (IHI) model employs the PDSA methodology to guide QI interventions. The steps of this methodology are to establish aims, define the problem, identify success metrics, and systematically implement a QI intervention in short, rapid cycles. The IHI model emphasizes that the PDSA cycle is for action-oriented learning. The cycle is meant to test a change on a small scale, reevaluate the process, and then test on a broader scale. This model can be applied to small QI interventions implemented by one physician in her own practice and to large-scale changes in health care process on the level of a health care system.

The field of program evaluation is one place where the PDSA cycle features prominently as a methodology. A program evaluation focuses on determining the success of a program according to predefined goals to determine the need for adjustments to future programming. QI is framed as an important element in the program evaluation process. The PDSA cycle can be employed in this context to plan the evaluation of a program, implement the program, study the effects based on the predefined performance metrics, and act upon findings to improve the program. Run charts are a tool that can be used to determine if a PDSA cycle has resulted in improvements to the program or process. Though the analysis and interpretation of a run chart can be complicated, the chart itself is a simple plotting of a performance metric over time.

The different QI approaches are not mutually exclusive. The PDSA framework can be used to achieve small, quick wins on projects, and can be used in concert with a Six Sigma focus on data analytics. Lean is another QI approach that focuses on improving operational efficiency through reducing waste and creating value. Lean is often used in concert with Six Sigma. The Health Information Technology Research Center (HITRC)—funded by a consortium of U.S. Health and Human Services Agencies and tasked with improving health care through health information technology (HIT)—recommends focusing on a culture of CQI and utilizing a combination of these approaches to achieve quality goals.

PERFORMANCE MEASUREMENT IN QUALITY IMPROVEMENT

In order for organizations to focus on quality and QI in health care, they must understand how quality is measured and monitored. Similar to how QI interventions can be measured, performance can be measured at various levels of the organization, including across an organization, at a single clinic, or for a single provider. The level of measurement guides the scope of the QI intervention as well as the evaluation goal. The following sections describe metrics and measurement of quality and discuss some of the issues related to the definition and use of different performance measures to drive QI efforts in HCOs, and Table 9.4 summarizes this information and presents examples of both the metrics and data sources for those measures.

Table 9.4 Performance Measure Domains, Example Metrics, and Data Sources

Performance Measure Category	Examples	Potential Sources
Structure	Nurse/patient ratios, EHR meaningful use stage, certification and accreditation	Administrative data
Access	Wait time for a specialty referral, emergency department wait time	Administrative data, medical records
Process	Rate of preventive services, rate of controlled blood pressure or diabetes, compliance with safety protocols	Administrative data, medical records
Outcomes	30-day readmission rate, health care-associated infections, mortality rate	Administrative data, medical records
Patient Experience	Patient satisfaction, cleanliness, provider communication	Patient surveys, patient interviews

Performance Measures

Based on Donabedian's (1966) definition of quality in health care, three basic domains of **performance measures** have been specified: structural, process, and outcome measures. First, **structural measures of performance** are defined as those 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 ownership model, and the existence of an EHR system. 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.

Access is another quality domain often placed under the structural measure category. Measures of access are considered to be under the control of health care managers and are therefore becoming more commonly used as measures of quality. Access refers to the ability of patients to get the care they need at the time they need it. Access metrics are often used in the ambulatory setting and include measures such as the "on hold" time when a patient calls a clinic, the percentage of patients who are scheduled for a new patient visit by a certain time frame (e.g., within 30 days), and waiting times for scheduled appointments. Access measures can also be used in the hospital, including the wait-time for an ED bed or referral time to see a doctor at a specialty clinic.

Next, **process measures of performance** 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 viewed as firmly within the span of control managers have to influence and improve work processes (Grossbart and Agrawal, 2012).

Third, **outcome measures of performance** 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 readmission rates, patient safety incidents, and mortality. Patient-reported outcomes (PROs) are a class of outcome measures that incorporate the patient voice into the collection of quality of care information. A PRO is directly reported by the patient and refers to the patient's service satisfaction, functional status, or quality of life. PROs related to service satisfaction are referred to as **patient experience measures**, a subdomain of outcomes that is typically considered a separate class of measures for reporting and QI purposes.

Sources of Data for Performance Measures

Data for performance measures can come from a variety of sources including administrative data, patient medical records, patient surveys, and patient interviews. Administrative data, sometimes called claims data, are used both to pay bills and to manage care at the population level. The limitations to using this type of data for performance measurement include the bias inherent in the initial purpose of reimbursement and an associated lack of clinical precision. Patient medical records offer more precise clinical documentation but the process of pulling data from individual medical charts can be laborious. The proliferation of EHRs has facilitated the use of medical records for research and QI. However, there are barriers to using EHR data, including the need for sophisticated data warehousing and capabilities for report generation at the institution level.

Patient surveys are a data source for PROs. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is a patient satisfaction survey required by CMS for all hospitals in the United States. In addition to reporting the results of this survey to CMS, health care managers can use the various metrics in the survey—provider communication, cleanliness, and hospital rating—as data sources for QI interventions. PROMs (patient-reported outcome measures) turn PROs into a numerical score. The most widely known source of PROMS is PROMIS. Through PROMIS (patient-reported outcomes measurement information system), the National Institutes of Health (NIH) supported the creation of an item bank of rigorously developed and validated measures of patient-reported health, well-being, and functioning. The final source of data to mention is comments from individual patients, either from open-ended survey questions, in person interviews, or post-discharge telephone calls. This type of performance data can be used to provide context to quantitative metrics when evaluating QI interventions.

Using Performance Measures for QI

The performance measures discussed in the above sections are used by HCOs in public reporting, accreditation/licensure, payment models, and to conduct QI interventions. 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. A 2012 study

of 70 large, prominent HCOs found that 69 percent reported using a variety of performance measures in their QI efforts (Damberg et al., 2012). The National Quality Forum (NQF), a nonprofit organization that establishes consensus standards for measuring performance, has endorsed more than 700 measures that can be found on the NQF website in a searchable directory categorized by measure type, measure steward (entity that designed and maintains the measures), or care settings.

Given the large number of available measures, there is a need to balance using a concise number of performance measures with the flexibility to choose measures that fit the QI goals of specific projects. This is true at the policy level for CMS and insurance companies when developing reimbursement models and incentive programs, and it is true for managers of HCOs and hospital quality departments. Measures that an HCO reports to external entities for payment, public reporting, or accreditation may not be applicable to QI interventions at the unit or clinic level due to small numbers. Scholars have stressed the need to seek less variability in performance measures while simultaneously allowing for flexibility to meet the needs of specific innovations and populations (Higgins, Veselovskiy, and McKown, 2013).

Limitations of Using Performance Measures for QI

A problem that prevents widespread use of performance measures is the nature of the measures themselves. The validity and attribution of many outcomes-based quality measures are vigorously debated. There are three CMS P4P programs that rely on various performance measures: the Hospital Readmission Reduction Program (HRRP), the Hospital Value-Based Purchasing (VBP) Program, and the Hospital-Acquired Condition Reduction (HACR) Program. Across these three programs, large hospitals, major teaching, and safety-net hospitals were far more likely to be penalized, potentially due not to differing quality but to differences in patient case mix (Figueroa, Wang, and Jha, 2016).

Given this, some performance 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. 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 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. From a managerial perspective, this makes performance measures much more difficult than, say, financial indicators to motivate change in behavior.

GETTING TO HIGHER QUALITY AND QUALITY IMPROVEMENT

The Challenge of Implementation

Although QI holds promise for improving quality of care, HCOs that adopt QI interventions often struggle with implementation. **Implementation** is the critical gateway between the decision to adopt the QI intervention and its integration into routine practice. For example, implementation of a QI mindset occurs when clinical and nonclinical staff apply QI approaches and interventions routinely to improve clinical care processes. There are three general classes of success or failure in QI interventions: (1) widespread or unit-/role-specific avoidance of the QI intervention (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 show that the rate of evidence-based practices has not increased in the last decade despite the focus on evidence-based medicine (Levine, Linder, and Landon, 2016; Willis et al., 2017).

Why is the success of QI interventions so variable? In a general sense, implementation of most new, innovative practices is demanding on both individuals and organizations. It requires a complex mix of sustained leadership, extensive training and support, robust measurement and data systems, realigned incentives and human resource practices, and an organizational culture receptive to change. Further, QI efforts 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

Table 9.5 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).

DEBATE TIME: Which Quality Improvement Strategy?

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 PDSA, 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 approach?

on the success of a QI intervention, independent of the intervention itself (Kaplan et al., 2010). Table 9.5 lists features of a HCO and how each can contribute to implementation failure alongside key principles for success.

Context Matters

Researchers have suggested that the context of a QI intervention is integral to its success (Kaplan et al., 2012; Leonard, Graham, and Bonacum, 2004; McAlearney et al., 2015; Weaver et al., 2013). Above sections of this chapter have discussed the importance of a culture of continuous quality improvement. Yet, context is characterized as broader than culture, and includes management approaches and strategies, external factors, and the availability of implementation and management tools (Kaplan et al., 2010). A 2010 systematic review of the effect of context on QI interventions identified specific factors such as leadership from top management, data infrastructure and information systems, and years involved in QI (Kaplan et al., 2010). This research led to the development of a model for studying the impact of culture on QI efforts: the Model for Understanding Success in Quality (MUSIQ) (Kaplan et al., 2012).

• • • IN PRACTICE: Contextual Factors in Reducing Central Line-Associated Bloodstream Infections

Central Line-Associated Bloodstream Infection (CLABSI)-Reduction Efforts. Evidence has shown that implementing a "bundle" of five clinical practices can significantly reduce CLABSI rates (Pronovost et al., 2006). This clinical bundle, combined with dedicated line insertion and maintenance teams, checklists to ensure practice consistency, and practitioner education, has led hospital ICUs to see significant and sustained CLABSI rate reductions over the past 15 years. However, while some hospitals have virtually eliminated CLABSIs in their ICUs, others struggle to attain and/or sustain near-zero rates. In an attempt to address this variation, the Comprehensive Unit-Based Safety Program (CUSP)—a formal model for translating CLABSI-reduction evidence into practice—was developed at Johns Hopkins University and disseminated by the Agency for Healthcare Research and Quality (AHRQ) (Pronovost et al., 2006). CUSP helps hospital units assemble a multidisciplinary team of frontline providers, supported by senior executives, to identify why CLABSIs occur in their unit, and to generate solutions. By 2013, the overall rate of CLABSI infections among hospitals implementing CUSP dropped by 41 percent (AHRQ, 2013). Additionally, 68 percent of units reported zero CLABSIs for at least one quarter, up from 30 percent at baseline. While these statistics support program efficacy and the feasibility of achieving "zero," variability across participating ICUs remains, raising questions about what hospitals can do to improve their likelihood of success and sustain success over time.

This model identifies 25 contextual factors and proposes that factors within the microsystem of an HCO (QI leadership, supportive culture, motivation to change), and specifically factors within the QI team (team leadership, prior QI experience), directly influence QI success while factors in the broader organization and the external environment affect success indirectly. These findings are supported by a 2015 study applying the MUSIQ model to a review of systematic reviews of QI interventions (Kringos et al., 2015). However, the authors also report that while they found that contextual factors were significantly associated with success, these factors were rarely included in published reports. The success of QI efforts within HCOs could be significantly improved by the consideration and measurement of contextual factors throughout the implementation and evaluation process.

Context Is Important across Prevention Efforts

While patient safety culture is critical, differences in management strategies and practices are also part of the implementation context and may explain variability in efforts to reduce CLABSIs and other health care-associated infections (HAIs). Recently, research conducted by this chapter's authors sought to open the metaphorical "black box" of management practices to better understand the specific strategies that can influence HAI prevention. Using an exploratory, qualitative approach, eight hospitals from the first wave of AHRQ's CUSP initiative were classified as higher- versus lower-performing on the basis of success with CLABSI-reduction efforts. Interviews were conducted with administrative leaders, clinical leaders, professional staff, and frontline physicians and nurses to examine perspectives about CLABSI-reduction efforts. The resulting analysis characterized contrasts between higher- and lower-performing hospitals to improve our understanding of factors that contribute to variable performance in CLABSI-reduction efforts (McAlearney et al., 2015).

Six management strategies were almost exclusively present in the hospitals classified as higher-performing and absent or appreciably different in the lower-performing hospitals: (1) aggressive goal setting and support, (2) strategic alignment/communication and information sharing, (3) systematic education, (4) interprofessional collaboration, (5) meaningful use of data, and (6) recognition for success. For instance, one of the main management strategies that differentiated higher- from lower-performing hospitals was aggressive framing of the goal of "getting to zero" infections. While all sites reported establishing infection rate reduction goals, at the higher-performing sites the goal of zero infections was explicitly stated, widely embraced, and aggressively pursued through specific activities. In contrast, at lower-performing hospitals, the goal of "getting to zero" was more of an aspiration, with a notable absence of corresponding strategic actions as part of the hospitals' efforts to prevent CLABSIs. Further, in exploring these differences, it was noted that culture was not enough; higher-performing hospitals pursued a wide array of activities linked to these six management strategies in support of their CLABSI-prevention efforts (McAlearney et al., 2015).

MUSIQ Domains and Implementation Challenges

The MUSIQ domains provide a framework to guide discussion of the contextual factors affecting the success of well-coordinated QI interventions. Below potential contextual factors and implementation challenges are discussed within the four MUSIQ domains of *organization*, *quality improvement support and capacity*, *microsystem*, and *QI team*.

Organization

Culture Supportive of QI

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 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 (Carman et al., 2010). In other words, these changes often do not stick because they are inconsistent with prevailing values, understandings, and unspoken "rules" in the organizations.

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.

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 (Jha and Epstein, 2010; Joshi and Hines, 2006). For instance, 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. In addition, 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.

Quality Improvement Support and Capacity

Resource Availability

Developing robust information systems and reorganizing around clinical processes require significant financial resources (Cummings et al., 2007; Greenhalgh et al., 2004). Allocation of resources to QI efforts represents a key indicator of organizational commitment (Alexander et al., 2006). The support of QI with 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 interventions (Kaplan et al., 2010). For example, organizations that have "slack resources" that allow people to "squeeze" time to experiment with a new QI intervention without disrupting existing routines may lead to higher rates of implementation (Damschroder et al., 2009).

Data Infrastructure

A sophisticated data infrastructure is necessary to support the information needs of a successful QI intervention (Alexander et al., 2006; Kaplan et al., 2010). HCOs can utilize data from a variety of data sources—claims data, administrative data, EHR data, etc. However, appropriate use of this data for problem identification and success measurement requires not only a sophisticated data infrastructure but also employees with strong clinical informatics skills to navigate through all the HCO data and prepare useful metrics for QI, research, and public reporting. Developing the informatics staff and data infrastructure requires a significant financial commitment in addition to the allocation of clinical and administrative staff resources to QI efforts discussed in the above section.

Microsystem

QI Leadership from Middle Managers

Leadership refers to leaders at all levels of an organization who have a direct or indirect influence on QI efforts. 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 (Birken et al., 2013). Commitment, involvement, and accountability of leaders and managers can all have a significant impact on the success of QI efforts. 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

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 that 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
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 QI opportunities that those working in the health care industry may wish to consider.

SOURCE: Lee (2004).

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.

Learning Climate

Developing a climate that promotes learning is a "core property" that HCOs need for ongoing QI. Similar to culture, a positive learning 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 (Damschroder et al., 2009). Key characteristics of a learning climate that promotes QI efforts are that (1) a compelling and inspiring reason for QI intervention 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.

Quality Improvement Team

Team Tenure and Diversity. Burgeoning medical knowledge and the complexity of health care delivery have resulted in increasing specialization in the health care

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).

workforce. For example, physicians specialize in 1 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 part of the 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. Yet despite the imperative for collaboration, it is often missing from professional interactions, and its absence is a leading cause of quality problems (Hughes, 2008). 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.

Team Decision Making and Collaboration Skills

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 (Horwitz, Horwitz, and Barshes, 2011). 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, and 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 is 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 depend fundamentally on team-based approaches to change rather than top-down control (Nembhard et al., 2009).

Team Norms

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 can stifle organizational members' willingness to participate in the collaborative learning that is necessary for QI success (Carman et al., 2010). 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 efforts.

Factors influencing "speaking up" include perceived safety versus "costs" of reporting incidents, perceived efficacy versus utility, individual staff factors, such as communication skills and job satisfaction, and contextual factors, such as attitudes of leaders and hospital policy (Okuyama, Wagner, and Bijnen, 2014). A 2014 systematic review of the literature determined that research on "speaking up" has shown training to be effective at enhancing team communication across the

• • • 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. (2011).

hierarchy (Okuyama, Wagner, and Bijnen, 2014). By targeting trainings to address the above factors, managers of HCOs can influence the team dynamic and the climate and culture of their organization.

Building a Patient Safety Culture

Patient safety is an area of health care where culture has been highlighted as integral to successful QI; patient safety culture has been defined as a product of group values, attitudes, and patterns of behavior that influence an organization's health and safety activities (AHRQ, 2016). Building a strong patient safety culture has been the a key priority of many U.S. health care systems since the IOM's report in 2000 on the number of errors, adverse events, and near misses that happen each year in U.S. hospitals (Kohn, Corrigan, and Donaldson, 2000). Research has shown that perceptions of strong patient safety cultures do appear to be associated with fewer adverse events or other indicators of potential harm.

Given this link between culture and outcomes, a variety of strategies have been used to improve patient safety culture. One widely adopted strategy is a focus on improving teamwork in high-intensity health care settings and developing standardized processes to implement in this enhanced teamwork framework. Crew resource management (CRM) is a systematic approach for training teams in interpersonal communication, leadership, and decision-making practices, which allows teams to function effectively under even the most demanding, unpredictable situations (Maynard, Marshall, and Dean, 2012). Adapted from the airline industry, CRM and related approaches such as TeamSTEPPS (Clancy and Tornberg, 2007) have been linked to improved perceptions of patient safety culture (Pettker et al., 2011; Weaver et al., 2010), increased adherence to clinical guidelines (Tapson, Karcher, and Weeks, 2011), improved team performance (Lisbon et al., 2016; Mayer et al., 2011), reductions in surgical mortality (Neily et al., 2010) and adverse events (Moffatt-Bruce et al., 2015; Starmer et al., 2014).

Also in promoting the importance of a patient safety culture, the AHRQ has developed a survey to measure transformation toward a safety culture. Called the Hospital Survey on Patient Safety Culture (HSOPS), this publicly available survey tool is composed of 42 items addressing 12 dimensions of safety culture: teamwork within units, supervisor expectations/actions promoting patient safety, organizational learning, management support for patient safety, overall perceptions of patient safety, feedback and communication about error, communication openness, frequency of events reported, teamwork across units, staffing, and nonpunitive response to errors. This tool has been used extensively to measure cultural transformation and has been fielded in hospitals across the United States and internationally, with moderate-to-strong validity and reliability across dimensions (Blegen et al., 2009). Given that culture change may be one of the most difficult tasks facing HCO managers implementing QI interventions, effective change programs, such as TeamStepps and CRM, as well as publicly available culture surveys can be utilized and adapted to a variety of contexts.

APPLYING QUALITY IMPROVEMENT FRAMEWORKS

QI Tactics and Strategies

Create Opportunities for Staff Experimentation and QI Adaptation

HCOs' members' reluctance to participate in QI efforts 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 members 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 intervention 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 experienced greater implementation success (Tucker et al., 2008). Use of these activities facilitates implementation success not only by reducing resistance to the intervention but also by fostering "attitudinal commitment," or commitment that generates active involvement of staff in QI efforts.

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 efforts 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 learning rather than as a performance

STAGES OF GRIEF IN EHR IMPLEMENTATION

The transition from paper medical records to electronic health records (EHRs) has created significant disruption in the workflow of medical professionals. Interviews with primary care physicians across six U.S. health care organizations—identified because of purported success with EHR implementation—revealed that physicians' perceptions of the change guided their reactions (McAlearney et al., 2014). Many physicians perceived the EHR transition as a loss, and the authors of this study proposed that the Kubler-Ross five stages of grief model could be mapped onto physicians' reactions to this loss. The five stages—denial, anger, bargaining, depression, and acceptance—can be articulated as required phases of personal change for physicians adopting and integrating an EHR system.

Loss as a part of change is often overlooked. Addressing it directly and compassionately can potentially facilitate the success of QI implementation efforts. Combining insights from both individual (e.g., Kubler-Ross and Kessler, 2014) and organizational change management (e.g., Kotter, 2012), the investigators further note that managers can employ 10 strategies to facilitate change through perception management:

(1) Manage expectations
(2) Make the case for quality
(3) Recruit champions
(4) Communicate
(5) Acknowledge that it is a painful transition
(6) Provide good training
(7) Improve functionality, when possible
(8) Acknowledge competing priorities
(9) Allow time to adapt to the new system
(10) Promote a better, but changed, future

While these strategies were articulated in the context of EHR implementation (McAlearney et al., 2014), they can be applied to perception management across QI change efforts.

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.

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 (Dukerich, Golden, and Shortell, 2002). There are at least two strategies for fostering the organizational identification needed for implementation success in HCOs: (1) increase the attractiveness of the organizational identity and (2) increase the attractiveness of the external image of the organization (i.e., the image held by those outside of the organization) (Dukerich, Golden, and Shortell, 2002). The former strategy builds on the 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. They must also showcase their positive attributes (e.g., pro bono work, awards, new facilities) in order 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 agreement" (Bass, 1990). 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 (Bass, 1990). 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 efforts, transformational leaders use processes that effectively shift the focus of organizational members from their individual goals to collective goals such as QI interventions. 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 toward the organization's 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. Last, 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 efforts, HCOs are advised to use transformational leadership processes (Spinelli, 2006). 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 et al., 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 (Spinelli, 2006). 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 tend 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 (Aarons et al., 2016). 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, 2010). 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 approaches, these programs can help ensure that employees can understand and participate in QI interventions deployed by the organization. Further, this attention paid to developing leaders who will be able to lead QI interventions 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 find important, 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 importance 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.

Build Evidence for QI

QI Intervention Source

Perceptions of key stakeholders about whether the QI intervention is externally or internally developed may influence the success of QI implementation (Damschroder et al., 2009). The QI intervention 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 intervention 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 intervention as external (e.g., the literature for the Centers for Disease Control and Prevention strongly recommends using them) or as an internally developed QI intervention (e.g., the IV nurse team believes these offer the best solution to the problem). However, selection of an externally developed QI intervention coupled with a lack of transparency in the decision-making process about implementation of that QI intervention may lead to implementation failure (Damschroder et al., 2009). On the other hand, key ideas that come from outside the organization that are tailored to the particular organization more often result in successful implementation.

Reporting and Disseminating Successful Quality Improvement Interventions

The Standards for Quality Improvement Reporting (SQUIRE) provides guidelines on what and how information should be presented when discussing health care QI endeavors. These guidelines are described briefly below, but more information can be found at http://squire-statement.org/.

First, in developing a paper reporting QI results, the title of the paper should clearly identify what topic is being covered in the manuscript and how it relates to health care. The abstract should follow the journal guidelines for word count and topics covered. Abstracts should consolidate all of the major sections included in the manuscript, and provide an overview of the study and key findings.

• • • 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 interventions 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 efforts.

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, https://pbrn.ahrq.gov/) 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.

The Introduction section is comprised of the problem statement and existing knowledge on the topic covered. Answer why the problem is significant and where the literature succeeds and fails to provide valuable insight. Introductions should also include the rationale for why the selected approach/intervention(s) is appropriate for the stated problem. Last in this section, the Specific Aims should clearly communicate the purpose of the project.

Methods sections should include a description of the intervention(s) at a level that allows for reproducibility by others and a justification for why the selected intervention(s) is appropriate. Additionally, the key people involved in the study should be described in detail. For example, "our team included a unit nurse manager, chief quality officer, an administrative intern, and an epidemiology intern."

Measures used in studying the effects of the intervention should be described in detail as well as including a justification for their use. The Analysis section should include the methods used to assess and understand the data and should be appropriate given the selected measures. Study Results should review the association between the intervention and the measured outcomes. Include description of any missing data, the impact of contextual factors on the outcomes (e.g., is there any other explanation for the findings outside of the intervention(s)?), and any unanticipated benefits, challenges, or barriers with implementing the intervention(s).

The Discussion section outlines the findings and how these relate to outcomes as well as how they compare to similar studies. Describe how the intervention affected the organization and if there were any identified differences between observed and expected outcomes. Additionally, limitations of the study need to be identified and communicated. Include descriptions of efforts undertaken to mitigate these limitations how they affect the generalizability of the work. Finally, the Conclusions section should describe practice implications, the sustainability of the intervention(s), and next steps given the outcomes of the study.

DEBATE TIME: Focusing Quality Improvement Efforts

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. QI interventions can be designed and implemented to address many of these two 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 approaches 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 interventions.
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 interventions.

DISCUSSION QUESTIONS

1. Take the perspective of the CEO of a large health care system that owns its own 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 set as their major goal for this year to implement a QI intervention. 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 Northrop Healthcare were delighted that the new incident-reporting system at Northrop 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 interventions 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 EHR and other information systems, yet QI staff members were apparently not using these data. Instead, QI interventions 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 interventions?

REFERENCES

Aarons, G. A., Green, A. E., Trott, E., et al. (2016). The roles of system and organizational leadership in system-wide evidence-based intervention sustainment: A mixed-method study. *Administration and Policy in Mental Health and Mental Health Services Research, 43*(6), 991–1008.

Adams, R., Warner, P., Hubbard, B., et al. (2004). Decreasing turnaround time between general surgery cases: A six sigma initiative. *Journal of Nursing Administration, 34*(3), 140–148.

AHRQ. (2013). *Eliminating CLABSI, a national patient safety imperative: Final report*. Retrieved October 2, 2018, from

https://www.ahrq.gov/professionals/quality-patient-safety/cusp/clabsi-final-companion/index.html.

AHRQ. (2016). Hospital survey on patient safety culture. Retrieved October 2, 2018, from http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/hospital/index.html.

Alexander, J. A., Weiner, B. J., Shortell, S. M., et al. (2006). The role of organizational infrastructure in implementation of hospitals' quality improvement. *Hospital Topics, 84*(1), 11–21.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics, 18*(3), 19–31.

Bate, P., Mendel, P., & Robert, G. (2008). *Organizing for quality: The improvement journeys of leading hospitals in Europe and the United States*. Oxford: Radcliffe Publishing.

Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: Care, health, and cost. *Health Affairs (Millwood), 27*(3), 759–769. doi:10.1377/hlthaff.27.3.759.

Birken, S. A., Lee, S.-Y. D., Weiner, B. J., et al. (2013). Improving the effectiveness of health care innovation implementation: Middle managers as change agents. *Medical Care Research and Review, 70*(1), 29–45.

Blegen, M. A., Gearhart, S., O'Brien, R., et al. (2009). AHRQ's hospital survey on patient safety culture: Psychometric analyses. *Journal of Patient Safety, 5*(3), 139–144. doi:10.1097/PTS.0b013e3181b53f6e.

Carman, J. M., Shortell, S. M., Foster, R. W., et al. (2010). Keys for successful implementation of total quality management in hospitals. *Health Care Management Review, 35*(4), 283–293.

Chassin, M. R., & Loeb, J. M. (2011). The ongoing quality improvement journey: Next stop, high reliability. *Health Affairs (Millwood), 30*(4), 559–568.

Clancy, C. M., & Tornberg, D. N. (2007). TeamSTEPPS: Assuring optimal teamwork in clinical settings. *American Journal of Medical Quality, 22*(3), 214–217. doi:10.1177/1062860607300616.

Cummings, G. G., Estabrooks, C. A., Midodzi, W. K., et al. (2007). Influence of organizational characteristics and context on research utilization. *Nursing Research, 56*(Suppl. 4), S24–S39. doi: 10.1097/01.NNR.0000280629.63654.95.

Damberg, C. L., Sorbero, M. E., Lovejoy, S. L., et al.. (2012). An evaluation of the use of performance measures in health care. *Rand Health Quarterly, 1*(4), 3.

Damschroder, L. J., Aron, D. C., Keith, R. E., et al. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science, 4*, 50-5908-5904-5950. doi:10.1186/1748-5908-4-50; 10.1186/1748-5908-4-50.

Department of Health and Human Services. (2017). Million Hearts: Costs & Consequences. Retrieved October 2, 2018, from https://millionhearts.hhs.gov/learn-prevent/cost-consequences.html.

Donabedian, A. (1966). Evaluating the quality of medical care. *Milbank Memorial Fund Quarterly, 44*(Suppl. 3), 166–206.

Donabedian, A. (1988). The quality of care. How can it be assessed? *Journal of American Medical Association, 260*(12), 1743–1748.

Donabedian, A. (2005). Evaluating the quality of medical care. *Milbank Quarterly, 83*(4), 691–729. doi:10.1111/j.1468-0009.2005.00397.x.

Dukerich, J. M., Golden, B. R., & Shortell, S. M. (2002). Beauty is in the eye of the beholder: The impact of organizational identification identity and image on the cooperative behaviors of physicians. *Administrative Science Quarterly, 47*(3), 507–533. doi:10.2307/3094849.

Edmondson, A. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies, 40*(6), 1419–1452. doi:10.1111/1467-6486.00386.

Edmondson, A. C., Roberto, M. A., Bohmer, R. M., et al. (2005). The recovery window: Organizational learning following ambiguous threats. In William H. Starbuck, & Moshe Farjoun (Eds.), *Organization at the limit: Lessons from the Columbia disaster* (pp. 220–245). Malden, MA: Blackwell.

Elder, N., McEwan, T., Flach, J., et al. (2008). Advances in patient safety: New directions and alternative approaches (vol. 2: culture and redesign). In K. Henriksen, J. B. Battles, M. A. Keyes, & M. L. Grady (Eds.), *Creating safety in the testing process in primary care offices*. Rockville, MS: Agency for Healthcare Research and Quality.

Figueroa, J. F., Wang, D. E., & Jha, A. K. (2016). Characteristics of hospitals receiving the largest penalties by US pay-for-performance programmes. *BMJ Quality & Safety, 25*(11), 898–900.

Gilmartin, M. J., & D'Aunno, T. A. (2007). 8 leadership research in healthcare: A review and roadmap. *Academy of Management Annals, 1*(1), 387–438.

Greenhalgh, T., Robert, G., Macfarlane, F., et al. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly, 82*(4), 581–629. doi:10.1111/j.0887-378X.2004.00325.x.

Grossbart, S., & Agrawal, J. (2012). Conceptualization and definitions of quality. *Health care quality: The clinician's primer. ACPE, Sydney Olympic Park Google Scholar*.

Hammer, M. (1990). Reengineering work: Don't automate, obliterate. *Harvard Business Review*, *68*(4), 104–112.

Higgins, A., Veselovskiy, G., & McKown, L. (2013). Provider performance measures in private and public programs: Achieving meaningful alignment with flexibility to innovate. *Health Affairs (Millwood), 32*(8), 1453–1461. doi:10.1377/hlthaff.2013.0007.

Horwitz, S. K., Horwitz, I. B., & Barshes, N. R. (2011). Addressing dysfunctional relations among healthcare teams: Improving team cooperation through applied organizational theories. *Advances in Health Care Management, 10*, 173–197.

Hughes, R. (2008). *Patient safety and quality: An evidence-based handbook for nurses*. Rockville, MD: Agency of Healthcare Research and Quality.

Institute of Medicine (IOM). (2007). *Rewarding provider performance: Aligning incentives in Medicare.* Washington, DC: The National Academies Press.

Institute of Medicine Committee on Quality of Health Care in America. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press. Copyright 2001 by the National Academy of Sciences. All rights reserved.

Jha, A., & Epstein, A. (2010). Hospital governance and the quality of care. *Health Affairs (Millwood), 29*(1), 182–187.

Joshi, M. S., & Hines, S. C. (2006). Getting the board on board: Engaging hospital boards in quality and patient safety. *Joint Commission Journal on Quality and Patient Safety, 32*(4), 179–187.

Kaplan, H. C., Brady, P. W., Dritz, M. C., et al. (2010). The influence of context on quality improvement success in health care: A systematic review of the literature. *Milbank Quarterly, 88*(4), 500–559. doi:10.1111/j.1468-0009.2010.00611.x.

Kaplan, H. C., Froehle, C. M., Cassedy, A., et al. (2012). An exploratory analysis of the model for understanding success in quality. *Health Care Management Review*, *38*(4), 325–338. doi:10.1097/HMR.0b013e3182689772.

Khatri, N., Brown, G. D., & Hicks, L. L. (2009). From a blame culture to a just culture in health care. *Health Care Management Review, 34*(4), 312–322.

Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of Management Review, 21*(4), 1055–1080.

Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (2000). *To err is human: Building a safer health system* (Vol. 6). Washington, DC: National Academies Press.

Kotter, J. P. (2012). *Leading change.* Boston, MA: Harvard Business Press.

Kringos, D. S., Sunol, R., Wagner, C., et al. (2015). The influence of context on the effectiveness of hospital quality improvement strategies: A review of systematic reviews. *BMC Health Services Research, 15*(1), 277.

Kubler-Ross, E., & Kessler D. (2014) *On grief and grieving: Finding the meaning of grief through the five stages of loss.* New York: Scribner.

Lee, Fred. (2004). "If Disney ran your hospital." Chicago: American Hospital Association.

Lehrman, W. G., Elliott, M. N., Goldstein, E., et al. (2010). Characteristics of hospitals demonstrating superior performance in patient experience and clinical process measures of care. *Medical Care Research and Review, 67*(1), 38–55. doi:10.1177/1077558709341323.

Leonard, L. B., & Kent, D. S. (2008). Management lessons from Mayo clinic. McGraw-Hill Professional Publishing.

Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: The critical importance of effective teamwork and communication in providing safe care. *Quality & Safety in Health Care, 13*(S1), i85. doi:10.1136/qshc.2004.010033.

Levine, D. M., Linder, J. A., & Landon, B. E. (2016). The quality of outpatient care delivered to adults in the United States, 2002 to 2013. *JAMA Internal Medicine, 176*(12), 1778–1790. doi:10.1001/jamainternmed.2016.6217.

Lisbon, D., Allin, D., Cleek, C., et al. (2016). Improved knowledge, attitudes, and behaviors after implementation of TeamSTEPPS training in an academic emergency department: A pilot report. *American Journal of Medical Quality, 31*(1), 86–90. doi:10.1177/1062860614545123.

Lynn, J., Baily, M. A., Bottrell, M., et al. (2007). The ethics of using quality improvement methods in health care: The ethics of using quality improvement methods in health care. *Annals of Internal Medicine, 146*(9), 666–673.

Mayer, C. M., Cluff, L., Lin, W. T., et al. (2011). Evaluating efforts to optimize TeamSTEPPS implementation in surgical and pediatric intensive care units. *Joint Commission Journal on Quality and Patient Safety, 37*(8), 365–374.

Maynard, M. T., Marshall, D., & Dean, M. D. (2012). Crew resource management and teamwork training in health care: A review of the literature and recommendations for how to leverage such interventions to enhance patient safety. *Advances in Health Care Management, 13*, 59–91.

McAlearney A. S. (2008). Using leadership development program to improve quality and efficiency in healthcare. *Journal of Healthcare Management, 53*(5), 319–331.

McAlearney A. S. (2010). Executive leadership development in U.S. health systems. *Journal of Healthcare Management, 55*(3), 206–222.

McAlearney, A. S., Hefner, J., L, Sieck, C., J, & et al. (2014). The journey through grief: Insights from a qualitative study of electronic health record implementation. *Health Services Research, 50*(2), 462–488.

McAlearney, A. S., Garman, A. N., Song, P. H., et al. (2011). High-performance work systems in health care management, Part 2: Qualitative evidence from five case studies. *Health Care Management Review, 36*(3), 214–226. doi:10.1097/HMR.0b013e3182100dc4.

McAlearney, A. S., Hefner, J. L., Robbins, J., et al. (2015). Preventing central line-associated bloodstream infections: A qualitative study of management practices. *Infection Control & Hospital Epidemiology, 36*(5), 557–563. doi:10.1017/ice.2015.27.

Moffatt-Bruce, S. D., Hefner, J. L., Mekhjian, H., et al. (2015). What is the return on investment for implementation of a crew resource management program at an academic medical center? *American Journal of Medical Quality*, *32*(1), 5–11. doi:10.1177/1062860615608938.

Murray, K. R., Hilligoss, B., Hefner, J. L., et al. (2017). The quality reporting reality at a large Academic Medical Center: Reporting 1600 unique measures to 49 different sources. *International Journal of Academic Medicine, 3*(1), 10.

Neily, J., Mills, P. D., Young-Xu, Y., et al.. (2010). Association between implementation of a medical team training program and surgical mortality. *Journal of American Medical Association, 304*(15), 1693–1700. doi:10.1001/jama.2010.1506.

Nembhard, I., Alexander, J., Hoff, T., et al. (2009). Understanding implementation failure in health care delivery: A role for organizational research and theory. *Academy of Management Perspectives, 23*(1), 1–27.

Okuyama, A., Wagner, C., & Bijnen, B. (2014). Speaking up for patient safety by hospital-based health care professionals: A literature review. *BMC Health Services Research, 14*(1), 61. doi:10.1186/1472-6963-14-61.

Patterson, K., Grenny J., McMillan, R., et al. (2002). *Crucial conversations: Tools for talking when stakes are high.* New York: McGraw-Hill.

Pettker, C. M., Thung, S. F., Raab, C. A., et al. (2011). A comprehensive obstetrics patient safety program improves safety climate and culture. *American Journal Obstetrics & Gynecology, 204*(3), 216. e211–e216. doi:10.1016/j.ajog.2010.11.004.

Price, R. A., Elliott, M. N., Zaslavsky, A. M., et al. (2014). Examining the role of patient experience surveys in measuring health care quality. *Medical Care Research and Review, 71*(5), 522–554. doi:10.1177/1077558714541480.

Pronovost, P., Needham, D., Berenholtz, S., et al. (2006). An intervention to decrease catheter-related bloodstream infections in the ICU. *New England Journal of Medicine, 355*(26), 2725–2732.

Ritchey, M. D., Loustalot, F., Wall, H. K., et al. (2017). Million Hearts: Description of the national surveillance and modeling methodology used to monitor the number of cardiovascular events prevented during 2012–2016. *Journal of American Heart Association, 6*(5), e006021. doi:10.1161/jaha.117.006021.

Shortell, S. M., O'Brien, J. L., Carman, J. M., et al. (1995). Assessing the impact of continuous quality improvement/total quality management: Concept versus implementation. *Health Services Research, 30*(2), 377.

Shortell, S. M., & Kaluzny, A. D., (Eds.), *Health care management: Organization design and behavior* (5th ed.). Clifton Park, NY: Delmar Cengage Learning.

Spinelli, R. J. (2006). The applicability of Bass's model of transformational, transactional, and laissez-faire leadership in the hospital administrative environment. *Hospital Topics, 84*(2), 11–19.

Starmer, A. J., Spector, N. D., Srivastava, R., et al. (2014). Changes in medical errors after implementation of a handoff program. *New England Journal of Medicine, 371*(19), 1803–1812. doi:10.1056/NEJMsa1405556.

Studer, Q. (2003). *Hardwiring excellence: Purpose, worthwhile work, making a difference.* Gulf Breeze, FL: Fire Starter Publishing.

Tapson, V. F., Karcher, R. B., & Weeks, R. (2011). Crew resource management and VTE prophylaxis in surgery: A quality improvement initiative. *American Journal of Medical Quality, 26*(6), 423–432. doi:10.1177/1062860611404694.

Tucker, A. L., Singer, S. J., Hayes, J. E., & Falwell, A. (2008). Front-line staff perspectives on opportunities for improving the safety and efficiency of hospital work systems. *Health Services Research, 43*(5 part 2), 1807–1829. doi:10.1111/j.1475-6773.2008.00868.x.

U.S. Centers for Medicare & Medicaid Services. (2017). Million Hearts: Cardiovascular Disease Risk Reduction Model. Retrieved July 4, 2017, from https://innovation.cms.gov/initiatives/Million-Hearts-CVDRRM/.

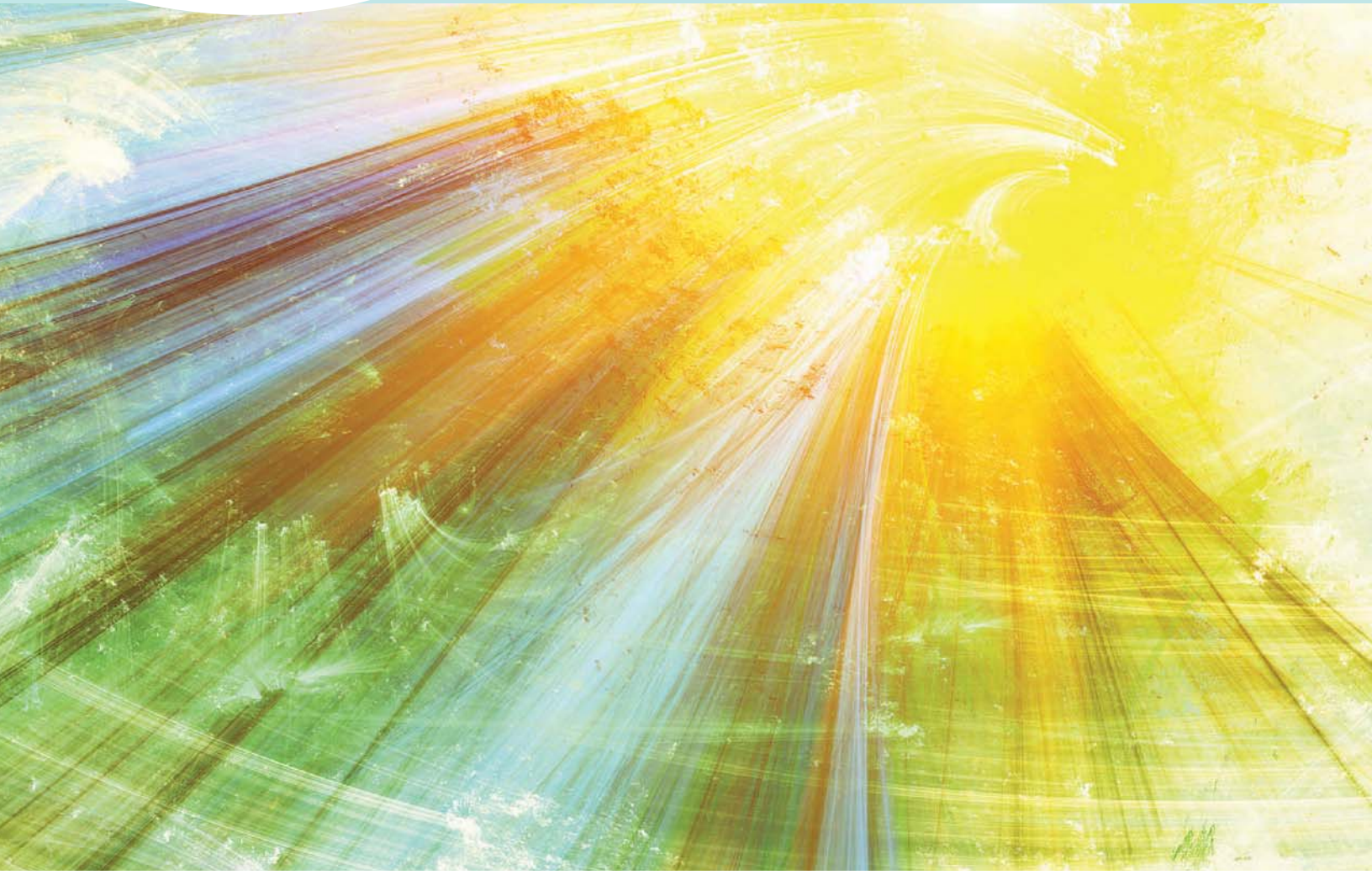
Weaver, S. J., Lubomksi, L. H., Wilson, R. F., et al. (2013). Promoting a culture of safety as a patient safety strategy: A systematic review. *Annals of Internal Medicine, 158*(5 Pt 2), 369–374. doi:10.7326/0003-4819-158-5-201303051-00002

Weaver, S. J., Rosen, M. A., DiazGranados, D., et al. (2010). Does teamwork improve performance in the operating room? A multilevel evaluation. *Joint Commission Journal on Quality and Patient Safety, 36*(3), 133–142.

Willis, T. A., West, R., Rushforth, B., et al. (2017). Variations in achievement of evidence-based, high-impact quality indicators in general practice: An observational study. *PLoS One, 12*(7), e0177949. doi:10.1371/journal.pone.0177949.

3

PART THREE
Macro Perspective



Chapter 10

Strategy and Achieving Mission Advantage

Stephen Walston and Ann F. Chou

CHAPTER OUTLINE

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

LEARNING OBJECTIVES

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

1. Discuss concepts of strategy and strategic management
2. Explain the importance and the formulation of mission, vision, and values in strategy
3. Describe how strategic advantage can be different in health care
4. Explain how strategy is developed and can evolve in organizations
5. Discuss the concept and components of business models
6. Explain how to analyze the internal and external environments and the integration of these analyses into strategic planning
7. Identify different generic strategic approaches and how these may be used in health care
8. Identify various strategy evaluation methods
9. Discuss how strategy and strategic management apply to health care markets

KEY TERMS

Business Model
Buyer Power
Competitive Advantage
Differentiation
Barriers to Entry
External Environment
First Mover Advantage
Generic Strategies
Horizontal Integration
Internal Environment
Mission
Monopoly
Oligopolies
Porter's Five Forces Framework
Portfolio Analysis
Rivalry
Strategy
Strategic Group
Strategic Management
Supplier Power

Switching Costs
SWOT Analysis
Threat of Substitution
Values
Vertical Integration
Vision

DEBATE TIME: Hospital Monopolies

Monopoly power has a negative connotation, as monopolists frequently extract higher prices as the sole player in the market. Nevertheless, many hospitals in the United States are considered monopolies. Many act as a monopoly by default as the market in which they operate cannot support another facility. Many, however, have actively attempted to achieve monopoly status and some hospitals have used that status to their advantage. Norman Regional Hospital (NRH), a 288-bed facility, is the only hospital in Norman, Oklahoma, 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 serve the community as the leader in health and wellness care. Their vision is as follows: "NRHS will be the provider of choice to improve the health and well-being of our regional communities." While the number of hospitals in other suburban communities has grown and competition is intense in the state, NRH remains the only hospital in its city. How has it maintained its monopoly position? In the 1980s, NRH worked with the city of Norman to pass legislation requiring any hospital desiring to enter the market to obtain city permission or a type of "certificate of need." With competitors unable to meet this criterion, NRH has effectively maintained its monopoly position. NRH has claimed that it can offer higher quality and lower cost medical care 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.ucomparehealthcare.com and https://www.medicare.gov/hospitalcompare/search.html.

CHAPTER PURPOSE

Strategy and strategic thinking remain a critical skill for health care leaders. The concept of strategy has been the focus of study for many management scholars, which has led to hundreds of books and publications, and strategy has become a core course for almost all business programs. This chapter provides an essential overview of strategy. First, we define strategy in terms of how it evolves and its relationship to the environment. Second, our definition helps illustrate the relationship of an organization's values, mission, and vision to strategy. Successful organizations derive strategies from their missions and, as we describe, seek mission advantage in their markets by developing strategies to fulfill these missions.

Third, the chapter provides methods and means to understand, develop, and implement strategies. Business models with four interacting components are discussed for general and health care firms. Readers learn that business models change as internal and external pressures motivate organizations to adapt to be successful. Fourth, the chapter explores the impact of external and internal environments and market structures on strategies. Fifth, to better understand the competitive forces in an industry, the Five Forces Framework is introduced. The importance of internal resources and their related organizational competencies is discussed where these resources and competencies should be valuable, rare, difficult to imitate, and lacking substitutes to achieve competitive advantage. Finally, the chapter concludes with a number of tools and concepts relating to strategy development and implementation. Examples of these tools include value chains, SWOT analysis, generic strategies, first mover advantage, product life cycle, and portfolio analysis. This chapter provides students with a broad overview of strategy and the ability to apply it to achieve mission advantage.

DEFINITION AND MEANING OF STRATEGY

Definition of Strategy

Strategy has a myriad of definitions. While strategy occurs at all levels of firms and organizations, there is little agreement on how strategy is defined (Luke, Walston, and Plummer, 2004; Murray, Knox, and Bernstein, 1994). Some see strategy as a formal plan, and some view strategy as crafting a process or means to beat a competitor. Yet others perceive strategy as a way of doing business, positioning an organization, and gaining advantage from either a prospective or an emergent viewpoint (Mintzberg, Ahlstrand, and Lampel, 2005; Porter, 1980). Strategy can also be considered a guide for future action, a pattern of past behaviors, and the fundamental way in which an organization operates (Mintzberg, Ahlstrand, and Lampel, 2005). Michael Porter (1980) defines strategy as developing a broad formula for how a business is going to compete and collaborate, what goals should be, and what policies are needed to carry out those goals to achieve the organization's mission. This perspective of

strategy as deliberate, purposeful behavior allows a firm to plan decisions that maximize opportunities while minimizing threats. Thus, strategy allows for conscious action to take advantage of external opportunities with a firm's own internal capabilities. Strategies are developed to guide future behaviors and achieve organizational goals.

Although we recognize that a firm's actual strategy can evolve through many different methods, we analyze strategy in a practical manner to provide students and health care managers with the knowledge and skills to improve their understanding and practice of strategy through intentional and cognitive decisions. Overall, at its essence, strategy is about efficiently organizing information to improve decision making and allocating resources accordingly. Leaders are faced with many critical choices: where to invest, whom to hire, what services to offer, etc. Leaders who develop strategic skills make better decisions. Strategies assist organizations to choose wisely among the many available options.

An organization's mission and **vision** statements should drive its strategy formulation. An organization should identify which business it is in (and will be in) and then set strategic goals and objectives to achieve its mission and vision. The strategic plan becomes a company's plan to address how a company will:

- Grow and develop its business lines
- Determine the level and extent of competition and collaboration with other organizations
- Integrate and coordinate its functional components
- Choose the services and programs it will emphasize and toward which to allocate greater resources
- Form and develop its culture (Walston, 2017)

Strategy does not create a blueprint for future decisions. The specific actions and paths to follow cannot be a detailed map, since the future is uncertain. Strategy must be flexible enough to allow for changing circumstances. However, strategic actions often commit resources that may be difficult to recover. For example, construction of health care facilities can take three to five years to complete and systems invest millions anticipating future returns. In South Florida, Hospital Corporation of America (HCA) planned to spend $449 million on hospital and health care facilities in 2017 (Hurtibise, 2016). Whether or not this strategy focusing on capital investment would benefit HC remains to be seen. However, successful strategies must balance committed resources with the need for flexibility and the advantage of being first in a market. These are decisions that leaders must make after careful consideration of their situation and environment. Strategic planning must be flexible to allow for changing environments and conditions and yet disciplined 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.

• • • IN PRACTICE: How Strategies Evolved

Strategy literally means "the art of the general" (from the Greek *stratego*s) and originally 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 recorded their experiences and wisdom to improve their armies' prospects. Some of the first records emerged between 500 BCE and 700 ACE in China, where a number of significant treatises on warfare emerged, the most familiar being Sun Tzu's *Art of War* (Sawyer, 2007).

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

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 widely in business. A recent search for "business strategy" on Google yielded over 34.5 million search results and 429,000 books (search May 2017). Overall, the nature of strategy remains very complex but widely accepted.

• • • IN PRACTICE: How Strategies Evolved *(Continued)*

Strategy has two very important functions. First, as mentioned previously, good strategies should improve decisions that allocate finite resources today for a more prosperous and successful tomorrow. Leaders, faced with multiple projects, must determine which ones receive personnel, materials, and other resources.

Another important function of a strategy is to challenge existing assumptions and open our eyes to new possibilities. For example, many hold on to old, often false assumptions that the elderly cannot surf the Internet and men make most of the financial decisions for families (Weinstein Organization, 2017). Both have proven to be false. Moreover, assumptions that were correct a decade ago may not hold true today. Good strategic thinking challenges existing assumptions and awakens leaders to new realities. Those that do not adjust to new realities and see changes will make decisions based on outdated or even erroneous information, which can lead to poor results.

Oftentimes, these assumptions may be based upon incorrect information. Take a look at Figure 10.1 below. When asked if Lima, Peru, is west or east of Miami, Florida, most people would believe that Lima is further west than Miami, when in fact Miami is west of Lima. In the late 1980s and early 1990s, most assumed that health maintenance organizations (HMOs) would be the dominant model for health care delivery. Based upon this assumption, many health care leaders rapidly purchased physician practices and formed insurance products to create integrated delivery systems. Some hospitals went so far as to alter their mission statements to become integrated systems. Yet, by the late 1990s, it was apparent that HMOs' growth had dissipated and preferred provider organizations (PPOs) began to dominate the health care market. Many health care systems that pursued integrated delivery systems, based on this assumption, made significant strategic blunders and generally failed to achieve their strategic goals (Burns and Pauly, 2002). Strategic thinking thus requires not only challenging assumptions but also the data on which they are based.

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, Florida, is actually further west than Lima, Peru. Miami, Florida, has a longitude of –80° 11' 37", while Lima, Peru'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.

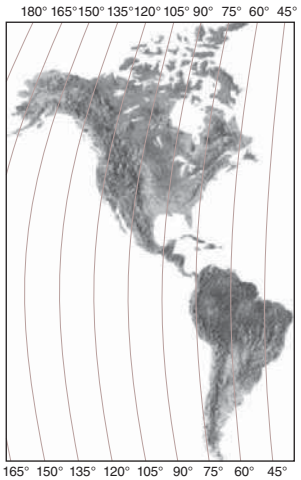


Figure 10.1 The Americas.

STRATEGIC MANAGEMENT

Steps in the strategic management process may include (1) goal formation, (2) environmental scanning, (3) strategy formulation, (4) strategy evaluation, (5) implementation, and (6) strategic control. **Strategic management** requires both internal and external management functions to facilitate this process. Internally, strategic management involves the participation of everyone in the organization, especially the leadership. Organizational leadership and management play key roles in (a) formulating strategies and integrating them into the organization's mission, visions, and goals; (b) leveraging organizational mechanisms, cultures, and resources to support the strategic implementation; and (c) conducting analyses and evaluation. Externally, strategic management enhances organizational success by anticipating possible changes in the environment in which

the organization operates and enabling organizations to change and maintain their **competitive advantage** against their rivals. Both external analyses and internal mechanisms are thus important in the strategic management process (Ginter, Swayne, and Duncan, 2002; Luke, Walston, and Plummer, 2004; Mintzberg, Lampel, and Ahlstrand, 2005; Schendel, 1994).

Environment

No organization is immune to influences from its external environment. Strategic management identifies and positions a firm to respond appropriately to external threats and opportunities. As an industry, health care is particularly sensitive to its external environment, which has continually experienced demographic, societal/cultural, economic, technological, political/legal, and global changes (Fahey, 1999; Moseley, 2018; Walter and Priem, 1999). For the most part, health care organizations cannot directly control these external factors but must develop strategies to effectively respond to these changes.

Demographic changes (e.g., population size, age distribution, geographic variation, racial/ethnic mix, and income levels) affect health care across the globe (Fahey and Narayanan, 1986). Populations across the world are getting older and in industrialized countries the birth rate has fallen dramatically (Altergott, 2016). The U.S. Census Bureau estimates that about 20 percent of the U.S. population will be older than age 65 by 2050. The U.S. population will also become more racially and ethnically diverse. As summarized in Figure 10.2, the minority population is rapidly growing in the United States. Roughly 43 percent of millennials today are nonwhite; by 2050, no racial or ethnic group will make up the majority.

The increased diversity of the population will prompt health care organizations to develop strategies that address changes in the cultural and demographic needs of their constituents. Culture, race, ethnicity, and primary language significantly dictate how health care is accessed and what prevention and treatment strategies are effective. A more diverse society requires more diverse and multicultural strategies. Professional organizations, like the American Hospital Association, have encouraged their members to take the lead and proactively adopt recommendations to address these needs (http://www.aha.org/content/00-10/09elimdisp-essentials.pdf, accessed May 17, 2017).

Along with an aging population, life-style changes have increased the prevalence of obesity and chronic conditions, leading to greater patient complexity. As patients become more difficult to manage clinically, the health care industry faces a continuing shortage of both clinicians and allied health workers (DesRoches et al., 2015). The industry also needs new models of delivery and care coordination to address its complex needs.

Technological advancements have also contributed to escalating health care costs that, in turn, spur broader insurance coverage to finance them. Increasingly, this financing role has shifted from the private to the public sector. In the United States, the federal and state governments pay for over 37 percent of health care costs through the Medicare and Medicaid programs in 2015 (CMS, 2017). As a result, they can mandate rules and regulations that require compliance in exchange for reimbursement. As a result, the health care industry is particularly susceptible to political and legal influences because the government has a complicated relationship with the industry as a provider, regulator, and payer.

The health care industry thus operates in a very large, dynamic, complex, and challenging external environment with many opportunities as well as threats. Health care organizations must craft strategies to deal with an aging and diverse customer base, increased competition, technological innovation, and pressures to improve quality while lowering costs ("value").

Achieving Strategic Success

In turn, successful strategies require direction, resources, and institutionalized processes. Too often, organizations believe that strategy is accomplished when direction is

1. There is more racial and ethnic diversity in the United States, where by 2050, no single racial or ethnic majority will exist in the United States.
2. Asia is supplying the highest number of immigrants to the United States.
3. Millennials are more racially diverse, with 43 percent identified as nonwhite.
4. There is a continuing increase of women in labor force, with over 40 percent of women working as the primary or sole household provider.
5. The percentage of Americans living in middle-class households decreased to under 50 percent.
6. Increasing population is not affiliated with any religion, which in itself has become the second largest group in most nations.

Figure 10.2 Demographic Changes Shaping the United States and World.
SOURCE: Cohn and Caumont (2016).

formulated. This, however, is only the first step in taking strategic action. As Scott Becker, CEO of Conemaugh Health System in Johnstown, Pennsylvania, said, "Everybody has a great strategic plan. The organizations that are successful are the ones that effectively operationalize it" (Rodak, 2013). Operationalizing strategy involves allocating responsibilities, authority, resources, and expected outcomes (key performance indicators) to measure progress. For example, one large international hospital that was established to primarily provide tertiary services identified as one of its strategic priorities to improve its service capacity. This was subdivided into project areas to (1) reduce the nontertiary 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 of these was further segmented into specific goals that had assigned responsibilities, key performance indicators, and reporting time frames.

Experience suggests that most strategies fail as a result of improper or inattentive implementation (Dye and Sibony, 2007). The best strategic plan, if poorly implemented with inadequate follow-up, is just another poor plan. Too often, there is only motion without concrete action. In fact, developing strategies without implementation can create many organizational problems.

This is oftentimes the most difficult aspect of strategic action. Organizations often spend an incredible amount of time and resources developing strategic plans. Yet, many of these plans do not get implemented, as surveys have shown that almost half of companies having strategic plans do not track the outcomes of their strategic initiatives, resulting in little actual strategic accomplishments (Dye and Sibony, 2007). This waste of resources is caused by an inward focus on the planning process and not making strategic activities outcome-oriented. If the plan is poorly developed, the organization will fail to improve its competitive position and attain its mission and vision.

To facilitate implementation, health care organizations should seek to:

- Identify responsibility and outcomes with definite time lines and key performance indicators: This should include managerial responsibility and related budgets necessary to accomplish targeted strategic objectives.
- Establish a monitoring and evaluation process: This process should facilitate communication of the progress and challenges in implementing the strategies.
- 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 and lack good synthesis of these data 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.
- Link budgets to strategies: Strategic plans are too often divorced from organizational budgets. Strategies need to be integrated into annual budgets and be used to drive strategic action.
- Incorporate strategic action into annual evaluations: Annual employee evaluations should be mapped to organizational goals. In particular, organizational values should be directly reflected in each evaluation. Employees and managers should determine how closely the employee is living the values in his or her work.

The Strategic Action Cycle

Strategic management includes a strategic action cycle that begins with development of a plan, identification of values, formulation of the mission and vision, strategic objectives, strategic analyses to identify corporate and then operational plans, followed by implementation (Figure 10.3). Implementation integrates budgeting, monitoring, and evaluation. Efforts and resources must be assigned to each of these tasks. Performance standards are established, measured, and monitored, which inform the next round of strategic planning.

It is important to recognize that strategic planning is not a "one-time event" but part of a strategic action cycle that should continue for the life of the business. While corporate/business strategic plans should lay out the future directions for the organization, progress should be reviewed annually and strategies updated accordingly. Performance targets and key strategies for at least three to five years should be a part of the time line.

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. There is not one right, optimal, or "one-size-fits-all" strategy. Effective strategies are created by matching internal abilities and resources to the external environment to meet the purpose for the organization's existence. Since organizations exist for many reasons, an effective and successful outcome may be different for different organizations. For example, a

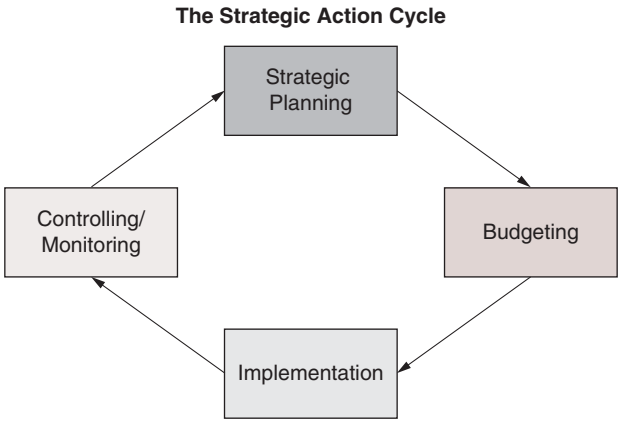


Figure 10.3 The Strategic Action Cycle.
SOURCE: Adapted from Walston (2017).

for-profit hospital may seek high financial returns to satisfy its stakeholders, while a church clinic might define success by the greater number of patients it serves.

The definition of success is based upon the important values and purposes of an organization. Each organization may have different values and external influences that will influence its objectives and how it would define its success. Different business models will 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, multimarket systems versus single market hospitals, and so on.

Organizations should seek "mission advantage" by strategically positioning themselves to best achieve their established mission (Walston, 2017). The basis of all successful strategies should originate with the organization's mission, vision, and values. Too often, however, these statements 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 suggest that in many organizations, few know the elements of their strategies, including their executives (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, significant fines, lower stock prices, and tarnished public reputation as a result of their fraudulent actions that contradicted their 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 the very visible mission and values statements that have been ubiquitously displayed 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 ethics that should guide employees' actions. They define what behaviors are both acceptable and unacceptable and should constrain how the mission and vision are accomplished. Certain behaviors, no matter how they accomplish the organizational mission, are unacceptable; even if the mission is accomplished, if the values have been violated, the organization has failed.

Unfortunately, many organizations fail to engrain values into their culture. Frequently, values are used only as marketing slogans, as organizations ignore them and fixate on financial results and profits (Walston, 2017). Often, organizations survey employees to ascertain compliance with their values, as 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. In many ways, employees are the best judge to determine if an organization's value statements are mere gestures or if they are connected to their strategic behaviors.

Is it valuable for organizations to articulate their values? 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. Particularly during times of stress, an organization lacking such a compass might feel pressures to deviate from standards and take decisions contrary to normal ethical practices. Pressure to achieve goals may also generate personality conflicts that could induce inappropriate and unethical behaviors. Written values serve as visible reminders of the organization's commitment to basic beliefs.

Moreover, written values assist in grounding organizational ethics over time. 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, p. 3).

In theory, organizational values represent the sum total of individual values held by each person affiliated with an organization—i.e., 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."

Expressed values can also be the means by which an organization shapes 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 multihospital system. Three of their expressed values include the following:

- *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.
- *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 one's hospitals to be located near lower socioeconomic areas and 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 core beliefs, values, and expectations of key shareholders.

- *Understand key stakeholder 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 all have influenced a search for values. One way to identify key stakeholders is to identify those who would suffer the most if the organization ceases to exist. The organization can conduct surveys and interviews to see what values are believed to be important. For what do they want the organization to be known? What makes them proud to be affiliated with the organization? Who are the heroes of the organization and why?
- *Compile common values among stakeholders*. Commonly expressed values should be identified and related values merged to express the ethical base of the organization's purpose. An organization should seek to identify those values that set it apart and make it distinctive.
- *Make values visible*. Organizational values must be visible and tied to performance. The values should be clearly incorporated into employees' (including the CEO's) evaluations, and the appraisal should be based on how well they are living the values. The organization should also link values to measurable strategic outcomes, as reflected in satisfaction scores, error rates, quality indicators, etc.
- *Establish memorable values*. Values should be in terms that stakeholders will understand and can remember. As a general rule, there should be no more than five to seven values.

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

The values an organization holds can directly influence its behavior and outcomes. Two different peoples conquered huge swaths of the known world across different centuries with different 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, and travelers and traders peacefully spread it into Africa, China, Malaysia, and Indonesia. However, even during conflicts, the sharing of Islam was a primary mission of the Arab armies. Thus, their values and actions reflected their mission.

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, irrespective of religion or creed, even enemies. Captives were to be shown mercy, be fed, and allowed to gain their freedom through ransom, labor, or on their word. When people were conquered, they were allowed to choose their religion and, generally, had more freedoms and opportunities. As a result, most of their conquered populations freely converted to Islam over time, achieving their primary mission (DeWeese, 1994).

• • • IN PRACTICE: How Values Dictate Actions and Outcomes: The Mongol and Arab Conquests *(Continued)*

In contrast to the Muslim Expansion, the Mongol Empire arose during the thirteenth and fourteenth centuries. At its height, the empire covered lands from China, Russia, and India to 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, was reputed to once have asked and then answered himself, "What is the greatest joy in life?" He said, "The greatest joy a man can know is to conquer his enemies and drive them before him, ride their horses and take away their possessions, 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, p. 60).

Yet, the Mongols had a strict sense of honor and loyalty. The Mongol "mission" was to conquer and obtain gains. 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, it would most often give the city 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, p. 4). Total destruction occurred to many cities including Kiev and Moscow. 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.

For both, values can readily dictate actions and outcomes.

Mission

A **mission** should be the foundation for strategic direction. The existence and enactment of the organization's mission is critical to its success. A mission keeps management focused on its primary purpose. A mission should be an enduring statement of core organizational purpose that distinguishes it from other organizations and identifies the scope of its operations in terms of products and markets (Business Dictionary, 2016). It is a key indicator of how the organization views its stakeholders. As such, it should germinate from the organization's values. A mission provides the reason for the organization's existence and forms the basis for strategy. It should guide the organization 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 investments and resource allocation.

What should be included in a mission? Most successful statements have measurable, definable, and actionable items. They contain as well an emotional appeal that all recognize and can 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. Such standards may include providing "world-class services" or "setting the community's quality standards." This segment is the essence of the organization's competitive advantage. What will your business do differently or better than others? The customer base should also be identified. Organizations may state in their missions that they serve a demographic segment, like women or children, or a nation or region.

Missions are expressed in many ways. Some are short and others lengthy. Collis and Rukstad (2008) suggest no more than 35 words. However, organizations establish many different kinds of missions. HealthTrust, Inc., a company formed in 1987 from Hospital Corporation of America, used a generic mission that it was the "Hospital Company." While, this two-word mission reflected HealthTrust's exclusive focus on hospital care, mission statements in general should have more than a simple phrase in order to differentiate and guide the organization.

Missions should be distinctive and guide an organization's strategies but short enough that employees can comprehend and apply. If a mission statement is too long, it cannot be readily communicated and internalized by everyone in the organization, which in turn cannot be effectively used to drive strategies. As demonstrated by Primary Children's Hospital (see below), missions can be short enough to be a mantra that employees can easily remember and use in their work.

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? Examine the mission for different types of organizations: an academic medical center, hospitals owned by a religious order, and a major pharmaceutical firm. How do their missions reflect the types of organizations that they are?

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. We attach 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.

Too often, companies use "cookie cutter" mission statements that fail to inspire (Persico, 2016). Businesses 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. Buzz words should be avoided. A hospital stating that its mission is "to provide the highest possible quality" is virtually meaningless. Other examples include a large health care system's mission to "remain at the forefront of health care delivery." What does this mean? Is it at the forefront of clinical technology, market share, quality, or innovation?

Missions should also be crafted to express the core function and purpose of the organization's existence. Although missions among successful organizations vary, in general, missions should contain the following:

1. Services or products offered
2. Values and standards that distinguish the organization from others
3. Market(s) in which the organization operates (Walston, 2017).

For example, a large health care organization had at first stated its mission to be the following:

> 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 main purpose for the medical center was to provide highly specialized health care and that education and research would support the delivery of specialized care. As a result, they altered their mission to this:

> Center provides the highest quality specialized health care in an integrated education and research setting.

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 in a larger sense. 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.

In contrast to railroads, Xerox has 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, it can provide both electronic and hard-copy documents that serve to improve its customers' business.

To be useful, a mission must also "call employees to action." To do this, it must motivate employees emotionally to act. It must be easily understood and short enough to be remembered. It should be measurable and reasonably attainable. It must be reviewed periodically to ensure relevance. A mission may need to change as the organizational external environment and internal resources evolve.

In summary, a mission should direct the organization to focus its energies on 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 to come. 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 outcomes that organizations would like to see that may be 5 to 10 years in the future, or further. Leaders and managers should possess competencies to structure the strategic vision, develop short- and long-term plans, and communicate them efficiently to employees so that the employees are empowered to act toward achieving the vision (Vainieri et al., 2017).

Mission and vision go hand in hand. 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 organization. For a vision to be effective, it should align with the organizational values, have understandable language, describe a desirable future, be clear, realistic, and concisely written.

Actions also need to be undertaken to move toward realizing the vision. For example, one large, international hospital set its vision to "become a world-leading institution of excellence and innovation in health care." This required that it benchmarks against the industry leaders, designates key services centers of excellence, and assures that necessary resources would be allocated to these services. Another example shows the vision statement of an academic medical center in the Southern United States, where the center 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

• • • IN PRACTICE: Primary Children's Hospital Mission

The Primary Children's Hospital is a tax-exempt, academic pediatric center of excellence serving five states in the intermountain region of the west. When Joseph Horton became its CEO, the mission statement was several sentences long and, while being factually correct, was rather ordinary and did not reflect the deep passion and powerful commitment to children that so many of the employees and physicians of the hospital felt. No one referred to the mission statement to explain why they made decisions.

The new CEO sought a powerful, short, and memorable mission statement to inspire the hearts and minds of those who served it. He wanted more of a "mission mantra" rather than a mission statement. The new mission was simply "The Child First and Always." It was carved into the granite wall of the entrance to the new hospital building that replaced the old one in 1990. While simple, history has shown the aligning power of these five words.

Twenty-five years after this simple mission was adopted by the hospital, a branding firm was asked to assess the hospital's brand. The firm found a high degree of unity among constituents and stakeholders. The consultants reported not only that there was incredible agreement among constituents but also that over 90 percent of them used the exact same words to describe it: "The Child First and Always."

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 this case, the medical center articulated its intended actions to achieve this vision.

Compare these two vision statements from a health care system located on the East Coast and a hospital on the West Coast:

> To create 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.
>
> To be the premier regional health care provider to the residents of its service area within . . .

The first might be too long to be impactful and contain unrealizable outcomes, while the second is more succinct and defines a geographic area to where that vision applies.

Vision statements often are more important in not-for-profit organizations. Lacking a primary bottom-line focus, an effective vision can guide not-for-profits to meet the challenges of their environment (Kilpatrick and Silverman, 2005). A concise vision written in clear language can provide specific, meaningful ideas to bring together an organization's goals and direction.

In summary, a vision should motivate and direct an organization. Vision and mission should be the foundation of all strategic plans. Leaders should seek to only craft strategies that help fulfill them. These two items should be the first and last discussion items of every strategic thinking process. This process should begin with a review of mission and vision, an environmental scan, followed by strategy formulation, and conclude with leaders confirming that the work aligns and promotes the organizational vision and mission.

STRATEGY AND HEALTH CARE

Competitive Advantage versus Mission Advantage

The concept of competitive advantage is widely used in strategy and has been conceptualized as the "Holy Grail" for businesses (Chiquan, 2007). This concept is defined by an increase in market power as a result of its actions (Luke, Walston, and Plummer, 2004), outperforming and distinguishing a company from its competitors (Porter, 1980), and the implementation of a value-creating strategy not simultaneously implemented by current or potential players (Barney, 1991). Each suggests a

DEBATE TIME: Missions, Visions, and Values

Here is an example of a home health service using its mission, vision, and values to drive its organizational direction and strategies. Is this organization effective in conveying why it exists, what it wants to be, and how it should behave and act?

Mission:

> To assist all New Brunswickers, who wish to remain in their homes, with the activities of daily living and or home health care necessary for them to do so for as long as they desire by providing them with the highest quality, most reliable services available

Vision:

> To be the provider of choice to all who require home health care and the employer of choice for all who wish to provide home health care services

Values:

> QUALITY—To provide the highest quality of service from the initial contact to the cessation of service
>
> CONTINUITY—To quickly establish regular caregivers at the beginning of service and within our power to ensure the same caregivers continue to provide service throughout
>
> COMMUNICATIONS—To keep the client and their circle of care up to date and aware of all aspects of their care
>
> RELIABILITY—To be dependable and trusted in all our dealings with clients, employees, and customers
>
> INTEGRITY—To act with the highest moral principles and professional standards in everything we do

competitive business environment of winners and losers in which organizations struggle to gain an advantage over their market competitors. Markets reward winners for superior service, pricing, and product innovation that provide consumers greater value. Organizations do this by exploiting their internal strengths to take advantage of environmental opportunities. Therefore, the sources of competitive advantage often come from external positioning (Porter, 1980) and/or organizational resources and capabilities (Barney, 1991).

While competitive advantage may generally apply to for-profit firms, it is not necessarily relevant for all health care organizations. Competitive advantage works well for those whose strategies are based on a "win–lose" perspective and whose success depends on finishing ahead of competitors in terms of market share, earnings, or other comparative metrics. However, health care organizations, especially those that are not-for-profit and/or whose mission involves service to vulnerable or disadvantaged populations, may consider that gaining strategic advantage over competitors is not an organizational priority or even inappropriate. Rather than promoting competitive advantage (which does not apply to many organization types such as nongovernmental organizations, not-for-profits, socially conscious firms, etc.), stressing mission advantage strengthens the applicability and alignment of mission statements and strategic focus to a wider variety of measures beyond the solely financial. Mission advantage focuses on achieving an organizational mission that can include profitability but also takes into account customer, community, and employee-desired benefits. A mission advantage focus allows companies to better tie core values and other mission-directed goals to drive organization's strategies.

Financial objectives of players in the health care sector have evolved over time. Hospitals, nursing homes, and health insurance plans were mostly established for charitable purposes. Studies suggest that health care organizations in the United States focus more on competition for patients compared to health care systems in other countries. Another marked difference is that collaboration and sharing responsibilities appear to be the norm among health care providers in other nations (Commonwealth Fund, 2004), creating greater efficiency in provision of care. There are various arguments for and against fostering health care competition (Hansen, 2008; Muscalus, 2008; Mutter, Wong, and Goldfarb, 2008). Although all organizations must generate sufficient income to survive, seeking competitive advantage may not be as effective in health care, where it is difficult to eliminate competition. Intense competition may just lower everyone's profits without improving service (Brandenburger and Nalebuff, 1997, p. 37).

Actions taken by one hospital, if proven successful, are frequently imitated by competitors, regularly leading to service overcapacity and increased aggressiveness. In Indianapolis, for example, no hospital dedicated to heart disease existed prior to the year 2002. Soon after one hospital announced the construction of a freestanding heart facility, all other competitors began development of their own heart hospitals, resulting in three freestanding heart hospitals and one inhospital heart hospital. Building a specialty hospital is not an inimitable strategy. The intensity in competition in the Indianapolis market ensured lower profit margins for all players. The division of market shares and resulting lower patient volume may have prevented quality improvement based on sufficient volume and learning.

Evolving Strategies

Strategies often evolve and change according to environmental pressures. Turbulent or uncertain environments may force an organization to consider strategic change. Factors that create uncertainty include the following:

1. Political/legislative changes
2. Technological innovation
3. Changing customer demand

The pace of change and uncertainty in health care has been spurred on by the numerous legislative proposals that have been considered in the past two decades. As U.S. governmental sources fund nearly half (46 percent in 2015) of health care, and as ongoing health reform efforts increase this share, the strong political influence in health care will surely continue. In addition, the U.S. health care system is one of its most regulated sectors; almost every aspect of it is under federal or state scrutiny (Field, 2007). Recently, fundamental philosophical differences between two major political parties in the United States are creating uncertainties as they seek radically different outcomes.

The pace of change is also often dictated by the rate of introduction of new technology. The speed of innovation is extremely rapid for some products and slower for others. Personal computers and cell phones are two products that have continued to experience rapid product innovation. Some predict that the integration of smartphones into health care delivery will radically change how we receive care in the future (Topol, 2015). Health care has also seen continuing progress in new pharmaceutical drugs, medical devices, and diagnostic equipment. According to the Centers for Disease Control and Prevention (CDC), genetic tests have been developed for thousands of diseases (https://www.cdc.gov/genomics/gtesting/), which can be integral in treating heritable disorders, especially cancers.

In addition, changing consumer demand introduces uncertainty and requires better aligned strategies. These changes may occur as a result of general economic conditions, population demographics, and cultural values.

When financial uncertainty arises for families due to loss of employment or insurance coverage, individuals often cut back on medications, preventive care, and visits to their doctor (Kaiser Family Foundation, 2015). Health care spending also varies significantly by age, race, and gender with those over age 65 spending 3.6 times more on health care than those between the ages of 19 and 44 (CMS, 2014).

Finally, a clearer strategy needs to be defined for adaptation to the changing marketplace and regulatory pressures. In health care, the marketplace is changing in both the government and the private sector, shifting from providing episodic care to managing health for the population (Caldararo and Nash, 2017). The federal government continues to exert pressure on health care organizations to move toward managing populations as a whole during the entire care delivery continuum. Private payers are also beginning to follow suit as risk-based payer contracts and bundled payment models have become more popular (Caldararo and Nash, 2017). As patients, providers, payers, and other stakeholders also demand high-quality and cost-effective care, new programs and organizational structures have been emerging as a response to these changes. For example, some health care organizations have signed onto Comprehensive Primary Care Plus (CPC+), a national advanced primary care medical home model that aims to strengthen primary care through regionally based multipayer payment reform, as a strategy to transform their care delivery. Accountable care organizations (ACOs) represent another example that promotes the quality agenda (Chukmaitov et al., 2017; Lewis et al., 2017). ACOs and similar reforms aim to achieve quality through improving coordination among health care providers. However, successful coordination requires health care organizations to think "outside of the box" and form strategic alliances and partnerships across organizational boundaries (Lewis et al., 2017; see also Chapter 11).

Business Models

A **business model** is a helpful way to see how an organization is organized, creates value, generates revenues, and compares with its competitors. Many have called for fundamental changes in the business model of health care (Crean, 2010; Lin, 2008; Perkins, 2010). The way health care is organized and funded (its business model) is predicted to change dramatically in the future (Jackson, 2008). Health care organizations 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 continuing to influence one another as the organization begins, evolves, and progresses:

1. Customer value: Meeting customer needs in terms of product differentiation, cost, and/or access/availability
2. Inputs: The combination of resources used to provide the product and/or service
3. Processes: The sequence of steps taken to deliver the product and/or service
4. Profitability: The financial mechanism to recover enough revenue to sustain the provision of the product and/or service

Figure 10.4 illustrates the interrelated components of a business model that constantly interact to produce services and products. Each of these components may be altered over time to address new challenges and environmental pressures.

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

Inputs

The combination and mix of resources used significantly affect the business model. Resources include personnel, materials, and equipment/machines. Organizations choose how much and what type of each that will be used. New technology that supplants human labor is often incorporated into a new business model for the delivery of the product or service. Personnel may be a mix of licenses and skill sets that may complement or substitute for one another. For example, clinics may use nurse practitioners or family practitioners, anesthesia may be administered by nurse anesthetists or anesthesiologists, and inpatient care may be delivered by hospitalists and intensivists rather than the admitting physician.

Processes

A process is a series of steps that ultimately transforms inputs into customer-valued products and services (Walston, 2017). An organization is composed of many different processes that are ordered to simplify decision making and increase efficiency. These include admitting, financial, and service processes, among many others. Processes can vary. Some hospitals will admit patients directly to their inpatient or outpatient room and use standardized protocols (also called clinical pathways) to direct how physicians should treat certain conditions.

Other hospitals traditionally make patients check in at a centralized location, transport them 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. Sufficient numbers of customers must be found who garner value from the product and/or services. At the same time, the inputs and processes must cost less than the revenues generated. For example, religious organizations generate revenues from donations, governmental facilities from governmental allocations, 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. Many argue that the U.S. health care business model must move to a patient-centered, value-based, and/or population-based focus that will require greater coordination of care and a greater attention to preventive and primary care (American Hospital Association, 2016; CMS Quality Strategy, 2016; Friedman et al., 2016).

The U.S. Health Care Business Model

Traditionally, the business model of the U.S. health care system has offered fragmented treatment of acute care at the expense of primary, preventive, and chronic care (Marvasti and Stafford, 2012). Little coordination has occurred among health care providers, duplicating services and driving up costs. Hospitals are costly structures to build and, since they are central to health care provision, have promoted high-cost acute care medicine (Perkins, 2010). The United States spends more than double per capita on health care than any other country. Yet, the U.S. health care system performs relatively poorly in terms of quality, access, efficiency, equity, and health outcomes, as Americans have relatively shorter life expectancy and more chronic disease (Squires and Anderson, 2015).

Today, many feel that the traditional hospital business model dramatically overshoots the needs of the average patient, yet misses basic concerns. National reports have long 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. As a result, new business models have sprung up to include retail health clinics located in retail stores, supermarkets, and pharmacies for uncomplicated illness, medical tourism (travel beyond international borders to obtain health care) (Vasquez, 2016), specialty hospitals, alternative medicine, and patient-centered medical homes (Berry and Mirabito, 2010; Society for Health Care Strategy and Market Development, 2008). Health care systems have also adopted structures to facilitate clinical integration that links physicians, hospitals, and services for chronic care and post-acute needs (Morrissey, 2015).

Customer Value

Traditional hospital business models originated in the early twentieth century as hospitals became the hub for clinical training, scientific research, and the repository of expensive medical technology to be used in acute-care medical treatment. Hospitals were the only medical facilities that possessed the collective technology to diagnose and treat serious illnesses. The unpredictability of

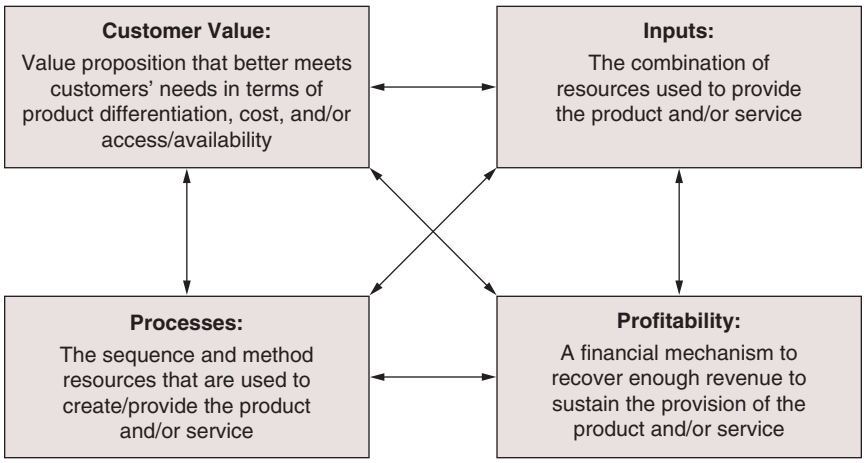


Figure 10.4 Components of a Business Model.

the medical problems dictated that hospitals needed to house many specialists to provide value to a wide variety of customers.

The three main values to be obtained in a service-related industry, like hospitals, include quality, cost, and access. Hospitals initially reorganized care by moving patient treatment from the home to the hospital. Patients obtained value by receiving sophisticated technology and higher quality of care. More recently, escalating costs and technological advances have encouraged the movement of traditional services provided in the hospital to alternative delivery settings (e.g., ambulatory surgery centers). Consumers now increasingly elect to access care through alternative models that hopefully improve population health and focus on preventive medicine and the reduction of disease (LaPenna, 2010).

Inputs

Inputs include 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, equipment, and support personnel. New, alternative models vary their inputs to use much less expensive manpower (e.g., nurse practitioners), settings (e.g., medical tourism), or innovative technology (e.g., telemedicine) to transmit health information. Certain health care professionals have also been given more responsibilities. For example, in some states, nurse practitioners and physician assistants can prescribe certain medications, perform physical exams, and other duties that have traditionally been provided by physicians.

Also, inputs vary by type of hospital. Community hospitals often do not have salaried medical staff but instead rely on voluntary staff or contracted providers. By contrast, academic medical centers employ the majority of their medical staff. Similarly, some types of HMOs (staff models like Kaiser Permanente) employ their physicians, while independent practitioner association (IPA) models like Hill Physicians Medical Group use contractual relationships.

Processes

Health care occupations have traditionally been segregated by professional expertise, status hierarchies, and location in the organizational chart. Similarly, work processes regarding how patients are admitted, treated, and released have been segmented. The advent of health information technology (e.g., electronic medical records) now allows providers to access the documentation of care received from other physicians, which may streamline the process to reduce duplicative testing and cut costs.

Revenue Generation

Whereas hospitals used to rely on charitable donations and insurance reimbursement, the government has become the biggest payer of hospitals. In 2015, U.S. state and federal governments collectively accounted for 37 percent of health care expenditures through the Medicare and Medicaid programs and 46 percent of spending overall (Keehan et al., 2017). Most hospitals are still mostly paid on a fee-for-service basis. Some delivery systems like Kaiser Permanente are financed by prepaid insurance premiums in which the hospital is a "cost center" and increased utilization decreases the organization's margin.

EVALUATION OF ORGANIZATIONAL ENVIRONMENT

A critical aspect of strategic planning and strategic thinking is to understand the organization's **external** and **internal environment**. It is important to understand existing and projected environments as they impact the basis of our assumptions, the subsequent allocation of resources, and strategic direction. Assumptions are propositions that are taken for granted, often with limited evidence. It is critical that our assumptions are checked and challenged, as past assumptions can be proven faulty. For example, in the past, assumptions were made that (1) hospital care would become outmoded and supplanted by outpatient services, (2) HMOs would control health insurance, and (3) only integrated health care systems could be successful. Each was shown to be false (Burns and Pauly, 2002). Organizations that clung too long to such assumptions suffered.

Organizations should periodically scan the environment to identify changing factors and challenge their assumptions. They should monitor both the external and internal environment: external market analysis should focus on competition, while internal assessment should examine the organization's own unique resources and capabilities (Burns, 2002).

External Evaluation

The nature of customers and the structure of the market directly influence how organizations must compete. Health care is highly sensitive to external variables, such as technological innovation, changing customer demand, and governmental regulation. Factors that should be evaluated include the following.

Customers

Who are they? Are there specific segments by age, gender, income, or geographic locations that use the

Table 10.1 Hospital Patient Origin by Region and Gender—Admissions

		2000			
Numbers	**Eastern Region**	**Western Region**	**Central Region**	**Other**	**TOTAL**
Female	1,299	903	5,497	2,583	10,282
Male	1,054	956	4,721	3,981	10,712
TOTAL	2,353	1,859	10,218	6,564	20,994
Percentage of Total					
Female	6.2%	4.3%	26.2%	12.3%	49.0%
Male	5.0%	4.6%	22.5%	19.0%	51.0%
TOTAL	11.2%	8.9%	48.7%	31.3%	100.0%
		2005			
Numbers	**Eastern Region**	**Western Region**	**Central Region**	**Other**	**TOTAL**
Female	1,021	744	6,310	2,444	10,519
Male	929	844	7,340	4,328	13,441
TOTAL	1,950	1,588	13,650	6,772	23,960
Percentage of Total					
Female	4.3%	3.1%	26.3%	10.2%	43.9%
Male	3.9%	3.5%	30.6%	18.1%	56.1%
TOTAL	8.1%	6.6%	57.0%	28.3%	100.0%

hospital's services? Which are increasing? Decreasing? Organizations should consider completing a customer (patient) origin study to define what geographic locations their customers come from. For example, the patient origin study in Table 10.1 shows that more than half of patients come from the Central Region, a percentage that grew from 48.7 percent in 2000 to 57 percent in 2005. The number of patients coming from the Central Region has grown as has the overall total, while the number and percentage of patients from the Eastern and Western Regions have declined significantly. Such information is strategically important to determine the impact of current strategies and inform what adjustments are needed. In this case, the strategies in the Central Region seem to be effective, while something negative is occurring in the other regions. These data may trigger other questions, such as whether other health care facilities have been opened in the other regions and/or physicians have changed their referral patterns.

Competition

Who is the competition and what is the nature of that competition? Is the competitive landscape changing? Are there new market entries? 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 factors, like their key referral sources (e.g., key physician and insurance groups), consumer perceptions of their organization, facility vacancy of competitors (e.g., bed occupancy rates), and price sensitivity for different services and how they change over time. Many health care organizations will find that they rely on a small number of organizations for a large portion of their patients. The perceptions of these patients are especially critical. For hospitals, competitors who have greater idle capacity (due to falling bed occupancy) may compete most vigorously on (lower) prices.

Market Structure

Strategies vary according to the market structure. The nature of competition is directly related to the structure and degree of fragmentation of a market. Market

structure is comprised of the number, concentration, and relative strength of organizations in an industry; the type of market structure influences the intensity and form of competition in the industry (Walston, 2017). As a result, organizations vary their strategies according to the structure of the market in which they exist.

As illustrated in Figure 10.4, markets can be categorized 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**, with firms struggling to differentiate their products and compete on price. Markets for agricultural commodities (wheat, corn, soy beans, etc.) often come closest to perfect competition. Products are homogeneous, product and pricing information are 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 close to perfect competition. One generic drug is often seen comparable to another (of the same prescription); customer choice is frequently restricted by insurance coverage, which is 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 its differentiation, has some control over its prices. General examples would include restaurants and clothing stores. In the United States, physician services exemplify monopolistic competition. There are many physicians but minimal competition based on price. Physicians may be differentiated by their office locations, education, and personal relationship with their patients.

An oligopolistic market is dominated by a few large organizations. The degree of market concentration is very high with only a few firms dominating the market. Barriers to entry exist. Organizations are interdependent in that they must take into account the reactions of their competitors when they make decisions regarding pricing and resource allocation. Organizations in **oligopolies** rarely compete on price but seek to "brand" and differentiate their products on other characteristics. Air travel is an industry where oligopolies exist in both the production side (large manufacturers like Boeing and Airbus) and the commercial side (e.g., large air carriers like United, Delta, American, and Southwest). Many health care systems, medical device companies, and insurers are oligopolies and, as such, seek to differentiate themselves and compete on factors such as access, quality, and relationships with physicians.

Monopolies are fully consolidated markets with only one firm. Monopolists lack competition, as they produce goods or services for which there are no close substitutes. Monopolies often lack incentives to be efficient but maintain high prices. Much of their strategic effort goes into creating barriers to entry against potential competitors. Water and electric services are often monopolies. Likewise, in many markets, especially in rural America, hospitals are monopolies. Monopolies are often associated with higher prices because of the lack of choice. Most studies support this relationship as markets with high hospital concentration (close to monopoly conditions) have also extracted higher prices (Federal Trade Commission and Department of Justice, 2004). The high cost of branded pharmaceutical drugs in the United States is partially explained by the "monopoly rights" given through patents and regulatory approvals by governmental agencies. These monopolies give drug companies greater ability to raise prices, often many times the rate of inflation. Some drugs, like Daraprim, used to treat serious parasite infections, enjoyed price hikes of 5,000 percent in 2015 alone (Tuttle, 2016).

The Five Forces Framework

Porter's Five Forces Framework has often been employed to define the structure of a market and understand the competitive forces in industries (Figure 10.6). 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 intensity of rivalry. At the center is the intensity of rivalry or competition; rivalry is heightened by the other four forces. Taken together, these forces help define an industry's market structure. Porter suggests that firms gain competitive advantage by

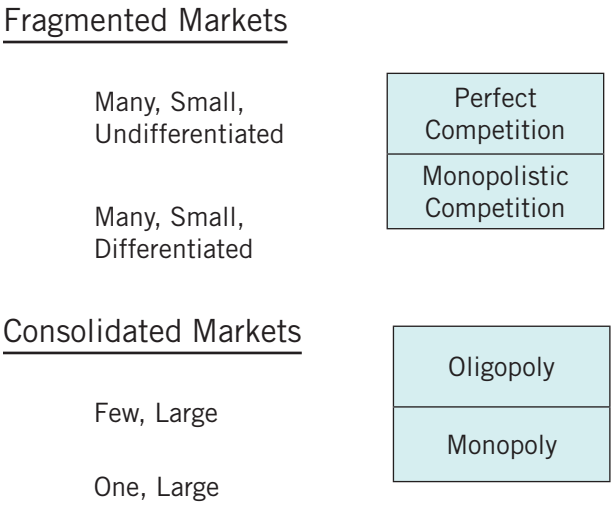


Figure 10.5 Market Structure.

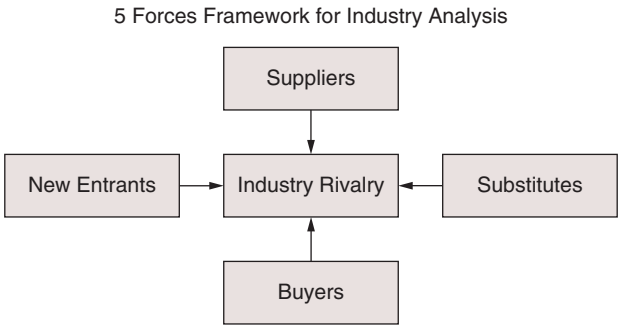


Figure 10.6 The Five Forces Model for Industry Analysis.

exploiting weaknesses in these five forces or by adopting strategies that modify these forces and reduce competitive pressures (Porter, 1980). As intensity of the forces increases and as the market structure approaches perfect competition, 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 industry profits. Each of the five forces is discussed below.

Rivalry

Rivals in a market compete for customers and market share. Such competition is based on a combination of price and product attributes. The degree of **rivalry** is influenced by many factors. One is the number of organizations in the competitive space. In an industry where new rivals can enter relatively easily, the industry is more competitive, and organizations are less likely to enjoy high average profitability. Rivalry is also likely in markets where competitors differ substantially from one another. For example, markets that have public, community, and private hospitals will create more competition due to expanded customer choice, compared to markets with only one type of hospital. Likewise, rivalry is affected by the size distribution of market firms. Competition increases as a market becomes less concentrated and/or firms control more equal shares of the market; by contrast, the existence of one (or a few) dominant organization diminishes rivalry. Hospital markets in the United States exhibit wide variations in their market structures. Many are monopolies or oligopolies (Walston, 2017). Figures 10.7 and 10.8 show two different markets, both in cities of about 1.5 million population. Figure 10.7 represents the market in Phoenix, Arizona, which has more hospital systems, greater variation in ownership due to more for-profit penetration, and less concentration. Figure 10.8 shows the market in Indianapolis, Indiana, which has fewer hospitals, is dominated by not-for-profit organizations and more concentrated. Comparing the two figures would lead to the conclusion that the Phoenix market is more competitive than Indianapolis.

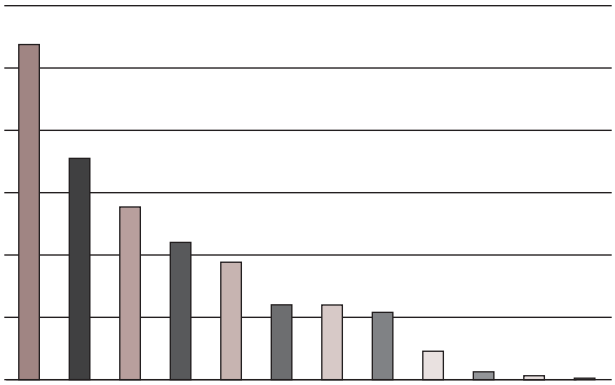


Figure 10.7 Phoenix Market Share.
SOURCE: https://www.ahd.com/

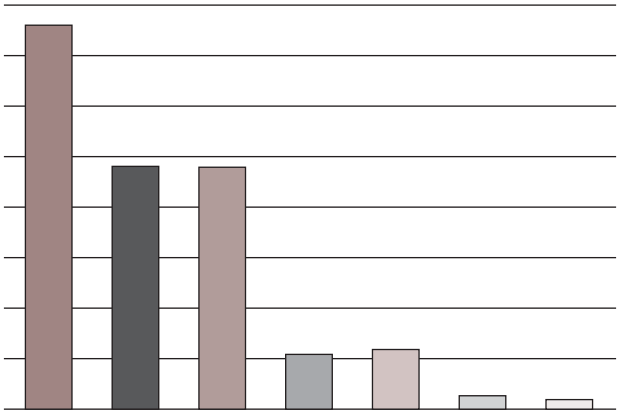


Figure 10.8 Indianapolis Market Share.
SOURCE: https://www.ahd.com/

Moreover, there are nonmarket structural characteristics that affect the intensity of competition (Porter, 1980). These include the difficulty in deploying organizational assets outside the industry (asset specificity), the amount of fixed costs, and excess capacity. As each of these increases, the intensity of rivalry grows, as firms are motivated to more aggressively seek volume to augment economies of scale and asset utilization. Other product factors include the degree of product similarity or differentiation and issues of switching costs. Products not perceived differently by the consumer become price competitive. The greater the differentiation, the more a firm can charge for its product, and the higher profits that can be produced. Likewise, the less it costs to switch to another product, the greater the competition.

Finally, the nature of the sales process can 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. Substitutes are products or services that replace another. The strength of the substitution is tied to the customer perception of how fully the new product matches the quality and price characteristics of the old. Other factors that influence the **threat of substitution** by new products include the relative price performance, **switching costs**, and the buyer's propensity to substitute (Porter, 1980). For example, technological advances in the 1990s such as minimally invasive surgery have replaced 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

An organization'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, and their willingness to experiment with alternatives (Mintzberg, Lampel, and Ahlstrand, 2005). As with rivalry, a buyer's bargaining power is partly dependent on market structure. If, as in the defense industry, there is only one or a few buyers for a product, the buyer(s) can exert strong influence on the firm's behavior. In health care, medical clinics will seek to contract with more than one insurer so that they do not depend on a single source for a significant portion of their business.

Supplier Power

Supplier power is the opposite of buyer power. Contrary to buyers, suppliers desire the ability to increase price and maintain the same quality. Suppliers gain power by how important their product or service is to the purchasers, when few suppliers exist, and the cost of switching to another supplier is high. Powerful suppliers can extract concessions from their buyers. Suppliers are more powerful when they are few in number and more concentrated than their buyers (Walston, 2017). For example, there are many vendors of health care information systems, but the cost to switch from one system to another is very high, which increases a supplier's power. On the other hand, some pharmaceutical companies are the only source for special drugs. As a result, they can charge very high prices. For example, Gilead Sciences' monthly price to take Sovaldi, a drug for hepatitis C, is $81,000 (Ramsy, 2016).

Threat of New Entrants

New entrants into markets may potentially decrease incumbents' market share and thereby increase price competition. The extent of barriers to entry will influence the number and size of organizations within a given market. Some of these barriers are naturally occurring, where others may be erected by existing organizations as a means to maintain and strengthen their market position (Kotler, Shalowitz, and Stevens, 2008). These barriers include the following:

- *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. Scale economies tend to exist in industries with significant fixed costs. As volumes increase, the high fixed costs are spread out and the average price declines; competitive success thus rests on high volume. For example, pharmaceutical wholesalers and manufacturers have very high fixed and capital costs. An organization desiring to enter such markets must have a substantial amount of financial resources and be willing to remain at competitive disadvantage until sufficient market share can be achieved. This serves as a deterrent to new entry.
- *Access to key resources or distribution channels*: In markets that have scarce critical resources or high distribution costs, lacking access to such resources or distribution channels can be a significant barrier to entry. For providers, this may be the lack of skilled, specialized personnel; for biotechnology start-ups with a new drug, it may be the lack of market access to specialists who prescribe it for their patients.
- *Legal restrictions*: Legal barriers often present barriers to entry. These can be patents, copyrights, or requirements for licensure. Government regulation might restrict entry by requiring potential entrants to gain prior government approval to offer products or service. Many states in the United States still require "certificate of need" for hospitals to obtain state approval prior to initiating a large capital expenditure. Other state laws create barriers for certain professions. In 2016, 29 states did not allow full practice authority to nurse practitioners, even though most evidence does not support these restrictions (Pohl et al., 2016).
- *Branding*: Marketing advantages are also enjoyed by incumbents as a result of their reputation. Some firms have successfully used their reputation to lower barriers to entry. For example, many U.S. providers with excellent reputations for delivering high quality of care have leveraged their "brand" to enter health care markets across state borders or even

international boundaries. Harvard International, Cleveland Clinic, Johns Hopkins, and others now have a presence in the Middle East.

- *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. These agreements restrict entry of other organizations into these markets (Kotler, Shalowitz, and Stevens, 2008).
- *Current excess capacity and threat of retaliation*: If current firms have excess capacity, they are often willing to reduce price to increase volume. Even the threat of entry will frequently motivate existing firms to lower or maintain low prices. Incumbents with a credible history of aggressive retaliation will pose an additional barrier to new entrants.

Evaluation of Rival Positioning

An organization should know and understand its competitors. The concept of "strategic groups" was initially introduced by Hunt in 1972 but further developed by Porter in 1980. A **strategic group** is defined as a set of organizations within an industry that have similar business models and/or strategic orientations such that they directly compete with one another. For example, in the restaurant business, there are many different classifications of dining, from fast food to fine dining. McDonald's clearly competes with Burger King and Wendy's but does not with five-star restaurants. These groups can be distinguished, based on factors such as the following:

- 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 and financial strength. Intangible resources include intellectual property (patents, copyright), brand name, and culture. 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, 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.

To be strategically important, internal resources must offer sustained benefits in the face of competition. To do so, these resources must be valuable, rare, difficult to imitate, and lack substitutes. Obviously, a resource should be valuable to be strategic and needs to improve an organization's effectiveness and efficiency. A resource should also be rare enough to generate demand and hard to replicate. For example, for many organizations, location is the critical resource that can be rare and hard to duplicate. Finally, even if a resource is valuable, rare, and hard to imitate, it may not provide sustained strategic advantage if it can be easily substituted. Physical assets are less likely to provide sustained strategic advantage. For example, purchasing the latest imaging machine is a strategy that can be easily and quickly imitated by competitors. Human resources can also be hired away from organizations. Advantage must be found in the combination of physical, human, and organizational resources. Sustained strategic gains come when the intangible resources are combined with the tangible to create a competitive organizational culture (Mintzberg, Lampel, and Ahlstrand, 2005). Culture has been suggested as the most effective and durable barrier to imitation, as it generates unique outcomes, is difficult to discern, and is very difficult to replicate (Barney, 1986). Of course, a positive culture is the most difficult to create, but organizations that do tend to innovate more have greater patient satisfaction and are more likely to achieve their goals (Bellou, 2007).

Evaluating Organizational Capabilities

One way to evaluate the use of organizational resources and capabilities is through a value chain analysis. Organizational capabilities refer to an organization's skillset in combining 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. That is, these capabilities are organized in a chain of activities that gives the product or service more added

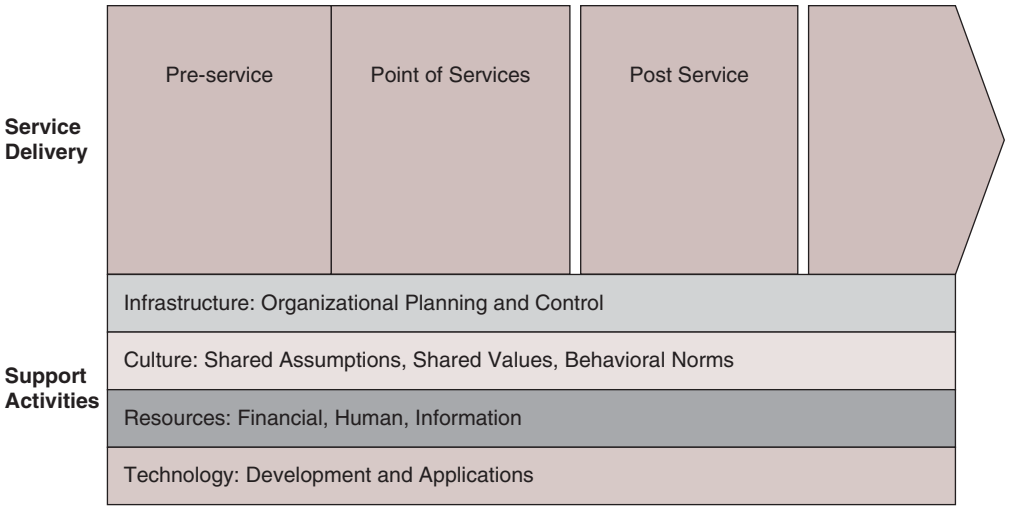


Figure 10.9 Value Chain.
SOURCE: Adapted from Ginter, Swayne, and Duncan (2002).

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 would also be included in the calculations.

In health care, a value chain assumes a systems approach where there are two subsystems: service delivery and support activities (Figure 10.9). The service delivery subsystem is further divided into preservice, point of service, and postservice, 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, highly qualified staff, and appropriate information technology (Ginter, Swayne, and Duncan, 2002).

Another common tool for evaluating an organization and its resources is a **SWOT analysis**. The SWOT (strengths, weakness, opportunities, and threats) analysis is a common analytical tool for evaluating organizational capabilities to enhance organizational effectiveness and strategic directions (Figure 10.10). It enables members of the organization to assess all aspects of the organization. These encompass 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. Organizations may identify areas where they can grow based on agreed-upon opportunities and mitigate sources of major threats (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 easy to initiate and involve many stakeholders. However, it is important to keep in mind some of the tool's limitations. SWOT does not provide trend information, may include erroneous information, and may not provide clear direction at its conclusion. Participants can come with singular perspectives, which may reflect their biases and misperceptions. In addition, unless a competent facilitator is used, vocal individuals may inappropriately influence the analysis, thereby leading to potentially inaccurate or biased results (Walston, 2017).

GENERIC STRATEGIES

Porter (1980) argued that a firm's competitive advantage would primarily derive from either its cost leadership or an ability to differentiate its product and/or services. The application of these strengths to either a broad or narrow market results in **generic strategies** (Figure 10.11).

Low-Cost Leadership

This generic strategy calls for being the low-cost producer in an industry for a given level of quality. Some companies are very successful as low-cost leaders. Walmart and Aldi Stores are known for their low prices and acceptable quality. They both work hard 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 the following:

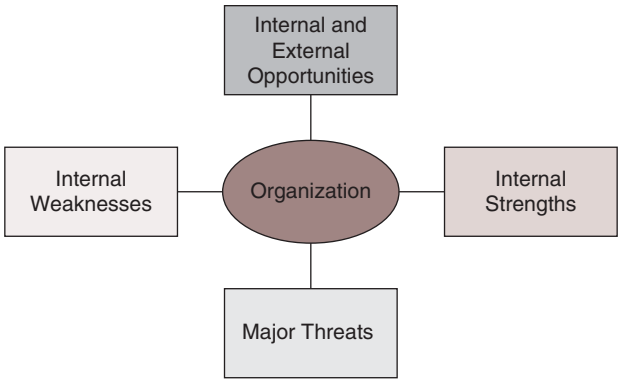


Figure 10.10 SWOT Analysis.

SOURCE: Adapted from Bourgeois, Duhaime, and Stimpert (1999).

- Vigorous price competition among rivals
- Similar products from rival sellers (products hard to differentiate)
- Most customers use product in similar ways
- Low switching costs
- High bargaining power with large buyers
- Low barriers to entry and new entries use introductory low prices to attract buyers
- Narrow product line to standardized, no-frills goods and services
- High asset turnover
- Low-cost distribution systems

A challenge for any organization in establishing a low-cost position is to assure an acceptable level of quality for its consumers. Quality preferences will vary according to the consumer's income, education, and cultural norms. However, for some products, such as health care, the quality requirements are very high for the vast majority of consumers. Health care providers that seek a low-cost position have extreme difficulty attracting desirable patients.

The challenge of a low-cost position in health care is partly due to consumers equating low cost to low quality and partly due to the insulation of many consumers from the actual cost of health care. Patients with insurance are mostly protected from high costs of care. Rather than having to pay the full charges, insured patients pay a fixed deductible and then generally a small percentage (coinsurance) on charges that have been discounted by the insurance company. However, low pricing can be an effective strategy for some services that are less likely to be covered by insurance. In areas with more price-sensitive consumers, low cost may help organizations attract patients. Consumers with high out-of-pocket costs more often compare prices, choose lower-cost health care services, and select less expensive drugs. For example, health care organizations may set low prices for normal obstetrical deliveries, physicals, and plastic surgeries. Health care providers may seek to have low-price (cost) positions in these market segments but realize that patients are not very price-sensitive in many other services (Ungar and O'Donnell, 2015).

Differentiation

A generic strategy based on **differentiation** requires the provision of a product or service that offers unique attributes that are valued by customers and perceived by customers to be better than competitors' products. In turn, that value may allow the organization to charge a premium price for the product or service. Product differentiation may also be accomplished through its products, services, personnel, channel, and image (Kotler, Shalowitz, and Stevens, 2008). Organizations may incorporate features that raise product performance or add attributes that buyers desire, such as greater reliability, durability, ease of use, convenience, safety, and low maintenance. Some health care systems have changed their facilities to provide "healing gardens," adding additional hallways to reduce noise, and adding gourmet chefs and room service (Landro, 2007). Organizations can also differentiate products to heighten customer satisfaction in noneconomic or intangible ways. They may improve service by increasing the ease of ordering, delivery, and/or maintenance and repair. An organization's personnel can also make a difference by their competence, courtesy, reliability, and communication skills. Many health care organizations, including the Virginia Mason Medical Center in Seattle, Washington, have partnered with patients and families to initiate service excellence programs that integrate quality and services (Bodnar, 2014). Channel differentiation can also distinguish an organization. The extent of coverage, expertise, and performance can be significant advantages. Health care providers seek to set up referral clinics in key areas, pharmaceutical firms offer multimodal drug delivery, and insurance companies develop networks that offer the widest scope of providers.

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. U.S. hospitals, health care systems, and clinics spent about $2.3 billion on health care advertising in 2015, 41 percent above the amount spent in 2011 (Kantar Media, 2016). Image advertising is often different from conventional marketing efforts (Rowland, 2006). If strong image and brand name exists, it can potentially be transferred to related

products and businesses. For example, entities have partnered with educational institutions such as Harvard University, which 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, a subsidiary of Partners Health Care System in Boston.

Focused Strategies

Focused or market niche strategies constitute another category of generic strategies. In Figure 10.11, 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, geography, political boundaries, etc. Many consider specialist hospitals as an example of organizations that compete in certain market niches. These hospitals are often physician-owned (in contrast to public ownership of most general hospitals), offer somewhat limited services, and only treat one disease type. Other health care organizations pursue focused strategies by establishing luxury services to attract wealthy domestic and foreign patients. Differentiating services include uniformed valets, professional greeters, 24-hour room service, and spas (Pourat, 2016). Competitive advantage is achieved by matching an appropriate strategy to the target market and defining the focus as unique/differentiated or low cost. Broad, uniquely focused strategies should be highly differentiated; narrow and low-cost strategies should be focused on cost leadership.

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 and/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, Roger Bannister has been honored and remember in athletics as the first man to break the four-minute mile barrier in 1954, even though he placed fourth in the 1952 Olympics and his record was broken just 46 days later (Bascomb, 2005).

First movers can gain advantage from (1) breakthroughs in research and development, (2) acquisition and control of scarce assets, and (3) reputation. Sustained advantage can be obtained by moving quickly up the learning curve. Amazon and eBay, for example, have excelled in adopting new technology, making key acquisitions, and establishing solid reputations to grow their businesses. Blue Cross and Blue Shield were the first entrants into the private health insurance market during the 1930s and 1940s and continue as market leaders today. Likewise, first mover pharmaceutical and biotech companies may gain strategic advantage for their innovation through patented new drugs. If first movers can gain access to crucial resources and capabilities, they

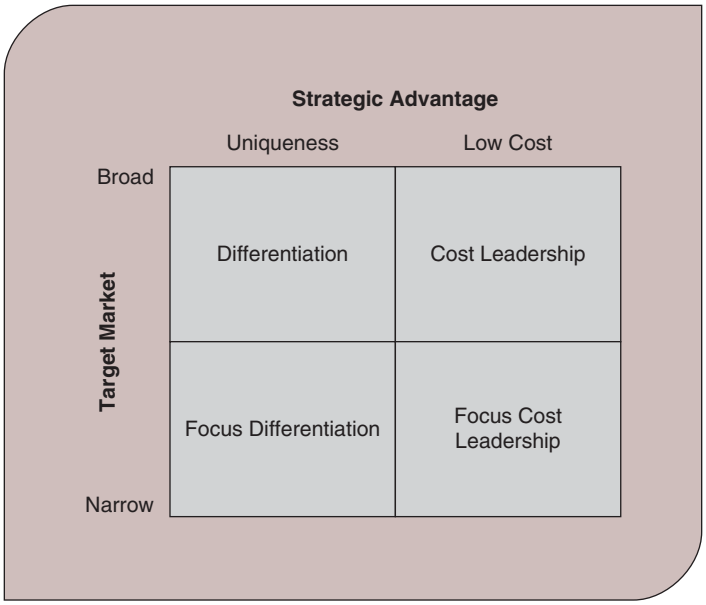


Figure 10.11 Generic Strategies.

SOURCE: Adapted from Walston (2017).

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 (second movers) 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. There are many firms that moved rapidly into a new product with strong financial backing that lost to later entrants. For example, Prodigy Communications was the first mover in online shopping; Dumont led in selling televisions; Chux led in disposable diapers; and Ampex led in video recorders. All were surpassed by later movers (Shilling, 2007). Apple was not the first mover in digital music, smartphones, or tablets but used the experience of others to dominate the market in these areas (Anthony, 2012). Second movers or "fast followers" may succeed more often than first movers because of existing demand and consumer acceptance (Shankar and Carpenter, 2013).

Product Life Cycle

All products and services go through phases or life cycles that relate to the level of costs and sales, which have strategic implications. Product life cycles occur because of the inherent limited life of any product, resulting from technological advances and adapting consumer preferences. Figure 10.12 shows the four life cycle stages. In the Emerging Stage, there may be initially few organizations 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, but 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 organizations merge to increase the market concentration, as competition pushes down profit margins.

Some believe that U.S. health care emerged in the early 1900s and underwent a growth stage in the mid-1900s aided by financing from insurance companies and significant growth in expenditures. The general health care industry now sits 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 10.12 Life Cycle.

Portfolio Analysis

In the 1970s, consulting firms developed various methods to analyze the strategic position of organizations. One very popular method is **portfolio analysis**. Various derivations of this concept still exist, such as the Boston Consulting Group's Growth-Share Matrix 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 scale economies, 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. Comparatively evaluate the viability and future of the main components of an organization's business
2. Graphically depict the performance of an organization's products and services
3. Examine the balance between cash flows and growth among key business components
4. Guide strategic allocation of resources (Walston, 2017)

An organization can examine the components of its business, sometimes known as strategic business units (SBUs), by their competitive position and environmental favorability (Figure 10.13). 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.

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

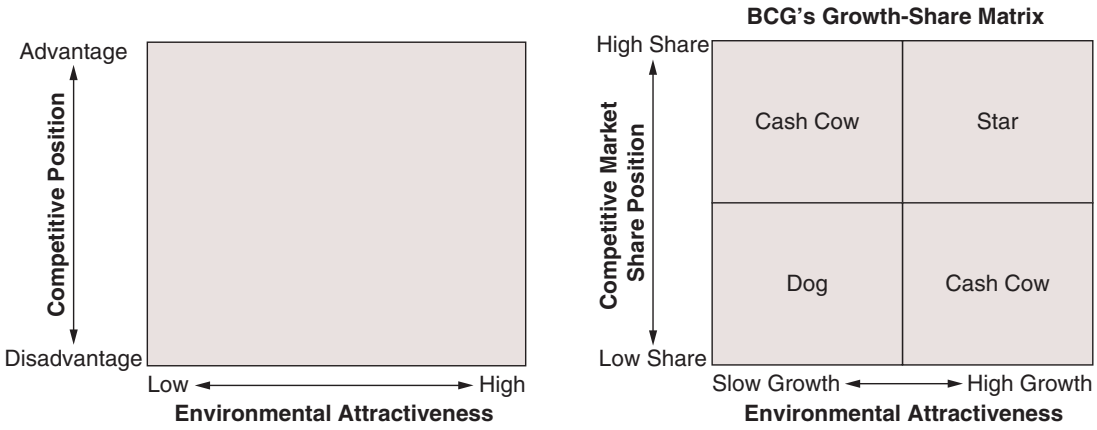


Figure 10.13 Competitive Positioning.

Common Strategies in Health Care

Health care strategies commonly focus on growth. Health care organizations frequently expand vertically to own products and services previously offered by their buyers or suppliers, grow horizontally to include similar products, or diversify by developing new products and services. Growth promises greater economies of scale, improved reputation, fast entry into markets, synergies, increased market power, higher salaries for top managers, and repositioning of the organization to take advantage of new opportunities and changing markets.

Health care strategic expansion is often referred to as **vertical** and **horizontal integration**. However, common ownership is not sufficient—true integration must occur to achieve the above benefits of growth strategies. In many cases, organizations that have been acquired are simply absorbed rather than actually integrated.

Vertical expansion happens when an organization acquires a business in its value chain that is a supplier (backward expansion) or a buyer of the organization's product(s) (forward expansion). For example, a hospital might employ physicians or have its own insurance company and create an integrated delivery system, which has been encouraged by national bodies to advance a population health focus (American Hospital Association, 2014). For example, in 2011, WellPoint, Inc., paid about $800 million to acquire CareMore, a provider of preventive services and UnitedHealth Group, Inc., bought Monarch HealthCare, an association of 2,300 physicians. Vertical integration of hospitals and physicians has become commonplace, with roughly 25 percent of physicians now working as employees. By contrast, integration with insurance companies and physicians has remained relatively rare, with only 2 percent of all primary care physicians working for insurance companies in 2016 (Herman, 2015; Matthews, 2011).

Horizontal expansion occurs when organizations producing similar products merge or are acquired. Thus, an organization grows by buying or merging with other organizations that provide comparable products. Hospitals and physician groups have used this strategy extensively and expanded horizontally to form multihospital systems and larger physician groups. In 2016, for example, 3,183 of 4,926 (65 percent) community hospitals belonged to a health care system (American Hospital Association, 2016). Health insurance companies also grew larger; in 2015, the largest 10 insurance companies controlled over half of the U.S. health care insurance market (Statista, 2016). Specialist physicians, especially cardiologists and orthopedists, are also increasingly consolidating into larger, single-specialty groups (Kash and Tan, 2016).

A third way to grow is *diversification* or acquiring organizations that offer different products or services. Organizations can diversify into either related or unrelated businesses. *Related diversification* leverages existing organizational competencies to expand its customer or product base. For instance, United Health Group has diversified into related areas such as population health management, health information technology consulting, and pharmacy care services (United Health Group, 2016). Chains, such as Walgreens, Walmart, Rite Aid, Kroger, Target, and CVS, have also diversified by opening retail clinics that offer basic medical services for minor illnesses. These clinics are often located within their store locations to provide convenient "one-stop" shopping for the customers/patients. By 2016, there were about 2,000 such clinics across the United States, reporting more than 6 million visits per year (Abelson, 2016); almost 93 percent of these retail clinics were owned by one of these chains (Hennessy, 2016; Rand Corporation, 2016)

On the other hand, unrelated diversification involves the acquisition and expansion into products and services that have little relationship with an organization's existing products and customers. For example, a hospital acquiring a hotel, sports store, mall, or restaurant represents an unrelated diversification.

The health care industry will continue to evolve and change with growth and integration strategies certainly being part of the future. Some argue that if health care financing moves back toward some form of capitation—a fixed amount per person payment—health care organizations will rapidly move to greater vertical integration (James and Poulsen, 2016). Pressures for greater efficiencies will motivate health systems, physicians, and other providers to closer collaboration and cooperation, creating greater horizontal and vertical integration. Health care systems will employ more physicians to grow and develop clinically integrated networks to promote population health and value-based models (Jacobs, 2015).

SUMMARY AND MANAGERIAL GUIDELINES

In today's market, health care organizations need strategies to manage change. Effective change strategies require preparation. This involves motivating and educating key stakeholders, building consensus within a strategic process, gathering relevant data, and identifying and challenging existing assumptions. Good organizations plan for strategic changes when they are not forced to do so. Medical staff and board members will often question the need for change and may resist moving forward, unless they understand the necessity for action. Leaders should be prepared to educate stakeholders regarding the purpose and motivation for change.

Strategic planning processes must involve the right people. However, involving key stakeholders often presents a challenge to organizations. Top executives should lead the strategic planning and exhibit their commitment by the dedication of time, resources, and intellect. Organizational boards, if appropriate, should also direct the strategic planning process and monitoring of results. 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. Frequently, the board's direct involvement with strategic planning is coordinated by the creation of a board strategic planning committee.

It is important to also identify others who should be involved and clearly define their degree of involvement and responsibilities. Employees, medical staff, and other organizations dependent upon the services of the health care organization have vested interests in the firm performing strategic planning and may be asked to participate in the planning process. The level of involvement and scope of responsibility should be plainly understood. Unclear responsibilities and involvement can lead to frustration and withdrawal of partners and key stakeholders, which will lead to greater impediments to creation and strategy implementation.

Health care organizations have used expansion strategies of vertical and horizontal integration that have created larger organizations linking stages in the industries value chain and expanding the geographic reach of health care companies. These strategies are predicted to continue, especially if the industry moves to payment through capitation. Organizational leaders should articulate for their stakeholders how these expansion strategies support the organization's missions and values and contribute to desired societal goals of higher quality, lower cost, and increased access to care.

Throughout this chapter, we see that strategy is an important and complex concept. Organizations struggle to successfully implement their strategic direction, as they wrestle with uncertainties and critical decisions. Although difficult, strategy and strategic thinking are critical in ensuring the success and survival of organizations. Organizations that understand and use these concepts to make better decisions are more likely to achieve their missions and visions. Strategic skills are increasingly important in the complicated and challenging industry of health care.

MANAGERIAL GUIDELINES

1. Understand the importance of mission and vision and their relationship to strategy and strategic management. All strategic actions and direction of an organization 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 guide actions at 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 organization. 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 shifts in any of the four components of a business model. The concept of a business model allows leaders to understand 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 environment in which the organization operates. Porter's Five Forces Framework and Value Chain provide 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 hospitals types. Do their missions and values reconcile with your expectations for that type of organization? Look at a religious organization. Does its mission and values reflect its religious teachings and mission? Now examine a for-profit hospital. Does its mission and values include the need to increase its 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 its environmental analyses using only a very extensive SWOT process. It then used the strengths, weaknesses, opportunities, and threats generated by this process as its environmental analysis. What would be the value of using this technique by itself? 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 an organization 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 are 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, enduring over time, hard to imitate, and 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? Manufacturers of durable medical equipment?
9. When should competitive advantage be the premise for a health care organization? How can mission advantage and competitive advantage coexist?

CASE 1

Concierge and Direct Primary Care Medicine: Solutions or problems?

Michael West runs the Glenton Medical Clinic, which is a group of 45 multispecialty physicians in Greenwich, Connecticut. He has been in this position for almost 15 years and has seen numerous changes in the health care sector. Although the clinic has prospered, expenses have continued to rise over the past five years, while revenues have remained stagnant. This has especially been true with the 22 primary care physicians within practice.

The clinic has billed insurance and sought to collect the difference from patients. If the patients are uninsured, the clinic sets up a payment plan.

At a conference Michael attended recently, a physician presented his transition to concierge medicine. The physician noted that more and more physicians feel overworked, especially spending more time with nonclinical paperwork. This has caused many to look for practice options and alternative financial arrangements with their patients. One option is concierge medicine, where practices charge a flat fee (monthly or annually) for enhanced services and greater access. Some of these "enhanced" services consist of same day access to the doctor via cell phone and text messaging; telephone, text message, and online consultations; unlimited office visits with no co-pays; prescription refills; and preventive care services. Another option presented was direct primary care (DPC), which likewise charges a monthly or annual fee. Practices using these models derive most of their revenues from membership fees and generally experience an increase in profitability.

Proponents suggest the DPC model works well for patients with complex medical conditions needing careful monitoring and help coordinating multiple specialists. Yet, only a few studies suggest better results. One study showed patients in a DPC model had 27 percent fewer emergency department (ED) visits, 60 percent fewer hospital days, and their health care coverage cost their employers 20 percent less (Beck, 2017).

Concierge practices' average monthly fees begin at $175 a month but can be more than $5,000 per year. Most practices that transition to concierge medicine will retain only 15 percent to 35 percent of their existing patients, but the physician will end up having a patient panel of only 300 to 600 patients. On the other hand, DPC practices are somewhat less expensive with monthly fees at about $100 and, as a result, they have larger patient panels of 600 to 800 per physician. DPC services generally include basic lab tests, vaccinations, and generic drugs (Colwell, 2016).

DPCs can establish care with a more restrictive and expensive practice for higher-income families. A few very restrictive practices charge $40,000 to $80,000 per family for an extensive, immediate array of services. These practices have only 50 families on their patient panel. These high-end practices can increase a primary care physician's income from mid-$200,000 to about $600,000 (Schwartz, 2017).

In the case of Glenton Medical Clinic, its primary care physicians currently have 2,000 to 3,000 active patients. Moving to either model would mean each physician would lose over 1,000 patients or more than 22,000 for the full clinic.

The insurance market has also changed, which encourages families to consider concierge medicine. A recent survey demonstrated that over half (51 percent) of workers were insured with a health care plan that required them to pay up to $1,000 out-of-pocket costs for health care before insurance covered any of the expenses. Many complain about the long wait to be seen in physician offices and then very short physician consultation visits. In fact, an average primary care physician in a traditional practice would spent 13 to 15 minutes seeing a patient, while a physician in a DPC practice would spend 30 to 60 minutes with the patient (Ramsey, 2017).

Patients appear to like the DPC model, as it includes in the monthly fee basic checkups with same-day or next-day appointments and the right to purchase medications and lab tests at or near wholesale prices. This means that DPC comes with almost 24/7 access to a primary care doctor, which might include using FaceTime while a family is on vacation or meeting in the office for stitches after a bad fall on a Saturday night. Since DPC does not accept insurance, there are no co-pays and no costs beyond the monthly fee.

Yet, upfront, prepaid fees in both models do not qualify as medical expenses that can be reimbursable from a flexible spending account (FSA) or health savings account (HSA). Patients have to have the financial means to pay these fees directly.

Michael has recently heard that a large company from Philadelphia has entered concierge medicine and DPC across the East Coast and is seeking to enroll up to 800,000 workers in the next few years. They will soon begin to

offer very high salaries to attract good primary care practitioners. Given the Glenton Medical Clinic's current business model, he cannot see how the company can keep its primary care physicians if they are given lucrative offers from this company.

Michael is concerned that switching to either model would leave more than half of their patients seeking another physician in a market that already has a shortage of primary care practices. In addition, currently the primary care physician referrals make up about 40 percent of their clinic's specialist patient load. It would appear that reducing the primary care panels would directly reduce the number of specialist referrals and subsequently impact the revenues for the clinic. However, Michael's assistant pointed out that the specialists were too busy now, had long wait times, and frequently turned down referrals from physicians from outside their clinic.

Questions

1. What are the advantages and disadvantages of the Glenton Medical Clinic moving its primary care physicians to either a concierge or DPC model?
2. Given the direction of health care, what would you recommend if you were Michael?

CASE 2

Improving Quality of HIV Care in Veterans Affairs (VA) Medical Centers

The Department of Veterans Affairs (VA) operates the largest integrated health care system in the United States, paying for and providing medical care to Veterans, with more than 1,700 hospitals, clinics, community living centers, domiciliaries, readjustment counseling centers, and other facilities. These VA facilities are organized into 1 of the 18 Veterans Integrated Services Networks (VISNs) by geographic location and each VISN has its own administrative hierarchy. Consider below the VA's mission and values (http://www.va.gov):

Mission
To fulfill President Lincoln's promise "To care for him who shall have borne the battle, and for his widow, and his orphan" by serving and honoring the men and women who are America's Veterans.

Core Values
VA's five core values underscore the obligations inherent in VA's mission: Integrity, Commitment, Advocacy, Respect, and Excellence. The core values define "who we are," our culture, and how we care for veterans and eligible beneficiaries. Our values are more than just words – they affect outcomes in our daily interactions with Veterans and eligible beneficiaries and with each other. Taking the first letter of each word—Integrity, Commitment, Advocacy, Respect, Excellence—creates a powerful acronym, "I CARE," that reminds each VA employee of the importance of their role in this Department. These core values come together as five promises we make as individuals and as an organization to those we serve.

Integrity: Act with high moral principle. Adhere to the highest professional standards. Maintain the trust and confidence of all with whom I engage.

Commitment: Work diligently to serve Veterans and other beneficiaries. Be driven by an earnest belief in VA's mission. Fulfill my individual responsibilities and organizational responsibilities.

Advocacy: Be truly Veteran-centric by identifying, fully considering, and appropriately advancing the interests of Veterans and other beneficiaries.

Respect: Treat all those I serve and with whom I work with dignity and respect. Show respect to earn it.

Excellence: Strive for the highest quality and continuous improvement. Be thoughtful and decisive in leadership, accountable for my actions, willing to admit mistakes, and rigorous in correcting them.

However, at various times, critics have expressed concerns about the substandard care provided by the VA and the resulting negative press created pressure on the VA to do better. As a response, the VA has launched transformation efforts to address its quality gaps over the last decade, with significant internal restructuring of the care delivery

system, including changes in delivery models (e.g., primary care teams, service lines), adoption of new technologies (e.g., computerized patient record system [CPRS]), and management strategies (e.g., guideline implementation, performance audit/feedback) (Jha et al., 2003). The VA also created nationally centralized data repositories in quality and utilization to support these efforts (Chou et al., 2015). These organizational changes in the aggregate have demonstrated positive associations with substantial gains in VA quality over time.

Moreover, VA funded a number of research and operational projects that focused on improving care quality for certain high-cost conditions, such as cardiovascular disease, diabetes mellitus, major depressive disorder, etc. In particular, Dr. Matthew Bidwell Goetz, the Chief of Infectious Diseases at the Greater Los Angeles VA Health Care System, implemented a project to improve routine HIV screening across multiple VISNs in areas where rates of HIV were on the rise (Goetz et al., 2013, 2015). Although medical advances have significantly improved the survival and quality of life of those who are infected with HIV, the rates of infection continue to be a major problem for some regions of the United States. As recent as 2015, the Centers for Disease Control and Prevention (CDC, 2016) estimated that southern states accounted for approximately 44 percent of all people living with an HIV diagnosis, despite making up only about one-third (37 percent) of the national population (Figure 1). By region, rates of HIV diagnoses per 100,000 adults and adolescents were 16.8 in the South, 11.6 in the Northeast, 9.8 in the West, and 7.6 in the Midwest.

Research evidence has shown that identifying and treating asymptomatic HIV-infected individuals can be highly cost-effective with vast reduction in morbidity and mortality (Goetz et al., 2015). However, full treatment benefits are not being realized, as many HIV-infected persons tend to be unaware of their disease status. Both provider and patient factors factors (e.g., low prioritization, time required for counseling, and poor accountability) as well as organizational barriers (e.g., lack of leadership support, poor information sharing) may have impeded disease identification and treatment.

Within the VA, despite frequent opportunities to achieve early diagnosis, the number of VA patients with documented risk factors for HIV infection who have been tested remains lower than ideal. The VA, in fact, changed its HIV screening policy from risk-based to routine. The Multi-VISN Quality Improvement Project for HIV was launched to develop an exportable intervention for increasing HIV testing rates across a number of VISNs. To measure the effectiveness of various components of the intervention, the project set up a natural experiment to compare the amount of support/resources delivered to individual VA facilities: three sites that were supported by a national team, seven sites that were supported by their respective local teams, and four facilities that served as control sites. The national team provided assistance to the sites with (1) a context-specific, computerized clinical reminder for HIV testing of individual patients; (2) audit/feedback consisted of a retrospective summary of provider-specific HIV screening rates of at-risk patients; (3) provider activation via established academic detailing and social marketing methodology; and (4) tools and resources to facilitate organizational change to remove barriers to HIV testing. Sites supported by local teams received only audit-feedback reports. At the control sites, it was "business as usual."

Findings from the project showed significant increases in HIV testing rates following the implementation of the interventions (Figure 2). In particular, patients receiving care from facilities where resources were provided by either the national or local team reported higher likelihood of getting tested, compared to their counterparts at control facilities (Goetz et al., 2013). At the end of the study, it was demonstrated that routine HIV testing proved to be cost-effective, especially among persons younger than 65 years (Goetz et al., 2015).

Questions

1. Please review the VA mission and values. Does the Multi-VISN QI Project for HIV support VA's mission and values? If so, how? If not, why not and how can the project align better with the VA mission and values?
2. What are the factors that may have led to the results achieved by the Multi-VISN QI Project for HIV?
3. Apply one of the analytic tools to assess if the Multi-VISN Project for HIV creates mission advantage for the VA.

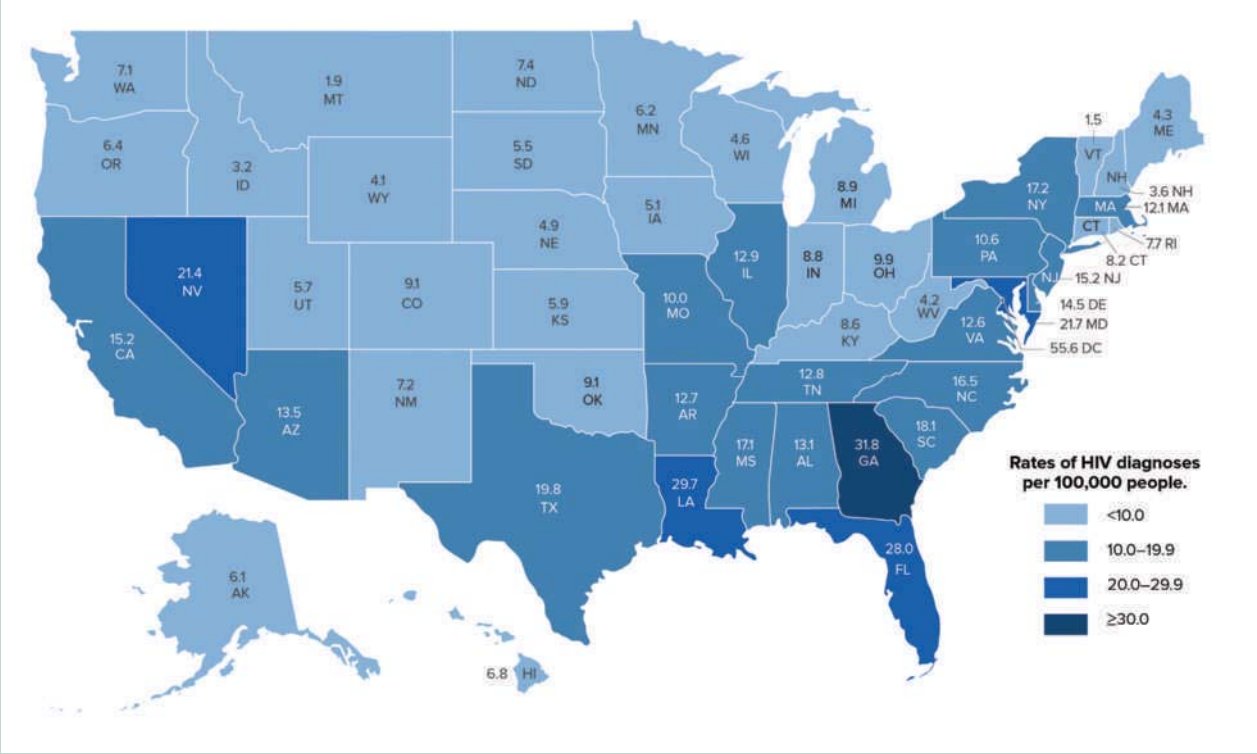


Figure 1 Rates of HIV Diagnoses per 100,000 People by State.

SOURCE: Adapted from CDC (2016). Diagnosis of HIV Infection in the United States and Dependent Areas, 2015. HIV Surveillance Report.

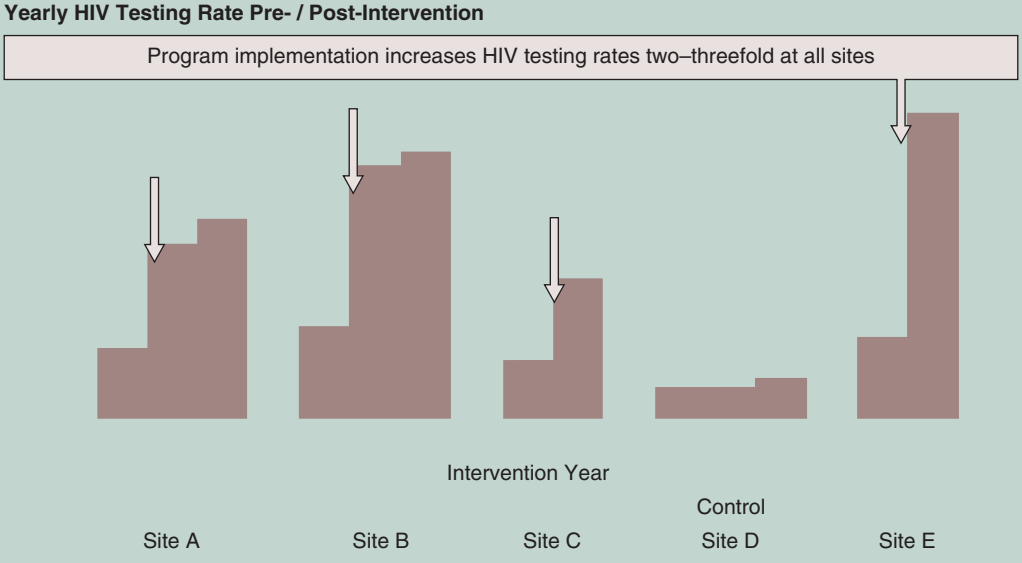


Figure 2 Changes in HIV Testing Rate Pre-Post Intervention.

REFERENCES

Abelson, R. (2016). Retail health clinics result in higher spending, survey finds. *New York Times,* March 7, 2016. Accessed October 1, 2018.

Altergott, B. (2016). US birth rate is dropping, but other countries have it worse. Retrieved October 20, 2017, from https://www.aol.com/article/news/2016/12/03/us-birth-rate-is-dropping-but-other-countries-have-it-much-wors/21619994/.

American Hospital Association. (2014). Trend watch: The value of provider integration. Retrieved October 20, 2017, from http://www.aha.org/content/14/14mar-provintegration.pdf.

American Hospital Association. (2016). AHA fast facts on US hospitals. Retrieved October 20, 2017, from http://www.aha.org/research/rc/stat-studies/fast-facts.shtml.

Anthony, S. (2012). First mover or fast follower. *Harvard Business Review*, June 14. Retrieved October 20, 2017, from https://hbr.org/2012/06/first-mover-or-fast-follower.

Armstrong, G., & Kotler, P. (1999). *Principles of marketing* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Barney, J. (1986). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review, 11*(3), 565–665.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*, 99–120.

Bascomb, N. (2005). *The perfect mile: Three athletes, one goal, and less than four minutes to achieve it.* New York: Mariner Books.

Beck, M. (2017). With direct primary care, it's just doctor and patient. *Wall Street Journal*, February 27. Retrieved from https://www.wsj.com/articles/with-direct-primary-care-its-just-doctor-and-patient-1488164702.

Bellou, V. (2007). Achieving long-term customer satisfaction through organizational culture: Evidence from the health care sector. *Managing Service Quality, 17*(17), 510–522.

Berry, L., & Mirabito, A. (2010). Innovative health care delivery. *Business Horizons, 53*(2), 157.

Bess, J. L., & Bess, A. (1990). Hospital portfolio analysis. *Health Care Strategic Management, 8*(5), 10–14.

Bodnar, W. (2014), Health care's evolving role of service excellence. *Becker's Hospital Review*, April 25. Retrieved October 20, 2017, from http://www.beckershospitalreview.com/hospital-management-administration/health care-s-evolving-role-of-service-excellence.html.

Bourgeois, L. J., Duhaime, I. M., & Stimpert, J. L. (1999). *Strategic management: A managerial perspective*. Charlottesville, VA: Dryden Press.

Brandenburger, A., & Nalebuff, B. (1997). *Co-opetition*. New York: Doubleday.

Burns, L. (2002). Competitive strategy. In D. Albert (Ed.), *A physician's guide to health care management*. Malden, MA: Wiley-Blackwell, 1–240.

Burns, L., & Pauly, M. (2002). Integrated delivery networks: A detour on the road to integrated care? *Health Affairs, 21*(4), 128–143.

Business Dictionary. (2016). Retrieved October 20, 2017, from http://www.businessdictionary.com/definition/mission-statement.html.

Caldararo, K. L., & Nash, D. B. (2017). Population health research: Early description of the organizational shift toward population health management and defining a vision for leadership. *Population Health Management, 20*, 368–373. doi: 10.1089/pop.2016.0172.

CDC. (2016). Diagnoses of HIV infection in the United States and dependent areas, 2015. *HIV Surveillance Report,* 27. Retrieved June 14, 2018, from https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

Chiquan, G. (2007). Is sustainable competitive advantage an achievable Holy Grail: The relevance gap between academia and business. *Journal of Business & Management, 13*(2), 115–126.

Chou, A. F., Rose, D. E., Farmer, M., et al. (2015, December). Organizational factors affecting the likelihood of cancer screening among VA patients. *Medical Care, 53*(12), 1040–1049. doi: 10.1097/MLR.0000000000000449. PubMed PMID: 26569643.

Chukmaitov, A. S., Harless, D. W., Bazzoli, G. J., et al. (2017). Factors associated with hospital participation in Centers for Medicare and Medicaid Services' Accountable Care Organization programs. *Health Care Management and Review*. doi: 10.1097/HMR.0000000000000182. [Epub ahead of print]. Retrieved October 11, 2018, from https://insights.ovid.com/crossref?an=00004010-900000000-99730.

CMS. (2014). Health expenditures by age and gender. Retrieved October 20, 2017, from www.cms.gov.

CMS. (2017). NHE Fact Sheet. Retrieved October 20, 2017, from https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html.

CMS Quality Strategy. (2016). Retrieved October 20, 2017, from https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/CMS-Quality-Strategy.pdf.

Cohn, D., & Caumont, A. (2016). 10 demographic trends that are shaping the US and the world. Pew Research Center Fact Tank. Retrieved October 20, 2017, from http://www.pewresearch.org/fact-tank/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/.

Collis, D., & Rukstad, M. (2008, April). Can you say what your strategy is? *Harvard Business Review*, 82–90. Retrieved October 20, 2017, from https://eclass.aueb.gr/modules/document/file.php/DET162/Session%201/Can%20you%20say%20what%20your%20strategy%20is.pdf.

Colwell, J. (2016). Concierge medicine becomes an option in reform era. *Medical Economics*. Retrieved from http://medicaleconomics.modernmedicine.com/medical-economics/news/concierge-medicine-becomes-option-reform-era.

Crean, K. (2010). Accelerating innovation in information and communication. *Health Affairs, 29*(2), 278–284.

DesRoches, C., Buerhaus, P., Dittus, R., et al. (2015). Primary care workforce shortages and career recommendations from practicing clinicians. *Academic Medicine, 90*(5), 671–677.

DeWeese, D. (1994). *Islamization and native religion in the golden horde: Baba Tukles and conversion to Islam in historical and epic tradition*. University Park: Pennsylvania State University Press.

Dye, R., & Sibony, O. (2007). How to improve strategic planning. *McKinsey Quarterly*. Retrieved October 20, 2017, from http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-to-improve-strategic-planning.

Fahey, L. (1999). *Competitors*. New York: John Wiley and Sons.

Fahey, L., & Narayanan, V. K. (1986). *Macroenvironmental analysis for strategic management*. St. Paul, MN: West Publishing Company.

Federal Trade Commission and Department of Justice. (2004). Improving health care: A dose of competition. A report by the Federal Trade Commission and the Department of Justice.

Field, R. I. (2007). *Health care regulation in America: Complexity, confrontation, and compromise*. New York: Oxford University Press.

Frazier, I. (2005). Annals of history: Invaders: Destroying Bagdad. *New Yorker*, April 25.

Friedman, A., Howard, J., Shaw, E., et al. (2016). Facilitators and barriers to care coordination in patient-centered medical homes from coordinators' perspectives. *Journal of the American Board of Family Medicine, 29*(1), 90–101.

Ghemawat, P. (2001). *Strategy and the business landscape*. Upper Saddle River, NJ: Prentice Hall.

Ginter, P. M., Swayne, L. E., & Duncan, W. J. (2002). *Strategic management of health care organizations*. Oxford, UK: Blackwell Publishing.

Goetz, M. B., Hoang, T., Kan, V. L., et al. (2015, August). Rates and predictors of newly diagnosed HIV infection among veterans receiving routine once-per-lifetime HIV testing in the Veterans Health Administration. *Journal of Acquired Immune Deficiency Syndromes, 69*(5), 544–550. doi: 10.1097/QAI.0000000000000653. PubMed PMID: 25886931.

Goetz, M. B., Hoang, T., Knapp, H., et al. (2013, October). QUERI-HIV/Hepatitis Program. Central implementation strategies outperform local ones in improving HIV testing in Veterans Healthcare Administration facilities. *Journal of General Internal Medicine, 28*(10), 1311–1317. doi: 10.1007/s11606-013-2420-6. Epub 2013, Apr 19. PubMed PMID: 23605307; PubMed Central PMCID: PMC3785651.

Hansen, F. (2008). A revolution in health care. *Institute of Public Affairs Review, 59*(4), 43–46.

Hennessy, M. (2016). Will more retail clinic ownership shift to health systems? *Contemporary Clinic*. Retrieved October 20, 2017, from http://contemporaryclinic.pharmacytimes.com/journals/issue/2016/february2016/from-the-chairman-will-more-retail-clinic-ownership-shift-to-health-systems.

Herman, B. (2015). Lost appetite: The expected surge in insurers buying physician practices never materialized. *Modern Healthcare*. Retrieved October 20, 2017, from http://www.modernhealthcare.com/article/20151010/MAGAZINE/310109979.

Hunt, M. (1972). Competition in the major home appliance industry. Doctoral dissertation, Harvard University, Cambridge, MA.

Hurtibise, R. (2016). Amid growing revenues, South Florida hospitals buzz with capital improvements. *Sun Sentinel*. Retrieved October 20, 2017, from http://www.sun-sentinel.com/business/consumer/fl-hospital-market-2017-20161230-story.html.

Institute of Medicine. (2001). *Crossing the quality chasm*. Washington, DC: The National Press.

Jackson, S. (2008). Predicting changes in industry structure. *Journal of Business Strategy, 29*(2), 54–57.

Jacobs, L. (2015). Looking ahead in 2016: Top 10 trends in health care, hospitals & health networks. Retrieved October 20, 2017, from http://www.hhnmag.com/articles/6800-looking-ahead-in---top---trends-in-health-care.

James, B., & Poulsen, G. (2016). The case for capitation. *Harvard Business Review, 94*(7–8), 102–111.

Jha, A. K., Perlin, J. B., Kizer, K. W., et al. (2003). Effect of the transformation of the Veterans Affairs Health Care System on the quality of care. *New England Journal of Medicine, 348*, 2218–2227.

Kaiser Family Foundation. (2015). 2015 employer health benefits survey. Retrieved October 20, 2017, from http://kff.org/report-section/ehbs-2015-summary-of-findings/.

Kantar Media. (2016). Health care marketing. Retrieved October 20, 2017, from http://gaia.adage.com/images/bin/pdf/KantarHCwhitepaper_complete.pdf.

Kash, B., & Tan, D. (2016). Physician group practice trends: A comprehensive review. *Journal of Hospital & Medical Management, 2*(1), 1–8.

Keehan, S., Stone, D., Poisal, J., et al. (2017), National Health Expenditure Projections, 2016-25: Price Increases, Aging Push Sector to 20 Percent of Economy, *Health Affairs, 36*(3): 553–563.

Kepros, J., Mosher, B., Anderson, C., et al. (2007). The product life cycle of health care in the United States. *Internet Journal of Health care Administration, 4*(2), 1–5. Retrieved October 11, 2018, from https://print.ispub.com/api/0/ispub-article/5390.

Kilpatrick, A., & Silverman, L. (2005). The power of vision. *Strategy & Leadership, 33*(2), 24–26.

Kotler, P., Shalowitz, J., & Stevens, R. (2008). *Strategic marketing for health care organizations*. San Francisco, CA: Jossey-Bass.

LaPenna, A. M. (2010). "Alternative" health care: Access as a revenue source in a consumer-driven market. *Journal of Health Care Management, 55*(1), 7–11.

Lewis V. A., Tierney K. I., Colla C. H., et al. (2017). The new frontier of strategic alliances in health care: New partnerships under accountable care organizations. *Social Science and Medicine, 190*, 1–10.

Lin, D. (2008). Convenient care clinics: Opposition, opportunities, and the path to health system integration. *Frontiers of Health Services Management, 24*(3), 3–12.

Luke, R., Walston, S., & Plummer, P. (2004). *Health care strategy: In pursuit of competitive advantage*. Chicago, IL: Health Administration Press.

Marvasti, F., & Stafford, R. (2012). From sick care to health care—reengineering prevention into the U.S. System. *New England Journal of Medicine, 367*, 889–891.

Matthews, A. (2011). The future of U.S. health care: What is a hospital? An insurer? Even a doctor? All the lines in the industry are starting to blur. *Wall Street Journal*. Retrieved October 20, 2017, from http://online.wsj.com/article/SB10001424052970204319004577084553869990554.html.

Mintzberg, H., Lampel, J., & Ahlstrand, B. (2005). *Strategy safari: A guided tour through the wilds of strategic management*. New York: Free Press.

Morrissey, J. (2015). Finding a path to clinical integration. *Hospital & Health Networks*. Retrieved October 20, 2017, from http://www.hhnmag.com/articles/3746-finding-a-path-to-clinical-integration.

Moseley, G. (2018). *Managing health care business strategy* (2nd ed.). Burlington, MA: Jones & Bartlett Learning.

Murray, W., Knox, M., & Bernstein, A. (1994). *The making of strategy: Rulers, states, and war.* Cambridge, UK: Cambridge University Press.

Muscalus, R. (2008). Competition and community: Key evolving issues that require careful consideration. *Frontiers of Health Services Management, 25*(2), 25–31.

Mutter, R., Wong, H., Goldfarb, M. (2008). The effects of hospital competition on inpatient quality of care, *Inquiry—Excellus Health Plan, 45*(3), 263–280.

Perkins, B. B. (2010). Designing high-cost medicine. *American Journal of Public Health, 100*(2), 223–233.

Persico, J. (2016). Do you really need a mission statement? *Innovation Excellence*. Retrieved October 20, 2017, from http://innovationexcellence.com/blog/2011/05/14/do-you-really-need-a-mission-statement/.

Pohl, J., Thomas, A., Barksdale, D, et al. (2016). Primary care workforce: The need to remove barriers for nurse practitioners and physicians. *Health Affairs Blog*. Retrieved October 20, 2017, from http://healthaffairs.org/blog/2016/10/26/primary-care-workforce-the-need-to-remove-barriers-for-nurse-practitioners-and-physicians/.

Porter, M. (1980) *Competitive strategy*. New York: Free Press.

Pourat, N. (2016). Luxury hospital care limits care for the less affluent. *New York Times*. Retrieved October 20, 2017, from http://www.nytimes.com/roomfordebate/2016/08/22/hospitals-that-feel-like-hotels/luxury-hospital-care-limits-care-for-the-less-affluent.

Prawdin, M., & Chaliand, G. (2005). *The Mongol Empire: Its rise and legacy*. Piscataway, NJ: Transaction Publishers.

Ramsy, L. (2016). The 10 most expensive drugs in the US. *Business Insider*. Retrieved October 20, 2017, from http://www.businessinsider.com/most-expensive-drugs-in-america-2016-9/#viekira-pak-abbvie-34600-1.

Ramsey, L. (2017). A new kind of doctor's office charges a monthly fee and doesn't take insurance—and it could be the future of medicine. *Business Insider*, March 19. Retrieved from http://www.businessinsider.com/direct-primary-care-a-no-insurance-health care-model-2017-3.

Rand Corporation. (2016). The evolving role of retail clinics. Retrieved October 20, 2017, from http://www.rand.org/content/dam/rand/pubs/research_briefs/RB9400/RB9491-2/RAND_RB9491-2.pdf.

Rodak, S. (2013). Creating accountability in health care strategic plan execution. *Becker's Hospital Review*. Retrieved October 20, 2017, from http://www.beckershospitalreview.com/strategic-planning/creating-accountability-in-health care-strategic-plan-execution.html.

Rowland, C. (2006). Hospitals blitz airwaves with ad campaigns. *Boston Globe.* Retrieved October 20, 2017, from http://www.boston.com/business/health care/articles/2006/02/21/hospitals_blitz_airwaves_with_ad_campaigns/.

Sawyer, R. (2007). *The seven military classics of ancient China*. New York: Basic Books.

Schendel, D. (1994). Introduction to "competitive organizational behavior: Toward an organizationally-based theory of competitive advantage. *Strategic Management Journal, 15*(S1), 1–4.

Schwartz, N. (2017). The doctor is in. Co-pay? $40,000. *New York Times*, June 3. Retrieved from https://www.nytimes.com/2017/06/03/business/economy/high-end-medical-care.html.

Shankar, V., & Carpenter, G. (2013). The second-mover advantage. *KellogInsight*. Retrieved October 20, 2017, from http://insight.kellogg.northwestern.edu/article/the_second_mover_advantage.

Shilling, G. (2007). First mover disadvantage. *Forbes.* Retrieved October 20, 2017, from https://www.forbes.com/forbes/2007/0618/154.html.

Society for Health Care Strategy and Market Development. (2008). *FutureScan 2008: Healthcare trends and implications 2008–2013*. Chicago, IL: Health Administration Press.

Squires, D., & Anderson, C. (2015). U.S. health care from a global perspective. *The Commonwealth Fund*. Retrieved October 20, 2017, from http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective.

Statista. (2016). Market share of leading health insurance companies in the United States in 2016, by direct premiums written. Retrieved October 20, 2017, from https://www.statista.com/statistics/216518/leading-us-health-insurance-groups-in-the-us/.

The Commonwealth Fund. (2004). A 5-nation hospital survey: Commonalities, differences, and discontinuities. Retrieved October 20, 2017, from https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_fund_report_2004_may_a_five_nation_hospital_survey__commonalities__differences__and_discontinuities_blumenthal_5nathospsuvrey_734_pdf.pdf.

Topol, E. (2015). The future of medicine is in your smartphone. *Wall Street Journal*. Retrieved October 20, 2017, from https://www.wsj.com/articles/the-future-of-medicine-is-in-your-smartphone-1420828632.

Tuttle, B. (2016). 21 incredibly disturbing facts about high prescription drug prices. *Money.* Retrieved October 20, 2017, from http://time.com/money/4377304/high-prescription-drug-prices-facts/.

Ungar, L., & O'Donnell, J. (2015). Dilemma over deductibles: Costs crippling middle class. *USA Today*. Retrieved October 20, 2017, from http://www.usatoday.com/story/news/nation/2015/01/01/middle-class-workers-struggle-to-pay-for-care-despite-insurance/19841235/.

United Health Group. (2016). Facts: 2016 Q3. Retrieved October 20, 2017, from https://www.uhc.com/content/dam/uhcdotcom/en/AboutUs/PDF/Q3-2016-Fact-Book.pdf.

Vainieri, M., Ferre, F., Giacomelli, G., et al. (2017). Explaining performance in health care: How and when top management competencies make the difference. *Health Care Management and Review*. (Epub ahead of print).