Strategic Management of Health Care Organizations

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2 CHAPTER

Understanding and Analyzing the General Environment and the Health Care Environment

"When written in Chinese, the word 'crisis' is composed of two characters – one represents danger and one represents opportunity."

Anonymous

Health Care Technology – Rapid Change Shaping the Industry

The impact that technology has on the delivery of health care services is clearly growing. For example, the sixty-four-slice cardiac CT allows patients to be scanned with very high resolution. The scan can be accomplished so fast that doctors can use the cardiac CT on patients with heart failure and other breathing disorders. Robots can now perform surgery with precision and accuracy that their human counterparts cannot nearly match. Small micro chips can be swallowed by patients and record valuable medical information as the chips travel throughout the digestive system.

As impressive as these high-tech innovations are, there are many developing low-tech innovations that have the potential to significantly impact the quality and cost of health care services as well. For example, the VeriChip is an implanted medical device that electronically links patients to their medical record. Imagine an unconscious patient at the scene of an automobile accident. Medical personnel on the scene are cautious about certain procedures or drugs because they are not aware of drug allergies, underlying health conditions, and medical history. However, with VeriChip and radio frequency identification (RFID) technology they can link directly to the victim's medical record, possibly saving lives and avoiding injuries.[1] Before the VeriChip becomes a practical reality it has a number of obstacles to overcome; however, the potential of the VeriChip is promising.

Drug packaging is another low-tech innovation that could save lives and improve the lives of many more. Each year many elderly patients are injured or die from unintentional overdoses of prescription drugs. Researchers at the University of Kentucky's Center for Manufacturing are testing a device which is designed to reduce accidental overdoses and drug abuse. A pill dispenser, called PillSafe, is a square box that can hold a month's supply of 60–120 pills stacked in four rows. To dispense the medication the patient presses a button and a timer records when the last pill was released. If the button is pressed again before the prescribed interval the container will not dispense the pill. If a user attempts to force the container open a chemical agent next to the medication is released and destroys the contents of the container.[2] PillSafe would be a major step in discouraging incorrect dispensing of prescription

medications whether the patient is a potential abuser or simply needs help in correctly taking the medication.

Finally, at the Center for Future Health at the University of Rochester, engineers and physicians are working on technologies that people can use in their homes to maintain and improve their health. Projects have been funded by Eastman Kodak, Intel, Microsoft and other corporations. One of the more ambitious projects is known as a "melanoma monitor." Scientists use multiple cameras to create a three-dimensional image of the skin. Skin-mapping is useful in tracking changes on the surface of the skin such as a mole that suddenly begins to grow. Another project involves a personal digital assistant that helps people keep anger under control. The device has the capability of assessing the tone of a person's voice as well as the words spoken, and recognizing when a person becomes angry.[3] Reminders would then be relayed to individuals to settle down and get their emotions under control before harm is done.

These are but a few of the high-and low-tech innovations in the health care sector. Technological innovations will continue to be a major influence on the nature of health care and must be considered in the development of strategies for most organizations.

References
1. "Health-Care Chips Could Get Under Your Skin," *Physorg.Com* (June 12, 2006).
2. Jim Butschli, "Futuristic Pill Container Zaps Prescription Meds," *Healthcare Packaging*™ (April 9, 2007), p. 1.
3. "Center for Future Health Receives $1 Million," *University of Rochester News* (January 7, 2000).

Learning Objectives

After completing the chapter you will be able to:

1. Appreciate the significance of the external environment's impact on health care organizations.

2. Understand and discuss the specific goals of external environmental analysis.

3. Point out some limitations of external environmental analysis.

4. Describe the various types of organizations in the general and health care environments and how they create issues that are of importance to other organizations.

5. Identify major general and industry environmental trends affecting health care organizations.

6. Identify key sources of environmental information.

7. Discuss important techniques used in analyzing the general and health care environments.

8. Conduct an analysis of the general and industry external environments for a health care organization.

9. Suggest several questions to initiate strategic thinking concerning the general and industry environments as a part of managing the strategic momentum.

The Importance of Environmental Influences

Fifty years ago the delivery of health care was a relatively uncomplicated relationship of facilities, physicians, and patients working together. Government and business stood weakly on the fringes, having little significant influence. Today, a multitude of interests are directly or indirectly involved in the delivery of health care. For instance, the for-profit provider segment has grown dramatically; private-sector businesses are largely responsible for the development and delivery of drugs, medical supplies, and many technical innovations; and government agencies regulate much of the actual delivery of health care services. As a result, in their quest for competitive advantage, organizations are investing increasingly more time and money in collecting and organizing information about the world in which they operate.[1]

Ultimately, strategic thinking is directed toward positioning the organization most effectively within its changing external environment. Peter Drucker writes, "The most important task of an organization's leader is to anticipate crisis. Perhaps not to avert it, but to anticipate it. To wait until the crisis hits is already abdication. One has to make the organization capable of anticipating the storm, weathering it,

and in fact, being ahead of it."[2] Therefore, to be successful, health care organization leaders must have an understanding of the external environment in which they operate; they must anticipate and respond to the significant shifts taking place within that environment. Strategic thinking, and the incorporation of that thinking into the strategic plans for the organization, is now more important than ever. Futurist Joel Barker has suggested that "in times of turbulence the ability to anticipate dramatically enhances your chances of success. Good anticipation is the result of good strategic exploration."[3] Organizations that fail to anticipate change, ignore external forces, or resist change will find themselves out of touch with the needs of the market, especially because of antiquated technologies, ineffective delivery systems, and outmoded management. Institutions that anticipate and recognize significant external forces and modify their strategies and operations accordingly will prosper.

Evolving External Issues

One of the greatest challenges for health care organizations is identifying the changes that are most likely to occur and then planning for that future. Interviews with health care professionals and a review of the health care literature suggest that health care organizations will have to cope with change in some or all of the following areas: legislative/political, economic, social/demographic, technological, and competitive.[4]

Legislative/Political Changes

- More regulation of health plan activity is expected, including legislation to curb health plan abuse, disclosure rules, mandates for clinical protocols, and privacy of medical records.
- Incremental legislative reform can be assumed, rather than large-scale health or social programs; legislative efforts to reduce escalating health care costs.
- Increased accountability for corporate governance (e.g., Sarbanes–Oxley).
- Employer-based insurance and Medicare are breaking down and will likely continue to shift toward government accounts.[5]

Economic Changes

- Health care by most measures is the US's largest industry and biggest private employer.[6]
- Procedure costs may be falling while total spending is rising.[7]
- Employers will become more unwilling to shoulder the entire burden of increasing costs for health care insurance and health care for their employees and retirees.
- Over 15 percent of Americans are without health insurance – a number that is predicted to be 48 million by 2009.
- Forced mobility of patients from one health care provider to another will increase because of changes in the health plan selected by employers.

Social/Demographic Changes

- Without a truly radical adjustment in health care spending, which there is no reason to expect, demographics alone will drive health care's share of GDP (gross domestic product) from the current 16 percent to as high as 25 percent.[8]
- An aging population and increased average life span will place capacity burdens on some health care organizations while a lessening of demand threatens the survival of others. By 2020, the US population over the age of 65 is expected to reach 53.7 million.
- The Hispanic population, many of whom do not speak English or speak it poorly, will continue to grow. Hispanics could become the largest minority child population as early as 2010. By 2050, one out of four Americans will be Hispanic.
- A more ethnically diverse population will continue to develop.
- An increase in income disparity is expected – a critical factor in determining health care delivery.
- "Tiered" access to health care is anticipated, with the division between the tiers becoming more extreme.
- There are predictions of critical shortages of nonphysician health care professionals and primary care physicians, yet a surplus of physicians within some specialties and in some geographic regions.

Technological Changes

- The high costs of purchasing new, sophisticated, largely computer-based technologies to meet the demand for high-quality health care will continue to rise.
- Significant advances in medical information technology are anticipated, such as automation of basic business processes, clinical information interfaces, data analysis, and telehealth.
- As suggested in the Introductory Incident, new technologies will emerge in the areas of drug design, imaging, minimally invasive surgery, genetic mapping and testing, gene therapy, vaccines, artificial blood, and xenotransplantation (transplantation of tissues and organs from animals into humans).

Competitive Changes

- Further consolidation will be seen within the health care industry because of cost pressures and intensified competition.
- The disintegration of some health care networks can be expected.
- Health care corporations will continue to expand into segments that have less regulation and into businesses outside of the traditional health care industry.
- The importance of market niche strategies and services marketing will increase.
- Outpatient care and the development of innovative alternative health care delivery systems will continue to grow.

- The decreasing viability of many of the nation's small, rural, and public hospitals means that there will be a reconfiguration of the rural health care delivery system.
- Increasing numbers of physician executives will have leadership roles in health care organizations.
- More emphasis will be on preventive care through wellness programs and healthy behavior.
- An increased emphasis will be placed on cost containment and measurement of outcomes of care (cost/benefit).
- A changing role for public health is expected, moving back to "core" activities (prevention, surveillance, disease control, assurance) and away from the delivery of primary care.
- A shortage of 800,000 nurses will occur by 2020. The Southern Regional Education Board, for example, estimates that in its 16 state region and the District of Columbia there will be 40,000 job openings for Registered Nurses every year until 2014. This, in spite of the fact, that 26,000 qualified applicants were denied admission to nursing programs in the region due to shortages of the faculty and facilities necessary to train them.
- Pressure to reduce the costs of administration of health care will increase.

Legislative/political, economic, social/demographic, technological, and competitive changes over the past three decades have shaped the health care industry and have contributed to the creation of a new language to describe it. Perspective 2–1 examines the growing list of health care acronyms and abbreviations that characterize the nature of industry change.

Perspective 2–1

The Changing Language of Health Care

- AHC (academic health center) or AMC (academic medical center): a group of related institutions including a teaching hospital, a medical school and its affiliated faculty practice plan, as well as other health professional schools.
- CMS (Center for Medicare and Medicaid Services): part of the US Department of Health and Human Services, the contracting agency for health maintenance organizations (HMOs) that seek direct contractor/provider status for provision of Medicare and Medicaid benefits.
- CON (certificate of need): laws in some states require a CON to determine whether the state will permit a hospital or a physician's practice to open or add beds, operating rooms, or expensive pieces of technology (see Perspective 3–3).
- DRG (diagnosis-related group): a classification system using 383 major diagnostic categories that assign patients into case types. It is used to facilitate utilization review, analyze patient case mix, and determine hospital reimbursement. For example, the classification DRG 320 indicates a kidney and urinary tract infection.
- DSH (disproportionate share hospital): programs that provide for additional payments to hospitals that serve a large number of low-income inpatients.
- EMR (electronic medical record): A medical document stored in a machine-readable format. Data are entered into the record via many different sources, including computerized entry and various document imaging systems. Also called an electronic patient record.

- EPO (exclusive provider organization): although structurally similar to a preferred provider organization (PPO), an EPO can simply be a network of health care providers; the plan beneficiaries cannot go out of the network or they must pay the entire cost of services. EPO physicians are reimbursed only for services actually provided to plan beneficiaries (rather than a capitated rate).
- FFS (fee for service): refers to a provider that charges the patient according to a fee schedule set for each service or procedure performed; the patient's total bill will vary by the number of services or procedures actually performed.
- HEDIS (healthplan employer data and information set): a set of standardized measures of health plan performance that allows comparisons of quality, access, satisfaction, membership, utilization, financial information, and management.
- HIPAA (Health Insurance Portability and Accountability Act): enacted in 1996, it includes five primary sections or "titles." Title 1: Health Care Access, Portability, and Renewability. Title 2: Preventing Health Care Fraud and Abuse; Administrative Simplification. Title 3: Tax-Related Health Provisions. Title 4: Application and Enforcement of Group Health Plan Requirement. Title 5: Revenue Offsets.
- HMO (health maintenance organization): an organization interposed between providers and payors that attempts to "manage the care" on behalf of the health service consumer and payor. HMOs are responsible for both the financing and delivery of comprehensive health services to an enrolled group of patients.
- IDS (integrated delivery system): IDSs combine and own, or closely coordinate, multiple stages of health care delivery. The integration usually includes many steps in the full spectrum of health services delivery, including physicians, hospitals, and long-term care facilities.
- IPA, IPO (independent practice association, independent practice organization): a legal entity composed of physicians who have organized for the purpose of negotiating contracts to provide medical services. Typically, physicians maintain their independent businesses but come together as a group to negotiate with payors. A super IPA has many IPAs rolled into one to contract with payors.
- JCAHO (Joint Commission on Accreditation of Healthcare Organizations): the major accrediting body for many health care organizations. Hospitals must be JCAHO accredited to receive Medicare and Medicaid funds; thus, the organization has great importance in the health care delivery system.
- LOS (length of stay): length of stay is also known as the average length of stay (ALOS) or the arithmetic mean of length of stay (AMLOS). It is the average number of days patients stay in the hospital for a specific DRG (diagnosis related group).
- MCO (managed care organization): any organization whose goal is to eliminate excessive and unnecessary service, thereby keeping health care costs manageable.
- MSO (management service organization): a legal corporation formed to provide practice management services to physicians. At one extreme, an MSO could own one practice or several hundred practices. At the other extreme, an MSO may not own any physician practices or provide management services. In that case, the MSO would be strictly an entity that signs managed care contracts for an affiliated provider group. Typically, an MSO will require a commitment of 10 to 40 years from the physician or group practice contracting for its services.
- NCQA (National Committee for Quality Assurance): a private, not-for-profit organization, NCQA is governed by a board of directors that includes employers, labor representatives, consumers, health planners, quality experts, policy makers, and representatives from organized medicine.
- NIH (National Institutes of Health): one of the agencies of the Public Health Service, which is a part of the Department of Health and Human Services of the US federal government. The NIH is responsible for medical and behavioral research for the United States.
- NP (nurse practitioner): a nurse who serves as the initial contact into the health care system and coordinates community-based services necessary for health promotion, health maintenance, rehabilitation, or prevention of disease and disability. Nurse practitioners work interdependently with other health professionals to provide primary health care in many communities.

- OON (out of network): describes health care services received from providers who do not participate in a managed care program's contracted network of providers. Typically, patients pay all costs out of pocket (no reimbursement).
- OSHA (Occupational Safety and Health Act): a comprehensive plan for regulating workplace safety.
- PA (physician assistant): an allied health professional who, by virtue of having completed an educational program in the medical sciences and a structured clinical experience in surgical services, is qualified to assist the physician in patient care activities. Physician assistants may be involved with patients in any medical setting for which the physician is responsible, including the operating room, recovery room, intensive care unit, emergency department, hospital outpatient clinic, and the physician's office.
- PCP (primary care physician): a physician responsible for coordinating and managing the health care needs of members. PCPs may be trained in primary care, pediatrics, obstetrics/gynecology, internal medicine, or family medicine. They determine hospitalization and referral to specialists for their patients.
- PHO (physician–hospital organization): an organization designed to integrate a hospital and its medical staff to contract with payors as a single entity. Physicians retain their independence. A super PHO has many PHOs rolled into one to contract with payors.
- PMPM (per member per month): under capitation, the amount paid to care for each member per month, regardless of the number and extent of services used by the member.
- POS (point-of-service): combines a health maintenance organization insurance plan with traditional insurance. "Point-of-service" refers to members deciding whether to go in or out of the network. The employee belongs to a managed care plan but can opt for the traditional plan anytime. POS members usually pay less when they stay within the HMO network but can avoid restrictions. When they choose the traditional insurance plan, typical coverage requires them to meet a deductible and 70 to 80 percent of health care costs are paid. Sometimes POS is called an "HMO with an escape hatch."
- PPO (preferred provider organization): an entity through which various health plans or carriers contract to purchase health care services for patients from a selected group of providers, typically at a better per-patient cost.
- PPS (prospective payment system): a system designed to control costs for Medicare and Medicaid patients. Rather than reimbursing on a retrospective cost-plus system, PPS legislation in 1983 reimbursed hospitals on a prospective (predetermined) basis. For example, a hospital would know that it would receive a set amount to treat a broken hip. If the patient could be treated at a cost lower than the reimbursed amount, the hospital could keep the "profit." On the other hand, if the hospital spent more than the reimbursable amount, for whatever reason, it had to absorb the loss.
- PSO (provider-sponsored organization): integrated groups of doctors and hospitals that assume managed care (often Medicare) risk contracts.
- RBRVS (resource-based relative value scale): a national fee system for Medicare payments to physicians. The fee schedule is designed to shift payment patterns from a number of more costly specialties (such as those in surgery) to primary care.
- SNF (skilled nursing facility): an institution that provides inpatient skilled nursing care and rehabilitative services and has transfer agreements with one or more hospitals.
- TPA (third-party administrator): a firm that performs administrative functions such as claims processing and membership for a self-funded health care insurance plan or a start-up managed care plan.
- UR (utilization review): the review of services delivered by a health care provider to evaluate the appropriateness, necessity, and quality of the prescribed services.

The External Nature of Strategic Management

Strategic thinking, strategic planning, and managing strategic momentum should be directed toward positioning the organization most effectively within its changing environment. Environmental analysis is a part of the situational analysis section of the strategic thinking map presented in Exhibit 1–1. The conclusions reached in environmental analysis will affect the directional strategies and internal analysis. *Environmental analysis* is largely strategic thinking and strategic planning and consists of understanding the issues in the external environment to determine the implications of those issues for the organization.

Environmental analysis requires externally oriented strategic managers who search for ways to radically alter the status quo, create something totally new, or revolutionize processes. They search for opportunities to do what has never been done previously or to do known things in a new way. Therefore, the fundamental nature of strategic management requires the awareness and understanding of outside forces. Strategic managers encourage adoption of new ideas in the system, maintain receptivity to new ways of doing things, and expose themselves to broad views. Environmental analysis can remove the protective covering in which organizations often seal themselves.[9] Effective environmental analysis occurs through strategic thinking. This chapter concerns methods to assess the general environment and the health care environment and Chapter 3 focuses on analysis methods to evaluate the service area and competitors within it.

Determining the Need for Environmental Analysis

Based on extensive experience in the business sector, A. H. Mesch developed a series of questions to determine if an organization needs environmental analysis.[10] The questions are equally relevant to health care organizations and include:

1. Does the external environment influence capital allocation and decision-making processes?
2. Have previous strategic plans been scrapped because of unexpected changes in the environment?
3. Has there been an unpleasant surprise in the external environment?
4. Is competition growing in the industry?
5. Is the organization or industry becoming more marketing oriented?
6. Do more and different kinds of external forces seem to be influencing decisions, and does there seem to be more interplay between them?
7. Is management unhappy with past forecasting and planning efforts?

These questions concern the general and health care industry environments as well as the service area. Answering "yes" to any of the questions suggests that management should consider some form of environmental analysis. Answering "yes" to five or more of the questions indicates that environmental analysis is

imperative. In today's dynamic environment, most health care managers would probably answer "yes" to more than one of these questions and should therefore be performing environmental analysis – assessing trends, events, and issues in the general environment, the health care industry environment, and the service area.

External environmental analysis attempts to identify, aggregate, and interpret environmental issues as well as provide information for the analysis of the internal environment and the development of the directional strategies. Therefore, environmental analysis seeks to eliminate many of the surprises in the external environment. Organizations cannot afford to be surprised. As one writer has pointed out, "to the blind all things are sudden." The elimination of surprises is an appropriate goal because even in periods of dynamic, rapid transformation, there are vastly more elements that do not change than new things that emerge.[11]

Strategic managers who practice environmental analysis are so "close" to the environment that by the time change becomes apparent to others, they have already detected the signals of change and have explored the significance of the changes. These managers are often called visionaries; however, vision is often the result of their *strategic awareness* – thoughtful detection and interpretation of subtle signals of change. Such strategic managers are able to eliminate "predictable surprises" for the organization – surprises that shouldn't have been. These mangers are able to avoid disasters by recognizing the issue, making it a priority in the organization, and mobilizing the resources required to address it.[12]

The lack of forecasting and planning success sometimes is the result of directing processes internally toward efficiency rather than externally toward effectiveness. Such planning systems have not considered the growing number and diversity of environmental influences. Early identification of external changes through environmental analysis will greatly enhance the planning efforts in health care organizations. For example, as it became clear that health care reform was moving toward some form of managed care or managed competition (in the health care industry environment and service area), many physician group practices and solo practitioners joined together to create large physician-driven health care organizations that could compete for prepaid health care contracts. These physicians viewed such organizations as a way to evolve competitively to ensure their survival. As discussed in Perspective 2–2, another recent shift in the external environment to which health care organizations must successfully respond is emergency and disaster preparedness.

The Goals of Environmental Analysis

Although the overall intent of environmental analysis is to position the organization within its environment, more specific goals may be identified. The specific goals of environmental analysis are:

- to identify and analyze current important issues and changes that will affect the organization;
- to detect and analyze early or weak signals of emerging issues and changes that will affect the organization;

Perspective 2–2

Health Care Facility Disaster Preparedness: Planning for Emerging Threats

At a time when many health care organizations are struggling to remain solvent, the specter of terrorism continues to shape the health care delivery system. Since the September 11, 2001 terror attacks, the anthrax mailings, and the increasing threat of infectious disease outbreaks from agents such as SARS and pandemic flu, the national agenda has focused on the ability of health care organizations to respond to emergencies, both terrorist related and naturally occurring.

Increasingly, federal agencies such as the Health Resources and Services Administration and the Joint Commission on Accreditation of Healthcare Organizations identify emergency preparedness as a major initiative for hospital accreditation. However, planning and holding disaster preparedness exercises by hospitals and communities across the nation reveal that large gaps exist in the health care system, such that many institutions lack the capacity or the capability to respond to an incident that produces multiple victims. Additionally, emergency planning intensifies the financial burden already plaguing health care organizations. Recent evidence from nationally based disaster preparedness exercises indicates that disaster response mandates are insufficiently funded and hospitals must make up the difference in cost from operating revenues – while still maintaining the full array of patient services.

The challenges faced by health care institutions adapting to the current environment are manifold; however, all problem areas must be examined and solutions must be identified prior to an emergency situation. The failure to do so will severely hinder community response and may result in unnecessary casualties. Some of the fundamental issues that affect the preparedness level of any health care system are as follows:

- The health care delivery system is burdened with increased patient utilization and severe staff shortages as well as decreased medical and financial resources. Care must be taken by hospital planners to maximize response capability without taxing the already fragile situation.
- Hospitals will be the "first receivers" as patients exposed to bioterror or infectious disease agents seek care in hospital emergency departments as serious symptoms begin to emerge. Because emergency departments are already overcrowded and hospitals operate at capacity on a daily basis, a successful planning initiative must consider surge capacity, or a means to free up patient care areas and resources to care for large numbers of affected individuals.
- Even a small event with minimal casualties can overload the hospital response system. Therefore, plans should be regional in nature. Integration and coordination of the spectrum of response agencies in the community will enable the combination of existing resources to provide for the optimum outcome.
- Existing information technologies, such as those that facilitate data transfer, real-time situational analysis, diagnostics, and surveillance must be utilized to manage the flow of information before, during, and after an event to improve coordination, incident management, and response.
- Training must be ongoing. Hospital staff members must be familiar with the incident command structure of the facility and all the policies and procedures associated with emergency event response. An emergency plan must be constantly evaluated through exercises to identify strengths and weaknesses and to keep it current and realistic.

Sources: Rachel D. Vásconez, MPH, University of Alabama at Birmingham, from Dan Hanfling, Klaus O. Schafer, and Carl W. Armstrong, "Making Healthcare Preparedness a Part of the Homeland Security Equation," *Topics in Emergency Medicine* 26, no. 2 (April–June 2004), pp. 128–143; and John L. Hick, Dan Hanfling, Jonathan L. Burstein, Craig DeAtley, Donna Barbisch, Gregory M. Bogdan, and Stephen Cantrill, "Health Care Facility and Community Strategies for Patient Care Surge Capacity," *Annals of Emergency Medicine* 44, no. 3 (2004), pp. 253–261.

- to speculate on the likely future issues and changes that will have significant impact on the organization;
- to classify and order issues and changes generated by outside organizations;
- to provide organized information for the development of the organization's internal analysis, mission, vision, values, goals, and strategy; and
- to foster further strategic thinking throughout the organization.

In addition to the identification of current issues, environmental analysis attempts to detect early or weak signals within the external environment that may portend a future issue. Sometimes based on little hard data, managers attempt to identify patterns that suggest emerging issues that will be significant for the organization. Such issues, if they continue or actually do occur, may represent significant challenges. Early identification aids in developing strategy.

Strategic managers must go beyond what is known and speculate on the nature of the industry, as well as the organization, in the future. This process often stimulates creative thinking concerning the organization's present and future products and services. Such speculation is valuable in the formulation of a guiding vision and the development of mission and strategy. The bulleted list of evolving external issues at the beginning of this chapter provides some of the emerging and speculative forces that strategic managers will begin to incorporate into their thinking today.

There is an abundance of data in the external environment. For it to be meaningful, managers must identify the sources as well as aggregate and classify the data into information. Once classified, important issues that will affect the organization may be identified and evaluated. This process encourages managers to view environmental changes as external issues that may affect the organization.

When strategic managers – top managers, middle managers, and front-line supervisors – throughout the organization are considering the relationship of the organization to its environment, innovation and a high level of service are likely. Strategic thinking within an organization fosters adaptability, and those organizations that adapt best will ultimately displace the rest.

The Limitations of Environmental Analysis

Environmental analysis is important for understanding the external environment, but it provides no guarantees for success. The process has some practical limitations that the organization must recognize. These limitations include:

- Environmental analysis cannot foretell the future.
- Managers cannot see everything.
- Sometimes pertinent and timely information is difficult or impossible to obtain.
- There may be delays between the occurrence of external events and management's ability to interpret them.

- Sometimes there is a general inability on the part of the organization to respond quickly enough to take advantage of the issue detected.
- Managers' strongly held beliefs sometimes inhibit them from detecting issues or interpreting them rationally.[13]

Even the most comprehensive and well-organized environmental analysis processes will not detect all the changes taking place. Sometimes events occur that are significant to the organization but were preceded by few, if any, signals. Or the signals may be too weak to be discerned.

Perhaps the greatest limiting factor in external environmental analysis is the preconceived beliefs of management. In many cases, what leaders already believe about the industry, important competitive factors, or social issues inhibits their ability to perceive or accept signals for change. Because of managers' beliefs, signals that do not conform to what he or she believes may be ignored. What an individual actually perceives is dramatically determined by paradigms (ways of thinking and beliefs). And any data that exist in the real world that do not fit the paradigm will have a difficult time permeating the individual's filters. He or she will simply not see it.[14] As creativity expert Edward De Bono explains, "We are unable to make full use of the information and experience that is already available to us and is locked up in old structures, old patterns, old concepts, and old perceptions."[15] Despite long and loud signals for change, in some cases organizations do not change until "the gun is at their heads," and then it is often too late.

The External Environment

Organizations and individuals create change. Therefore, if health care managers are to become aware of the changes taking place outside of their own organization, they must have an understanding of the types of organizations that are creating change and the nature of the change. Exhibit 2–1 illustrates the concept of the external environment for health care organizations. In this chapter we will explore the types of changes initiated in the general environment and the health care industry environment.

Components of the General Environment

All types of organizations and independent individuals generate important issues – and subsequently change – within the general environment. For example, a research firm that is developing imaging equipment may introduce a new technology that could be used by a variety of other organizations in very diverse industries such as hospitals (magnetic resonance imaging) and manufacturing (robotics). The members of the *general environment* may be broadly classified in a variety of ways depending on the strategic management needs of the organization

Exhibit 2–1: The External Environment of a Health Care Organization

The General Environment

The Health Care Environment

- Government Institutions
- Business Organizations
- Educational Institutions
- Religious Institutions
- Research Organizations/
  Foundations
- Individuals/Consumers

- Planning/Regulatory
  Organizations
- Primary Providers
- Secondary Providers
- Provider Representatives
- Individuals/Patients

The Service Area

Impact
the
Organization

- Competitors
- Government Services
- Business Organizations
- Non-profit Organizations
- Other Local Organizations
- Individuals/Consumers
    Demographics
    Psychographics
    Health Status

Impact
the
Organization

Impact
the
Organization

analyzing the environment. These groups of organizations and individuals make up the broad context of the general environment:

1. Government institutions,
2. Business organizations,
3. Educational institutions,
4. Religious institutions,
5. Research organizations and foundations, and
6. Individuals and consumers.

Organizations and individuals in the general environment, acting alone or in concert with others, initiate and foster the "macroenvironmental" changes within society. These organizations and individuals generate legislative/political, economic, social/demographic, technological, and competitive change that will, in

the long run, affect many different industries (including health care) and may even directly affect individual organizations. Therefore, external organizations engaged in their own processes and pursuing their own missions and strategic goals will affect other industries, organizations, and individuals.

In the general environment, changes usually affect a number of different sectors of the economy (industry environments). For example, passage of the prescription drug bill during the George W. Bush presidency affected a variety of organizations as well as individuals including insurance companies, organizations representing the elderly, and retirees. Similarly, the early health care reform initiatives of the Clinton Administration to create a national health care system would have affected virtually all institutions in the general environment, not just health care organizations.

The organization itself may be affected directly by the legislative/political, economic, social/demographic, technological, and competitive change initiated and fostered by organizations in the general environment. In the aggregate, these alterations represent the general direction of societal change that may affect the success or failure of any organization. Therefore, an organization engaging in strategic management must try to sort out the fundamental changes being generated in the external environment and detect the major shifts taking place. A shift in consumer attitudes and expectations about health care is an example of a societal change that may affect the success or failure of health care organizations. Demographic changes are somewhat more predictable and the growing number of seniors in the US population will impact every aspect of the environment as well as the health care environment. However, sometimes the demographics of the general environment can provide misleading health care trends, as illustrated in Perspective 2–3.

Typically, as information is accumulated and evaluated by the organization, it will be summarized as environmental issues affecting the industry or organization. The identification and evaluation of the issues in the general environment are important because the issues will accelerate or retard changes taking place within the industry yet may affect the organization directly as well.

Components of the Health Care Environment

Organizations and individuals within the *health care environment* develop and employ new technologies, deal with changing social and demographic issues, address legislative and political change, compete with other health care organizations, and participate in the health care economy. Therefore, strategic managers should view the health care environment with the intent of understanding the nature of all these issues and changes. Focusing attention on major change areas facilitates the early identification and analysis of industry-specific environmental issues and trends that will affect the organization. However, in today's environment a more focused service area competitor analysis is typically required as well (see Chapter 3).

Perspective 2-3

Sociodemographic
Dynamics
and the Hispanic
Paradox

Sometimes data collection methods used for the general population mask underlying trends that may have significant health implications. Notwithstanding their economic status and health insurance coverage, Hispanics are often not considered in discussions of health disparities. Hispanics are thought to have similar if not better mortality outcomes than non-Hispanic Whites. This assumption is called Hispanic health advantage or Hispanic Paradox[1] and has the effect of shifting the disparity debate to differences between non-Hispanic Whites and Blacks.[2]

The reasons underlying the Hispanic Paradox may be related to data collection techniques. For example, for US Census racial categories, Hispanics must choose among the best fit of the available categories. As a result, almost half the Hispanics indicated that they were White, some said they were Black, others indicated they were American Indians, Asian, Native Hawaiian, Other Pacific Islander, or some other race.

The Hispanic population is composed of at least 25 countries with the Spanish language being the only common identifier. Mexican Americans make up almost 70 percent of the 37.4 million Hispanics in the United States, but there are also Central and South Americans, Puerto Ricans, and Cubans among others. Moreover, these groups are quite different. Mexican Americans are the youngest, least educated, and least likely to have health insurance while Puerto Ricans are the least likely to be uninsured, have the highest percentage of unemployed, and the most likely to live below the poverty level. Cubans are the oldest, the most educated, and the least likely to be unemployed while Central and South Americans are the least likely to live below the poverty level.[3]

Data collection techniques at the level of the general environment (e.g., population statistics) may lead to inferences that are misleading.[4] In the case of the Hispanic population a failure to recognize the heterogeneity among subgroups contributes to the acceptance of the Hispanic Paradox or the view that Hispanics as a group have lower mortality outcomes than non-Hispanic Whites. This belief is not true of all Hispanic subgroups and consequently eliminates many groups from the discussion of health disparities.

References

1. K. V. Patel, K. Eschbach, L. A. Ray, and K. S. Markides, "Evaluation of Mortality Data for Older Mexican Americans: Implications for the Hispanic Paradox," *American Journal of Epidemiology* 159, no. 7 (2004), pp. 707–715.
2. A. Palloni and E. Arias, "Paradox Lost: Explaining the Hispanic Adult Mortality Advantage," *Demography* 41, no. 3 (2004), pp. 385–415.
3. R. Ramirez and G. P. De la Cruz, *The Hispanic Population in the United States*. (Washington, D.C.: US Census Bureau, Current Population Reports, 2002).
4. Luisa N. Borrell, "Racial Identity among Hispanics: Implications for Health and Well-Being," *American Journal of Public Health* 95, no. 3 (2005), pp. 379–381.

The wide variety of health care organizations makes categorization difficult. However, the health care system may be generally grouped into five segments:

1. Organizations that regulate primary and secondary providers;
2. Organizations that provide health services (primary providers);
3. Organizations that provide resources for the health care system (secondary providers);
4. Organizations that represent the primary and secondary providers; and
5. Individuals involved in health care and patients (consumers of health care services).[16]

Exhibit 2–2 lists the types of organizations and individuals within each segment and provides examples. The categories of health care organizations listed under each of the health care segments are not meant to be all-inclusive, but rather to provide a starting point for understanding the wide diversity and complexity of the industry.

Exhibit 2–2: Organizations in the Health Care Environment

Organizations that Regulate Primary and Secondary Providers
- Federal regulating agencies:
  Department of Health and Human Services (DHHS)
  Center for Medicare and Medicaid Services (CMS)
- State regulating agencies:
  Public Health Department
  State Health Planning Agency (e.g., certificate of need [CON – see Perspective 3–3])
- Voluntary regulating groups:
  Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- Other accrediting agencies (CAHME, CEPH)

Primary Providers (Organizations that Provide Health Services)
- Hospitals:
  Voluntary (e.g., Barnes/Jewish/Christian Health System)
  Governmental (e.g., Veteran's Administration Hospitals)
  Investor-owned (e.g., HCA–The Healthcare Company, Tenet)
- State public health departments
- Long-term-care facilities
- Skilled nursing facilities (e.g., Beverly Enterprises, Mariner Post-Acute Network, ManorCare)
- Intermediate care facilities
- HMOs and IPAs (e.g., Care America, Aetna Health Care, United Healthcare)
- Ambulatory care institutions (e.g., Ambulatory Care Centers, Ranchos Los Amigos Rehabilitation Center)
- Hospices (e.g., Hospice Care, Inc., Porter Hospice, Grace House of Minneapolis)
- Physicians' offices
- Home health care institutions (e.g., CareGivers Home Health, Arcadia Home Health CareVisiting Nurses Association [VNA], Interim Home Care)

Secondary Providers (Organizations that Provide Resources)
- Educational institutions:
  Medical schools (e.g., Johns Hopkins, University of Alabama at Birmingham [UAB])
  Schools of public health (e.g., The University of North Carolina at Chapel Hill, Harvard)
  Schools of nursing (Presbyterian School of Nursing)
  Health administration programs (University of Washington, The Ohio State University)
- Organizations that pay for care (third-party payors):
  Government (e.g., Medicaid, Medicare)
  Insurance companies (e.g., Prudential, Metropolitan)
  Businesses (e.g., Microsoft, Ford Motor Company)
  Social organizations (e.g., Shriners, Rotary Clubs)

Exhibit 2–2: *(cont'd)*

- Pharmaceutical and medical supply companies:
  Drug distributors (e.g., Bergen Brunswig, Walgreen, McKesson)
  Drug and research companies (e.g., Bristol Myers Squibb, Merck, Pfizer, Hoffman-LaRoche, Eli Lilly, Upjohn, Warner Lambert)
  Medical products companies (e.g., Johnson & Johnson, Baxter International, Abbott Labs, Bausch & Lomb)

Organizations that Represent Primary and Secondary Providers
- American Medical Association (AMA)
- American Hospital Association (AHA)
- State associations (e.g., Illinois Hospital Association, New York Medical Society)
- Professional associations (e.g., Pharmaceutical Manufacturers Association [PMA], American College of Healthcare Executives [ACHE], American College of Physician Executives [ACPE], Medical Group Management Association [MGMA])

Individuals and Patients (Consumers)
- Independent physicians
- Nurses
- Nonphysician professionals
- Nonprofessionals
- Patients and consumer groups

Source: Adapted from Beaufort B. Longest, Jr., *Management Practices for the Health Professional,* 4th edn (Norwalk, CT: Appleton & Lange, 1990).
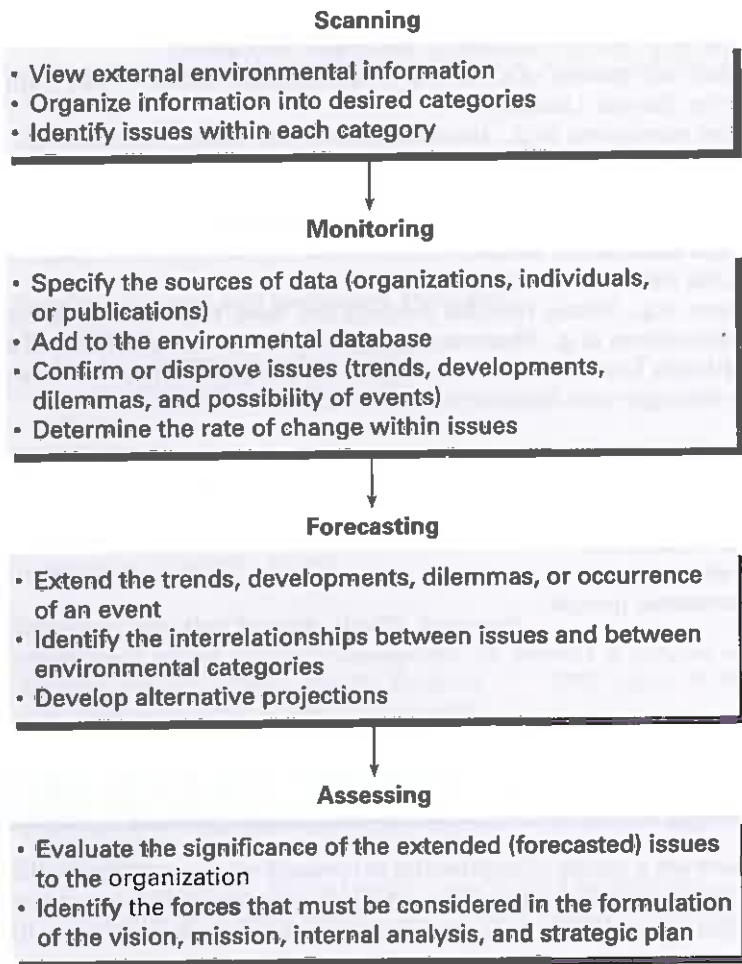
The Process of Environmental Analysis

There are a variety of approaches to conducting an environmental analysis. Regardless of the approach, four fundamental processes are common to environmental analysis efforts (see Exhibit 2–3): (1) *scanning* to identify signals of environmental change, (2) *monitoring* identified issues, (3) *forecasting* the future direction of the issues, and (4) *assessing* the organizational implications of the issues.[17]

Scanning the External Environment

As suggested earlier in this chapter, the external environment is composed of a number of organizations and individuals in the general and health care environments. Some of the organizations and individuals in the external environment have little direct involvement with the health care industry while others are directly involved. The distinction is not always clear. These organizations and individuals, through their normal operations and activities, are generating changes that may be important to the future of other organizations. Changes in the general environment are always "breaking through" to the health care environment. For example, health care often advances hand in hand with technology, as is the

Exhibit 2–3: Strategic Thinking Map of the Environmental Analysis Process

Scanning

- View external environmental information
- Organize information into desired categories
- Identify issues within each category

Monitoring

- Specify the sources of data (organizations, individuals, or publications)
- Add to the environmental database
- Confirm or disprove issues (trends, developments, dilemmas, and possibility of events)
- Determine the rate of change within issues

Forecasting

- Extend the trends, developments, dilemmas, or occurrence of an event
- Identify the interrelationships between issues and between environmental categories
- Develop alternative projections

Assessing

- Evaluate the significance of the extended (forecasted) issues to the organization
- Identify the forces that must be considered in the formulation of the vision, mission, internal analysis, and strategic plan

case with the convergence of imaging technology and biotechnology – enabled by advanced health care information technology – which promises to radically change diagnosis and treatment for many chronic diseases.[18]

The environmental scanning process acts as a "window" to these organizations. These organizations and individuals are generating strategic issues that may shape the entire health care industry or have a direct impact on any one health care organization. Managers engaged in environmental scanning carry out three functions. They:

- view external environmental data;
- organize external information into several desired categories; and
- identify issues within each category.

Strategic issues are trends, developments, dilemmas, and possible events that affect an organization and its position within its environment. Strategic issues are often ill-structured and ambiguous and require an interpretation effort (forecasting and assessment).[19] Often, in attempting to identify important external issues, general labels such as opportunities or threats are used to classify issues. However, the use of these labels leads strategic thinkers to think in terms of potential strategies to address the issue rather than the impact of the issue. Therefore, at this stage in strategic planning, it is beneficial to avoid using the terms opportunities/threats, positive/negative, gain/loss, or controllable/uncontrollable and instead consider the consequences of the issue itself. Strategies can be worked later after leaders have a better understanding of external issues as well as internal resources, competencies, and capabilities.

The scanning function serves as the organization's "window" or "lens" on the external world. The scanning function is a process of viewing a number of external organizations either in the general or health care environment in search of current and emerging trends or issues. In the scanning process, planners focus on data generated by external organizations and individuals, and compile and organize it into meaningful categories. As a result, issues found in the external environment are organized through the scanning process. Prior to this interpretation process, issues are diverse, unorganized, sporadic, mixed, and undefined. The scanning process categorizes, organizes, accumulates, and, to some extent, evaluates issues.

INFORMATION CATEGORIES

To effectively monitor and further analyze issues, they should be organized into logical categories. Categories not only aid in tracking but also facilitate the subsequent assessment of the issues. The categories most used to classify issues are legislative/political, economic, social/demographic, technological, and competitive. Issues, of course, are not inherently technological, social, and so on. However, using this approach helps managers to understand the nature of the issues and aggregate information and organize it. Through the aggregation and organization process, patterns may be identified and evidence accumulated on an issue.

INFORMATION SOURCES

There are a variety of sources for environmental information. Although organizations create change, they are often difficult to monitor directly. However, various secondary sources (published information) are readily available. Essentially, people and publications both outside and inside the organization serve as the lens to the external world. Typically, within the organization, there are a variety of experts who are familiar with external issues and who may be the best sources of such information. In addition, many organizations collect patient and consumer information and subscribe to and archive industry, technical reports, and data bases. Outside the health care organization, patients, physicians, nurses, suppliers, third-party payors, pharmaceutical representatives and managed care companies may be

considered important direct sources. Indirect sources are mostly newspapers and journals, the Internet, television, libraries, and public and private databases.

Environmental scanning is perhaps the most important part of environmental analysis because it forms the basis for the other processes. In the scanning activity, issues and changes are specified and sources identified. It is from this beginning that a database for decision making will be built. It is crucial that managers understand the thinking that led to the development and selection of strategic and tactical issues from among those identified in the scanning process. It is therefore advantageous if as many managers as possible take part in scanning. An important aspect of environmental scanning is that it focuses leaders' attention on what lies outside the organization and enables them to create an organization that can adapt to and learn from that environment.

Monitoring the External Environment

The *monitoring* function is the tracking of issues identified in the scanning process. Monitoring accomplishes four important functions:

1. It researches and identifies additional sources of information for specific issues delineated in the scanning process that were determined to be important or potentially important to the organization.
2. It adds to the environmental database.
3. It attempts to confirm or disprove issues (trends, developments, dilemmas, and the possibility of events).
4. It attempts to determine the rate of change within issues.

The monitoring process investigates the sources of the information obtained in the scanning process and attempts to identify the organization or organizations creating change and the sources reporting change. Once the organizations creating change and the publications or other information sources reporting change have been identified, special attention should be given to these sources.

The monitoring function has a much narrower focus than scanning; the objective is to accumulate a database around an identified issue. The database will be used to confirm or disconfirm the trend, development, dilemma, or possibility of an event and to determine the rate of change taking place within the environment.

The intensity of monitoring is reflected in management's understanding of the issue. When managers believe they understand the issue well, less monitoring will be done. However, when environmental issues appear ill-structured, vague, or complex, the issues will require a larger amount of data to arrive at an interpretation.[20]

Forecasting Environmental Change

Forecasting environmental change is a process of extending the trends, developments, dilemmas, and events that the organization is monitoring. Further, forecasting

looks at how hidden currents in the present signals possible changes in direction for organizations and societies. Thus, the primary goal of forecasting is to identify the full range of possibilities.[21] Therefore, the forecasting function attempts to answer the question, "If these trends continue, or if issues accelerate beyond their present rate, or if this event occurs, what will the issues and trends 'look like' in the future?"

Three processes are involved in the forecasting function:

1. Extending the issues (trends, developments, dilemmas, or occurrences of an event);
2. Identifying the interrelationships between the issues and environmental categories; and
3. Developing alternative projections.

Assessing Environmental Change

Information concerning the environment, though abundant, is seldom obvious in its implications. Strategic managers must interpret the data they receive. After all, facts do not speak for themselves; one has to make sense of the facts, not just get them straight.[22] *Assessing* environmental change is a process that is largely non-quantifiable and therefore judgmental. The assessment process includes evaluation of the significance of the extended (forecasted) issue on the organization; identification of the issues that must be considered in the internal analysis; development of the vision and mission; and formulation of the strategic plan. However, even when exposed to identical issues, different managers may interpret their meaning quite differently. Interpretations are a result of a variety of factors including perceptions, values, past experiences, and context.

Strategic decisions are made in the context of changing financial, social, political, technical, and environmental forces – understanding the context in which an organization operates is, therefore, fundamental. Understanding context is called "sensemaking," a term coined by organizational psychologist Karl Weick.[23] Strategic leaders who have a sense of context know how to quickly capture the complexities of their environment and explain them to others in simple terms. This explanation helps to ensure that everyone is working from the same map, which makes it far easier to discuss and plan for the journey.[24] Sensemaking is a dynamic challenge, however, as Perspective 2–4 illustrates. New technologies create new data sources and new data sources require new skills in sensemaking.

The assessment process is not an exact science, and sound human judgment and creativity may be bottom-line techniques for sensemaking – a process without much structure. The fundamental challenge is to make sense out of vague, ambiguous, and unconnected data. Strategic leaders have to infuse meaning into data; they have to make the connections among discordant data such that signals of future events are created. Sensemaking involves acts of perception and intuition. It requires the capacity to suspend beliefs, preconceptions, and judgments that may inhibit connections being made among ambiguous and disconnected data.[25]

Perspective 2–4

Beyond Making
Sense: New
Information Sources

Sensemaking relates to taking in information from the environment, making sense of it, and communicating it to others in the organization. Strategic sensemaking focuses on understanding how strategic decision makers create meaning around intended changes and negotiate them with organizational members.[1] Today, some organizations are becoming part of new efforts, such as *Enterprise 2.0*, to gather, make sense of, and use the knowledge of all interested people both in and out of the organization.

Enterprise 2.0 organizations build platforms, such as blogs and wikis, in order to make visible and learn from knowledge workers.[2] Information is welcome that originates inside as well as outside the organization and is considered regardless of whether it flows vertically or horizontally. Enterprise 2.0 organizations encourage the use of blogs where people post ideas to which others can respond and where new ideas can germinate. Wikis are also used. These tools are particularly interesting because they allow people to modify the work of others. Tags are used to categorize the information posted, which makes searching content much easier and more efficient. Imagine the creative potential that can be released with effective tags attached to blogs and wikis.

With the Enterprise 2.0 toolkit (blogs, wikis, tags, and so on) executives have access to incredible amounts of knowledge freely offered from individuals inside and outside the organization. This information provides intelligence concerning customers, developing technologies, competitive forces, and many other topics. Organizations in very turbulent, information intensive environments such as health care can benefit from Enterprise 2.0.[3]

Enterprise 2.0 organizations have access to large amounts of information creating new challenges to executive sensemaking. Enterprise 2.0 will change how executives create, adapt, distribute, and consume information content.[4] Blogs and wikis are significant developments in information sources, and strategic decision makers must be alert to how this information can be useful in improving decisions. At the same time, they must accept the challenges to sensemaking that these new information sources create.

References

1. Linda Rouleau, "Micro-Practices of Strategic Sensemaking and Sensegiving: How Middle Managers Interpret and Sell Change Every Day," *Journal of Management Studies* 42, no. 7 (2005), pp. 1413–1441; and Jonathan Perry, "Making Sense of Executive Sensemaking: A Phenomenological Case Study with Methodological Criticism," *Journal of Health Organization & Management* 17, no. 4 (2003), pp. 240–263.
2. Andrew P. McAfee, "Enterprise 2.0: The Dawn of Emergent Collaboration," *MIT Sloan Management Review* 47, no. 3 (2006), pp. 21–28.
3. Erik Brynjolfsson and Andrew P. McAfee, "Beyond Enterprise 2.0," *MIT Sloan Management Review* 48, no. 3 (2007), p. 53.
4. Andrew Fano, "Turning Data Chaos into Business Gold," *Optimize* 5, no. 9 (2006), p. 57.

Environmental Analysis Tools and Techniques

Several different strategic thinking frameworks and techniques may be used to examine the general and health care environments. These frameworks, which are informal and generally not overly sophisticated, have been variously described as "judgmental," "speculative," or "conjectural."[26] Indeed, environmental analysis is largely an individual effort and is directed to person-specific interests. Further,

environmental analysis usually is not limited to just one of the environmental analysis tools and techniques. The remainder of this chapter will discuss environmental analysis frameworks that identify issues in the general and health care environments. An approach and techniques for more specific market segmentation and competitive analysis will be discussed in Chapter 3.

Simple Issue Identification and Extrapolation

Issue identification and extrapolation is a matter of identifying issues and then, from the existing data, anticipating the importance of the issue and likelihood that it will remain an issue. Perhaps because of its relative simplicity, issue identification and extrapolation is a widely practiced analysis method. Unfortunately, environmental issues are rarely presented as a neat set of quantifiable data; rather, environmental issues are ill-structured and conjectural. Thus, in many cases, issue identification and extrapolation in environmental analysis is a matter of reaching consensus on the existence of an issue and speculating on the likelihood of its continuance.

As illustrated in Exhibit 2–4, the issue identification and extrapolation process for a nursing home includes the identification of issues by environmental category and the determination of its probable impact on the organization. Additionally, managers may assess the likelihood that the trend, development, or dilemma will continue or that the event will occur, and then identify the sources for additional information.

These issues may then be plotted on the chart shown in Exhibit 2–5. The assumption is that the issues to the right of the curved line in the exhibit have a significant impact (high impact) on the organization and are likely to continue or occur (high probability) and should be addressed in the strategic plan.

Exhibit 2–4: Issue Identification and Evaluation by a Nursing Home

Trend/Issue	Evidence	Impact on Our Organization (1–10)	Probability of Trend Continuing (1–10)
Aging Population	1 in 5 Americans will be at least 65 by 2030	9	9
Wealthier Elderly	Income of those 60+ has increased 10% faster than any other group	7	6
Local Competition	Over past 5 years, number of nursing homes in the service area has increased from 5 to 7	7	9

10 = High impact or probability 1 = Low impact or probability

Exhibit 2–5: Environmental Trends/Issues Plot
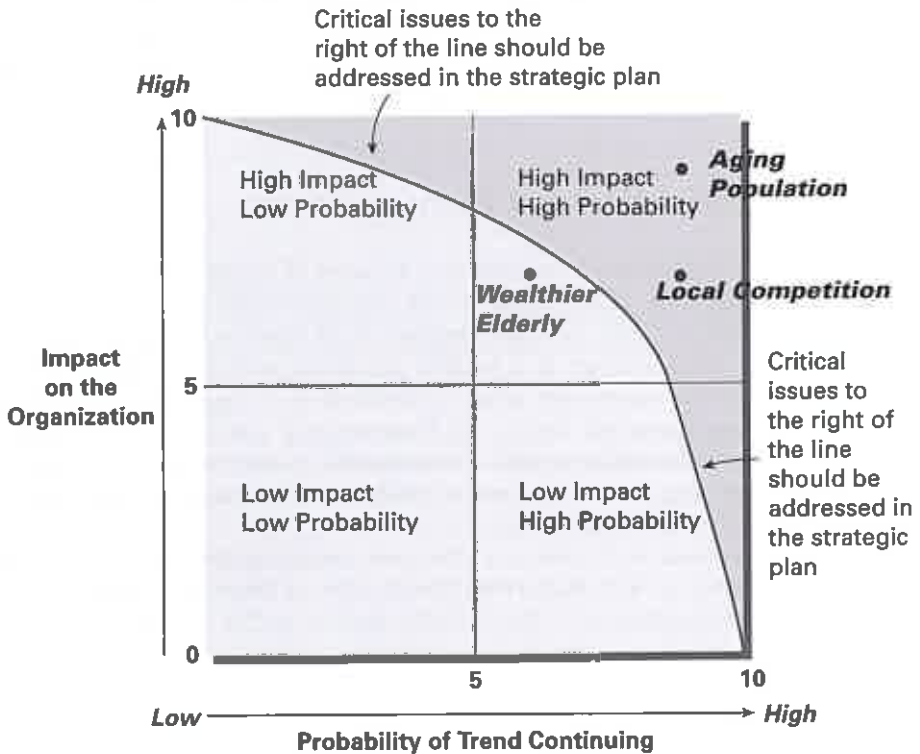
The formats illustrated in Exhibits 2–4 and 2–5 are useful for organizing environmental data and providing a starting point for speculating on the direction and rate of change for identified trends. However, trend extrapolation of environmental issues requires extensive familiarity with the external environment (the issues) and a great deal of sound judgment.

Solicitation of Expert Opinion

Expert opinion is often used to identify, monitor, forecast, and assess environmental trends. Experts play a key role in shaping and extending the thinking of leaders. Health care leaders can use these opinions to stimulate their strategic thinking and begin developing human resources strategies. To further focus leaders' thinking and generate additional perspectives concerning the issues in the external environment, there are a number of more formal expert-based environmental analysis techniques. These strategic thinking frameworks help to solicit and synthesize the opinions and best judgments of experts within various fields.

THE DELPHI METHOD

The Delphi method is a popular, practical, and useful approach for analyzing environmental data. The Delphi method may be used to identify and study current and emerging trends within each environmental category (technological, social/demographic, economic, and so on). More specifically, the Delphi method is the development, evaluation, and synthesis of individual points of view through the systematic solicitation and collation of individual judgments on a particular topic. In the first round, individuals are asked their opinions on the selected topic. Opinions are summarized and then sent back to the participating individuals for the development of new judgments concerning the topic. After several rounds of solicitation and summary, a synthesis of opinion is formulated.[27]

The traditional Delphi method has undergone a great deal of change in the context of environmental analysis. The salient features of the revised Delphi method are to:

- identify recognized experts in the field of interest;
- seek their cooperation and send them a summary paper (based on a literature search); and
- conduct personal interviews with each expert based on a structured questionnaire.[28]

In contrast to traditional Delphi methods, there is no further feedback or repeated rounds of questioning. The major advantage is that it is easier to recruit recognized experts because they do not need to commit as much of their time.

The Delphi method is particularly helpful when health care managers want to understand a specific environmental issue. For example, a Delphi study was designed to define the role and responsibilities of sports medicine specialists in the United Kingdom. A mail questionnaire was sent to a random sample of 300 members of the British Association of Sport and Exercise Medicine. The original questionnaire contained 300 attributes and allowed participants to modify their responses based on feedback from other participants. The study was recognized as the first systematic attempt to define the role and responsibilities of the sports medicine specialist and concluded that sports medicine was an evolving specialty in the United Kingdom.[29] More recently, methods and experts from other disciplines have been applied to health care issues such as the forecasting of infectious diseases, as illustrated in Perspective 2–5.

NOMINAL GROUP TECHNIQUE, BRAINSTORMING, AND FOCUS GROUPS

The nominal group technique (NGT), brainstorming, and focus groups are interactive group problem identification and solving techniques. In *nominal group technique,* a group is convened to address an issue, such as the impact of consolidation within the health care industry or the impact of an aging population on hospital facilities.

Perspective 2–5

Forecasting Infectious Diseases Using Prediction Markets

When Philip M. Polgreen was an undergraduate economics and mathematics student he became interested in using mathematics to predict the spread of smallpox. He subsequently attended medical school and found ways of applying his mathematics and medical training in predicting the spread of infectious diseases. During the spread of severe acquired respiratory disease syndrome (SARS) he met economists from the University of Iowa who developed *prediction markets* and helped him to apply the method to the forecasting of infectious diseases.

Prediction markets is a forecasting methodology designed to obtain and chart expert opinions. Prediction markets have been used to predict elections and legislative vote outcomes, initial offering stock prices, Federal Reserve actions relative to interest rates, and numerous other phenomena. In addition, corporations such as Google, Hewlett Packard, and Eli Lilly have used this method to predict a variety of business trends and developments.

Prediction markets are "virtual exercises" that forecast events based on experts bidding on the validity of propositions – much like stock market commodities speculation. Propositions based on some future event are presented and an arbitrary value assigned (e.g., $100) to the proposition. The propositions are called contracts. For example, a typical forecasting proposition might be "The influenza vaccine currently produced includes the appropriate dominant strain of the virus that will circulate this season." Infectious disease experts who participate in the predictions market buy and sell contracts designated as "yes" and "no." Trading of the contracts takes place until the end of the influenza season and the final value of the contract is based on the outcome of the event. At that point, the outcome is revealed by a recognized authority, such as the World Health Organization in this case. At the close of the market in the influenza study, for example, participants received final payoffs of from $28.9 to $301.86.

Participants use their own information to trade during the course of market trading in an attempt to maximize their profits. They buy contracts they consider undervalued and sell those that they considered overvalued. The prices at which the contracts trade reflect overall consensus and can be used to make predictions and using techniques such as this, experts find new opportunities for sharing their knowledge.

The three major requirements of the application of prediction markets are: (1) disparate information, (2) uncertainty, and (3) an outcome against which to base the value of a contract. Where appropriately utilized, prediction markets possess some advantages over more traditional surveys of expert opinion. For example, since prediction markets sample expert opinions on a continuous and ongoing basis they allow for the identification of abrupt shifts in opinion faster than with surveys. Moreover, in prediction markets the most successful participants are those with the best information. These are precisely the individuals whose opinions one most wants to tap in a futuristic study.

Each individual independently generates a written list of ideas surrounding the issue. Following the idea-generation period, group members take turns reporting one idea at a time to the group. Typically, each new idea is recorded on a large flip chart for everyone to consider. Members are encouraged to build on the ideas of others in the group. After all the ideas have been listed, the group discusses the ideas. After the discussion, members privately vote or rank the ideas. After voting, further discussion and group generation of ideas continue. Typically, additional voting continues until a reasonable consensus is reached.[30]

A *brainstorming* group is convened for the purpose of understanding an issue, assessing the impact of an issue on the organization, or generating strategic alternatives. In this process, members present ideas and are allowed to clarify them with brief explanations. Each idea is recorded, but evaluation is generally not allowed. The intent of brainstorming is to generate fresh ideas or new ways of thinking. Members are encouraged to present any ideas that occur to them, even apparently risky or impossible ideas. Such a process often stimulates creativity and sparks new approaches that are not as risky, crazy, or impossible as first thought.[31]

NGT and brainstorming could be used to understand and respond to the increasing competition for ambulatory surgery. The outpatient surgery center is a rapidly growing trend and hospitals are very concerned about the impact this growth could have on their bottom line. In 1980, for example, only 15 percent of all surgeries were performed on an ambulatory basis. Today, more than 75 percent are outpatient. Inpatient surgeries requiring a one-day or longer length of stay now constitute only about 18–20 percent of hospital surgery profits and the percentage is dropping each year. The most popular outpatient areas are gastroenterology, orthopedics, gynecology, ophthalmology, as well as podiatry, ENT, and general surgery. However, increasingly there are signs that angioplasty, peripheral vascular surgery, and low-risk coronary interventions such as pacemakers and cardiac defibrillators may be next.

These changes and the prospect of even greater changes offer an opportunity for hospital managers to employ brainstorming groups to plan for the future. Some of the major uncertainties that could be addressed by the groups include the physician factor and Medicare. Brainstorming groups could provide serious insights into how willing physicians are to continue performing their procedures in hospitals and turn away from investments in outpatient facilities that could provide a 25 percent return on invested capital. Moreover, outpatient surgeries are easier for physicians to schedule without the aggravation of sharing operating rooms with inpatient and emergency services. Brainstorming groups might also be used to project the future direction of Medicare reimbursement. Although both of these factors represent major uncertainties informed groups could be very useful in preparing for the increasingly competitive health care environment.[32]

Similar to the process of brainstorming, *focus groups* bring together 10 to 15 key individuals to develop, evaluate, and reach conclusions regarding environmental issues. Focus groups provide an opportunity for management to discuss particularly important organizational issues with qualified individuals. Hospitals and large group practices have used focus groups of patients to better understand the perceived strengths and weaknesses of the organization from the patient's view. For example, Johns Hopkins was considering the establishment of an integrated delivery system under one umbrella name. Focus groups of physicians, present and past patients, nonpatients, and others convinced them to change plans. Focus groups can provide new insights for understanding issues and suggest fresh alternatives for their resolution.

Dialectic Inquiry

Dialectic inquiry is a "point and counterpoint" process of argumentation. The nineteenth-century German philosopher Hegel suggested that the surest path to truth was the use of a dialectic process – an intellectual exchange in which a thesis is pitted against an antithesis. According to this principle, truth emerges from the search for synthesis of apparently contradictory views.[33]

More specifically, in environmental analysis, dialectic inquiry is the development, evaluation, and synthesis of conflicting points of view (environmental issues) through separate formulation and refinement of each point of view.[34] For instance, one group may argue that health care costs will be declining between 2010 and 2012 (thesis) because of the prospective payment system, pressure by government, businesses, labor, market-based health care reform, physician reimbursement reform, and so on. Another group may present a case that the trend toward rising health care costs will continue (antithesis) because of hospital failures, the high cost of new technology, failure of health care reform initiatives, and so on. Debating this issue will unearth the major factors influencing health care costs and the implications for the future.

Any health care provider can utilize this technique by assigning groups to debate specific external issues. The groups make presentations and debate conflicting points of view concerning the environment. After the debate, the groups attempt to form a synthesis of ideas concerning the likely future.[35]

Stakeholder Analysis

Stakeholder analysis is based on the belief that there is a reciprocal relationship between an organization and certain other organizations, groups, and individuals. They are referred to as stakeholders: that is, organizations, groups, and individuals that have an interest or "stake" in the success of the organization. Examples of possible health care stakeholders, shown as a "stakeholder map," are presented in Exhibit 2–6.

Stakeholders may be categorized as internal, interface, and external. Internal stakeholders are those who operate primarily within the bounds of the organization, such as managers and other employees. Interface stakeholders are those who function both internally and externally, such as the medical staff and the corporate officers of the parent company. External stakeholders operate outside the organization and include such entities as suppliers, third-party payors, competitors, regulatory agencies, the media, the local community, and so on.[36] Such stakeholders have been referred to as the "organization ecosystem"– organizations that affect and are affected by the creation and delivery of the organization's product or service. Part of stakeholder analysis is to systematically identify the organizations with which their future is most closely intertwined and determine the dependencies that are most critical.[37]

Some of these stakeholders are almost always powerful or influential; others are influential regarding only certain issues; still others have little influence or power.

Exhibit 2–6: A Stakeholder Map for a Large Multispecialty Group Practice
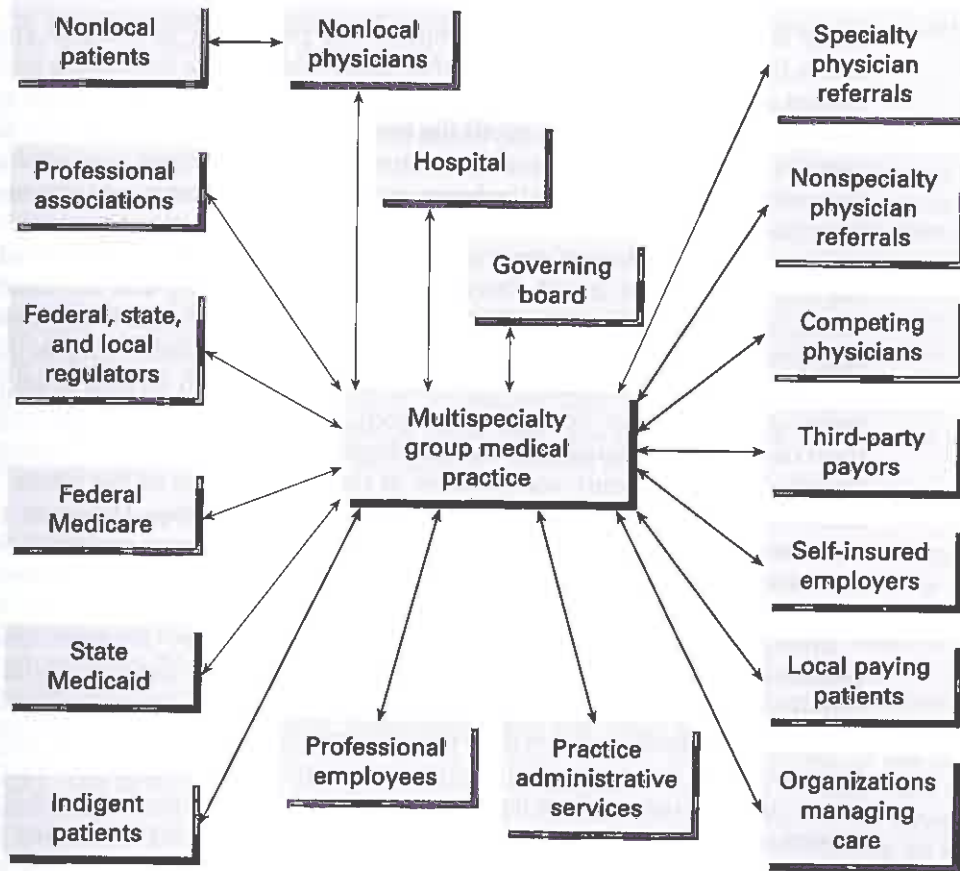
If the stakeholders can be identified and evaluated, then the "forces" affecting the organization may be specified. The needs and wants of these constituencies may dramatically affect the strategy of an organization.[38]

Typically, managers tend to focus attention on known, salient, or powerful stakeholders to help to protect existing competitive advantages. However, there is growing evidence that "fringe" stakeholders are important as well – particularly for developing new ways of thinking. Stuart Hart and Sanjay Sharma suggest that "the knowledge needed to generate competitive imagination and to manage disruptive change increasingly lies outside the organization, at the periphery" of the organization's established stakeholder network.[39] Therefore, strategic thinkers must be open to fringe ideas and nontraditional thinking developed by fringe players. At first, these stakeholders may appear to be poor, weak, isolated, non-legitimate or radical.[40] In reality, they may be strong purveyors of change.

Scenario Writing and Future Studies

Many businesses regularly use scenarios. The popularity of scenario analysis is due in large part to the inability of other, more quantitative forecasting methods to predict and incorporate major shifts in the environment and provide a context for strategic thinking. Scenarios avoid the need for single-point forecasts by allowing users to explore several alternative futures.[41] Scenario analysis is an alternative to conventional forecasting that is better suited to an environment with numerous uncertainties or imponderables – where there is no map.

A *scenario* is a coherent story about the future, using the world of today as a starting point. Based on data accumulated in the scanning and monitoring processes, a scenario or narrative that describes an assumed future is developed. The objective of scenarios and future studies is to describe a point of time in the future as a sequence of time-frames or periods of time. Scenario writing often requires generous assumptions. Few guidelines indicate what to include in the scenario. In most cases several plausible scenarios should be written. It is an all-too-common mistake to envision only one scenario as the "true picture of the future."[42] Most authorities advocate the development of multiple scenarios. However, to avoid decision makers focusing only on the "most likely" or "most probable" scenario, each scenario should be given a distinctive theme name, such that they appear equally likely.

Multiple scenarios allow the future to be represented by different cause–effect relationships, different key events and their consequences, different variables, and different assumptions. The key question is: "If this environmental event happens (or does not happen), what will be the effect on the organization?" The use of multiple scenarios was particularly helpful as organizations considered the probable impact of health care reform legislation on their organizations. Exhibit 2–7 presents a brief summary of three scenarios or alternative futures for health care between now and 2012. The scenarios were developed by the Institute for the Future to provide a description of critical factors that will influence health and health care in the first decade of the twenty-first century.

Exhibit 2–7: Three Future Health Care Scenarios

Scenario One: **Stormy Weather**
None of the fundamental problems of cost, quality, or access are resolved by 2010. Between 2010 and 2012, managed care fails to deliver reduced costs or push quality resulting in a backlash by consumers and providers. Legislation is enacted to negate the authority of managed care. Medicare cherry-picking by risk insurance plans leaves the sickest patients to be covered by conventional indemnity plans. A few major provider groups emerge; physicians and hospitals fear leaving their group. In a tight labor market, large employers continue to offer health benefits to employees; smaller employers are less able to pay for the increased costs. Health care spending reaches 19 percent of GDP and 22 percent of the population is uninsured. New technology continues to offer improved, less invasive alternatives and is demanded by baby boomers – a knowledgeable group that expects to participate in their own health care decisions. No social consensus develops to limit end-of-life care. Information technologies require huge investment but lead to disappointing results in terms of cost savings. The public

health sector minimally meets its mandated functions. People worry about losing health benefits and most are unhappy with the increased out-of-pocket costs. Medicaid strains state budgets; Medicare strains the federal budget – especially as early boomers begin to access the system in 2010. Health care reform is in the forefront of public policy once again.

Scenario Two: Long and Winding Road

Large employers maintain price pressure on health plans and require greater contribution by employees. The increased out-of-pocket costs cause employees to reduce their use of health care services. Health plans tighten control through closed networks that pressure providers for clinical price controls. Providers attempt to resist the insurance "hassles" with very limited success. The 1998 federal budget bill includes Medicare and Medicaid cost containment as it does each year following. The public health system continues to compete with the private sector on health service delivery. Health care costs reach 16 percent of GDP and 16 percent of the population is uninsured. The system remains tiered with 20 percent in public coverage or uninsured, 60 percent in restrictive managed care, and 20 percent in high-end, indemnity insurance programs. Cost-based reimbursement is curtailed; large integrated providers have not materialized. Physicians tend to practice in small groups (although there are no solo practices). Comprehensive health care reform does not rise to the top of the public policy agenda because the system is managing to "muddle on through . . ."

Scenario Three: Sunny Side of the Street

Competition drives excess capacity from the system and providers and patients work together to improve health. Newly trained physicians have lowered income expectations. Providers with best practices survive; consolidation occurs and excess capacity (especially hospital beds) is eliminated. Prospective payment covers all outpatient services. Clinical information systems improve care processes and outcomes. The electronic patient record becomes a reality. Technology focuses on improved outcomes and reduced costs. Therapy trade-off can be made based on cost-effectiveness. Public health will engage in public–private partnerships and will focus on assessment, development of policy, and assurance. Health care costs are 15 percent of GDP, and 10 percent of the population is uninsured. The systems are in place to minimize unnecessary variations in health care practices, operate efficiently, track outcomes to lead to further improvements, and handle the aging of baby boomers. Insurors are rewarded for improving the health of a population and focusing on long-term health care decisions.

Source: Institute for the Future, *Health and Health Care 2010: The Forecast, The Challenge* (San Francisco: Jossey-Bass Publishers, 2000), pp. 10–14.

Selecting the Strategic Thinking Framework

The purpose of analyzing the general and health care environments is to identify and understand the significant shifts taking place in the external environment. Exhibit 2–8 summarizes the primary focus, advantages, and disadvantages of each strategic thinking framework.

The approach selected for evaluating the general and health care environments will depend on such factors as the size of the organization, the diversity of the products and services, and the complexity and size of the markets (service areas). Organizations that are relatively small, do not have a great deal of diversity, and have well-defined service areas may opt for a simple strategic thinking framework

Exhibit 2–8: Primary Focus, Advantages, and Disadvantages of Environmental Techniques

Technique	Primary Focus	Advantage	Disadvantage
Simple Trend Identification and Extrapolation	Scanning Monitoring Forecasting Assessing	• Simple • Logical • Easy to communicate	• Need a good deal of data in order to extend trend • Limited to existing trends • May not foster creative thinking
Delphi Method	Scanning Monitoring Forecasting Assessing	• Use of field experts • Avoids intimidation problems • Eliminates management's biases	• Members are physically dispersed • No direct interaction of participants • May take a long time to complete
Nominal Group Technique	Scanning Monitoring Forecasting Assessing	• Everyone has equal status and power • Wide participation • Ensures representation • Eliminates management's biases	• Structure may limit creativity • Time consuming
Brainstorming	Forecasting Assessing	• Fosters creativity • Develops many ideas, alternatives • Encourages communication	• No process for making decisions • Sometimes gets off track
Focus Groups	Forecasting Assessing	• Uses experts • Management/expert interaction • New viewpoints	• Finding experts • No specific structure for reaching conclusions
Dialectic Inquiry	Forecasting Assessing	• Surfaces many subissues and factors • Conclusions are reached on issues • Based on analysis	• Does not provide a set of procedures for deciding what is important • Considers only a single issue at a time • Time consuming
Stakeholder Analysis	Scanning Monitoring	• Considers major independent groups and individuals • Ensures major needs and wants of outside organizations are taken into account	• Emerging issues generated by other organizations may not be considered • Does not consider the broader issues of the general environment
Scenario Writing	Forecasting Assessing	• Portrays alternative futures • Considers interrelated external variables • Gives a complete picture of the future	• Requires generous assumptions • Always a question as to what to include • Difficult to write

that may be carried out in house, such as trend identification and extrapolation, in-house nominal group technique or brainstorming, or stakeholder analysis. Such organizations may include independent hospitals, HMOs, rural and community hospitals, large group practices, long-term care facilities, hospices, and county public health departments.

Health care organizations that are large, have diverse products and services, and have ill-defined or extensive service areas may want to use a strategic thinking framework that draws on the knowledge of a wide range of experts. As a result, these organizations are more likely to set up Delphi panels and outside nominal groups or brainstorming sessions. In addition, these organizations may have the resources to conduct dialectics concerning environmental issues and engage in scenario writing. Such approaches are usually more time consuming, fairly expensive, and require extensive coordination. Organizations using these approaches may include national and regional for-profit health care chains, regional health care systems, large federations and alliances, and state public health departments. Ultimately, the strategic thinking framework selected for environmental analysis may depend primarily on the style and preferences of management. If used properly, any of the frameworks can be a powerful tool for identifying, monitoring, forecasting, and assessing issues in the general and health care environments.

Managing Strategic Momentum – Validating the Strategic Assumptions

The strategic plan is based in part on an analysis of the external environment. Initially this analysis provides the basic beliefs or assumptions that management holds concerning various issues in the external environment. Once strategic management is adopted as the operating philosophy of managing, strategic thinking, strategic planning, and managing the strategic momentum require frequent validation of the strategic assumptions to determine whether issues in the external environment have changed and to what extent. Continued strategic thinking is vital to maintaining strategic momentum.

The strategic thinking map presented in Exhibit 2–9 provides a series of questions designed to detect signals of new perspectives regarding these assumptions. The questions examine management's understanding of the external environment and the effectiveness of the strategy. The board of directors, strategic managers, or others may use these questions as a beginning point to confirm the assumptions underlying the strategy. Such strategic thinking questions may indicate the emergence of new external opportunities or threats that will affect the organization and may suggest areas where additional information will be required in future planning efforts. Current, accurate information may mean survival for many health care organizations. Questions concerning the external environment may reveal that a group practice knows far too little about the views of its major constituents (stakeholders) or the existence of new technologies or social trends. A validation (or invalidation) of the strategic assumptions reinvigorates strategic thinking and provides a basis for investigating whether to change the strategy.

Exhibit 2–9: Strategic Thinking Questions for Validation of the Strategic Assumptions

1. Has the organization's performance been adversely affected by unexpected or new trends or issues in the general environment?
2. Has the organization's performance been adversely affected by unexpected or new trends or issues in the health care environment?
3. Have new opportunities emerged as a result of new trends, issues or events in the external environment?
4. Is the strategy acceptable to the major stakeholders?
5. Are there new technological developments that will affect the organization?
6. Have there been social or demographic changes that affect the market or strategy? Changes in ethnic mix? Language barriers? Family structure?
7. Has the legislative/political environment changed?
8. Are there new local, state, or federal regulations or laws being introduced, debated or passed that will affect operations or performance?
9. Are there new economic issues?
10. Have new competitors outside the industry considered entering or actually entered into health related areas?
11. Is the strategy subject to government response?
12. Is the strategy in conformance with the society's moral and ethical codes of conduct?

Lessons for Health Care Managers

Health care managers must be able to understand and analyze the general and health care industry environments. To be successful, organizations must be effectively positioned within their environment. Organizations involved in making capital allocations, experiencing unexpected environmental changes or surprises from different kinds of external forces, facing increasing competition, becoming more marketing oriented, or experiencing dissatisfaction with their present planning results should engage in environmental analysis.

The goal of environmental analysis is to classify and organize the general and health care industry issues and changes generated outside the organization. In the process, the organization attempts to detect and analyze current, emerging, and likely future issues. The gathered information is used for internal analysis; development of the vision and mission; and formulation of the strategy for the organization. In addition, the process should foster strategic thinking throughout the organization.

Although the benefits of environmental analysis are clear, there are several limitations. Environmental analysis cannot foretell the future; nor can managers hope to detect every change. Moreover, the information needed may be impossible to obtain or difficult to interpret, or the organization may not be able to respond quickly enough. The most significant limitation may be managers' preconceived beliefs about the environment.

The external environment includes organizations and individuals in the general environment (government institutions and agencies, business firms, educational

institutions, research organizations and foundations, and individuals and consumers) and organizations and individuals in the health care environment (organizations that regulate, primary providers, secondary providers, organizations that represent providers, and individuals and patients).

Organizations and individuals in both the general and health care environments generate changes that may be important to health care organizations. Typically, such change is classified as legislative/political, economic, social/demographic, technological, or competitive. Such a classification system aids in aggregating information concerning the issues and in determining their impact. Sources for environmental issues are found both inside and outside the organization and are direct as well as indirect.

The steps in environmental analysis include scanning to identify signals of environmental change, monitoring identified issues, forecasting the future direction of issues, and assessing organizational implications. Scanning is the process of viewing and organizing external information in an attempt to detect relevant issues that will affect the organization. Monitoring is the process of searching for additional information to confirm or disprove the issue (trend, development, dilemma, or likelihood of the occurrence of an event). Forecasting is the process of extending issues, identifying their interrelationships, and developing alternative projections. Finally, assessing is the process of evaluating the significance of the issues. The information garnered from external environmental analysis influences internal analysis, the development of the vision and mission, and formulation of the strategy for the organization.

There are several strategic thinking frameworks to conduct the scanning, monitoring, forecasting, and assessing processes. These methods include simple issue identification and extension, solicitation of expert opinion, dialectic inquiry, stakeholder analysis, and scenario writing. Finally, as part of managing the strategic momentum, evaluation of the strategic assumptions (external issues) should periodically take place. The next chapter focuses on service area competitive analysis.

Health Care Manager's Bookshelf

Peter Schwartz, *The Art of the Long View: Planning for the Future in An Uncertain World* (New York: Currency Doubleday, 1991)

Peter Schwartz was working as a futurist at the Stanford Research Institute in 1975 when he met Pierre Wack of Royal/Dutch Shell. Later, in 1982, he replaced Wack as head of Shell Group Planning. This position provided a unique opportunity to perfect the scenario building skills he had practiced for years. In his book, *The Art of the Long View: Planning* *for the Future in An Uncertain World*, Schwartz presents the fundamental nature of scenarios, how to build them, and how to use them.[1]

One way to avoid becoming a victim of surprise is to create different stories of equally likely futures. These stories are called *scenarios*, an important objective of which is to aid strategists in "creating a fit"

between their organization and its environment.[2] Scenarios are not about predicting the future but are about perceiving futures in the present (p. 36). They are "vehicles for helping people learn."[3] In a sense, scenario planning is about "freeing the mind" of the health care strategist to admit that tomorrow may not be like today.[4]

Schwartz extended his work in the *Art of the Long View* and introduced the concept of *inevitable surprises*. Even though we do not like surprises, they are inevitable because they have already started taking place through *predetermined events* — forces we can anticipate with certainty.[5] If we can identify these events, why will there be surprises? The answer is simple – while the events are predetermined, the timing, results, and consequences are not (p. 6).

The *Art of the Long View* provides planners with a uniform process for developing scenarios. Schwartz suggests an eight-step process: step 1 – identify a focal decision; step 2 – list key factors influencing the success or failure of the decision; step 3 – list the driving forces in the environment that influence the key factors; step 4 – rank the key factors and driving forces in terms of their importance and the uncertainty associated with each; step 5 – select the scenario logic involving determining the dimensions along which the eventual scenarios will differ; step 6 – flesh out the scenarios; step 7 – return to the focal decision and rehearse implications for the future; and step 8 – select leading indicators and signposts and determine the indicators necessary to monitor each scenario in an ongoing manner.

One writer stated that The *Art of the Long View* is "destined" to become a milestone in long-range planning and strategic thinking. Understanding the lessons in this book should provide decision makers with the "ability to act confidently" because of the knowledge they have of where the uncertainties of the future in health care will lie.[6] Surprises will never be eliminated. However, futurists such as Schwartz have provided strategic thinkers with the tools to at least minimize the ill effects of those surprises that are predictable, even if they are inevitable.

References

1. Peter Schwartz, *The Art of the Long View: Planning for the Future in An Uncertain World* (New York: Currency Doubleday, 1991).
2. Edward Desmarais, "The Art of Scenario Planning: A Review of Two Books," *Journal of Business and Economic Studies* 6, no. 1 (2000), pp. 81–85.
3. "The Art of the Long View," *The Futurist* 26, no. 1 (1992), p. 35.
4. "The Future is Tricky," *Economist* 320, no. 7726 (1991), p. 10.
5. Peter Schwartz, *Inevitable Surprises: Thinking Ahead in A Time of Turbulance* (New York: Gotham Books, 2003).
6. James Wilk, "A Shimmering View of the Logic of Unfolding Futures: Book Review," *Long Range Planning* 24, no. 6 (1991), pp. 110–121.

Key Terms and Concepts in Strategic Management

Assessing	Focus Groups	Scanning
Brainstorming	Forecasting	Scenarios
Delphi Method	General Environment	Secondary Provider
Dialectic Inquiry	Health Care Environment	Sensemaking
Expert Opinion	Monitoring	Stakeholder Analysis
External Environmental	Nominal Group Technique (NGT)	Strategic Issues
Analysis	Primary Provider	Trend Identification

QUESTIONS FOR CLASS DISCUSSION

1. What types of changes are likely to occur in the health care environment in the next several years?
2. Why is environmental analysis important for an organization?
3. Describe the "setting" for health care management. Is the setting too complex or changing too rapidly to accurately predict future conditions?
4. Most health care managers would answer "Yes" to many of A. H. Mesch's questions to determine whether an organization needs environmental analysis. Are there other questions that seem to indicate that health care organizations should be performing environmental analysis?
5. What are the specific goals of environmental analysis?
6. What are the limitations of environmental analysis? Given these limitations, is environmental analysis worth the effort required? Why?
7. What four processes are involved in environmental analysis? What are their subprocesses?
8. How does the scanning process create a "window" to the external environment? How does the window concept help in understanding organizations and the types of information they produce?
9. Why is the process of environmental analysis as important as the product?
10. Which of the environmental analysis strategic thinking frameworks are most useful? Why?
11. Using Exhibit 2–6 as an example, develop a "stakeholder map" for a health care organization in your metropolitan area or state. On this map show the important health care organizations and indicate what impact they may have on the industry.
12. Which of the scenarios in Exhibit 2–7 do you think is most likely? Why? Based on today's issues, develop your own scenario of health care in 2012.
13. What are an organization's strategic assumptions? How may the strategic assumptions be evaluated as part of managing strategic momentum?

NOTES

1. Kathleen M. Sutcliffe and Klaus Weber, "The High Cost of Accurate Knowledge," *Harvard Business Review* 81, no. 5 (2003), p. 75.
2. Peter F. Drucker, *Managing the Nonprofit Organization: Principles and Practices* (New York: HarperCollins Publishers, 1990), p. 9.
3. Joel A. Barker, *Future Edge: Discovering the New Paradigms of Success* (New York: William Morrow, 1992), p. 28.
4. This partial list of issues in the health care industry results from tracking the strategic issues in health care in the professional and trade literature, government and foundation reports, and numerous interviews with both public and private health care professionals by the authors.
5. Charles R. Morris, "Why U.S. Health Care Costs Aren't Too High," *Harvard Business Review* 85, no. 2 (February 2007), p. 52.
6. Ibid., p. 50.
7. Ibid.
8. Ibid., pp. 50, 52.
9. James M. Kouzes and Barry Z. Posner, *The Leadership Challenge: How to Keep Getting Extraordinary Things Done in Organizations* (San Francisco: Jossey-Bass Publishers, 1995), p. 47–48; and Ross Dawson, *Living Networks: Leading Your Company, Customers, and Partners in the Hyper-Connected Economy* (Upper Saddle River, NJ: Prentice Hall – Financial Times, 2003), see especially Chapter 9.
10. A. H. Mesch, "Developing an Effective Environmental Assessment Function," *Managerial Planning* 32 (1984), pp. 17–22.
11. Paul Saffo, "Six Rules for Effective Forecasting," *Harvard Business Review* 85, no. 7/8 (July/August 2007), p. 130.

12. Michael D. Watkins and Max H. Bazerman, "Predictable Surprises: The Disasters You Should Have Seen Coming," *Harvard Business Review* 81, no. 3 (2003), pp. 72–80. For a comprehensive assessment see Max H. Bazerman and Michael D. Watkins, *Predictable Surprises: The Disasters You Should Have Seen Coming and How to Prevent Them* (Boston, MA: Harvard Business School Press, 2004).

13. J. O'Connell and J. W. Zimmerman, "Scanning the International Environment," *California Management Review* 22 (1979), pp. 15–22; and Bradley J. Olson, Satyanarayana Parayitam, and Yongjian Bao, "Strategic Decision Making: The Effects of Cognitive Diversity, Conflict, and Trust on Decision Outcomes," *Journal of Management* 33, no. 2 (2007), pp. 196–222.

14. Barker, *Future Edge*, p. 86.

15. Edward De Bono, *Serious Creativity: Using the Power of Lateral Thinking to Create New Ideas* (New York: HarperBusiness, 1992), p. 17. See also Bradley L. Kirkman, Benson Rosen, Paul E. Tesluk, and Christina B. Gibson, "The Impact of Team Empowerment on Virtual Team Performance: The Moderating Role of Face-to-Face Interaction," *Academy of Management Journal* 47, no. 2 (2004), pp. 175–192.

16. Beaufort B. Longest, Jr., *Management Practices for the Health Professional*, 4th edn (Norwalk, CT: Appleton & Lange, 1990), pp. 12–28.

17. Liam Fahey and V. K. Narayanan, *Macroenvironmental Analysis for Strategic Management* (St. Paul: West Publishing, 1986).

18. Klaus Kleinfeld, "Seeing is Treating," *Harvard Business Review* 85, no. 2 (February 2007), p. 47.

19. James B. Thomas and Reuben R. McDaniel, Jr., "Interpreting Strategic Issues: Effects of Strategy and the Information-Processing Structure of Top Management Teams," *Academy of Management Journal* 33, no. 2 (1990), p. 288. See also Peer C. Fiess and Edward J. Zajac, "The Symbolic Management of Strategic Change: Sensegiving via Framing and Decoupling," *Academy of Management Journal* 49, no. 6 (2006), pp. 1173–1193.

20. Thomas and McDaniel, "Interpreting Strategic Issues," pp. 289–290.

21. Saffo, "Six Rules for Effective Forecasting," p. 124.

22. Sutcliffe and Weber, "The High Cost of Accurate Knowledge," p. 75.

23. Karl E. Weick, *Sensemaking in Organizations*, (Thousand Oaks, CA: Sage Publications, 1995); Deborah Ancona, Thomas W. Malone, Wanda. Orlikowski, and Peter M. Senge, "In Praise of the Incomplete Leader," *Harvard Business Review* 85, no. 2 (February 2007), pp. 94–95.

24. Ibid., p. 95.

25. Fahey and Narayanan, *Macroenvironmental Analysis*, p. 39.

26. H. E. Klein and R. E. Linneman, "Environmental Assessment: An International Study of Corporate Practice," *Journal of Business Strategy* 5 (1984), pp. 66–75. See also Jonathan Parry, "Making Sense of Executive Sensemaking," *Journal of Health Organization & Management* 17, no. 4 (2003), pp. 240–263; and Linda Rouleau, "Micro-Practices of Strategic Sensemaking and Sensegiving: How Middle Managers Interpret and Sell Change Every Day," *Journal of Management Studies* 42, no. 7 (2005), pp. 1413–1441.

27. James L. Webster, William E. Reif, and Jeffery S. Bracker, "The Manager's Guide to Strategic Planning Tools and Techniques," *Planning Review* 17, no. 6 (1989), pp. 4–13; and Pamela Tierney and Steven M. Farmer, "The Pygmalion Process and Employee Creativity," *Journal of Management* 30, no. 3 (2004), pp. 413–432.

28. S. C. Jain, "Environmental Scanning in US Corporations," *Long Range Planning* 17 (1984), p. 125. See also Dovev Lavie, "Capability Reconfiguration: An Analysis of Incumbent Responses to Technological Change," *Academy of Management Review* 31, no. 1 (2006), pp. 153–174.

29. B. Thompson, D. MacAuley, O. McNally, and S. O'Neill, "Defining Sports Medicine Specialist in the United Kingdom: A Delphi Study," *British Journal of Sports Medicine* 38, no. 2 (2004), pp. 14–18.

30. Craig S. Fleisher and Babette E. Bensoussan, *Strategic and Competitive Analysis: Methods and Techniques for Analyzing Business Competition* (Upper Saddle River, NJ: Prentice Hall, 2003), pp. 287; and Lucy L. Gilson and Christina E. Shalley, "A Little Creativity Goes A Long Way: An Examination of Teams' Engagement in Creative Processes," *Journal of Management* 30, no. 4 (2004), pp. 453–470.

31. Fleisher and Bensoussan, *op. cit.*, p. 257.

32. Information for this example was adapted from Richard Haugh, "Competition Keeps Getting Hotter for Ambulatory Surgery," *Hospitals & Health Networks* 80, no. 10 (2006), pp. 68–72.

33. Barbara Karmel, *Point and Counterpoint in Organizational Behavior* (Hinsdale, IL: Dryden Press, 1980), p. 11; and W. Jack Duncan, Peter M. Ginter, and Linda E. Swayne, *Strategic Issues in Health Care Management* (Boston, MA: PWS-Kent Publishing, 1992), p. 6.

34. Webster, Reif, and Bracker, "The Manager's Guide," p. 13.

35. Ibid.

36. Myron D. Fottler, John D. Blair, Carlton J. Whitehead, Michael D. Laus, and G. T. Savage, "Assessing Key Stakeholders: Who Matters to Hospitals and Why?" *Hospital and Health Services Administration* 34, no. 4 (1989), p. 527.

37. Marco Iansiti and Roy Levien, "Strategy as Ecology," *Harvard Business Review* 82, no. 3 (2004), pp. 68–78.

38. Fottler, Blair, Whitehead, Laus, and Savage, "Assessing Key Stakeholders," p. 532.

39. Stuart L. Hart and Sanjay Sharma, "Engaging Fringe Stakeholders for Competitive Imagination," *The Academy of Management Executive* 18, no. 1 (2004), pp. 7–18.

40. Ibid.

41. Audrey Schriefer, "Getting the Most Out of Scenarios: Advice from the Experts," *Planning Review* 23, no. 5 (1995), pp. 33–35; J. Alberto Aragón-Correa and Sanjay Sharma, "The Social Side of Creativity: A Static and Dynamic Social Network Perspective," *Academy of Management Review* 28, no. 1 (2003), pp. 89–106; and Mats Lindgren and Hans Bandhold, *Scenario Planning: The Link between Future and Strategy* (Houndsmills, UK: Palgrave Macmillian, 2003).

42. Peter Schwartz, *The Art of the Long View: Planning for the Future in An Uncertain World* (New York: Currency Doubleday Publishers, 1991).