DECISION MAKING FOR IMPROVED PERFORMANCE

Ken E. Mack

Mary Ann Crawford

Mary C. Reed

Decision Making for Improved Performance

IYAD WYAD, YWAG WYAG
*"If you always do what you always did,
you will always get what you always got."*

Management Series Editorial Board

Your board, staff, or clients may also benefit from this book's insight. For more information on quantity discounts, contact the Health Administration Press Marketing Manager at (312) 424-9470.

A New Approach to Decision Making

The organization's bottom line today reflects the quality of past decision making.
—Patrick Quinlan, M.D. (2003)

THE DECISION-MAKING ENVIRONMENT FOR healthcare executives has changed dramatically. In the 1970s and even early 1980s, many executives of not-for-profit healthcare organizations may not have made the correlation articulated so succinctly by Dr. Quinlan. Under the retrospective cost-reimbursement system prevalent in those decades, the decision-making environment was simply more forgiving. Healthcare organizations were reimbursed for whatever costs they incurred; hence, bad decisions generally did not result in financial losses. ▶

Today, however, decision-making stakes are higher than ever. Cost constraints and declining profitability continue to set the tone. Increased utilization; aging facilities; restricted, prospective-based reimbursement; and increased competition, among other factors, have created an extremely demanding decision-making environment (see the sidebar).

Given this environment, healthcare executives must focus on the decision-making process in their organization to determine if the process is effective in moving the organization toward its strategic goals. The ability to make high-quality and efficient decisions is no longer a *nice to have* organizational attribute; it is a *must have* attribute. Decisions must enable an organization to both meet its mission and maintain its financial viability.

OVERVIEW OF PUBLICATION

This book provides leaders with practical strategies for evaluating their organization's current decision-making approach, addressing barriers to changing that decision-making process, and improving the process. It offers a step-by-step approach to decision making that is similar to the method used in clinical medicine.

Chapter 1 presents insights from executives into the decision process and describes today's decision-making landscape, comparing clinical to managerial decision making. It also includes an overview of a seven-step approach to decision making that can significantly improve an organization's performance.

Chapter 2 explores the first step of this approach: analyzing the organization's current decision-making style and addressing obstacles to changing the decision-making process.

Chapter 3 describes steps two through seven: defining the decision's objective, identifying and prioritizing factors that affect the decision, gathering the essential information and generating options, assessing options and selecting the best, creating an action plan and implementing it, and monitoring the decision's impact and revising the decision if necessary.

Chapter 4 presents a real-life example of the use of the seven-step approach by a hospital's executives and its physicians who needed to make a decision about whether or not to pursue strategic alignment.

WHAT EXECUTIVES SAY

Research conducted by our firm, DMI *Transitions* (DMI), confirmed the need for improved decision making in healthcare and was a main impetus for this book. The research also brought to light many of the strategies we recommend here.

In 2002, DMI electronically surveyed more than 700 chief executive officers, chief financial officers, chief operating officers, chief medical officers, and other physician leaders nationwide. Survey respondents provided information on their organization's decision-making process and its effectiveness and on their decision-making obstacles. They also offered possible keys to improving the process.

In 2003, DMI conducted detailed telephone interviews with 18 top healthcare executives nationwide, again intending to find out about decision-making methods within the executives' organization. We also asked executives about their perception of the state of decision making in the healthcare industry as a whole. These interviews revealed decision-making strategies that have been successful in healthcare operations.

Past and present realities faced by executives differ significantly. Moving forward, executives now need to

- *determine organizational impact.* Consider what the decision will do both *for* the organization and *to* the organization (Philp 1985).
- *measure financial impact.* Ensure that every decision improves the organization's competitive and/or financial position.
- *make timely decisions.* Slow and ineffective decision-making processes are costly. Because "time is money" (as Ben Franklin says), the right decisions must be made and must be made efficiently. What organization can afford *not* to improve its performance?

When asked to name the method that they find most effective in making decisions, the executives we interviewed unanimously stated that decision making should be approached as a group, rather than an individual, process.

THE CURRENT DECISION-MAKING LANDSCAPE

The general management literature is

teeming with descriptions of individual and group decision-making methods derived from the fields of social science and psychology. Bearing names such as the "rational model," the "political model," and even the "garbage can model," many of these models are purely theoretical in nature and are rarely seen in action in the real world.

Clinical decisions are omnipresent in the decision-making landscape of healthcare organizations. In any given organization, the majority of decisions made on a day-to-day basis are clinical, focused on patient care, and driven by physicians. The decisions made by clinicians generally reflect their extensive training and experience.

Managerial decisions are also ubiquitous, but they are less understood and perhaps not as efficient, effective, and respected as some would like them to be. "They [the health system's executives] never get anything done," notes a community physician. "It takes forever to get a decision made here," says a mid-level manager in the same health system.

Clinical and managerial decision-making environments differ significantly, and this affects how decisions are made. Consider the following:

- *Decision-making risk.* For the clinician, decisions can mean life or death for the patient. For the executive, single decisions can sink the organization; however, organizational failure is normally the result of multiple bad decisions.
- *Resource use.* For the clinician, use of more resources often achieves better outcomes, but cost constraints limit resource use. For the executive, resource use is discouraged because constraints in dollars, time, and people, for example, are severe.
- *Information availability and access.* The clinician must sift through huge amounts of data to make a decision. The executive needs to do likewise, but he or she may not have access to the information needed for the decision.
- *Decision-making time frame.* For the clinician, decisions often must be made rapidly, sometimes in a matter of minutes. For the executive, decisions can occur over hours, days, or even months.
- *Decision-making standards.* For the clinician, an evidence-based approach to decision making has spurred the development of clinical practice guidelines that assist practitioners and patients in choosing appropriate healthcare for specific medical conditions. High-quality clinical practice guidelines direct all

care team members and, when consistent with the evidence, have been shown to improve care quality. Can managerial decision making also be subject to evidence-based standards? Certainly, managerial decision-making "guidelines" have not been developed yet.

Table 1 compares clinical and managerial culture, use of research and evidence, and decision making.

Use of
Table 1 is
restricted

It seems clear from comments made by interviewed executives that managerial decision making can benefit from some of the rigors common in clinical decision making such as the methodical collection and analysis of data; the application of general rules, as feasible; and the use of an evidence-based approach.

OVERVIEW OF THE SEVEN-STEP APPROACH

The seven-step decision-making process proposed in this book offers a rational, logical, and sequential approach to managerial decision making by small groups. This does not mean that intuition or experience cannot play a role, nor does it mean that back-and-forth with process steps or larger groups cannot be effective. Step sequence and suggested team size can vary.

Similar to other processes described in the management literature (Lyles 1982; Philp 1985; Weiss 1985), this new approach involves seven key steps (see Figure 1):

1. Understand the organization.
2. Define the objective of the decision.
3. Identify and prioritize the factors that will influence the decision.
4. Collect information needed to make the decision, and generate decision options.
5. Evaluate options, and make the best choice.
6. Develop an action plan, and implement the decision.
7. Monitor decision's effects, and revise as appropriate.

Comparable steps in clinical decision making are outlined in the sidebar.

Figure 1. Seven Key Steps for Improved Decision Making
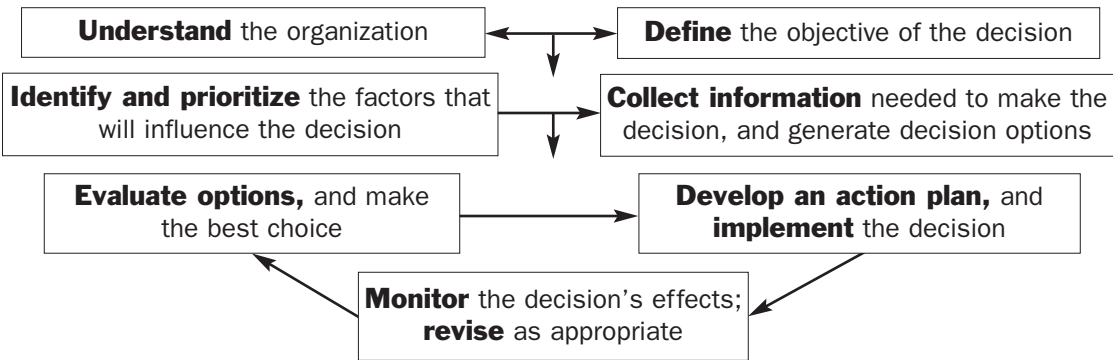
REFERENCES

Lyles, R. I. 1982. *Practical Management Problem Solving and Decision Making*. New York: Van Nostrand Reinhold Company.

Philp, T. 1985. *Improve Your Decision Making Skills*. London: McGraw-Hill Book Company (UK) Limited.

Quinlan, P. 2003. Personal communication with authors, January. Patrick Quinlan, M.D., is CEO of The Ochsner Clinic Foundation, New Orleans, Louisiana.

Walshe, K., and T. G. Rundall. 2001. "Evidence-based Management: From Theory to Practice in Health Care." *The Milbank Quarterly* 79 (3): 440–41, 429–57.

Weiss, W. H. 1985. *Decision Making for First-Time Managers*. New York: American Management Association.

Step 1:
Understand the Organization

It is important to distinguish between efficiency—doing things right—and effectiveness— doing the right things.
—Peter Drucker
(1988)

THIS CHAPTER COVERS THE FIRST STEP OF OUR suggested approach to improving organizational decision making: Examine the existing decision-making process and the barriers to changing that process, then establish the strategies for removing those barriers. Information from this unbiased self-assessment can be used to enhance the organization's performance. The executives we interviewed and surveyed stressed the critical importance of gaining a thorough understanding of how decisions *currently* are made in the organization and how this process affects the achievement (or not) of strategic objectives. A good starting point for such an understanding is assessing the organization's culture and decision-making style. ▶

ASSESS CULTURE AND DECISION-MAKING STYLE

The first step in clinical decision making is to listen to the patient and perform a physical examination. By doing so, the clinician acquires the necessary data to establish the reason for the patient encounter. The equivalent of this first step in managerial decision making is to learn the organization's decision-making approach and identify barriers to process change.

Few would argue that the organization's culture or style of decision making can make or break an organization. In our 2002 electronic survey (see Chapter 1), 52 percent of respondents indicated that organizational culture is very relevant or critical to decision making. However, many executives never really understand culture and style and their organizationwide impact on decision making.

- *Culture* is the values, beliefs, customs, knowledge, and practices shared by a group.
- *Style* is a particular, distinctive, or characteristic mode of action, or mode of decision making in our context.

Culture is the basic "personality" of the organization that surrounds everyone who works there. Because collective beliefs shape behaviors, culture can affect decision-making styles. There are four predominant decision-making styles: controlling, analyzing, advocating, and facilitating. A style may represent the entire organization or exist only within particular groups such as boards, management, physicians, units, or divisions. As such, the question "Who owns the style?" is relevant.

A *controlling style* is goal oriented, pragmatic, and focused on the present. Decision makers with such a style plan their approach and act independently, often closely directing others in the performance of tasks. Preferring efficient alternatives, these people reach decisions quickly and involve only those who are "useful" to the decision-making process. They view decision making in a competitive light; they often want their alternative to be selected. They communicate about decisions primarily verbally. The best way to interact with controlling decision makers is to present conclusions first, avoid introductions and small talk, expect questions, and provide direct answers. Executives who want action

from these decision makers should give them freedom to make decisions and should support their conclusions and actions.

An *analyzing style* is characterized by a logical, step-by-step approach. Decision makers who follow this style study all alternatives and contingencies but often select an already proven option; as such, the style often can be viewed as conservative. Analyzers involve *all* people deemed competent in the decision-making process, and they tend to communicate about decisions through written means. Their decisions are made slowly and methodically. The best way to interact with analyzing decision makers is to be well organized and prepared, provide documentation, and avoid stating exaggerated or unsubstantiated claims. Executives who want action from these decision makers should support their thoughtful approach but should insist on receiving a decision within a specified time frame.

An *advocating style* uses a big-picture approach. Advocating decision makers are venturesome—willing to take risks—and intuitive. They prefer creative and fresh alternatives and like to involve responsive individuals in the

decision-making process; as such, they often run behind schedule because of the time involved in gathering people's views and available options. They communicate largely verbally and often with a dramatic flavor. The best way to interact with advocating decision makers is to avoid saturating them with details, expect them to deviate from the topic, and share personal information. Executives who want action from these decision makers should ask them to reach an agreement, if possible, but should maintain tight control over the decision-making time frame.

A *facilitating style* is people oriented, whereby the preference is to reach decisions through group consensus. Decision makers with this style often are idealistic, tentative, and may look for a "comfortable solution" to avoid conflict whenever possible. They carefully weigh the impact of decisions on people and relationships, and they communicate orally and with an informal style. The best way to interact with facilitating decision makers is to allow time to get to know them on a personal level and to hear and discuss their opinions and ideas. Executives who want action from these decision makers should outline

a decision-making plan and establish and monitor a decision time frame.

The sidebar summarizes key characteristics of each style.

One style does not fit all, and no style is right or wrong. Nor is any style easy to change. The executive must determine whether the current style is moving the organization toward its desired strategic objectives. If not, the executive should identify the barriers to changing the style and should begin to eliminate them.

IDENTIFY AND ADDRESS BARRIERS TO PROCESS CHANGE

Deciding to change and *accomplishing* change are vastly different endeavors. Most executives wish to improve the way they make decisions, but most encounter very real barriers to doing so. Barriers to decision-making change exist to some degree in every healthcare organization. Recognizing barriers helps executives devise strategies to remove them.

Key barriers include culture, politics, policies and procedures, committee decision making, limited information, and executive and board leadership. A thorough description of

these barriers and the strategies for eliminating them are beyond this book's scope, but some critical observations warrant mention.

Culture

Cultural barriers include inflexibility, conformity, lack of trust and openness, lack of leadership motivation, and defensive management. Cultural change often occurs with the arrival of new leadership, which in effect wipes clean the slate and establishes new ground rules for a new operating environment. Even without a new leadership team, culture can still change as existing leaders gain a different perspective of their organization. For example, one organization's CEO began to recognize physicians as first-line customers. He operationalized this vision by proactively meeting with physicians to learn their concerns and requiring management staff to do likewise. The leadership team then addressed each concern. Two years later, the organizational culture had changed from one characterized by management-physician antagonism to one that is "physician friendly." Leadership commitment, visibility, and communication are critical to cultural change.

Politics

Nearly 70 percent of respondents to our survey indicated that politics, to varying degrees, represents a major (or somewhat major) decision-making obstacle in their organization. For example, many organizations do not have a process for evaluating the services of and awarding contracts to outside vendors. As a result, "politickers"—those that engage in politically motivated dealings—take advantage of the void in the process, limit the search for internal alternatives, and ramrod their external company of choice. The establishment of concrete decision-making processes can minimize political barriers.

Policies and Procedures

If administrative layers or hierarchy and policies and procedures are too voluminous, decision makers are unlikely to search adequately for alternatives, involve those who can aid in the process, or break down organizational fiefdoms. To address this barrier, organizations may need to flatten their reporting structure or to streamline policies and procedures.

Committee Decision Making

Although team-based decision making is critical, it can be excruciatingly slow. The size of committees is often large (with more than five to seven people), which makes even finding a time to meet a challenge. When meetings finally do take place, gaining consensus on items that should be pursued is difficult at best. Using small decision-making teams and establishing and monitoring a clear, non-negotiable decision time frame are two strategies for eliminating this barrier.

Limited Information

Executives often must make decisions that are based on imperfect data. Severe time pressure limits the search for appropriate and adequate information; it also limits the identification and exploration of alternatives. New information technology and management systems or processes, such as software for financial analysis and data dashboards (described in Chapter 3), can appropriately arm executives with needed information in a timely manner.

Executive and Board Leadership

The effectiveness of an organization's decision making depends on the degree of risk taking, trust, and flexibility possessed by its executives (Argyris 1966). As such, leaders themselves may be the biggest

obstacle to changing the decision-making process. Healthcare executives who do not have knowledge of or exposure to successful decision models used in other industries may not be equipped to modify and adapt their own processes. In contrast are leaders who embrace an ethos of learning, considering themselves lifelong learners and pursuing training and development in broadly based decision-making methodologies and techniques.

After executives complete this first step, we invite them to consider implementing Steps 2 through 7 of the decision-making approach described in the next chapter.

REFERENCES

Argyris, C. 1966. "Interpersonal Barriers to Decision Making." *Harvard Business Review* 44 (2): 84–97.

Drucker, P. 1988. "The Coming of the New Organization." *Harvard Business Review* 66 (1).

Steps 2 Through 7:

Implement the Full Process, Monitor Results

If two men agree on everything, you may be sure that one of them is doing the thinking.
—Lyndon B. Johnson

THIS CHAPTER DESCRIBES STEPS TWO THROUGH seven of the decision-making approach we are recommending.

STEP 2: DEFINE THE OBJECTIVE OF THE DECISION

Like the clinician who listens to and examines the patient to determine the objective of the clinical encounter, healthcare executives must establish the overall goal of the decisions ▶

they make. Many healthcare organizations want to get everything done today. However, accomplishing multiple major goals simultaneously is not possible in most cases. Therefore, organizational decisions must have realistic and achievable objectives. Four key questions must be answered when setting the parameters for the decision:

1. What type of decision has to be made?
2. What problem(s) must the decision solve, and what is the objective?
3. Who should be involved in making the decision?
4. What tangible results does the organization expect?

Answers to these questions are the foundation for an improved decision-making process.

Decision Type

Decisions can be classified into three categories: crisis, operational, and strategic.

Crisis decisions are those that require immediate attention. They can have huge financial implications, involve life-or-death choices for multiple individuals, and bring an organization's internal operations to a standstill. External and political ramifications following such decisions are likely to be immediate and significant. Two examples of situations that require a crisis decision are as follows:

- A train derailed in a hospital's service area, bringing in hundreds of patients who require emergency treatment
- A flood caused major damage to a long-term care facility, forcing an evacuation of its residents

Most healthcare organizations have well-developed and tested procedures for handling crisis situations. Executives can respond quickly and appropriately to such situations through crisis-mode decision making.

Operational decisions are those that are made on a day-to-day basis. They have relatively smaller financial implications and cause only temporary disruption of internal operations. External and political ramifications following such decisions are minimal. Two examples of scenarios that rely on operational decisions include the following:

- Which patient should be put in which bed
- How to increase staffing to meet a spike in patient census

Table 2. Decision Types and Their Impact

Impact	Crisis	Strategic	Operational
Financial	>$1,000,000	$250,000–$1,000,000	<$250,000
Health/safety/compliance	Life threatening	Pattern of injuries and citations	Minor injuries
Operations	Closing of the hospital	Continuous shutdown of a key service	Ongoing disruption of service
Clinical	Life threatening and increased morbidity	Declining quality indicators	Patient and physician inconvenience
Employee morale	Unionization	High turnover rates, compared with benchmarks	Common and ongoing employee complaints

Operational decisions tend to be comfortable ones for executives who are trained and accustomed to facing daily challenges.

Strategic decisions are those that are critical to meeting an organization's mission or vision. These decisions do not resolve short-term or present crises, but they are key to the organization's long-term and future success and can have significant and lasting financial and political ramifications. Two examples

of scenarios that require such decisions are as follows:

■ Expanding capacity to meet increased demand
■ Divesting acquired physician practices

All too frequently, executives delay making strategic decisions until underlying problems become crises. Although the seven-step approach can improve crisis and operational decision-making processes, it is most valuable when applied to strategic decision making because of the long-term impact of strategic decisions.

Table 2 presents the impact of each decision type, and Table 3 on the next page is a sample list of executives involved, by decision type and impact. Senior and middle-level executives at one community hospital in California developed these tables in response to an employee/management satisfaction survey that revealed a major disconnect in perception between senior and middle managers. In the survey, senior executives indicated that middle-level managers (e.g., directors and line managers) were fully empowered to make and implement decisions needed to perform their responsibilities, but the middle managers disagreed with that

Table 3. Decision Makers Involved, by Decision Type and Impact			
Impact	**Crisis**	**Strategic**	**Operational**
Financial	CEO, CFO, board's finance committee chair	CFO, COO, CNO	Department director, line managers
Health/safety/ compliance	CEO, CNO, CMO	COO, compliance officer, VPs	Department director, line managers
Operations	CEO, COO, CNO	COO, CNO, key department directors	Department director, line managers
Clinical	COO, CMO, CNO, chief of staff	CNO, CMO, CFO, chair of the medical staff	Chair of the medical staff, department director, nursing managers
Employee morale	COO, CNO, VP of human resources	COO, CNO, VP of human resources	Department director, line managers

claim. To reinforce the hospital's commitment to ensuring that decision making involves the appropriate people at the agreed-on managerial level, the executives created these tables, printed them on wallet-sized cards, and distributed them to all managers.

Executives who conduct an organizational assessment, such as the one done by this California hospital, should use the results to construct a decision table that is specific to their organization.

The Problem and the Decision Objective

More often than not, an item that needs a decision is first expressed as a complaint or frustration, examples of which include

- "Our operating room is never running at capacity,"
- "Our labor costs are out of sight," and
- "We're trying to do too much and doing nothing well."

Probing these complaints may be required to get to a genuine definition of the problem (Hiebert and Klatt 2001, 200). Perhaps the problem lies in the operating room workflow, in using agency rather than employed staff, or in the scope of services as defined. Peter Drucker (1967) recommends checking a problem's

definition repeatedly against all observable facts and then throwing out a definition "the moment it fails to encompass any of the [facts]."

Defining the objective of solving the problem sounds relatively easy but is a challenging task. The way an objective is written or framed can significantly affect the choices that are made and the decision process as a whole. Not surprisingly, the objective's framing reflects the habits, outlook, and expectations of the decision makers (Tversky and Kahneman 1986). Consider the difference between the following statements, each of which is framed by four executives of a hospital that is experiencing overcrowding in the emergency department:

1. Our objective is to meet the increased demand for emergency services.
2. Our objective is to expand emergency department capacity.
3. Our objective is to reduce admission bottlenecks and increase available inpatient beds.
4. Our objective is to address overcrowding in the emergency department.

Statement 1 assumes that increased demand for emergency services is at the root of the overcrowding, which may or may not be the case. Overcrowding may in fact be due to an ineffective patient admission system. Statement 2 assumes that capacity must be increased to reduce overcrowding, which, again, may or may not be the case. Statement 3 assumes that the problem is the organization's inability to move patients through and out of the emergency department and into beds, but what if capacity truly is not sufficient? Statement 4, the most accurate statement, succinctly states the objective and makes no assumptions about the level or reason for overcrowding.

Decision Participants

Participants will vary according to the type of decision and its strategic importance. The following are key considerations when selecting participants:

- What is the decision type (crisis, operational, or strategic)?
- Who has the authority, respect, and credibility to lead the decision-making process?
- Who is closest to the issues involved, and who can offer an essential knowledge base?

- Who is critical to decision implementation?
- Who can be helpful on an ad hoc basis?

The size of the decision-making group also has to be considered. Groups of five to seven people tend to perform with greater efficiency than groups composed of more than seven members. A common problem experienced by many healthcare organizations is having more decision makers than necessary. This reality largely stems from executives' fear of being kept out of the information loop.

One healthcare organization in Canada uses a small-group approach. Its senior management articulates the decision that must be made, classifying it as crisis, operational, or strategic. Then, senior management assigns the responsibility for the decision making to two groups:

1. A small *work group* that studies the issue and recommends a decision by a specified date.
2. A larger *need-to-know group* that is informed of the work group's activities. At times, members of this group serve as consultants to the work group and attend meetings of the work group.

A healthcare organization in Ohio uses an approach that is a slight variation of the Canadian hospital's approach. The Ohio organization's senior management assigns three individuals to a team, which assumes ownership of the decision-making process. If the decision to be made is strategic, the team includes an MBA, who brings business expertise; a CPA, who brings financial expertise; and a physician, who brings clinical expertise. If the decision to be made is operational (e.g., how to design the budgeting process), team members will include individuals from relevant disciplines such as finance, human resources, and medicine or nursing.

Generally, crisis decisions in the healthcare industry are handled within an all-hazards command structure (frequently called incident command system or ICS) for responding to and recovering from emergencies such as power failures, hurricanes, and acts of terrorism. A decision-making command center is staffed by a small team, whose responsibilities include keeping the entire organization and the community informed of developments and planned responses. For example, in one medical center's emergency command structure, the team included the following

individuals performing the following functions (JCAHO 2002):

- CEO or a designated alternate as the administrative incident director
- Emergency department physician on duty as the medical incident director
- Vice president of operations as the nursing incident director
- Manager of facilities operations as traffic controller
- Vice president of public affairs as head of the information center
- Manager of material control as head of medical supply distribution

Following the attacks of September 2001 and power failures of August 2003, most healthcare organizations have strengthened their emergency or crisis decision-making process.

The Expected Tangible Results

Executives must make the decision objectives as tangible as possible, as every decision has ramifications on numerous areas, including financial, strategic, operational, quality, customer service, and physician relations. At the outset, decision makers should quantify the results expected from the decisions they make. For example, if an organization's executives are

evaluating the divestiture of acquired physician practices, they should quantify the expected ramifications, including the following (Kamholz 2003):

- *Financial*: cash gained from the sale and from improved operating results
- *Physician relations*: increase/ decrease in physician referrals and physician satisfaction
- *Strategic*: the ability to focus capital spending on investments related to core, rather than tangential, business activities

Figure 2 on the next page details the tangible financial results of an alignment strategy, which is discussed in Chapter 4.

STEP 3: IDENTIFY AND PRIORITIZE THE FACTORS THAT WILL INFLUENCE THE DECISION

For Step 3, the clinician determines probabilities of the causes of the patient's chief medical complaint. Then, he or she identifies factors that will help or impede the diagnosis and

Figure 2. Tangible Financial Impact of a Physician-Alignment Strategy

	Expense Reduction		Incremental Revenue		Incremental Cost
	Low	High	Low	High	
Best-Practice Institute					
Proactively reducing average length of stay	($5,000,000)	($10,000,000)			TBD
Standardization of treatment protocols	($3,000,000)	($5,000,000)			TBD
Pay for quality contract + 1% to 2%			TBD		TBD
CMS* quality premium payments + 1%			TBD		TBD
PVD** screenings: 1,000 screens yield 167 patients who have procedures at $8,000 to $12,000			$1,336,000	$2,004,000	$186,000
Cholesterol screens: 600 screens yield 330 "positives" and 188 patients at $10,000 to $15,000			$1,880,000	$2,820,000	$186,000
Physician sales: 150 to 200 incremental admissions at $8,000 to $12,000			$1,200,000	$2,400,000	$280,000
	($8,000,000)	($15,000,000)	$4,416,000	$7,224,000	$652,000

	Low	High	Estimated Cost
Overall financial impact	$12,416,000	$22,224,000	$652,000

* Centers for Medicare & Medicaid Services
** Peripheral Vascular Disease

treatment. Similarly, the executive must define the decision criteria, which will guide the process, and the key stakeholders, who will ensure agreement on and commitment to the solution. In addition, the executive has to identify decision constraints such as resources (time, dollars, and staff) and scheduling. Prioritizing the key factors or decision criteria enables executives to focus the decision-making process.

Decision Criteria

Criteria are the standards by which decision makers will evaluate or test the various alternatives or options, laying out the rules or principles of the evaluation. These criteria may be value based (e.g., quality of care, patient satisfaction) and represent the preferences of the decision-making team, or they may be predictive based (e.g., market share, return on investment, increased referrals) and used to forecast a desired preference (Scholl 2003).

Criteria should include both quantitative and qualitative factors. Quantitative criteria are easier to establish, rank, and measure, but qualitative criteria (those that are intangible in nature) can often make or break a decision (Weiss 1985). Examples of qualitative criteria

include employee morale, market competition, or an organization's relationship with its medical staff or surrounding community. A decision's impact on those criteria can be pivotal in the decision-making process.

Key Stakeholders

When determining the *key stakeholders*, executives should ask, Who is needed to ensure agreement and commitment to the solution? What are their interests, strengths, and limitations? For example, a decision about whether to develop a special procedures room to treat peripheral vascular disease has a wide circle of physician stakeholders, including interventional radiologists; vascular surgeons; interventional cardiologists; interventional neurologists; and department directors of radiology, surgery, cardiology, neurology, and nursing. Management stakeholders from finance, environmental services, and admitting also play a role.

Decision Constraints

Constraints commonly include capital (e.g., debt capacity, debt structure, credit position), time (e.g., dates, scheduling), staffing (e.g., skill set, training, availability), competition, legal and regulatory requirements

Table 4. Prioritization Matrix				
Key Factor/ Criteria	**Critically Important**	**Very Important**	**Reasonably Important**	**Of Slight Importance**
Enhanced quality of care	4			
Increased market share/revenue		3		
Improved physician relations		2		
Improved patient satisfaction			1	

(e.g., Stark II, JCAHO), affiliations, information, technology, and communications. Constraints may be negotiable or non-negotiable and can make or break a decision. For example, one hospital in New Jersey that was considering several possible joint ventures with physicians identified a possible deal breaker— the legality of an ownership model for a proposed diagnostic cath lab in a state that has a Stark II-like law.

Prioritization of Decision Criteria
Using a prioritization matrix, such as the one presented in Table 4, enables executives to focus on what is really important. One technique for prioritizing is multi-voting. This method involves giving each member of the decision team a number of points that they can assign to individual key factors or criteria. Votes are tallied, and the number of points

given to each item is noted. Table 4 is a matrix of key criteria. The numbers designate the importance assigned to each by one hospital's ten-member decision-making team charged with deciding whether or not to establish a strategic alliance between the hospital and a physician group (see the case in Chapter 4).

STEP 4: COLLECT INFORMATION NEEDED TO MAKE THE DECISION, AND GENERATE DECISION OPTIONS

The clinician comes up with multiple hypotheses about the cause of the patient's symptoms and then orders laboratory tests to help him or her determine the validity of the

hypotheses. Similarly, the executive must identify all possible decision alternatives and collect data that will facilitate the process of establishing and evaluating the options. The broader the range of possible options, the better the decision-making process.

Thinking creatively and outside the box is key in Step 4. Executives often look to industry peers for solutions, but they should also look to other industries. A lot of literature is available on the management philosophies and decision approaches of companies such as Continental Airlines, Microsoft, and Wal-Mart. These approaches can be applied to healthcare organizations as well.

A great out-of-the-box example of generating a range of decision options can be found in the book *From Worst to First* by Gordon Bethune, CEO of Continental Airlines. Bethune (1999) describes his turn-around, decision-making strategy that took Continental Airlines from the lowest rated of the nation's 10 biggest airlines to one of the best rated within one year. Bethune focused on collecting information, generating decision options, and decision making in four areas: market, finance, product, and people. He clearly and regularly communicated the organization's vision to all stakeholders, identified and installed strong financial information systems and well-defined data dashboards, clearly defined employee expectations and empowered them to achieve such expectations, and used rewards to change behavior.

Bethune recognized that to generate a full range of decision options, he and his staff needed to collect and analyze information in new and different ways. Financial data, particularly about Continental's cash position, were critical. The organization's then-current reporting system did not provide timely information on cash flow. In less than 60 days, staff developed a new, streamlined cash reporting system to provide the needed real-time information. In-depth knowledge about the organization's cash position enabled Bethune and his team to evaluate whether certain decision options could be pursued.

Continental's team collected both qualitative and quantitative data to generate decision options. Through focus groups, the organization learned that business travelers were disgruntled by the fact that gate attendants could not approve flight changes. This qualitative information

resulted in a marketing strategy that authorized employees at key points of service (including gates) to make flight changes. Quantitative customer satisfaction data published monthly by the airline industry were used to calculate bonuses, which is a people-related strategy devised by Bethune and his colleagues. That is, if the company met its financial goals and was among the top five airlines in customer satisfaction, all employees received monthly and yearly bonuses.

Bethune's other market-related strategies included focusing on flying to where people wanted to go (rather than on market share) and partnering with travel agents. His financial strategies involved investing in high-quality financial reporting systems and scaling down the number of aircraft used. Product-related strategies included a focus on making reliability a reality, asking key customers what they want, and targeting efforts on meeting those desires. Bethune's people-related strategies included keeping employees focused on the future, giving employees a checklist of goals rather than rules, and rewarding employee success.

One health system in Florida uses a creative human resources strategy, which is an out-of the-box decision option, gleaned from the airline industry. Unable to fill nursing shifts, the health system implemented a bidding system, which is commonly used by airlines to match available and willing pilots and flight attendants with open shifts. In this health system, nurses who want to work additional shifts (and who had not been offered the ability to do so) are able, based on their seniority, to bid on available shifts. The establishment of the bidding idea was well received by nursing staff, and the health system is now able to significantly reduce shift vacancies.

Data Sources

Information is a common roadblock. Getting too much, too little, or the wrong information at the wrong time can be costly. It can frustrate change and stop progress in implementing new decision-making processes.

The effective management of information is crucial to healthcare outcomes, quality of care, patient safety, and organizational and individual improvement. Information is data (material, facts, clinical observations) that have been interpreted and organized so that they may be used in decision making. To carry out clinical

activities, healthcare organizations rely on information about the science of care, individual patients, care provision, and the outcomes of care (JCAHO 1999).

For example, physicians and other licensed independent practitioners rely on data in clinical records, such as vital signs and response to care, to make an accurate assessment and to determine treatment. To carry out management activities, executives rely on comparative data and information to identify opportunities for improving organizational and patient care processes. High-quality information ensures high-quality decisions.

The collection of data needed for managerial decision making is significantly more complex than that for clinical purposes. For example, consider the many sources for the following dashboard elements:

- *Quality indicators:* mortality/morbidity, infection, unscheduled returns to the operating room, needlestick injury, patient fall, and medication error rates
- *Financial indicators:* average days in accounts receivable, cost per patient day, days cash on hand, and average age of plant

- *Service indicators:* patient, physician, and staff satisfaction (as measured by referral rates); patient satisfaction with pain management; staff turnover and absenteism
- *Access indicators:* length of stay in the emergency department, frequency of diversions, use and turnover of operating rooms, and severity adjusted length of stay

No one person or department provides all the data that allow executives to see the big picture. Executives should carefully identify the elements that truly will aid in evaluating and monitoring decision alternatives. An unwieldy proliferation of indicators can dilute the focus of management and board and can lead to "analysis paralysis," which occurs when an increasing amount of data, appropriate or not, is collected and analyzed.

Because data collection can be time consuming and costly, economical and efficient data collection is vital. Standardization of data within and beyond the organization helps increase collection efficiency and decrease collection cost. For example, to evaluate whether or not to implement a new design for all nursing units within the network, executives choose

medication error rates as a quality indicator.

Medication error rates vary widely, depending on how facilities define such errors, among other factors. Some organizations define it as *any* error, whether or not it results in compromised patient safety, while others define it as *only* an error that results in compromised safety. For example, a 15-minute delay in administering many medications may not injure the patient or reduce therapeutic effectiveness and hence would not be considered an error in hospitals that have a more limited definition. However, this same delay would be captured as an error in facilities that have the broadest definition. Without a standardized definition, error rates will not provide the needed apples-to-apples comparison for the executives in our example. Without such accurate comparison data, decision making may be impaired.

Decision Options

A "We've never done that here" or "That won't work here" mind-set must be discouraged, and team members must be encouraged to think beyond traditional boundaries so that the team can come up with as many decision options as possible.

Brainstorming is the technique most often used for this purpose. The team leader should follow traditional brainstorming ground rules such as reiterating that "there is no bad idea" and asking team members to not express reactions or provide commentary as ideas are expressed. Sometimes, the best ideas are the most unusual.

For example, executives who wish to expand an organization's emergency department (ED) capacity to meet increasing utilization may generate three options: (1) expand the ED in its current location, (2) develop incremental capacity at a satellite site, or (3) build a completely new ED at an adjacent site. Other options, such as leasing space or building capacity in phases, may be proposed as well.

Broader thinking would result in executives considering other solutions such as improving the admissions process and increasing inpatient bed capacity. In many facilities, severe ED overcrowding may be due, at least in part, to "boarding" patients—the practice of keeping admitted patients in the ED until a bed becomes available in the hospital. This practice leaves inadequate space for treating emergency patients and fuels the cry

for more ED capacity, when acute care capacity may be the real issue.

STEP 5: EVALUATE OPTIONS, AND MAKE THE BEST CHOICE

With laboratory test results in hand, the clinician, in partnership with the patient, evaluates diagnostic or therapeutic options and chooses the option most likely to provide benefits that outweigh the risks. Similarly, the executive must weigh various decision options against the established decision criteria and then select the option most likely to produce a favorable outcome. In the management arena, the participation of a decision-making team has significant impact on the identification, evaluation, and selection of options and on the assessment of the selected solution.

Option Evaluation

A chart that lists the pluses and minuses or risks and benefits of each decision alternative enables the team to assess options and to quickly eliminate those that obviously have more negative than positive consequences. Table 5 on the next page is such a chart for the Florida

health system that wants to address its nursing shortage, as described earlier. The health system decided to implement Option 2—the creation of an electronic shift-bidding system. Open nursing slots were posted on the organization's intranet, allowing nurses to bid on desired shifts and confidentially state their desired hourly rate. Implementation of this option eliminated the need for agency nurses, whom the organization paid twice the average hourly bid wage.

A more thorough and targeted way of evaluating alternatives is ranking options against established criteria. The criteria can include such factors as chance for success, staying power, reliability, risk, workability, receptivity by management/staff/physicians, barriers to implementation, compatibility with organization's strategic and financial objectives, cost, implementation time frame, and measurability and objectivity. In addition, the criteria can be weighted by the decision team. For example, the team can agree to assign more weight (i.e., points) to options that are compatible with strategic and financial objectives and less weight to options that do not meet the "staying power" criteria.

The option or options with the highest score is selected, and possible consequences of that option should then be further evaluated. Table 6 illustrates how the health system in Florida ranked options against criteria.

Alternative Selection

The goal of selection is to identify the option that meets criteria, produces minimal negative consequences, and brings the organization closest to its desired objective. At times, no single option will satisfactorily meet all

Table 5. Pluses and Minuses Chart

Option 1	Pluses	Minuses
Provide signing bonuses of $10,000 to nurses willing to commit to staying a minimum of two years	1. Attracts a large number of nurses 2. Helps nurses new to the labor force to pay off their school loans 3. Competitors are not currently offering a similar bonus 4. May result in an immediate boost in nursing staff numbers 5. May encourage retention of new grads for two years	1. Is easy for a competitor to match 2. Does not guarantee that nurses would stay after two years 3. Is likely to cause morale issue among existing nurses 4. Provides only a short-term fix 5. Does not address the long-term retention issue

Option 2	Pluses	Minuses
Implement an electronic shift-bidding system	1. Can be implemented within 90 days 2. Should reduce reliance on agency nurses 3. Provides opportunity for existing staff nurses to work more if they want 4. Decreases nursing vacancy rates and hiring costs 5. Reduces turnover	1. May not work 2. Nurses may bid too high 3. Bids may not cover all shifts 4. Organization may end up paying some nurses more than $100,000 5. May be able to be duplicated by competitors

Option 3	Pluses	Minuses
Outsource entire nursing function	1. Third-party management success already experienced in Food and Environmental Services 2. Should reduce turnover 3. Provides career options for nurses 4. Performance criteria can be established in the outsourcing contract	1. A core competence is lost 2. Nurses may unionize 3. May not be a long-term solution 4. May result in negative physician and employee reaction/morale

criteria; hence, compromise may be necessary. Identifying a fallback option is recommended in case things go wrong with the first selection. For example, the health system in Florida selected Option 2 (electronic bidding) but identified Option 1 (signing bonus) as a fallback.

Decision traps—flaws, misperceptions, biases, or irrational anomalies in thinking that are ingrained or hardwired into the human brain—can impair the decision-making process at this point (Hammond, Keeney, and Raiffa 1998). As described in the psychology and business literature, decision traps include bonded rationality, anchoring trap, status-quo trap, sunk-cost trap, confirming-evidence trap, and framing trap. The sidebar on the following page briefly describes each trap and offers a couple of strategies for reducing the impact of each. Executives who are aware of such

Table 6. Ranking Options Against Criteria

Provide a 1–10 rating on how well option meets criterion, with 1 as "does not meet criterion well" and 10 as "meets criterion perfectly"

Decision Criteria (in priority order)	Option 1: Signing Bonus	Option 2: Shift Bidding	Option 3: Outsourcing
1. Acceptance by existing nursing staff	5	8	2
2. Retention of nurses	6	8	8
3. Ability to meet customer service goals	8	7	5
4. Acceptance by physicians	8	9	3
5. Financial feasibility	7	6	6
6. Management control	9	9	6
7. Clinical-quality improvement	8	8	4
8. Ease of duplication by competitors	1	5	7
9. Congruence with mission	6	8	2
10. Ability to improve employee morale	4	8	2
TOTAL	**62**	**76**	**45**

DECISION TRAPS AND STRATEGIES FOR MINIMIZING THEIR IMPACT

Bounded rationality: Unlike a computer, human decision makers have a restricted capacity to accurately and thoroughly process the information needed to make complex decisions. To address this trap, do the following:
- Use a team approach to decision making.
- As a team, identify decision alternatives.
- Assign each team member a responsibility for exploring a specific option and reporting the findings to the group.

Anchoring trap: This occurs when a decision maker gives disproportionate weight to the first information he or she receives. Such information, in effect, anchors the decision maker's point of reference and sways his or her future thoughts and judgments. Trends or past events can inappropriately anchor expectations about future performance. In fact, in a rapidly changing environment such as healthcare, past performance may not be a good indicator of future performance. Do the following to address this trap:
- Withhold giving an idea/opinion when speaking with others about the decision at hand.
- View the problem from different perspectives, moving beyond the first line of thought that occurs.
- Be open minded, and seek information from a variety of people to widen your frame of reference.

Status-quo trap: The current state or condition is a very strong lure or trap during the decision-making process. As the number of choices increases, so does uncertainty and the powerful pull to maintain the status quo. To eliminate this trap, do the following:
- Never think of the status quo as the only alternative. Identify other options, and evaluate their pluses and minuses.
- Ask yourself if you would choose the status-quo alternative if, in fact, it were not the status quo.
- Avoid exaggerating the costs or efforts associated with non-status-quo alternatives.

Sunk-cost trap, also called the "escalation of commitment trap": This occurs when decision makers are unwilling to admit that past decisions were flawed and continue to "throw good money after bad" by supporting previously unsuccessful courses of action. Strategies for addressing this trap are as follows:
- Acknowledge that some good ideas will end in failure and that people make mistakes.
- Cut your losses. As Warren Buffett said, "When you find yourself in a hole, the best thing you can do is stop digging."
- Seek out people who were not involved in past decisions and therefore are unlikely to be committed to them.

Confirming-evidence trap: This occurs when a decision maker gives too much weight to information that supports his or her viewpoint and too little weight to information that clashes with his or her viewpoint. Minimize this trap by doing the following:
- Examine all evidence with equal rigor.
- Ask open-ended (as opposed to leading) questions when seeking advice.
- Seek the advice of more than just those individuals who are likely to agree.

Framing trap: How a question or problem is framed can have a very big impact on the choices made by decision makers. Avoid this trap with the following strategies:
- Do not accept the way a problem is framed initially. Reframe the problem numerous ways and look for distortions caused by framing.
- When others make recommendations, examine the way they framed the problem. Ask them to reframe the problem in different ways.

Sources: Hammond, J. S., R. L. Keeney, and H. Raiffa. 1998. "The Hidden Traps in Decision Making." *Harvard Business Review* 76 (5): 47-58; Sims, R. R. 1994. *Ethics and Organizational Decision Making*. Westport, CT: Quorum Books.

traps can avoid making bad decisions based on flawed thinking. In addition, executives who are alert to two typical decision-making behaviors described in the next paragraphs can take practical steps to reduce such behaviors.

The first is *satisfying* or *"satisficing" behavior*. This occurs when decision makers choose a course of action that will result in the desired goal without exploring all possibilities. Decision makers with such behavior simplify the problem and use intuition, past history, instinct, and best judgment to come up with a solution. As coined by Nobel Laureate Herbert A. Simon and his colleague James G. March in their 1958 book *Organizations*, satisficing behavior usually stems from human inability to process the wealth of information needed to make complex decisions or from the lack of necessary data. As a result, as soon as decision makers find a satisfactory or "good enough" solution that meets the criteria set by the organization, they discontinue their search for alternatives and adopt the solution at hand (Radford 1975).

The second is *incrementalizing behavior*. This occurs when decision makers break down a problem requiring a decision into a series of smaller issues rather than tackling or committing to the problem as a whole. Often characterized as "muddling through," this behavior generally offers only short-term alternatives and solutions. K. J. Radford (1975, 219) states that "[a]n emphasis on short-term decision problems and a neglect of longer-term problems with their inherent greater uncertainties" may be due to organizational avoidance of uncertainty in decision making. In other words, most people do not like ambiguity, so they try to minimize its impact whenever possible by dealing with the unknowns in small chunks. Amitai Etzioni (1989, 122-23) suggests that incrementalizing represents "moving not so much toward a goal as away from trouble, trying this or that small maneuver without any grand plan or sense of ultimate purpose."

Incrementalizing behavior eliminates the need for comprehensive information gathering and yields conservative decisions that often do not represent innovative solutions. It also neglects longer-term problems. For example, executives of an organization that has been experiencing the need for additional bed capacity for ten years exhibit incrementalizing behavior when they make the decision to add a new wing only to those departments that are most vocal in expressing concern

about the lack of space within their service areas. This behavior lacks a big-picture view of facility needs, resulting in design-related operating inefficiencies created by incremental growth.

STEP 6: DEVELOP AN ACTION PLAN, AND IMPLEMENT THE DECISION

Once a diagnosis is made, the clinician then works with the patient to develop a treatment plan. An action plan is the equivalent document in the management arena. This plan is rarely developed at one time and rarely outlines actions to be followed in a sequential manner. Straight-line progress from one place to another is rare in business. "Instead, it's a series of zigzag lines," notes one executive. "You may end up where you want to be, but you have to be flexible enough that you can go a little off here and there" (Ahmanson 1990).

Barrier Busters
In the early stages of action plan development, executives must be realistic and recognize that the barriers identified earlier are not simply going to go away. The challenge is to address them through specific strategies, including troubleshooting problems that are likely to occur when a decision is implemented.

Obtaining buy-in and input from managers and other employees are critical. Most efforts to implement new decisions fail, not because the goal is undoable but because managers and rank-and-file employees do not have ownership of the process. Getting the right input at the right time, addressing the NIH (not invented here) challenge, and obtaining and using feedback are the responsibility of executives.

The sidebar provides strategies for gaining buy-in.

A Change Plan
Putting together a change plan that will make the new decision a reality involves identifying what is needed to ensure success, planning the sequence of events, setting target dates, assigning responsibilities, and establishing monitoring systems. In a concisely written plan, executives outline overall goals, implementation steps or activities, key dates, the individuals responsible for completion of each activity,

budget/financial details, and communication methods. Again, communicating the plan and achieving buy-in are critical. According to Lyles (1982), "[t]he best laid action plans often fail because of confusion in implementation or lack of understanding or support." Staff affected by the decision need to understand how to make the decision a reality. Written or charted time lines clarify what needs to be accomplished, by whom, and by when.

Decision Implementation

Management experts indicate that success is 20 percent planning and 80 percent implementation. Even with the best data, the best plan, and the best people, the decision will fail if it is not properly implemented. Decisions that are made an intricate part of the organization's operating standards and culture will endure. Successful implementation includes the following steps:

- Clearly define the project and its goals.
- Identify and prioritize steps needed, and assign responsibilities for each step.

- Develop a visual time line that shows the progression of the overall project and individual time lines for members of the project team.
- Communicate constantly, and update the visual time line.
- Keep face-to-face meetings to a minimum, and make them productive.
- Monitor the process relentlessly.
- Reinforce positive behaviors among project participants.

Having an empowered, committed staff greatly aids the successful implementation of a new decision. To achieve this, executives must "walk the walk" and must communicate regularly to the entire organization about progress and accomplishments. Communication must take place in all available forums such as staff newsletters, department meetings, and e-mail announcements.

IMPLEMENTATION EXAMPLES The decision-making process of the Canadian healthcare organization described earlier is as follows:

1. After studying the issues surrounding the decision that must be made, the work group

Figure 3. A Small-Group Approach to Decision Making
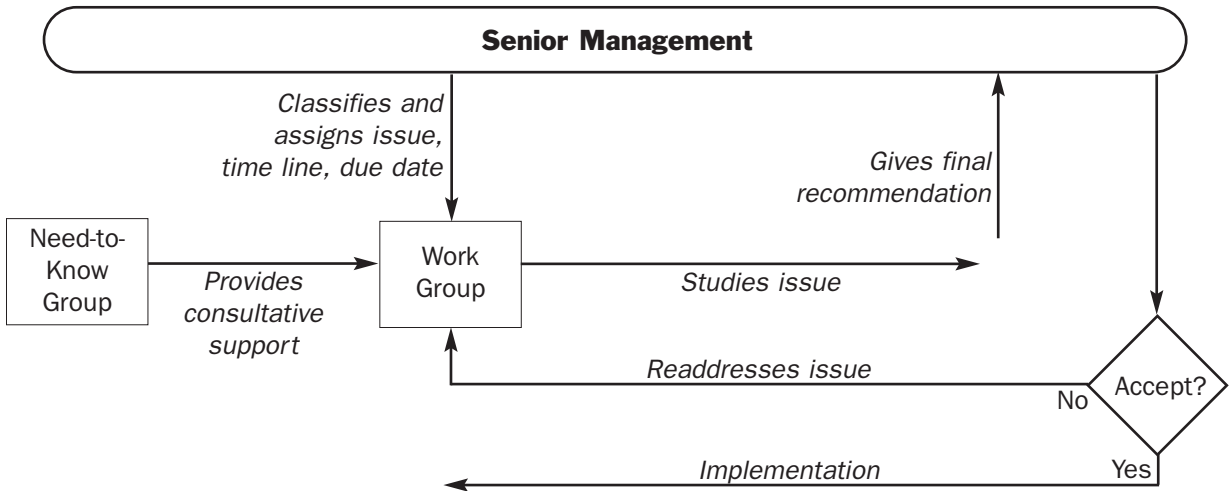
presents senior management with a recommended decision.

2. If senior management accepts the recommendation, an implementation team and completion dates are assigned.

3. If senior management does not accept the recommendation, the work group may readdress the issue by further studying specified areas or may simply discontinue its activities.

Figure 3 illustrates how this small-group approach works.

In the Ohio healthcare organization described earlier, the decision-making process progresses as follows:

1. The three-person decision team is charged with researching and clarifying issues surrounding the decision and with identifying and making a recommendation about decision options.

2. Senior management provides a time line and completion date.

3. If the recommendation or a variation of it is accepted by senior management, the team leads the implementation team.

Figure 4 (on page 38) illustrates how this approach works.

The sidebar provides additional decision-making strategies recommended by healthcare executives.

**PRACTICAL DECISION-MAKING STRATEGIES
RECOMMENDED BY HEALTHCARE EXECUTIVES**

- Do not hold decision-making meetings on Mondays and Fridays.
- Use telephone conferencing at early stages of the decision-making process.
- Use e-mail to vote on decisions.
- Empower line managers to make appropriate decisions.
- Create data dashboards at all decision-making levels.
- Ensure that managers receive decision-making training.
- Create a decision-making calendar, set deadlines, and stick to them.
- Provide accessibility to executives. Ask executives to offer two half-days per week for open-door access by staff who have decision-related questions.
- Create a decision-making status report using a spreadsheet such as Excel®. E-mail the report to decision participants, and highlight actions that each participant has agreed to take prior to the next meeting.
- Try stand-up decision-making management meetings.
- Consider excluding the CEO and COO from preliminary decision-making meetings of management staff.
- Share information so that decisions can be made with up-to-date data. Use bulletin boards and broadcast e-mails to facilitate regular communication about the status of the decision-making process.
- Assess list of standing/regular decision-making meetings and participants on a biannual basis.
- Consolidate boards and management to streamline the decision-making process.
- Distribute the agenda five to seven days before the decision-making meeting.
- Start and finish decision-making meetings on time. As a penalty, ask late comers and meeting chairpersons who go over the allotted time to make contributions to a charity.
- Train managers to facilitate decision-making meetings.
- Implement a "no-show-no-participation" policy for decision-making meetings.

STEP 7: MONITOR THE DECISION'S EFFECTS, AND REVISE AS APPROPRIATE

Just as the clinician watchfully waits for the effects of the treatment he or she has prescribed and then revises it as necessary, the executive must monitor the effects of the implemented decision and make any appropriate changes. Monitoring and measurement activities are key to continued improvement.

Creating data dashboards that will provide relevant, real-time information is one of the best ways to monitor decisions. Dashboards may be broad-based (covering the entire organization), narrow in focus (covering just one department or unit), or product line/venture-specific. To ensure effectiveness, dashboards must have the following characteristics:

- *Information balance.* Dashboards monitor financial, operational, quality, and satisfaction indicators.
- *Metric rigor.* More than 15 metrics dilutes attention. Approximately ten well-defined metrics—such as readmission rates, average length of stay, staff turnover—provide the needed focus.
- *Presentation strength.* A picture is worth a thousand words. Charts, graphs, and other illustrative ways of presenting the data provide a quick and easy-to-understand view.
- *Decision triggers.* The team defines indicator values that will trigger a

Figure 4. A Variation of a Small-Group Approach

Leadership

| Identify decision | → | Three-person team (TPT) takes "ownership" | → | TPT does research, clarifies issues, and identifies options | → | TPT gives recommendation |

| TPT and other team members implement decision | ← | Accept recommendation |
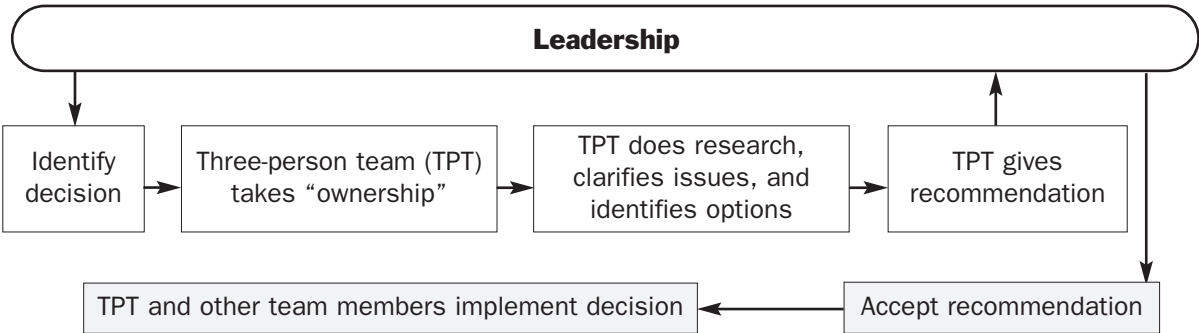
decision or a change in decision. Entity-specific fixed and comparative targets signal needed action.

Figure 5 presents a one-page dashboard developed and monitored for a community hospital.

A careful review of measures on the data dashboard will reveal whether the decision is meeting its intended objectives. If variance is evident, the approach may need to be tweaked or the decision revisited. For example, the health system in Florida that implemented the decision to use an electronic shift-bidding system for nurse staffing would be likely to track FTEs (full-time equivalents) per occupied bed, salaries/benefits per FTE, average length of stay, and other indicators. If salary costs started to rise, executives may revisit the decision and consider offering sign-on bonuses.

Exception reports are another means of monitoring a decision's effects. Executives define specific criteria, such as days cash on hand, admissions, or nursing turnover, and staff then track the data related to each criterion. When trends are negative, an exception report sounds the alarm. However, due to limited data collection and analysis, the exception-report approach is largely reactive in nature and tells only a small piece of the whole story. Thus, it is not as effective a means as data dashboards.

PUTTING IT ALL TOGETHER

The seven-step approach recommended in this book is neither rocket science nor brain surgery. Rather, it is a logical method for decision making that is worthy of

Figure 5. Data Dashboard for Community Hospital

General Hospital
Monthly Operating Report

Statistics	Actual	Budget	Prior Yr	% Budget	% Prior Yr
Admissions	722	750	651	-3.7%	10.9%
Acute Admissions	688	625	578	10.1%	19.0%
Patient Days	3,500	3,750	3,450	-6.7%	1.5%
Adjusted Patient Days	6,000	6,250	5,646	-4.0%	6.3%
Avg Daily Census	233	242	223	-3.6%	4.8%
IP Surgeries	250	188	180	33.3%	38.9%
OP Surgeries	500	475	449	5.3%	11.4%
Total Surgeries	750	663	629	13.2%	19.2%
Open Hearts	35	10	7	250.0%	438.5%
Cath Volume	250	200	214	25.0%	17.1%
ER Admits/ER Visits	18.3%	15.6%	21.2%	2.7%	-2.9%
ER Visits	2,000	2,000	1,675	0.0%	19.4%
ER Left w/o Treatment	10	-	86	n/a	-88.4%
Deliveries	45	38	27	20.0%	69.8%

Financial Indicators	Actual	Budget	Prior Yr	% Budget	% Prior Yr
Rev > Exp	-	1,000,000	800,000	(1.00)	(1.00)
EBITDA	-	2,500,000	1,500,000	(1.00)	(1.00)
Operating Margin Ratio	0.00%	8.00%	7.00%	(1.00)	(1.00)
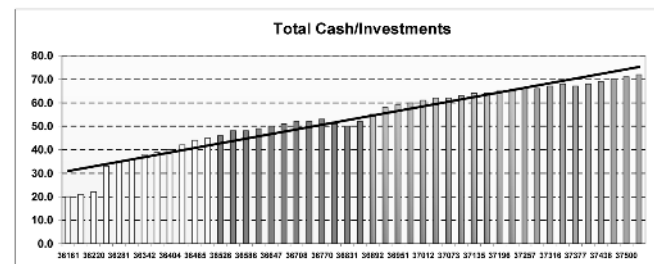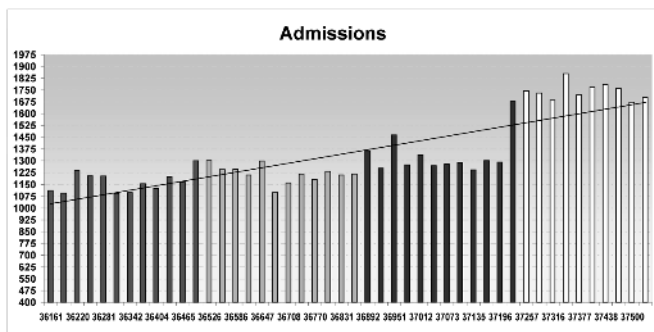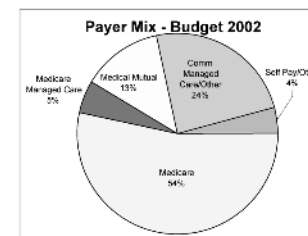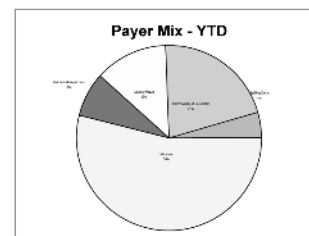
Productivity/Ratios	Actual	Budget	Prior Yr	% Budget	% Prior Yr
Paid FTEs	1,200	1,400	1,501	14.3%	20.1%
Worked FTEs	1,100	1,200	1,380	8.3%	20.3%
Contract FTEs	5	-	37	n/a	86.4%
Worked & Contract FTEs/Occ Bed	3.50	3.60	3.89	2.8%	10.0%
Salaries & Benefits/FTE	-	99,999	99,888	1.00	1.00

Utilization	Actual	Budget	Prior Yr	% Budget	% Prior Yr
Medicare Case Mix	1.5000	1.4000	1.6000	7.1%	-6.3%
Total Case Mix	1.2000	1.1000	1.5000	9.1%	-20.0%
Adult & Pediatric LOS	4.10	4.10	4.50	0.0%	8.9%
Total LOS	5.10	5.11	5.80	0.2%	12.1%
Med/Surg Supply/Adj Pat Day	-	125.00	135.00	1.00	1.00
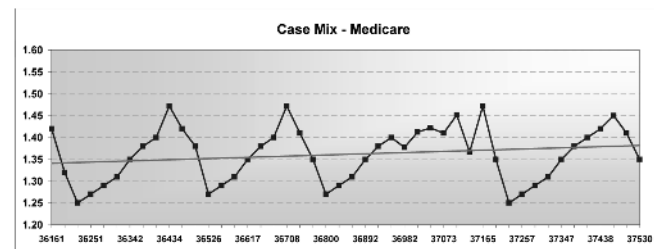
implementation. The sidebar lists the advantages of this approach.

Senior executives who operate under slow decision-making processes should be well aware that they have no choice but to change such processes. A cursory look at mature industries outside healthcare reveals that organizations that are unable to move quickly in response to change do not survive. Some of the best-known and respected healthcare institutions nationwide are having to call in turnaround companies to help them with their inefficient decision-making processes. As one quote states, "[a]wareness need never remain superficial in an educated person, whereas unawareness is certain to be ignorance probably compounded by arrogance" (National Conference on Higher Education 1988). Moreover, Ray Ewing of All State Insurance, had also uttered,

SIDEBAR

BENEFITS OF THE SEVEN-STEP APPROACH TO DECISION MAKING

- Offers a rational, logical, and sequential approach to decision making.
- Applies rigor to an often haphazard process.
- Facilitates timely and efficient decision making.
- Ensures buy-in of relevant stakeholders through a group/team process.
- Reduces potential for decision making based on politics or squeaky wheels, thereby enhancing staff morale.
- Encourages data- and information-based decisions that are evaluated according to quantitative and qualitative criteria.
- Broadens search for decision alternatives, and promotes out-of-the-box thinking.
- Identifies impact of decision in multiple performance dimensions (e.g., financial, strategic, operational, quality, employee/physician/patient satisfaction).
- Facilitates the building and achievement of consensus.
- Monitors decision effectiveness in the short and long terms.
- Reduces likelihood of decision traps and incremental or "satisficing" decision-making behavior.

"[I]gnorance gets us into trouble; arrogance keeps us there." Executives who maintain the arrogance of slow decision-making processes will most certainly be ensuring their organizations' demise.

REFERENCES

Ahmanson, W. 1990. Quoted in *Tough Choices: The Decision-Making Styles of America's Top 50 CEOs*, by W. J. Pelton, S. Sackmann, and R. Boguslaw, 121. Homewood, IL: Dow Jones-Irwin.

Bethune, G. 1999. From *Worst to First: Behind the Scenes of Continental's Remarkable Comeback*. New York: John Wiley & Sons, Inc.

Drucker, P. F. 1967. "The Effective Decision." *Harvard Business Review* 45 (1).

Etzioni, A. 1989. "Humble Decision Making." *Harvard Business Review* 67 (4): 122–123.

Hammond, J. S., R. L. Keeney, and H. Raiffa. 1998. "The Hidden Traps in Decision Making." *Harvard Business Review* 76 (5): 47–58.

Hiebert, M., and B. Klatt. 2001. *The Encyclopedia of Leadership*. New York: McGraw-Hill.

Johnson, L. B. Quote. [Online information; retrieved 9/03.] http://www.brainyquote.com/quotes/quotes/l/lyndonbjo137074.html.

Joint Commission on Accreditation of Healthcare Organizations (JCAHO). 1999. *Information Management: Questions and Answers for Hospitals*. Oakbrook Terrace, IL: JCAHO.

———. 2002. *A Guide to Emergency Management Planning in Health Care*. Oakbrook Terrace, IL: JCAHO.

Kamholz, K. 2003. "Divesting Non-Core Businesses." [Online information; retrieved 9/03.] *Kaufman Hall Report* Fall issue. www.kaufmanhall.com.

Lyles, R. I. 1982. *Practical Management Problem Solving and Decision Making*, 62. New York: Van Nostrand Reinhold Company.

March, J. G., and H. A. Simon. 1958. *Organizations*, 137–71. New York: John Wiley & Sons, Inc.

National Conference on Higher Education. 1988. Quoted in *Simpson's Contemporary Quotations* by J. B. Simpson. New York: Houghton Mifflin.

Radford, K. J. 1975. *Managerial Decision Making*, 216. Reston, VA: Reston Publishing Company.

Scholl, R. W. 2003. "Dealing with Multiple Conflicting Criteria." [Online information; retrieved 3/03.] www.cba.uri.edu/Scholl/Notes/Decision_Making_Models.htm.

Sims, R. R. 1994. *Ethics and Organizational Decision Making*. Westport, CT: Quorum Books.

Tversky, A., and D. Kahneman. 1986. "Rational Choice and the Framing of Decisions." *Journal of Business* 59 (4): S257, 271–75.

Weiss, W. H. 1985. *Decision Making for First-Time Managers*, 156. New York: American Management Association.

Case Study:

Decision Process for a Hospital-Physician Alignment

This chapter shows a real-life application of the seven-step decision-making approach.

DURING THE 1990S, BOTH HOSPITALS AND physicians felt the impact of constrained reimbursement, increasing costs, and declining margins. These and other trends currently affect hospitals and physicians and are likely to continue well into the foreseeable future. Reduced Medicare reimbursement for physician services, the burden of uncompensated care that results from the growing population of uninsured, ▶

state fiscal crises that limit Medicaid reimbursement, and aging facilities will continue to threaten the financial health of providers nationwide.

A closer alignment of physicians and hospitals intuitively could enhance efficiencies and bargaining power. However, economic pressures appear to be fueling increased competition between these two parties. Physicians are opening specialty hospitals in high-margin niches such as cardiology and orthopedics, thereby siphoning from hospital coffers reimbursement for historically profitable services. However, physician-owned specialty hospitals may be lacking management expertise, capital, information systems, and marketing support.

The exploration and pursuit of alignment strategies deserve intense focus. A true alignment offers physicians contracting clout, management expertise, and capital while providing hospitals the short- and long-term revenue flow necessary to remain competitive. Given the daunting nature of the current healthcare environment and the very real opportunities possible through a true strategic and financial alignment, decision making about alignment strategies must occur through a high-quality process.

This chapter presents a real-life application of the seven-step decision-making approach described in this book. Through the formation of an alliance between a group of independent practice physicians and a hospital in the Southeast, the approach ultimately resulted in the creation of the Best-Practice Institute, a hospital-physician alignment. The goal of the institute was to enhance the quality of community care using evidence-based clinical standards and to improve the support services available to member physicians.

THE "SLOW-NO" PERIOD

In 1999, a group of physicians who had privileges at the hospital but were practicing independently asked hospital executives to form an alliance with them. The physicians wanted to improve clinical quality and outcomes through the use of evidence-based medicine. Although the concept of evidence-based medicine was in its formative stage at the time, the physicians were aware of its likely growth nationwide because of its ability to reduce variability in practice patterns. They also foresaw the link between physicians' use of evidence-

based best practices and financial reimbursement. Pay-for-performance plans, designed to improve care by encouraging physicians to follow specific treatment guidelines, were on the horizon. Financial incentives for physicians who could demonstrate their ability to improve care quality were becoming increasingly common.

For a number of years, the hospital's executives were not responsive to the physicians' request. Their concerns centered on whether such an alliance would be successful, how much it might cost, how it would be structured, who would provide leadership, and a myriad other issues. Because other hospitals had not yet established similar alliances, the hospital executives did not have peer organizations to which they could turn to evaluate their concerns and obtain benchmarks. They deferred decision making, which frustrated physicians who perceived the foot dragging as a "slow no." Meanwhile, the hospital's key competitor had just been acquired by a for-profit system and wanted to be more responsive to physician needs and ideas and hence was moving quickly in making decisions.

In 2002, following three years of providing physicians with a slow no about alignment possibilities, the hospital found itself in a significantly negative financial environment. Its market share had eroded dramatically, particularly in profitable areas such as cardiology, orthopedics, neurosurgery, and women's services. A number of physician-owned ambulatory facilities had opened in the same service area, and the hospital had a plentiful supply of empty beds. Faced with such challenges, the executives became willing to reconsider their position and give serious consideration to alignment strategies. Affiliated physicians were still interested in aligning with the hospital due to their long-term loyalty to the organization.

A description of the seven-step process used to make the decision about whether or not to proceed with an alliance follows.

STEP 1: UNDERSTAND THE ORGANIZATION

Culture and style played a major role in the decision-making processes of both parties.

The physicians' decision-making style was controlling, which reflected their clinical training. Accustomed to independent and rapid decision making about clinical care, the physicians were willing to make a decision that they thought had a

surety of success in the range of 65 percent to 70 percent. They saw the value of, and were interested in, aligning with the hospital through which they provided the bulk of their acute care services. In their eyes, alignment was a sure bet.

The executives, on the other hand, exhibited an analyzing style. In the hopes of achieving an 85 percent to 90 percent surety of success, the executives made decisions slowly after gathering all the information. If relevant information was not available, they deferred decision making.

Barriers to change were numerous. Fear of a loss of control was significant for the executives. Development and use of best-practice protocols had to be clinically driven, with physicians in the driver's seat. "Might giving up some control come back to bite us?" the executives asked. Fear of innovation and fear of being on the "bleeding edge" also were a factor. The executives were more comfortable assuming the follower role than the innovator role. Because the cost of the alignment strategy initially was not clear, the executives were unwilling to make a decision, preferring instead to move slowly until the financial ramifications of the idea became

apparent. Without information about how other hospitals had fared with such an alignment, the executives felt at a distinct disadvantage, wondering, Would the hospital's liability increase? How would such an alliance be structured? Reimbursement for services performed (piecework reimbursement) was familiar, so how might payment based on outcomes affect the hospital's bottom line?

The hospital's deteriorating market share and financial performance spurred the removal of these barriers and willingness to approach decision making in a new manner.

STEP 2: DEFINE THE OBJECTIVE OF THE DECISION

The hospital executives and physicians recognized that the decision to be made was a strategic one. The decision to align would affect how care was to be delivered in the future and thus was likely to have an impact on the long-term success of both parties. The objective of the decision was to determine whether an alignment between physicians and the hospital could ensure the provision of the highest possible quality of care

while generating revenues that would secure the financial competitiveness of doctors and the hospital alike. Problems to be solved by the decision included how the alignment would be structured and financed and whether an alignment could improve operational efficiencies for both parties. A key issue was whether payers and/or business coalitions in the area would contract with the aligned entity to provide patient volume at a premium rate for the entity.

Decision participants included six physicians who had spearheaded the alignment idea, the hospital's CEO, CMO, vice president of managed care and marketing, and the physician directing the hospital's quality efforts. This core group (the work group) met every two weeks for five months.

A larger need-to-know group, which was kept informed of the work group's activities, included the hospital's CFO, CNO, CIO, vice president of operations, and 15 senior managers whose responsibilities spanned clinical and administrative departments. The six physicians in the work group kept the hospital's medical staff leadership, including the chief of staff and medical staff officers, informed on a regular basis. They also were in touch regularly with influential physician leaders in the community whose acceptance of the alignment strategy would help ensure its success. Each member of the work group had to keep four or five physicians in the know.

The work group attempted to make the decision indicators as tangible as possible. In the area of clinical quality, the group agreed to developing clinical standards of care and service targets that met or exceeded those established by Premier, Centers for Medicare & Medicaid Services, and the Leap Frog Group. In the area of financial performance, the group established the goals of increasing patient volume, obtaining advantageous managed care contracts, and enhancing operational efficiency. For example, group purchasing through an aligned organization was projected to achieve savings of 5 percent to 20 percent in healthcare insurance, malpractice insurance, and practice supplies.

The group recognized that implementation and use of an electronic medical record (EMR) across all hospital departments and physician practices would be "the enabler" for capturing and reporting data. Data analysis would lead to improvements in clinical quality, patient safety, and documentation.

STEP 3: IDENTIFY AND PRIORITIZE THE FACTORS THAT WILL INFLUENCE THE DECISION

Decision criteria were both value based and predictive based. Improved quality of care, normally considered value based, was the number one, front-and-center criterion. The work group identified means to add a predictive component by using standards established by organizations like the Leap Frog Group. The group learned that access to 1,800 clinical protocols, covering the continuity of care between physicians' offices and hospitals, was available through a major university and could be adjusted for community standards. Financial performance was a second criterion. The alignment must bring cost efficiencies and increased revenue. No vote was needed on prioritization of the two key criteria because the group had consensus on the critical importance of clinical quality improvement.

Key stakeholders who were needed to ensure agreement and commitment to the solution included the members of the work group, the need-to-know group, community physicians, the

hospital board, and purchasers. Constraints included capital, time, staffing, legal/regulatory requirements, information technology, and communications.

STEP 4: COLLECT INFORMATION NEEDED TO MAKE THE DECISION, AND GENERATE DECISION OPTIONS

Both the work group and the need-to-know group were involved in collecting the information needed to make the decision. Data acquisition centered around the following:

- *Information systems.* Because an alignment would not achieve operating efficiencies without an EMR system, research into EMR alternatives had to be done. A member of the need-to-know group identified EMR vendors, explored alternative systems, visited sites where specific EMR systems had been implemented, and obtained cost information.
- *Organizational structure.* The work group obtained information regarding alternative ways of

structuring an alliance, both from a legal perspective and from a staffing standpoint.

- *Payer/business coalition/member physician (market) interest.* Because the ability to obtain managed care and business coalition contracts was key to an alignment's success, the work group talked with potential payers in the community about offering a community-rated product. They also approached community physicians about joining the Best-Practice Institute.

- *Financial implications.* The work group explored costs and revenues that might be involved in pursuing the alignment strategy (see Figure 2, Chapter 3).

The decision options were to proceed with a hospital-physician alignment, not to proceed with such an alignment, or to defer the decision (as had been done in the past).

STEP 5: EVALUATE OPTIONS, AND MAKE THE BEST CHOICE

Step 4 yielded information that was favorable to a decision to proceed with alignment. By using the hospital's information technology (IT) infrastructure, the organization could implement an EMR system for physician practices without incurring significant costs. Costs were limited to software leases. Existing staff could be used to manage the alliance. The physician responsible for the hospital's quality efforts would monitor the alliance's impact on care quality. The alliance did not need to be structured as a separate corporation because the federal government allows vertical integration to improve care, including contracting by a vertically integrated entity.

Interest was high among local payers and business coalitions, with some expressing an interest in contracting immediately. Interest in the alignment among community physicians was similarly high. The costs of proceeding with the Best-Practice Institute were low because existing IT infrastructure and staff would be used.

The work group unanimously agreed to proceed with alignment. "Why wouldn't we want to do this?" the members asked. Having the same decision makers at the meeting table every other week built consensus. Few members missed meetings, in spite of busy travel schedules, and

everyone took advantage of the option for teleconferencing if they were off site. Decision barriers were overcome one by one. The hospital's deteriorating financial and market share position had already removed the status-quo trap—the organization simply could no longer afford to do nothing. The consensus-building process enhanced trust and encouraged hospital executives and physicians to share control.

STEP 6: DEVELOP AN ACTION PLAN, AND IMPLEMENT THE DECISION

The work group moved quickly to develop a business plan that outlined specific actions needed to implement the decision. The team identified two high-priority items critical to the alliance's success in Year 1:

1. *Address the hospital's length of stay (LOS) problem.* High LOS was costing the hospital $11 million a year. The work group agreed that reducing LOS would be one of the first joint initiatives.
2. *Provide community physicians with a tangible benefit of membership*

in the Best-Practice Institute. The work group identified affordable practice insurance and small-group health insurance as visible benefits, which thereby facilitated buy-in. Table 7 is a summary of alignment advantages to physician members.

The work group identified three key program components for the Best-Practice Institute: preventive health programs, education for both physicians and consumers, and screenings for early detection. Specific actions were outlined for each. For example, three screening sessions (for cholesterol and diabetes) were scheduled for Year 1. Specific clinical-quality indicators were defined, including patient satisfaction, infection rate, return to surgery, medication errors, adjusted mortality, certifications, and average LOS. Benchmarks for each indicator were set as well. In addition, the group established market share goals and marketing strategies and a timetable for implementing action items (see Table 8 on page 52).

The decision to proceed with an alignment between the hospital and physicians was implemented in early 2003. Four key initiatives were the focus: EMR implementation, contracts

Table 7. Membership Benefits for Physicians	
Alignment	**Benefits**
Alignment with hospital	• Maintain practice autonomy • Receive advantages of multispecialty group practice without merging professional corporations • Improve patient care • Access more patients • Reduce wasted physician time and practice resources • Improve patient finances • Increase market share
Clinical integration • EMR • Gainsharing • Clinical trials	• Improve practice efficiencies • Reduce paperwork • Share in hospital efficiency cost savings • Generate incremental practice revenue
Group purchasing • Healthcare insurance • Malpractice insurance • Practice supplies	• Possible premium savings of 5 percent to 20 percent • Potential premium reductions of 5 percent to 10 percent • Access to group purchasing • Purchasing with discounts of 5 percent to 8 percent
Joint ventures • Outpatient clinical services • Medical real estate and equipment	• Share in "hospital" technical fees • Improved outpatient efficiency • Low-risk, reasonable return on investment
Regional program • Marketing representatives • Day clinics • Institute "affiliate"	• Increased patient volume • Personal introduction to potential referral sources • Ongoing outreach relationship • Improved patient transfers and specialty consults
Marketing and health screenings	• Additional office-practice volume • Group-practice-like "brand identity"
Managed care contracts	• Improved fee schedule • Ability to attract future contracts from the Centers for Medicare & Medicaid Services and regional payers • Use of existing infrastructure and not-for-profit legal status
Top 100 hospitals	• Physician prestige • Increased number of office patients • Enhanced managed care contracts

Table 8. Action Items Timetable

Goal	Year 1				Year 2				Year 3			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Regional physician development	▓	▓	▓									
Physician marketing and screenings	▓	▓	▓									
Benchmarks and measures identification	▓	▓	▓									
EMR system implementation			▓	▓	▓							
Group purchasing	▓											
First managed care contract acquisition		▓										
Small-group health and benefits acquisition			▓	▓								
Joint ventures				▓	▓	▓						
Alliance "report card" development				▓	▓	▓						
Malpractice-insurance acquisition					▓	▓						
Gainsharing						▓	▓	▓				
National clinical benchmarks and protocols establishment							▓	▓	▓			
Inclusion of designated programs in Top 100 lists											▓	▓

Note: Shaded areas indicate where activities were projected to occur.

with major payers, insurance for affiliated physicians, and LOS reduction. Within just a few months, the Best-Practice Institute had achieved the following:

- Obtained one major contract with a business coalition and another with an insurer
- Successfully negotiated a favorable rate for practice and healthcare insurance
- Commenced implementation of an EMR in physician practices
- Implemented systems-based and practice pattern changes to improve LOS

STEP 7: MONITOR THE DECISION'S EFFECTS, AND REVISE AS APPROPRIATE

Although key stakeholders and others involved are still implementing the Best-Practice

Institute decision, clinical, market, and financial indicators are already in place to facilitate monitoring. The "upside" revenue potential for the institute is projected to exceed its cost by a factor of 19 to 1. If specific clinical and financial indicators are not achieving targeted levels, the executives will revise relevant action plans.

Suggested Reading List

Argyris, C. 1966. "Interpersonal Barriers to Decision Making." *Harvard Business Review* 44 (2): 84–97.

Bazerman, M. H. 1997. *Judgment in Managerial Decision Making*. New York: John Wiley & Sons, Inc.

Clark, G. L., and J. C. Marshall. 2002. "Decision-making: Models of the Real-world and Expertise." Presented at the National Association of Pension Funds Annual Investment Conference, Edinburgh, Scotland, March 13–15.

Clemen, R. T. 1997. *Making Hard Decisions: An Introduction to Decision Analysis*. Pacific Grove, CA: Duxbury Press.

Davis, L. 1998. *Shortcuts for Smart Managers*. New York: American Management Association.

Donaldson, G., and J. W. Lorsch. 1983. *Decision Making at the Top: The Shaping of Strategic Direction*. New York: Basic Books.

Einhorn, H. J., and R. M. Hogarth. 1987. "Decision Making: Going Forward in Reverse." *Harvard Business Review* 65 (1): 66–70.

Epstein, M. J., and R. A. Westbrook. 2001. "Linking Actions to Profits in Strategic Decision Making. *MIT Sloan Management Review* 42 (3): 39–50.

Etzioni, A. 1989. "Humble Decision Making." *Harvard Business Review* 67 (4): 122–26.

Garvin, D. A., and M. A. Roberto. 2001. "What You Don't Know About Making Decisions." *Harvard Business Review* 79 (8): 108–16.

Hammond, J. S., R. L. Keeney, and H. Raiffa. 1998. "The Hidden Traps in Decision Making." *Harvard Business Review* 76 (5): 47–58.

———. 1998. *Smart Choices: A Practical Guide to Better Decisions*. Cambridge, MA: Harvard Business School Press.

Harrison, E. 1999. *The Managerial Decision-Making Process*. Boston: Houghton Mifflin Co.

Hiebert, M., and B. Klatt. 2001. *The Encyclopedia of Leadership*. New York: McGraw-Hill.

Kaner, S., L. Lind, C. Toldi, S. Fisk, and D. Berger. 1996. *Facilitator's Guide to Participatory Decision-Making*. British Columbia, Canada: New Society Publications.

Keeney, R. L. 1996. *Value-Focused Thinking: A Path to Creative Decisionmaking*. Cambridge, MA: Harvard University Press.

Klein, G. 1999. *Sources of Power: How People Make Decisions*. Cambridge, MA: MIT Press.

Lahti, R. K. 1996. "Group Decision Making within the Organization: Can Models Help?" [Online information; retrieved 3/03.] Center for the Study of Work Teams (University of North Texas). www.workteams.unt.edu/reports/lahti.htm.

Lyles, R. I. 1982. *Practical Management Problem Solving and Decision Making*. New York: Van Nostrand Reinhold Company.

March, J. G. 1994. *Primer on Decision Making: How Decisions Happen*. New York: Free Press.

March, J. G., and J. P. Olsen. 1982. *Ambiguity and Choice in Organizations*. Bergen, Norway: Universitetsforlaget.

Pelton, W. J., S. Sackman, and R. Boguslaw. 1990. *Tough Choices: The Decision-Making Styles of America's Top 50 CEOs*. Homewood, IL: Dow Jones-Irwin.

Philp, T. 1985. *Improve Your Decision Making Skills*. London: McGraw-Hill Book Company (UK) Limited.

Radford, K. J. 1975. *Managerial Decision Making*. Reston, VA: Reston Publishing Company.

Raiffa, H., J. Richardson, and D. Metcalfe. 2003. *Negotiation Analysis: The Science and Art of Collaborative Decision Making*. Cambridge, MA: Belknap Press.

Russo, J. E., P. J. H. Schoemaker, and M. Hittleman. 2001. *Winning Decisions: Getting it Right the First Time*. New York: Doubleday.

Scheidel, T. M., and L. Crowell. 1979. *Discussing and Deciding: A Desk Book for Group Leaders and Members*. New York: Macmillan Publishing Co., Inc.

Schick, F. 1997. *Making Choices: A Recasting of Decision Theory*. Cambridge, MA: Cambridge University Press.

Sims, R. R. 1994. *Ethics and Organizational Decision Making*. Westport, CT: Quorum Books.

Succi, M. J., S. D. Lee, and J. A. Alexander. 1998. "Trust Between Managers and Physicians in Community Hospitals: The Effects of Power Over Hospital Decisions." *Journal of Healthcare Management* 43 (5): 397–415.

Tversky, A., and D. Kahneman. 1986. "Rational Choice and the Framing of Decisions." *Journal of Business* 59 (4): S257, 271–75.

Veney, J. E., and A. D. Kaluzny. 1998. *Evaluation and Decision Making for Health Services*. Chicago: Health Administration Press.

Walshe, K., and T. G. Rundall. 2001. "Evidence-based Management: From Theory to Practice in Health Care." *The Milbank Quarterly* 79 (3): 429–57.

Weiss, W. H. 1985. *Decision Making for First-Time Managers*. New York: American Management Association.

Welch, D. A. 2001. *Decisions, Decisions: The Art of Effective Decision Making*. Amherst, NY: Prometheus Books.

Acknowledgments

We want to express our sincere appreciation to our colleagues, clients, and the many members of the American College of Healthcare Executives who contributed their ideas and experiences to make this book a practical guide for executives industrywide. We are grateful also for the encouragement of Audrey Kaufman of Health Administration Press who saw the germ of the idea for this book and planted it; to editorial consultant Nancy Gorham Haiman, whose research and writing helped make the idea grow; and to Jane Williams of Health Administration Press for her expert editing.

About the Authors

Ken E. Mack, FACHE, is president of DMI *Transitions* (DMI). Based in Cleveland, Ohio, this independent firm provides consulting services to healthcare providers. Its focus is on developing profitable business solutions through well-planned and well-executed strategic planning, business development, operations management, and physician integration activities. Since Mr. Mack founded the firm in 1984, DMI has assisted more than 500 healthcare providers in developing profitable business relationships.

Prior to 1984, Mr. Mack was vice president of business development for Akron General Medical Center, a strategic planner and product manager for General Electric, and the national marketing director for the Stouffer Corporation. Board certified in healthcare management and a Fellow of the American College of Healthcare Executives (ACHE), Mr. Mack serves as faculty for ACHE, the Healthcare Financial Management Association, the American Medical Association, and the American Hospital Association. Mr. Mack earned an M.B.A. in marketing from Cleveland State University and a

B.S. in management from Bowling Green State University.

Mary Ann Crawford, Ph.D., R.N., is president of the *Transitions* Division of DMI. Dr. Crawford's consulting practice focuses on operations, including implementing new clinical services (e.g., heart surgery), initiating department turnarounds to reduce costs, and providing interim management support with hands-on assistance.

Previously, Dr. Crawford held positions at two 500-bed teaching hospitals: as senior vice president/chief operations officer at Timken Mercy Medical Center and as vice president of clinical services at Akron General Medical Center. She has 38 years of experience in the healthcare field and has managed both nursing and clinical service areas. In addition, she is a former faculty member of the University of Akron College of Nursing and has served as faculty for ACHE. Dr. Crawford has a Ph.D. in educational administration and an M.S.N. from Kent State University, and she holds a B.S.N. from St. John College.

Mary C. Reed is president of the Medical Integration Division of DMI. Ms. Reed is recognized for her expertise in managed care, physician integration, and strategic business planning. Her experience spans both the private and public sectors, including such fields as pharmaceutical marketing, banking, retail management, and healthcare. In healthcare, she specializes in strategic clinical service line development and has extensive experience in developing joint ventures between healthcare providers.

Ms. Reed holds an M.B.A. from the University of Dayton and a B.A. from Ohio Dominican College. She speaks frequently for such organizations as the Alliance for Healthcare Strategy and Marketing, Medical Group Management Association, Managed Care Congress, Employee Assistance Programs Association, and American Association of Health Care Plans.