

Introduction: Managing for Quality and Performance

CHAPTER OBJECTIVES

After reading this chapter, readers will:

- Be familiar with the framework of this book.
- Understand the importance of sound managerial practices in contemporary organizations that provide programs and services related to health.
- Appreciate the advantages of applying systems thinking to management.
- Understand the importance of improving quality and performance while demonstrating value.
- Appreciate that quality management and quality initiatives contribute to organizational success.

CHAPTER SUMMARY

This chapter introduces the concepts of management, systems thinking, and quality. It reviews their importance and emphasizes their interrelationship. This introduction provides the basis for the other chapters in this book.

CASE STUDY

Elizabeth was visiting a prospective graduate school and was talking to Dr. Lombard, an academic advisor.

Dr. Lombard broke the ice by saying, “So, Elizabeth, please tell me a little about your schooling to this point and about your career goals.”

“I finished college last spring,” Elizabeth replied. She continued, “My grade point average was above 3.64. I majored in liberal studies because I was not sure what I wanted to do with my life. I had a part-time job during college and worked for a bank sorting checks and routing papers at night. I talked my way into an internship at a local health organization. I shadowed the chief executive officer and then completed a data analysis project. That was really interesting. I was evaluating the results of a year-long quality initiative. Productivity in one department increased by 19%. Nobody asked me for my opinion, but if they had, I would have said that the increase could have been greater if they had also worked at improving customer service.”

“Have you reached any conclusions as a result of your studies and working experiences so far?”

Elizabeth hesitated and then spoke, “Concerning a career, no conclusions yet. However, I liked the work and the environment in the health organization. Doing something that helps others is appealing. I noticed some similarities in the way employees were handled at different locations within the same organization. I find that intriguing but am not sure where to begin. I guess that is where you come in.”

If you were Dr. Lombard, what advice would you offer to Elizabeth?

INTRODUCTION

Managers are found in every organization. They apply principles of management to address basic organizational needs. Systems thinking provides a useful paradigm and structure for managerial activities. Quality initiatives and good customer service enhance the operations and potential for success of any organization. This chapter introduces all three subjects: management, systems thinking, and quality improvement.

MANAGEMENT

Management evokes images of control, motivation, and operations—internal activities that are essential in organizations. Referring to the individuals who

perform those activities, one contemporary source defines management as “those in charge of running a business” (Princeton University 2010). Another offers the following definition: “the person or persons that are in charge of running a business establishment, organization or institution” (American Heritage 2006). Traditionally, the primary activities (also referred to as functions) of managers have been categorized as planning, organizing, leading or motivating, and controlling (Schermerhorn 2009). In this book, we use the term *facilitating* to encompass the motivational and leadership activities emphasized in health organizations. We also add the activity *improving* to each of the four functions to emphasize the foundational importance of continuous quality improvement in all management activities. The chapters of this book are grouped around the four management functions of: *planning for improvement*, *organizing for improvement*, *facilitating improvement*, and *control and improvement*. Managers and the four categories of management activities are essential to ensure the smooth operation of an entity.

Management has many experts (both by reputation and by self-proclamation) who have published books on the subject (see references and resources at the end of the chapter). The common thread is the need to guide an organization toward its goals. A related common element of a manager’s job is providing guidance and sufficient resources for employees to be productive. Other important aspects of managing that have emerged more recently include applying systems thinking, continuously improving the quality of services and programs, and providing excellent customer service. These are discussed in greater detail later in this chapter.

Competencies are defined as effective applications of knowledge, skills, attitudes, and values in complex situations (Calhoun et al. 2002). A diverse range of managerial competencies is needed in all working milieus. Work that is related to health is undertaken in a wide variety of settings, including private organizations that are classified as for-profit or nonprofit and public (government-funded) organizations. The governance and financial guidelines that apply to for-profit, nonprofit, and public organizations are different. The managerial competencies are, however, quite similar. There are some differences depending on the size of the organization. Managers of small organizations tend to be generalists who must be able to meet a variety of demands that emerge in their day-to-day activities. In comparison, managers who work in large organizations may become specialists who focus on a category of complex issues, such as finance, human resources, strategic planning, or program evaluation.

All managers need to understand people. They must understand leadership, evaluation, motivation, personalities, and communication styles. Successful managers are able to apply these basics to the people that they work with and

supervise. They must be able to adjust their expectations of individual employees. They must also be adroit at helping their employees develop their competencies and prepare them for advancement.

Management is challenging but is rarely boring. Achieving success as a manager requires the ability to modify plans on short notice. Managers must trust their employees and give them opportunities to grow. Management also includes accepting the knowledge that employees will occasionally fail and being able to help them learn from failure. Successful managers have open and prepared minds. Finally, managers must be committed to their employees, their employer, and themselves. In addition to commitment, they must respect all three. Despite the challenges of management and the hard work that is required to complete many tasks, the satisfaction that accompanies success is highly rewarding.

Although full-time managers have the primary responsibility for carrying out the management activities of an organization, in fact, all employees contribute to their fulfillment and, by extension, to organizational success. All employees of an organization, whether they are managers or not, contribute to planning, organizing, facilitating, and controlling their organizations for improvement and performance. All employees benefit from having some of the competencies of management and from understanding the managerial functions. No matter what their role in the organization, employees make choices about how to manage their own work and often assist in managing the work of several team or project members. In effective organizations, employees both identify with and contribute to the activities of management rather than viewing managers as members of a different group or, worse, as adversaries or enemies.

If employees understand and support (in addition to challenging and trying to improve) the management activities of their employer, then the organization is better able to move quickly and efficiently to improve processes and outcomes. Employees also feel more invested in their organization and more empowered in their work. Employees become allies, rather than victims, of management. For these reasons, it is important that individuals understand and participate in fulfilling the management functions of their employer's organization. This applies to all persons in a given organization and is independent of their positions.

SYSTEMS THINKING

A key advance in modern management practice was the realization that managerial decisions are rarely, if ever, made in a vacuum. Each decision has implications for other parts of the organization and often for suppliers and customers. For example,

the decision to reorganize a department is likely to affect how employees interact with workers from other departments and with external stakeholders. In addition, every management decision has consequences (some of which are unanticipated) that unfold over weeks, months, and even years. A decision to reorganize has long-term consequences for employee morale, retention, and performance, and for community relations. Better decisions result when the interdependent effects and long-term consequences of managerial actions are considered in advance.

Generically, this approach to decision making can be referred to as *systems thinking*. Systems thinking can be defined as “a general conceptual orientation [that is] concerned with the interrelationships between parts and their relationships to a functioning whole, often understood within the context of an even greater whole” (Trochim et al. 2006, 538). Systems thinking has been characterized as *forest* thinking rather than *tree-by-tree* thinking. This highlights the importance of understanding the context of relationships in addition to their details. Systems thinking has also been described as *dynamic* thinking rather than *static* thinking because it pushes people to consider the consequences of their actions over time (Richmond 2000). Systems thinking has been advanced as a basic competency for all public health practitioners (Association of Schools of Public Health 2010), and it has received widespread application in the study of public health policy. Almost by definition, preventing health problems and promoting population health through public policy require systems thinking because the consequences of promotion and prevention unfold over long periods of time and involve complex interrelationships. Systems thinking also is promoted as a basic competency for managers in hospitals and other providers of clinical health services through the competency models of major professional associations such as the American College of Healthcare Executives, the American Organization of Nurse Executives, and the Healthcare Financial Management Association (Healthcare Leadership Alliance 2011).

A classic review and application of systems thinking (Senge 1993) in the early 1990s prompted interest in more widespread applications of systems thinking in management decision making. To encourage application of systems thinking, each chapter following this one concludes with an example of applied systems thinking in situations and organizations related to management. Several terms and ideas that underlie systems thinking for managers in organizations that provide programs and services related to health will be introduced next.

Systems are groups of interacting or interdependent elements that form a unified whole. Organizations clearly are systems. They are comprised of inputs (employees, managers, and financial resources) and processes (policies, procedures, and production activities) that interact to produce outputs (products, programs,

and services). An organizational system is open to influences from its environment, particularly suppliers of inputs and recipients or purchasers of outputs. To visualize changes in a system over time, the concept of a *causal loop* is very useful. Causal loop diagrams portray cause-and-effect linkages within a system. Causal loops are circular, rather than straight lines. They encourage thinking about changes that occur over time and about feedback effects. *Feedback* is information about change that leads to further modifications. Performance reviews of employees are examples of a common feedback mechanism that exists within organizational systems. Causal loops can either be *reinforcing*, where change in one direction causes even more change in that same direction, or *balancing*, where change in one direction creates resistance in the opposite direction. The result of a *balancing loop* is a stable situation or equilibrium.

Organizational growth is an example of a *positive reinforcing loop* (also referred to as a virtuous cycle). Often, organizational growth creates new revenues or other sources of support, which spurs further growth. In contrast, a *negative reinforcing loop* (also referred to as a vicious cycle) leads to unwanted change. Organizational downsizing is an example of a negative reinforcing loop. Downsizing can reduce the quality of organizational outputs, decrease demand for organizational services, and stimulate further downsizing. Monitoring budgets by using variance analysis (reviewing deviations from expected expenditure allocations) is an illustration of a balancing causal loop. A negative variance causes managers to reduce spending or cut expenses, causing the budget to move back into equilibrium.

Causal loops form the building blocks for visualizing systems as they change over time. Management scholars have identified several (approximately 10) common types or storylines of system change. *System archetypes* are patterns that occur repeatedly in different settings (Pegasus Communications 2010). System archetypes are useful for training people to think dynamically about complex interrelationships.

Fixes that fail is an example of a system archetype. In the fixes that fail storyline, a solution (fix) is applied to a problem and has immediate positive results. However, the fix has unforeseen long-term consequences that eventually make the problem worse. A balancing loop in the short run is offset by the outcomes of a negative reinforcing loop that appears after some delay and eventually overwhelms the balancing loop. “Win today, lose tomorrow” summarizes the fixes that fail scenario. The tobacco industry in the United States “won today” for many decades by denying that smoking caused serious health problems. Those denials had the unintended long-term consequence of stimulating development of convincing scientific evidence that increased the liability of tobacco companies for damages, harming the industry in the long run. An example of a fix that fails

in the realm of management is rewarding a single employee who is vocal about needing a pay raise, without considering the more subtle, long-term demoralizing effects that such a single reward can have on the rest of the workforce.

A second systems thinking archetype is *drifting goals*, wherein a gradual downward slide in performance goes unnoticed, threatening the long-term future of a system. Suppose, for example, that managers in an organization tolerate rude behavior by an employee toward other employees and customers. Over time, the organization's acceptance of that behavior frees other employees to behave in the same rude manner. Levels of customer service and internal collaboration drift downward. Customers or clients gradually turn to other sources for services, threatening the organization's existence.

In addition to system archetypes, more formal systems thinking tools for management include simulation modeling, learning laboratories, and diagrams that portray organizational performance over time. Many quality improvement tools, including those covered elsewhere in this book, draw on systems thinking because they require that analysts uncover the truth (often, the story behind the story) by tracing quality problems back in time to discover their systemic root causes.

Systems thinking simplifies managerial life by helping managers to see meaningful, underlying patterns. With mastery of a few basic concepts and some practice, managers can make better decisions by foreseeing the system-level consequences of their actions.

QUALITY IMPROVEMENT

Quality improvement (QI) encompasses a set of methods and techniques that can be used to improve programs, services, products, or output of any organization. They can also be used to decrease organizational costs. The approach and scope of quality improvement programs can vary.

Two QI approaches are relatively common, top down and bottom up. In *top down*, senior leaders in an organization support QI as a method for improving performance, create a vision that provides one or more goals, and supply needed resources. In *bottom up*, lower-level workers are trained in basic QI methods and techniques and then encouraged to apply their training. The scope of QI can vary from relatively modest to extreme. *Transformational change* is defined as a radical alteration that involves a complete rethinking about the way an organization is structured or managed.

One specific example of a QI approach is *process engineering*, a methodology that analyzes operational sequences (Bonem 2008) and is used to improve operational efficiency. The ultimate goal of process engineering is to eliminate or

modify activities that do not add value. Others examples will be introduced in later chapters.

Manufacturing and service industries have been using QI methods and techniques for over 90 years. Although QI has been adopted extensively in many industries throughout the world, health organizations have lagged. Health care delivery organizations began adopting QI methods and techniques in the 1990s. Public health departments have only recently begun to use QI methods and techniques (Riley et al. 2010). The underlying premise behind improving the performance of health organizations and public health departments is that doing so will result in more affordable and higher quality health-related services and, ultimately, healthier people.

Applying Quality Improvement

The American health system has sophisticated care delivery capability, featuring complex technology and very committed providers. However, serious questions exist regarding quality, performance, and value. The health care system accounts for the largest sector of the economy. Americans currently spend almost \$2.5 trillion per year on health care, comprising approximately 17.6% of the total gross domestic product (Centers for Medicare and Medicaid Services 2011). This is the highest level of per capita spending in any country of the world. Despite this level of spending, the United States does not have the best health status measures or indices. Moreover, individuals receive approximately one-half of the services that should be delivered when they visit health care organizations (McGlynn et al. 2003). Approximately 25% to 35% of the services delivered have no effect on the outcome. Evidence suggests that many treatments and services are provided when less expensive care options would yield comparable results (Orszag and Ellis 2007).

The focus of the acute care sector is delivering individual care services with the primary goal of restoring health and caring for sick and dying persons. The public health sector focuses on communities with the goals of protecting health, enhancing health promotion, and improving the health of the general population.

Critics assert that the health care industry is ineffective and inefficient. Effectiveness means achieving high-quality results, whereas efficiency is defined as maximizing outcomes while minimizing costs. For example, from a financial perspective, hospitals are better off being full rather than empty. Physicians are paid when they interact with patients, independent of their health status. The delivery system is biased toward delivering services, independent of their value.

Questions regarding value and performance have been directed at the public health system. Approximately 5% of health care expenditures are made for public health services. The rest are directed to hospitals, physicians, and prescription drugs. Lifestyle issues such as poor nutrition and inadequate exercise have resulted in an obesity epidemic involving approximately 40% of adults, and 20% of American adults routinely use tobacco products. These two public health issues alone put tremendous upward pressure on health care spending. It is now estimated that three-quarters of all health care expenditures are made for chronic diseases that are related to diet (US Department of Agriculture 2011).

QI programs might be used to address several problems that have just been described. A review of treatment protocols could identify opportunities for procedural changes. A review of service delivery might reveal gaps in applications of existing service standards. A review of outcomes could help to identify unneeded treatments or services. Reviewing current programs has the potential to identify less expensive options. An analysis of treatment and service activities or needs might suggest potential modifications to the existing goals of restoring health and caring for sick and dying persons. Reviewing how the salaries of physicians and other care providers are determined might lead to changes in professional responsibilities and compensation that are more closely linked to the health status of their patients.

Analyzing the programmatic goals of public health might identify programs that have limited utility or uncover opportunities for new services. Such activities might lead to savings that could be reallocated to yield better results or improve productivity.

Although QI programs have great potential, they are not universal panaceas. Research has highlighted several risk factors for obesity in the American population. Inappropriate nutrition and inadequate exercise are two important examples. Modifying these behaviors will require more personal commitment and effort rather than organizational activities. The experience gained with addressing tobacco usage may provide some guidance that can be generalized to other personal activities that contribute to less than optimal health.

CONCLUSION

This chapter has introduced management, systems thinking, and QI. These three concepts are synergistic. Organizations and agencies that provide programs and services related to health benefit when the three concepts are applied. With the

concepts of management, systems thinking, and quality explained, readers will have a better understanding of the rest of this book.

CASE STUDY RESOLUTION

After thinking for a few moments, Dr. Lombard turned to Elizabeth and said, “Have you ever considered a career in management? The field needs people with inquisitive but open minds. After learning some fundamentals, you should have options. Before you make a commitment for additional training, let me give you something to read. After you have finished the material, come back, and we will continue this conversation.”

“Thanks,” Elizabeth said as Dr. Lombard handed her a copy of this book.

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- **Academy of Management:** <http://www.aomonline.org>
- **American Health Information Management Association:** <http://www.ahima.org>
- **American Society for Quality:** <http://www.asq.org/>
- **Applied Systems Thinking: When Smallpox Becomes a Threat Again:** <http://www.pegasus.com/aar/model3.html>
- **Centers for Disease Control and Prevention Syndemics Prevention Network:** <http://www.cdc.gov/syndemics/>
- **Institute for Healthcare Improvement:** <http://www.ihl.org/>
- **Journal of Healthcare Management:** <http://www.ache.org/PUBS/jhmsub.cfm>
- **National Institute of Standards and Technology, Baldrige National Quality Program:** <http://www.nist.gov/baldrige/>
- **One Health Initiative:** <http://onehealthinitiative.com/>
- **Robert Wood Johnson Foundation:** <http://www.rwjf.org/>
- **Society for Human Resource Management:** <http://www.shrm.org>
- **Systems Thinking:** <http://www.answers.com/topic/systems-thinking>
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