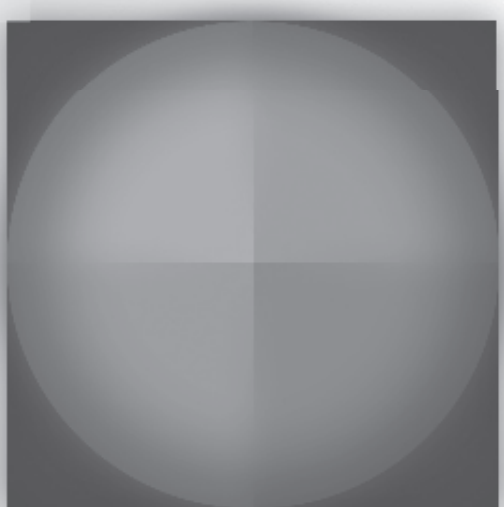
Integrating Quality and Strategy in Health Care Organizations



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To our wonderful children,
Dara and Mina

Sarmad Sadeghi
Afsaneh Barzi

To my wife,
Lynn,
for being so patient with my work load

Osama Mikhail

To my very understanding wife,
Linda Ann Shabot

M. Michael Shabot

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Foreword

Quality is elusive. Not only achieving it. But defining it. Measuring it. Planning it. And improving it. That's why *Integrating Quality and Strategy in Health Care Organizations* is a book whose time has come. Drs. Sarmad Sadeghi, Afsaneh Barzi, Osama Mikhail, and Michael Shabot take nothing for granted. They provide a bedrock definition for quality. They construct their arguments and observations on a foundational understanding of healthcare organization and the strategic role of quality in the evolving dynamics of the American healthcare system. The result is a document of surpassing utility, combining a basic introduction to the topic of quality in health care with high-level analysis and advice for current and future leaders in medicine and public health.

Quality in health care has moved to the forefront of the national discussion in recent years. Quality and safety are rightfully seen as key to controlling costs and improving outcomes and experience. Healthcare leadership is coming to understand that quality is more than compliance. It needs to become a permanent part of the organizational culture. Moreover, we have to plan to maintain and improve quality going forward. Quality needs to be front and center as we hire, build, and organize for the future. This calls for vision, and a relentless focus on patients and their needs.

I'm pleased to note that the authors of *Integrating Quality and Strategy in Health Care Organizations* include examples from the Cleveland Clinic among their case studies. The Cleveland Clinic pioneered many aspects of quality improvement over the past 30 years. We have been measuring and analyzing volumes, mortality, and other data at increasing levels of magnification. The results include a steady improvement in some key outcomes indicators and a dramatic improvement in others. The Cleveland Clinic's quality improvement efforts have been inestimably aided by two factors. One is the group practice model of medicine, which enables us to implement quality and safety protocols

with a minimum of organizational friction. The second is health information technology. We have quality, experience, and utilization dashboards that enable us to gather, visualize, and act on quality data almost instantaneously. These are outstanding tools.

The quality revolution requires aggressive leadership at all levels. Tomorrow's health care will be driven by outcomes, innovation, and service. Those who can build quality into their strategic planning will enjoy the greatest rewards. Not the least of those rewards will be the health of our patients, the safety of our hospitals, and the wellness of our communities.

I would like to thank the authors of *Integrating Quality and Strategy in Health Care Organizations* for their thorough and incisive overview of this all-important topic.

Delos M. Cosgrove, MD
CEO and President of the Cleveland Clinic

Preface

Healthcare organizations are increasingly under financial and regulatory pressures to improve the quality of care they deliver. Public reporting on quality of care is making potential deficiencies visible, which adds to this pressure. In this environment, healthcare organizations are working aggressively to respond to these forces by improving their performance in measures that are under increasing scrutiny.

Unfortunately, only a small, albeit important, portion of the quality challenges is addressed in this fashion. There are several causes for this, but perhaps the most important ones are the lack of a formal definition and appreciation of quality in its full breadth and depth, and the inability to fully integrate quality into the strategic planning process for healthcare organizations.

This book attempts to fill this gap. It is designed for audiences in classrooms at schools of public health and healthcare administration, as well as executives and managers in healthcare organizations. The authors have tried to present a thorough yet concise review of the current healthcare environment, the history of quality in general, and quality issues specific to the healthcare industry. This is followed by a definition of quality from the Institute of Medicine—which will be repeated as needed throughout the book—and a review of the challenges to quality measurement and the major organizations that provide guidance to healthcare organizations in the management of quality.

Fully integrating quality into the strategic planning process requires a sophisticated quality measurement and monitoring system. The authors present a framework that addresses all of the domains and dimensions of quality and their integration into the range of operational activities within the healthcare organization. A structured approach for reporting quality performance at each operational level along a particular domain or dimension of quality is provided and can be aggregated to multiple levels of the organization. This framework is simple and flexible, yet it allows for straightforward expansion such that every

quality related measure for any healthcare operation can be incorporated. The parallels between financial performance and quality performance management are presented and the case is made that ultimately quality performance must reflect the same level of priority and attention as financial performance at both the executive and governance levels. The framework proposed and presented in this book will serve that end.

The landscape of quality performance management in health care is constantly evolving, making it virtually impossible to be current on all aspects related to the subject. However, the authors believe that the framework and principles presented will continue to apply even as some of the specifics evolve. Consequently, the authors remain hopeful that this book will continue to provide a structured basis for dealing with the complex and ever-changing world of quality performance management in healthcare organizations.

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Introduction

Quality has been an area of fashionable attention in health care for some time; however, recently the focus has begun to shift toward quality as a major (but not sole) concern within the overall context of healthcare reform. For decades, quality was taken for granted, even though neither a clear definition nor expectations of quality care were available. This was challenged by an Institute of Medicine (IOM) report in 2000, *To Err is Human*, which unraveled the entire tapestry of the "best healthcare system in the world."[1] According to IOM's report, up to 98,000 deaths per year were the result of preventable medical errors[1]—a very grim statistic. Suddenly, not only could one not be certain of the quality of care delivered, but also the safety of the care delivered was in question. The "first, do no harm" covenant of medicine was at risk.

In addressing the issue of healthcare quality, the IOM advanced a definition of quality as follows[2,3]:

> The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

On the basis of this definition, IOM put forth six aims for the 21st century healthcare system; these aims were intended to make the healthcare system safer, more effective, patient centered, timely, efficient, and equitable.[3]

This was a beginning. Ten years later, many government, private nonprofit, and for-profit organizations entered the arena to help improve the quality of the healthcare system by introducing quality measurement schemes, hospital quality surveys and reports, and so forth. Unfortunately, these efforts have not been well coordinated, and at times have been overlapping, repetitive, and somewhat selective, focusing only on a few aims introduced by IOM and addressing only a limited number of medical conditions. Moreover, the reports and performance measurement systems that have been developed are highly vulnerable to subjective

interpretation, can somewhat easily be manipulated and may therefore be misleading, and are not sufficiently comprehensive to be the basis for any decision making, specific or general, by consumers or payers/policy makers, respectively.

Health care has been transformed from individual physicians engaged in medical practice based on their own beliefs and with minimum financial expectations to large, complex enterprises interacting in the delivery of care for an individual. As best stated by Paul Starr in *The Social Transformation of American Medicine*, medicine has gone from a "sovereign profession to a vast industry."[4]

Quality was, is, and always will be expected from healthcare organizations. What is changing is the shift from a general "trust" of physicians and other healthcare professionals to a skepticism that now demands scientific measurement and transparency—basically a shift away from acceptance of the "art" of medicine to reliance on the "science" of medicine (to the extent that it exists). Whereas trust might have been the only basis for quality expectations in the context of one individual physician–patient interaction, more measures of quality are needed for a multi-tier interaction in the complex healthcare system of today.[5] The quality measurement movement removes a reliance solely on professionalism and focuses on other means to measure (and ensure) quality.

Expansion of managed care in health care is another reason for growing concerns over quality. Managed care organizations have financial liabilities and the interest of their shareholders in addition to the interest of their enrollees, which can create conflicts of interest.[6]

Several other factors make healthcare quality a very important topic. The first of these factors is cost considerations. As it is well known, the societal cost of health care is rising rapidly, and at the same time the government is trying to contain cost while maintaining or even improving quality.[7] In fact, cost is a very important consideration in the quality movement in health care.[8] Historically, quality in manufacturing was reformed under the pressure of resource limitations and cost containment. Similarly, the rising cost of health care and pressure from consumers, the government, and managed care organizations are the drivers of the quality movement in health care.

Shortfalls in quality include overuse, underuse, and misuse of the services.[9,10] Decrease of overuse and prevention of misuse will decrease the cost of health care; however, decrease of underuse will increase the overall cost of health care in the short run, but might prove to be a cost-saving investment decades later.

All of these factors have made attention to quality in health care a necessity; awareness of the high rate of *defects* in current practices in health care has been

sobering. The thought of having similar defect rates in other industries could not be more frightening. At a defect rate of 20%, which is reported to happen in the use of antibiotics for colds, there would be 9 million daily errors in credit card transactions, 36 million checks would be deposited in the wrong accounts every day, and there would be a 1,000-fold increase in deaths from airplane crashes.[11]

There is no question that quality must improve. Regulatory initiatives influenced by the requirements of accrediting organizations such as The Joint Commission (TJC) and Det Norske Veritas (DNV) have been successful but are by no means comprehensive or sufficient. There must be a multilateral effort by all parties involved including consumers and regulatory bodies, not just the providers and payers, to create a will that is strong enough to move this $2.6 trillion[12] industry toward reducing the rate of preventable defects to a level comparable with that of other industries while at the same time creating an environment that provides care that is comparable across dimensions of geography and socioeconomic status. Goals must be set high; only then can there be consistent and evidence-based care delivered to all. And only then can there be hope to be rid of staggering nonproductive costs such as malpractice insurance and defensive medicine.

Medical care is delivered in a complex environment that is in desperate need of reform. The first step would be the recognition that the United States population does not have the best health in the world.[13]

In a discussion about quality in health care, one would hear, most frequently, about quality improvement *initiatives* and quality-enhancing *projects*, or *tactics* to improve quality in the context of a healthcare organization. For this text, the principal healthcare organization is the hospital, and it therefore represents the primary healthcare setting for the text. These tactics for improvement of quality should be integrated into an organization's strategy and may well represent a significant portion of that organization's strategic plan or multiyear programs. The goal is often to satisfy regulatory requirements, or enhance the organization's standing with an accrediting organization or Medicare, or, although less frequently, maintain or improve the organization's standing on the *U.S. News & World Report* ranking.

Furthermore, when quality is looked at in terms of an initiative, project, or tactical move, the impact of other parts of the organization's strategic or multiyear plan is rarely factored in the final outcome. It is conceivable that other competing initiatives may undermine the quality initiative. As an example, one could think

of two initiatives: a cost-containment project that reduces staff in a lab, which may affect error rates, and an addition of new equipment for greater accuracy in lab results—the net effect on quality may be unpredictable.

Therefore, management may consider that any and all initiatives in a strategic plan may have direct, indirect, or even unintended positive or negative impact on the quality of care delivered in its organization. As a result, management should evaluate the impact of any strategic plan on the quality of the organization's products or services before entering the execution phase. Furthermore, the impact on quality should be regarded as a critical consideration in determining the overall advisability of the plan.

This brings up the following question: What is the appropriate placement of quality and quality performance in the context of an organization's priorities and strategic direction? This is followed by the question: How can quality considerations be integrated into the strategy development process so that a variety of consumer, payer, competitive, and regulatory concerns are addressed adequately and in a systematic fashion? The answers to these questions and others embody the contribution of this text to the management literature and are further discussed in the chapters.

HOW TO USE THIS BOOK

This text is divided into 10 chapters. Although the discussion starts with quality as a general concept and then transitions from a history of the quality movement in manufacturing to the modern healthcare system, the frameworks offered and discussed here focus on the quality of health care delivered in the inpatient setting of a hospital organization. It is, however, possible to expand these frameworks to apply to other contexts, such as organizations that focus mainly on outpatient care delivery or organizations that provide care in both inpatient and outpatient settings.

Chapter 1: Understanding the U.S. Healthcare System

Chapter 1 aims to set the stage for the topics covered in this book. A healthcare organization is part of a very complex industry with many moving parts that interact with each other and also with the environment. To understand the organization and to contemplate organizational strategy requires an understanding of the industry and its environment. To that end, a brief historical review of the U.S. healthcare system and its evolution seems to be the appropriate overture to the primary topic of this text. In this chapter, the forces that impinge on a

healthcare organization are identified and discussed. This chapter was written during a major regulatory overhaul of the healthcare system by the Obama administration, and therefore it is important and necessary to address the impact of reform on quality. As such, the authors will seek answers to the following questions in an objective manner:

1. What characterizes the U.S. healthcare system today?
2. What are the highlights of historical healthcare reform movements?
3. What are the major elements of the reform and how will they impact the healthcare system?

Chapter 2: Understanding the Healthcare Organization

Chapter 2 addresses the general management structure of a healthcare organization. This organizational structure is responsible for developing the strategic plan that establishes priorities and direction for the healthcare organization. Depending on the specific healthcare focus and size of the organization, its management structure can vary. However, to perform well in the U.S. healthcare environment, there is a set of managerial and governance functions that every organization must incorporate and execute reasonably well.

Chapter 2 will seek to answer the following questions:

1. What are the typical management structures and the corresponding scopes of responsibilities?
2. What is a typical strategic planning process like?
3. What is the relationship between strategic planning, strategy execution, and operational activities within the organization?

Chapter 3: General Concepts in Quality

Chapter 3 aims to understand the evolution of quality from a historical perspective with an initial look at manufacturing where many of the principles of quality assurance and improvement were developed. From there, differences between manufacturing and healthcare industries will be pointed out to create a better understanding of which concepts and principles from manufacturing may be readily adopted and which may need to be adjusted or set aside. This is followed by a review of the literature dealing with quality of inpatient care and concludes by presenting a widely accepted definition for healthcare quality that will form the basis for a more detailed and more operational approach to measuring, managing, and improving the quality of inpatient care.

In Chapter 3, the following specific questions are discussed:

1. How is quality addressed in other industries, and what impact has this had on addressing quality in health care?
2. What is healthcare quality, and what are the similarities and differences between it and manufacturing or service quality.
3. What is an operational framework for and definition of healthcare quality?

Chapter 4: Current State of Quality Measurement: External Dynamics

Chapter 4 aims to show the current state of healthcare quality measurement. To that end, a representative group of organizations that are active in the field of healthcare quality will be reviewed. A summary that captures each organization's contribution to the field of healthcare quality will be presented.

In Chapter 4, the following specific questions are discussed:

1. What are the active organizations in various healthcare quality-related areas?
2. What are the primary functions of these organizations and what stakeholders are represented by them?

Chapter 5: Current State of Quality Measurement: Internal Dynamics

The objective of Chapter 5 is to give a brief overview of some of the concepts, stakeholders, and dynamics of managing the quality of care that is delivered by a healthcare organization. The most important quality measures, proposed by the organizations discussed in Chapter 4, have made it to the radar screens of most healthcare organizations, and monitors and controls have been set up not only to have information about the status of those measures, but also to be able to respond to deficiencies and provide mechanisms for course correction.

Healthcare organizations, in adapting to external forces, have developed methods to automate and streamline their control over the quality measures. This chapter attempts to answer the following questions:

1. What is involved in establishing a culture of quality within a healthcare organization?
2. How has safety become synonymous with quality?
3. Do these efforts sufficiently address the quality needs of the modern healthcare organization?

Chapter 6: Measuring Quality of Inpatient Care

The objective of Chapter 6 is to present a framework for the measurement of (inpatient) healthcare quality, as defined in Chapter 3. This framework is intended to provide a basis for inpatient healthcare providers operationally to define, measure, report, and improve quality of care in a way that can meaningfully be addressed at multiple levels within the provider organization. The supporting literature and logical backbone of this framework is also discussed. The following questions are specifically discussed:

1. What would a quality measurement system that is consistent with IOM aims look like?
2. How can such a system be made operational and geared toward a specific organization?
3. How can measures across domains and dimensions of quality be aggregated in a logical fashion to create broader reports of an organization's performance?

Chapter 7: Understanding Quality and Performance

The aim of Chapter 7 is to develop a deeper understanding of the quality of medical care in a healthcare organization. This is followed by an effort to answer the following specific questions:

1. What are the interactions between strategy, organizational performance, finance, and quality?
2. Who is accountable for the quality of care delivered by an organization?
3. What is value in health care?
4. How are strategic decisions made? How should they be made?

After a discussion of what is involved in formulating a strategy and the significance and importance of quality in this process, the stage is set for Chapter 8.

Chapter 8: Quantifying the Quality Performance Gaps

The objective of Chapter 8 is to lay out a strategy development framework driven by organizational performance considerations. This framework is based on the setting of performance targets and then identification of gaps between the current status and the performance targets. In contrast to the conventional finance-centered planning process, this framework will require an estimation of not only financial consequences but also quality consequences of any strategy

considered by the organization. In such a context, the following questions need to be answered:

1. How can quality measures be identified and used in this framework?
2. How should the targets be set and the gaps measured?

Once performance gaps are measured, the organization is ready to develop a strategic plan to achieve the performance targets within a specified time frame. This will be discussed in Chapter 9.

Chapter 9: Closing the Gaps

The objective of Chapter 9 is to develop this framework further and include control mechanisms for strategy selection and course corrections during implementation. Here the following questions will be addressed:

1. How can various strategies be described with respect to healthcare quality?
2. How should quality performance be monitored and course correction implemented in the organization?

Chapter 10: Case Studies in Healthcare Quality

Chapter 10 will provide a series of healthcare quality improvement case studies from different institutions. Each case study illustrates a systematic approach to a quality problem.

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