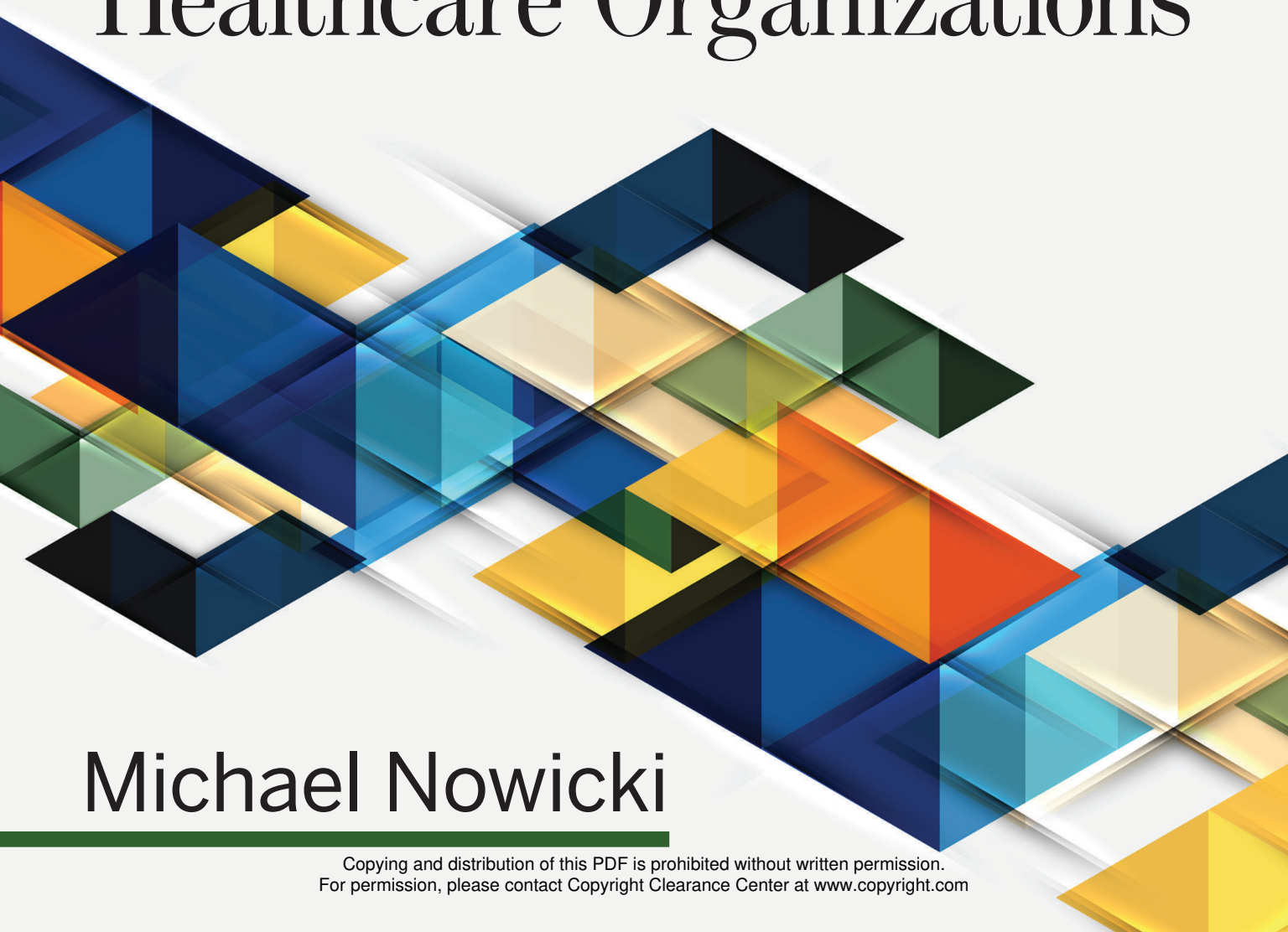
INTRODUCTION TO THE Financial Management of Healthcare Organizations

EIGHTH EDITION



Michael Nowicki

INTRODUCTION TO THE Financial Management *of* Healthcare Organizations

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EIGHTH EDITION

Michael Nowicki

GATEWAY
TO HEALTHCARE MANAGEMENT

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Health Administration Press, Chicago, Illinois
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Washington, DC 20036
(202) 763-7283

I dedicate this book to my parents who, by their actions more than their words, instilled in me the value of lifelong learning. From my mother, I learned that effort is a reward in itself. From my father, I learned that correct answers count, always.

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PREFACE

Introduction to the Financial Management of Healthcare Organizations is intended to be the primary textbook in introductory courses in healthcare financial management at both the undergraduate and graduate levels as well as a reference book for program graduates and other practicing healthcare managers. The purpose of this book is to introduce students and managers to the fundamental concepts and skills necessary to succeed as managers in an increasingly competitive environment.

For instance, program graduates find employment in a variety of healthcare settings. Therefore, the focus of this book—as well as the title of the book—extends beyond the hospital. Program graduates consistently report a deficiency in financial skills; this book includes problems representing key concepts. Traditional-age students report a need to apply the financial skills introduced in financial management. To address both of these concerns, this book includes mini–case studies within many chapters, practice problems at the ends of some chapters, and a comprehensive case study at the end of the book.

Introduction to the Financial Management of Healthcare Organizations is part of Health Administration Press's Gateway to Healthcare Management series. The textbooks in this series are geared specifically to students who are new to healthcare management.

In this edition, Part I includes an overview of financial management; the organization of financial management, including updated information on job responsibilities and salaries; financial analysis and management reporting, including the most recent changes in generally accepted accounting principles (GAAP); and the tax status of healthcare organizations, including the most recent court cases differentiating for-profit and not-for-profit hospitals.

Part II includes information about third-party payers and payment methodologies including value-based purchasing; Medicare and Medicaid, including updated laws pertaining to these public programs as well as federal government settlements with providers on fraud and abuse allegations; cost accounting and analysis; and reimbursement, including methods of setting rates.

Part III covers the management and financing of working capital; the management of the revenue cycle, including the distinction between the revenue cycle and accounts receivable; and materials management.

Part IV focuses on resource allocation and includes strategic and operational planning, budgeting, and capital budgeting.

Finally, Part V provides an analysis of trends that will affect healthcare organizations in the future, including healthcare cost projections and the need for entitlement reform. The Affordable Care Act (ACA) of 2010 and the Medicare Access and CHIPS Reauthorization Act (MACRA) of 2015 are discussed throughout the book but more prominently in Parts II and V. Recent federal laws are also discussed in Parts II and V.

Each part of the book includes its own recommended reading list. A running glossary of important terms accompanies each chapter and is compiled at the end of the book; a list of abbreviations used in the text is also included at the end of the book. At the end of every chapter, key points and discussion questions encourage students to summarize what they are learning and put it into their own words. The chapters are modular to allow instructors to either delete specific chapters or assign the chapters in an order based on individual preference or classroom requirements.

I hope you find *Introduction to the Financial Management of Healthcare Organizations* relevant, current, and easy to understand.

Instructor Resources

This book's instructor resources include PowerPoint slides, test banks, answer guides to the in-book discussion questions, mini-cases, an end-of-book case, and a transition guide to the new edition.

For the most up-to-date information about this book and its instructor resources, go to ache.org/HAP and search for the book's order code (2443I).

This book's instructor resources are available to instructors who adopt this book for use in their course. For access information, please email hapbooks@ache.org.

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I would like to gratefully acknowledge those who assisted me in this eighth edition: my wife, Tracey, and our kids, Hannah and David, who have often sacrificed time with Dad so that I could write; my many students over the years, who have challenged me to find a better way to explain, teach, and evaluate the understanding of difficult concepts; Dana Forgione, PhD, CPA, CMA, CFE, professor of accounting at the University of Texas at San Antonio, and Brian Conner, CPA, partner and national practice leader–hospitals for Moss Adams LLP and 2018–2019 chair of the HFMA Principles and Practices Board, who provided a technical review of the financial statements; Texas State University for continuing to support faculty research efforts; and Dick Clarke, president emeritus of HFMA, who in ways too numerous to mention has always supported my academic career. Finally, special thanks to those at Health Administration Press who have made this eighth edition what it is.

PART I

FINANCIAL MANAGEMENT

CHAPTER 1

FINANCIAL MANAGEMENT IN CONTEXT

No matter where you are in the healthcare finance arena, there are opportunities to move things forward, to act, to resist complacency, to refuse to allow yourself to think that things won't ever change. As finance professionals we all have strengths that will serve our organizations well in these times of change.

Debora Kuchka-Craig, former chair of the Healthcare Financial Management Association

Learning Objectives

After completing this chapter, you should be able to do the following:

- Understand the purpose of healthcare organizations
- Relate the purpose of healthcare financial management to the purpose of the organization
- Understand the objectives of healthcare financial management
- Apply quality assessment to healthcare financial management
- Apply organizational ethics to healthcare financial management
- Examine the value of healthcare financial management to the management functions and the changing face of healthcare
- Review background accounting, economics, and statistics information (appendixes 1.1, 1.2, and 1.3)

Introduction

Successful organizations, whether for-profit, not-for-profit, or governmental, have two things in common: (1) a congruent and well-understood organizational purpose, and (2) a functional management team. The purpose of this introductory chapter is to describe financial management in healthcare organizations within the context of organizational purpose and a competent management team.

Organizational Purpose

Organizational purpose is often determined by the owner. Whereas a community-owned, not-for-profit healthcare organization's purpose is to provide healthcare services to the community, a corporate-owned (via stockholders) for-profit healthcare organization's purpose is to provide profit for the owner.

By necessity, most organizations have more than one organizational purpose. For instance, even though a not-for-profit healthcare organization's purpose is to provide healthcare services to the community, the organization must survive economically—meaning that it must generate sufficient revenue to offset expenses and allow for growth. And although a for-profit healthcare organization's purpose is to provide profit for the owner, the organization must meet its customers' needs—meaning it must keep the physicians, patients, employers, and insurance companies satisfied.

In addition to their primary purpose, most healthcare organizations have secondary purposes—for example, many government-owned healthcare organizations provide large-scale medical education programs.

To maintain congruence, the management team must communicate the organizational purpose or purposes not only to the employees but also to owners, customers, and other important constituents. When multiple purposes are present, the management team must prioritize the purposes.

Healthcare Management Team

In its broadest context, the objective of healthcare management is to accomplish the organizational purposes. Doing so is not as simple as it sounds, especially if the healthcare organization's purposes are "to provide the community with the services it needs, at a clinically acceptable level of quality, at a publicly responsive level of amenity, at the least possible cost," as Berman, Kukla, and Weeks so aptly put it in their classic text *The Financial Management of Hospitals* (1994, 5). Healthcare managers must identify, prioritize, and often resolve these sometimes contradictory purposes in a political environment that involves the organization's governing board and medical staff; in a regulatory environment that involves licensing and accrediting agencies; and in an economic environment that involves increasing competition, resulting in demands for lower prices and higher quality.

Competent healthcare managers attempt to accomplish the organizational purposes by planning, organizing, staffing, influencing, and controlling (called the **management functions**) and through communicating, coordinating, and decision making (called the **management connective processes**). For more information on the management functions and connective processes, see *Dunn and Haimann's Healthcare Management* (Dunn 2021).

management functions The key functions of a manager, including planning, organizing, staffing, influencing, and controlling.

With the exception of nursing home administrators, no licensure requirements are needed to be a practicing healthcare manager. However, facility-accrediting organizations such as **The Joint Commission** require healthcare managers to possess such education and experience as required by the position. Moreover, formal educational programs for healthcare management do exist at both the undergraduate and graduate levels. Undergraduate programs can seek program review and approval from the Association of University Programs in Health Administration. Graduate programs can seek program review and accreditation from the Commission on Accreditation of Healthcare Management Education. Furthermore, healthcare managers can seek membership and certification in professional associations, including the American College of Healthcare Executives (ACHE), which has more than 48,000 members, more than 25 percent of whom are board certified in healthcare management as Fellows of the American College of Healthcare Executives (FACHE) and 60 percent of whom have a master's degree (ACHE 2020).

management connective processes Management functions that connect elements of the healthcare organization, including communicating, coordinating, and decision making.

The Joint Commission The primary accrediting body for healthcare organizations.

Purpose of Healthcare Financial Management

The purpose of healthcare financial management is to provide accounting and finance information that helps healthcare managers accomplish the organization's purposes. No licensure requirements are needed to be a practicing healthcare financial manager. Facility-accrediting organizations such as The Joint Commission rarely provide requirements for healthcare financial managers; they often hold the organization's CEO responsible for financial management.

Formal educational programs for healthcare financial management are not common and usually exist as postgraduate certificate programs. The chief financial officers of most large healthcare organizations possess a master's degree in business administration, a bachelor's degree in accounting, and a certificate in public accounting and have healthcare experience. For formal continuing education and certification in healthcare financial management, healthcare financial managers can seek membership and certification in healthcare professional associations, including the **Healthcare Financial Management Association (HFMA)**. According to its certification operations administrator (HFMA 2020), the association has more than 56,000 affiliates, including 11,970 certified revenue cycle representatives (CRCRs), 2,431 certified healthcare financial professionals (CHFPs), 1,494 members certified as fellows of the Healthcare Financial Management Association (FHFMAs), 629 certified specialists in business intelligence (CSBIs), 429 certified specialists in accounting and finance (CSAFs), 429 certified specialists in managed care (CSMCs), 198 certified specialists in physician practice management (CSPPMs), and 76 certified inpatient coding auditors (CICAs).

Healthcare Financial Management Association (HFMA) Professional association of healthcare financial managers.

Accounting

financial accounting
A type of accounting that provides historical accounting information to external users through the development of financial statements.

Accounting is generally divided into two major areas: *financial accounting* and *managerial accounting*. The primary purpose of **financial accounting** is to provide accounting information, generally historical in nature, to external users, including owners, lenders, suppliers, the government, and insurers, through the development of financial statements.

Accounting information prepared for external use must follow formats established by the American Institute of Certified Public Accountants (AICPA) and other, similar organizations and must follow generally accepted accounting principles used for standardization. The 1996 *AICPA Audit and Accounting Guide for Health Care Organizations* (AICPA 1996) established four basic financial statements that hospitals should prepare for external users:

1. A consolidated balance sheet
2. A statement of operations
3. A statement of changes in equity
4. A statement of cash flows

managerial accounting
A type of accounting that provides accounting information, generally current or prospective in nature, to internal users for decision-making purposes.

The primary purpose of **managerial accounting** is to provide accounting information, generally current or prospective in nature, to internal users, including managers, for

CRITICAL CONCEPTS
Measurements

Healthcare financial managers monitor many measurements. Among the most common are the following:

- *Admissions*: The number of patients, excluding newborns, accepted for inpatient service
- *Average daily census*: The average number of inpatients, excluding newborns, receiving care each day during the reporting period
- *Average length of stay (ALOS)*: Number derived by dividing the number of inpatient days by the number of admissions
- *Occupancy rate*: The ratio of average daily census to the average number of statistical (set up and staffed for use) beds

decision-making purposes. Such accounting information supports the planning and control management functions. In this way, managerial accounting is the link between financial accounting and the manager. Managerial accounting, or accounting information prepared for internal use, requires no prescribed format and therefore varies greatly among organizations. Managerial accounting topics such as budgeting and inventory control require knowledge of economics, statistics, and operations research.

Many managerial accountants believe that **cost accounting**—the study of costs, including methods for classifying, allocating, and identifying costs—is either synonymous with or a subset of managerial accounting. Others argue that cost accounting includes all managerial accounting and also requires some financial accounting. Cost accounting and managerial accounting also include topics that could be considered finance.

cost accounting
The study of costs, including methods of classifying, allocating, and identifying costs.

ratio analysis
Quantitative method of determining an organization's financial performance by computing the relationships of important line items in the financial statements.

capital investment analysis
A budgeting procedure to determine the potential profitability of a long-term investment.

Finance

Historically, the purpose of finance has been to borrow and invest the funds necessary for the organization to accomplish its purpose. Today, the purpose of finance is to analyze the information provided by managerial accounting to evaluate past decisions and make sound assessments regarding the future of the organization (Finkler 2020). Finance uses techniques such as **ratio analysis** and **capital investment analysis** and requires knowledge of financial and managerial accounting (see appendix 1.1), economics (see appendix 1.2), statistics (see appendix 1.3), and operations research. Exhibit 1.1 shows the relationship of finance to the aforementioned supporting disciplines.

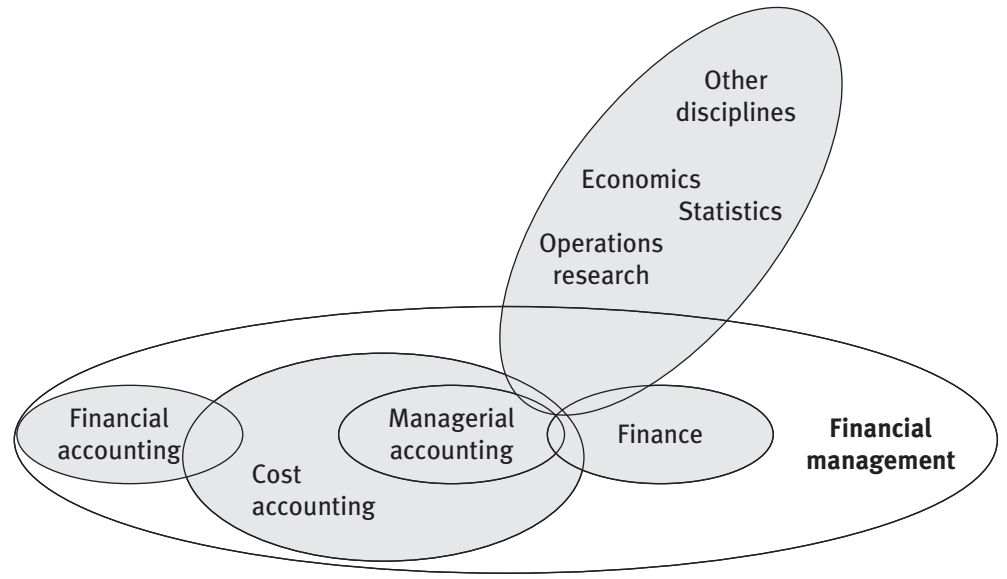

Exhibit 1.1
Financial Management Relationships

Major Objectives of Healthcare Financial Management

In this section, we will examine six major objectives of healthcare financial management: (1) to generate income, (2) to respond to regulations, (3) to facilitate relationships with third-party payers, (4) to influence the method and amount of payment, (5) to monitor physicians, and (6) to protect tax status.

Generate Income

While the purpose of healthcare financial management is to provide accounting and finance information that assists healthcare management in accomplishing the organization's objectives, all organizations have at least one objective in common: to survive and grow. Organizations in other industries might refer to this objective as maximizing owners' wealth; healthcare organizations typically refer to it as maintaining community services. In either event, the organization will be of little use if it cannot afford to continue to operate.

Therefore, the most important objective of healthcare financial management is to generate a reasonable **operating income** (i.e., the difference between collected revenue and expenses) by investing in assets and putting the assets to work.

operating income
The difference between operating revenue and operating expenses; a reasonable amount is considered the most important objective of healthcare financial management.

Respond to Regulations

Although financial management in healthcare organizations has similar objectives to that of organizations in other industries, different objectives also exist. The government regulates healthcare to a significant degree because healthcare organizations are in a position to take advantage of the sick and the elderly; regulation protects individuals who cannot protect themselves. As sponsors of care (the entity that is ultimately responsible for financing the healthcare bill), federal, state, and local governments pay more than 45 percent of all personal healthcare expenditures and therefore have a vested interest in ensuring that government money is well spent (Centers for Medicare & Medicaid Services [CMS] 2020). Healthcare organizations must also be accredited or certified to qualify for reimbursement from many third-party payers and to qualify for loans from certain lenders. Therefore, the second objective of healthcare financial management is to respond to the myriad of regulations in a timely and cost-effective manner.

third-party payer
An agent of the patient (the first party) that contracts with a provider (the second party) to pay all or a portion of the bill to the patient.

Facilitate Relationships with Third-Party Payers

The third objective of healthcare financial management is to facilitate the organization's relationship with each **third-party payer**, such as an insurance company, that will pay all or a portion of the bill. As major sources of funds, private health insurance, Medicare, and Medicaid account for more than 68 percent of all personal health consumption spending (CMS 2020). Financial management must be responsive to third-party payers and in many

ways must treat third-party payers as customers because the third party pays the bill. At the same time, financial management must be attentive to the patient because the patient has influence over the third-party payer and in some cases may be partially responsible for the bill.

Influence Method and Amount of Payment

The fourth objective of healthcare financial management is to influence the method and amount of payment chosen by third-party payers. Third-party payers are becoming increasingly aggressive in asking healthcare organizations for discounts if they provide large numbers of patients.

Some third-party payers, such as Medicare, are asking healthcare organizations to assume part of the financial risk for the patient by agreeing to a **prospective payment**, or, in other words, agreeing in advance to a price for providing care to a patient. Healthcare organizations lose money if they provide care that costs more than the prospective payment.

Some third-party payers are asking healthcare organizations to assume risk by agreeing to a **capitated price** (i.e., a price per head or subscriber) before the subscriber actually needs care. Capitated prices put healthcare organizations at risk for not only the cost of care but also the utilization (how often patients seek care) and intensity of care (what providers order for patients after they seek care).

prospective payment
A payment system in which a healthcare organization accepts a fixed, predetermined amount to treat a patient, regardless of the true ultimate cost of that treatment. Prospective payment can be based on a variety of patient classifications—diagnosis-related groups (DRGs) for inpatients, ambulatory payment classifications (APCs) for outpatients, resource utilization groups (RUGs) for nursing homes, as examples.

capitated price
A healthcare payment system in which an organization accepts a monthly payment from a third-party payer for each individual covered by that payer's plan, regardless of whether a given individual is treated in a given month. Also known as *capitation*, it provides a financial incentive to a healthcare organization to keep its population from using more healthcare services than necessary because the organization loses money if the cost of care due is more than the capitated price provided by the third-party payer.

Monitor Physicians

The fifth objective of healthcare financial management is to monitor physicians and their potential financial liability to the organization. In 2019 (the most recent year for which data were available at time of publication), professional services including physicians, dentists, and other professionals accounted for 27 percent of all personal healthcare expenditures (CMS 2020). However, physicians influence much of the healthcare spending that is not directly attributed to them. For example, physicians order the patient admission, the diagnostic testing and treatment for the patient, and the patient discharge. Healthcare financial management must ensure through the utilization review process that physician ordering patterns are consistent with what the patient needs. In addition, healthcare financial management must ensure through the credentialing process and the risk management process that the healthcare organization that uses more healthcare has minimized its exposure to legal liability for a physician's possible negligent actions.

Protect Tax Status

The sixth major objective of healthcare financial management is to protect the organization's tax status. For-profit healthcare organizations seek ways to reduce their tax liability, and not-for-profit healthcare organizations try to protect their tax-exempt status. Protecting

MINI-CASE STUDY

Suppose you were recently hired to manage a new primary care physician's office. The physician's office will be located downtown in a major metropolitan area with significant competition. You need to establish the organization's purpose and financial objectives. What items should you consider in establishing the organization's purpose? What organizational purpose should you suggest to the physician owners? What should the financial objectives of the organization be?

tax-exempt status has become more difficult as state and local governments seek new revenue sources, and tax-exempt status has come under judicial and public scrutiny (see chapter 4).

Quality Assessment and Healthcare Financial Management

The healthcare industry has long had difficulty with defining quality:

> Quality . . . you know what it is, yet you don't know what it is. But that's self-contradictory. But some things *are* better than others, that is, they have more quality. But when you try to say what that quality is, apart from the things that have it, it all goes *poof!* There's nothing to talk about. But if you can't say what Quality is, . . . then for all practical purposes, it doesn't exist at all. But for all practical purposes it really *does* exist. What else are the grades based on? Why else would people pay fortunes for some things and throw others in the trash pile? Obviously, some things are better than others . . . but what's the "betterness"? . . . So round and round you go, spinning mental wheels and nowhere finding anyplace to get traction. (Pirsig 2005, 184)

Since the 1970s, healthcare organizations have responded to serious pressure to define quality. In the early 1970s, accrediting agencies and third-party payers applied this pressure. In the late 1970s and early 1980s, the consumer movement added pressure. From the late 1980s through the present, competition has added pressure. Economists predict that the pressure will continue as competition drives prices to their lowest—and relatively equal—point, and the market will force healthcare organizations that survive to compete on quality in addition to price. Healthcare organizations have responded to this pressure with two contrasting strategies: either a *proactive strategy* that attempts to adopt a comprehensive view of quality or a *reactive strategy* that attempts to limit views of quality to views developed by others.

Proactive Strategy

Healthcare organizations that have adopted a proactive strategy have developed multiple measures of quality, including direct and indirect measures that go beyond the minimum measures required by accrediting organizations (Conrad and Blackburn 1985).

Direct measures of quality assume that the organization can define and measure quality itself. These measures include the following:

1. *Goal-based measures* assess quality by the progress made toward the goals of the strategic and operating plans. The key advantage of goal-based measures is that they focus attention on success or failure.
2. *Responsive measures* assess quality by customer opinion. The key advantage of responsive measures is that they understand quality from the customer's point of view.
3. *Decision-making measures* assess quality by evaluating decisions. The key advantage of decision-making measures is that they direct accountability to the decision maker.
4. *Connoisseurship measures* allow quality to be assessed by expert opinion, such as accreditation. The key advantage of connoisseurship measures is that they inspire high credibility.

Indirect measures of quality assume that the organization cannot define and measure quality itself but can define and measure the *results* of quality. These measures include the following:

1. *Resource measures* assume that price reflects quality. The key advantage of resource measures is that they provide quantitative data that are readily available.
2. *Outcome measures* assume that results reflect quality. The key advantage of outcome measures is the emphasis on results.
3. *Reputational measures* assume that public perception reflects quality. The key advantage of reputational measures is that they produce ratings for the public.
4. *Value-added measures* assume that process reflects quality. The key advantage of value-added measures is that, after adjusting for input and output, they focus on process, which the organization can control.

Reactive Strategy

Healthcare organizations that have adopted a reactive strategy have responded in several ways to accrediting agencies and quality consultants, including

- ensuring quality by centralizing quality efforts in a quality assurance department, then decentralizing quality efforts to clinical departments, and then further decentralizing quality efforts to all departments;

- ensuring quality by studying clinical outcomes, then studying clinical processes, then studying all outcomes and all processes, and finally studying key outcomes and key processes;
- improving quality by continuous attention and total management; and
- assessing quality by identifying key processes and desired outcomes.

Since 1986, The Joint Commission has focused on quality, the customer, work processes, measurements, and improvements. To its primary goal of accrediting healthcare organizations, The Joint Commission added the goal of developing and implementing a national performance measurement database. For a description of the current requirements regarding performance measures and performance measure data, consult the Joint Commission's ORYX website (Joint Commission 2019).

In response to the Institute of Medicine's groundbreaking report *To Err Is Human* (IOM 1999) that as many as 98,000 Americans die each year as a result of errors in hospitals, The Joint Commission announced a new set of patient safety and medical error reduction standards that took effect July 1, 2001. The IOM report was reinforced by three 2006 studies that measured not only deaths caused by hospital-acquired infections but also the increased costs associated with preventable hospital errors (Conn 2006) and a 2016 Johns Hopkins study that claimed that as many as 250,000 people die every year from medical errors (Makary and Daniel 2016). The Joint Commission standards required accredited hospitals (Lovern 2001) to

- make their doctors tell patients when they receive substandard care or care that differs significantly from anticipated outcomes;
- implement an organization-wide patient safety program with procedures for immediate response to medical errors;
- report to the hospital's governing body at least once annually on the occurrence of medical errors; and
- revise patient satisfaction surveys to ask patients how the organization can improve patient safety.

National Patient Safety Goals (NPSGs)
A set of goals established by The Joint Commission to address safety areas of special concern for hospitals.

In July 2002, The Joint Commission approved the first **National Patient Safety Goals (NPSGs)** for hospitals. The NPSGs help accredited organizations address specific areas of concern regarding patient safety. Each goal includes a number of evidence- or expert-based requirements. Each year the goals are reevaluated, and the goals may be continued or replaced based on new patient safety priorities. The 2020 Joint Commission NPSGs for hospitals include the following (Joint Commission 2020):

- Improve the accuracy of patient identification.
- Improve the effectiveness of communication among caregivers.

- Improve the safety of using medications.
- Reduce the harm associated with clinical alarm systems.
- Reduce the risk of healthcare-associated infections.
- Identify patient safety risks.
- Prevent mistakes in surgery.

Effects of Quality on Profitability

Deming and others have long argued that quality improvements lead to higher profitability. Deming introduced the following chain reaction analogy: Improvements in quality (fewer errors) lead to improvements in productivity, which lead to lower costs, which lead to lower prices, which lead to improved market position, which leads to increased volumes, which lead to increased profit (Deming 1982).

Significant evidence shows a positive relationship between quality and profitability. IBM Watson Health (2020) identifies the 100 top hospitals each year using both quality and profitability criteria.

MINI-CASE STUDY

Suppose that you are the administrator of a nursing home owned by a for-profit parent corporation that owns 30 nursing homes. You have been asked by the board of directors of the parent corporation to explain how your quality initiatives will improve profitability. What is your presentation?

Organizational Ethics and Healthcare Financial Management

The Joint Commission and healthcare professional associations such as ACHE and HFMA have long emphasized organizational ethics. Several Joint Commission standards require healthcare organizations to have mechanisms in place to address ethical issues related to such topics as patient rights and management responsibilities. Ethical issues concerning patient rights include informed consent, patient confidentiality, and the patient's right to participate in care decisions and end-of-life decisions. Ethical issues concerning management responsibilities include resource allocation, conflicts of interest, and patient billing practices.

Resource allocation decisions by managers often conflict with the decisions made by

MINI-CASE STUDY

Imagine that you manage a four-physician office practice in a competitive neighborhood. Vendors often bring lunches and gifts for your staff and samples of prescription medications that the physicians then give to patients. Could any of these practices pose a problem? If so, why?

physicians and other clinicians. Managers typically represent a utilitarian view of ethics, best represented by the phrase "the greatest good for the greatest number." This view allows managers to sacrifice the use of resources for one patient to maintain resources for other patients, given the assumption that resources for the healthcare organization are limited. Clinicians typically represent a *deontological* view of ethics, which means that their decisions are governed by their duties to patients, which take precedence over the ends-based decision making of the manager. This continuous conflict seems to keep resource allocation decisions somewhat balanced.

Conflicts of interest occur when an individual owes duties to two or more persons or organizations and when meeting a duty to one somehow harms the other (Darr 2018). Perhaps the worst examples of conflict of interest involve the conflict between a manager's duties to the organization and a manager's duties to self, such as when managers use their positions of authority for personal gain. Even the perception of impropriety may cause a loss of credibility (Nowicki and Summers 2001). This is especially true in financial management, where contracts for services and products are awarded to vendors who may attempt to buy influence with a lunch or a gift.

For the most part, patient billing practices, especially for Medicare and Medicaid, are covered by law; however, even certain legal practices have ethical ramifications. For instance, how long should a healthcare organization hold a patient's deposit after the insurance company pays in full? State law on this issue and overpayments by commercial insurance companies is nonexistent or varies widely. Although a healthcare organization may be under no legal obligation to refund overpayments by insurance companies, is keeping someone else's money ethical? Many healthcare organizations use ethics committees to provide answers to these and other billing questions. Although healthcare organizations are not required to organize ethics committees, such committees are a useful way to solicit community input on billing issues.

Value of Healthcare Financial Management

Healthcare financial management provides accounting information and financial techniques that allow managers to perform the management functions and the management connective processes and therefore accomplish the organizational objectives. In addition, healthcare financial management also has direct value to these functions, as explained in the following list of management functions (Dunn 2021).

- *Planning*: After the governing body completes the strategic plan and senior management completes the operating plan, financial management is often responsible for completing the operating budget and capital budget. The operating budget often provides the incentives to plan properly.
- *Organizing*: Financial management provides a chart of accounts based on the organizational chart that identifies revenue centers and cost centers. Together

with the organizational chart, this chart of accounts provides the basis for responsibility accounting, which is the ability to hold department managers responsible for their revenues and expenses.

- *Staffing*: Financial management often staffs a variety of departments and processes important to the healthcare organization. Departments such as medical records and information systems are currently being placed under the supervision of financial management, in addition to departments such as accounting, admitting, and materials management, which have been traditionally under financial management. The increasing importance of nontraditional departments in the billing process appears to justify this trend.
- *Influencing*: Financial management provides rewards and penalties to motivate others to accomplish the organization's purposes.
- *Controlling*: Perhaps the responsibility closest to the overall function of financial management, the control of the budget, financial reports, financial policies and procedures, and financial audits allows financial management to monitor performance and take the appropriate corrective action when performance is unsatisfactory.

These management functions mean little without the management connective processes to integrate the functions.

Communicating and coordinating are important to financial management for both reporting and advising. Also important is coordinating the relationships between, for example, revenue and expenses, capital budgets and operating budgets, and volumes and prices and collected revenues.

Decision making is important to financial management as a direct measure of quality. Governing boards, CEOs, and outside sources such as independent auditors often judge the quality of financial management on the basis of the decisions and recommendations made by financial management. The advantage of this view of quality is that it holds the decision maker accountable. The disadvantage is that it assumes rational decision making. Decisions made in healthcare financial management are often based on politics or other criteria that are unknown to the evaluator of the decision. Therefore, a decision may be evaluated as bad on the basis of the known facts, but it may be evaluated as good on the basis of other criteria unknown to the evaluator.

Effect of Financial Management on the Changing Face of Healthcare

Many observers say that financial management is the most important predictor of whether healthcare organizations will survive in the current competitive climate and beyond. Healthcare is one of several industries that society has allowed to grow beyond the industry's ability

to produce efficiently—other industries include agriculture during the 1970s, the auto industry during the 1980s, the petroleum industry during the 1990s, the financial services industry during the first decade of the twenty-first century, and higher education during the 2010s. The recession that began in 2008 affected healthcare organizations as much as it affected many other industries, and the passage of the Affordable Care Act (ACA) in 2010 created entirely new financial challenges. The COVID-19 pandemic brought new financial challenges to the healthcare industry. The implications of these challenges on healthcare finance may not be fully known for many years, but at least three elements of the ACA were expected to profoundly affect the financial situation of healthcare organizations: the initial increase in the number of individuals with health insurance; the changing reimbursement structures; and the explicit linking of reimbursement with quality measures. Although the financial challenges of COVID-19 may be short-term, permanent changes in such processes as supply chain and disaster planning should occur.

Clearly, only the well-managed healthcare organizations will survive this changing situation; financial management will be instrumental in their survival.

Chapter Key Points

- Whereas an organization may have more than one organizational purpose, the financial purpose of the organization is to provide accounting and finance information that helps healthcare managers accomplish the organization's purposes.
- Among the major objectives of financial management relevant to any healthcare manager (to generate income, to respond to regulations, to facilitate relationships with third-party payers, to influence the method and amount of payment, to monitor physicians, and to protect tax status), the one objective all organizations' financial managers have in common is to survive and grow.
- Understanding the impact of quality on profitability can turn good managers into great managers.
- Sound ethical reasoning should affect every decision, even financial decision making.

Discussion Questions

1. Why is financial management important to the organization?
2. What is the distinction between the purpose of healthcare management and the purpose of healthcare financial management?
3. How would you prioritize the major objectives of healthcare financial management?

4. What are the major ethical theories, and how do they apply to the role of a healthcare manager?
5. Why should financial managers be concerned with quality initiatives in the healthcare organization?
6. How would you predict that financial management and the management functions will be important as healthcare changes in the future?

References

American College of Healthcare Executives (ACHE). 2020. "ACHE Members and Fellows." Accessed August 15. www.ache.org/about-ache/our-story/members-and-fellows.

American Institute of Certified Public Accountants (AICPA). 1996. *AICPA Audit and Accounting Guide for Health Care Organizations.* New York: AICPA.

Berman, H. J., S. F. Kukla, and L. E. Weeks. 1994. *The Financial Management of Hospitals*, 8th ed. Chicago: Health Administration Press.

Centers for Medicare & Medicaid Services (CMS). 2020. "National Health Expenditures 2019 Highlights." Modified December 16. www.cms.gov/files/document/highlights.pdf.

Conn, J. 2006. "Hospitals' Dirty Secret." *Modern Healthcare* 36 (47): 6–7.

Conrad, C. F., and R. T. Blackburn. 1985. "Program Quality in Higher Education: A Review and Critique of Literature and Research." In *Higher Education: Handbook of Theory and Research*, vol. 1, edited by J. Smart. New York: Agathon Press.

Darr, K. 2018. *Ethics in Health Services Management*, 6th ed. Baltimore, MD: Health Professions Press.

Deming, W. E. 1982. *Out of the Crisis*. Cambridge, MA: MIT Press.

Dunn, R. 2021. *Dunn and Haimann's Healthcare Management*, 11th ed. Chicago: Health Administration Press.

Finkler, S. A. 2020. *Finance and Accounting for Nonfinancial Managers*, 5th ed. Riverwoods, IL: Wolters Kluwer.

Healthcare Financial Management Association (HFMA). 2020. E-mail correspondence with Shirley Heavlin, HFMA Certification Operations administrator, August 17.

IBM Watson Health. 2020. *Watson Health 100 Top Hospital Study, 2020*. Published April 21. www.ibm.com/downloads/cas/REAWOAOD.

Institute of Medicine (IOM). 1999. *To Err Is Human: Building a Safer Health System*. Washington, DC: National Academies Press.

Joint Commission. 2020. *National Patient Safety Goals Effective July 2020 for the Hospital Program*. Published March 26. www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2020/npsg_chapter_hap_jul2020.pdf.

———. 2019. *ORYX for Hospitals (National Hospital Quality Measures)*. Published October. www.jointcommission.org/-/media/tjc/documents/measurement/oryx/cy2020_oryx_for_hospitals_fact_sheet.pdf.

Lovern, E. 2001. "JCAHO's New Tell-All." *Modern Healthcare* 31 (1): 2, 15.

Makary, M., and M. Daniel. 2016. "Medical Error—The Third Leading Cause of Death in the US." *BMJ* 353: i2319. Published May 3. www.bmj.com/content/353/bmj.i2139.

Nowicki, M., and J. Summers. 2001. "Managing Impossible Missions: Ethical Quandaries and Ethical Solutions." *Healthcare Financial Management* 55 (6): 62–67.

Pirsig, R. 2005. *Zen and the Art of Motorcycle Maintenance: An Inquiry into Values*. 25th Anniversary Edition. New York: William Morrow Paperbacks.

Appendix 1.1
Financial Accounting Outline

I. Financial accounting is the science of preparing financial statements for use by individuals and organizations external to the organization.
II. Accounting equation: Total assets = Liabilities + Net assets
III. Objectives of financial accounting
   A. Provide information that is useful to present and potential investors, creditors, and other decision makers.
   B. Provide information about the economic resources of the healthcare organization, the claims to those resources, and the effects of transactions, events, and circumstances that change those resources.
   C. Provide information about a healthcare organization's performance.
   D. Provide information about how a healthcare organization generates and expends cash, about its loans and repayment of loans, and about its capital expenditures.
   E. Provide information about how a healthcare organization has discharged its stewardship duties to its owners.
IV. Accounting concepts
   A. Entity—The healthcare organization stands apart from all other organizations and is capable of taking on economic transactions.
   B. Reliability—Accounting records must be based on information that is verifiable from an independent source.
   C. Cost valuation—Assets and services are recorded at actual, historical cost.
   D. Going concern—The entity will operate long enough to recover the cost of its assets.
   E. Stable monetary unit—This is the basis for ignoring the effects of inflation in short-term transactions.
V. Accounting principles
   A. Accrual accounting—Revenue is recorded when it is realized (i.e., billed), and expense is recorded when it contributes to operations.
   B. Cash accounting—Revenue and expenses are recorded when cash is actually received or paid.
   C. Accounting period—This is a defined fiscal year or month.
   D. Matching—Related revenue and expense should be reported in the same accounting period.
   E. Conservatism—Uncertainty dictates understating revenues and volumes that lead to revenues, and overstating expenses.
   F. Full disclosure—All economic transactions should be recorded.

G. Industry practices—Accounting principles are relatively unique to the healthcare industry.
   1. Fund accounting—This allows not-for-profit and governmental healthcare organizations to establish separate entities for specified activities. Typical funds include operating or general funds, specific-purpose funds, plant-replacement funds, and endowment funds. Each fund is self-balancing in that assets equal liabilities added to net fund balance.
   2. Contractual allowances—This is the revenue account that records the difference between billed charges and the price a customer has agreed in advance to pay via contract.
   3. Depreciation—This is the expense account that records the estimated cost of an expiring asset.
   4. Funded depreciation—This is the amount saved to replace assets at the end of their useful life.
   5. *AICPA Audit and Accounting Guide for Health Care Organizations*
      a. There were major changes in the 1990 edition.
         1) On the statement of revenues and expenses, operating revenue is reported net of contractual allowances.
         2) On the statement of revenues and expenses, operating revenue is reported net of charity care; however, the healthcare organization's policy for charity care, in addition to the level of charity care, must be in the footnotes.
         3) On the statement of revenues and expenses, bad debt expense is reported as an expense based on price.
         4) On the statement of revenues and expenses, donated assets are reported at fair market value as of the date of the gift.
         5) On the statement of revenues and expenses, donated services are reported as an expense, and a corresponding amount is reported as a contribution, but only if the services are significant and measurable.
      b. There were major changes in the 1996 edition.
         1) Changes were made to the basic financial statements.
            a) Balance sheet (consolidated)
            b) Statement of operations
            c) Statement of changes in equity
            d) Statement of cash flows
         2) The balance sheet reports net assets.
            a) Unrestricted
            b) Temporarily restricted
            c) Permanently restricted

3) Statement of operations reports performance indicator.
   a) Revenues over expenses
   b) Earned income
   c) Performance earnings

c. There were major changes in the 2010 edition.
   1) Update on the hierarchy of generally accepted accounting principles
   2) Omnibus change to the consolidation and equity method guidance for not-for-profit organizations
   3) Determining fair value when the volume and level of activity for the asset or liability have significantly decreased
   4) Interim disclosure about fair value of financial investments
   5) Recognition and presentation of other-than-temporary impairments
   6) The hierarchy of generally accepted accounting principles for state and local governments
   7) Land and other real estate investment by endowments
   8) Charity care remains a note to the financial statements but must be reported at full cost with the method used to determine cost.

d. There were major changes in the 2011 edition.
   1) Conforming to changes resulting from the *ASB Clarity Project*
   2) Reporting relationships with other entities
   3) Reporting and measuring noncash gifts
   4) Expiring donor-imposed restrictions
   5) Reporting program-related investments and microfinance loans
   6) Reporting net assets and related disclosures
   7) Accounting for contributions and receivables
   8) Accounting for investments
   9) Auditing net asset classification and revenue and expense recognition
   10) Healthcare entities that recognize a significant amount of patient services revenue at the time the services are rendered, even though the entity does not assess the patient's ability to pay, shall present that portion of bad debt as a deduction of revenue and shall report its policy for assessing collectibility in determining the timing and amount of patient service revenue by payer.

e. The Financial Accounting Standards Board (FASB) Accounting Standards Update 2014-09 (published September 2014) addresses revenue recognition (Topic 606), including implicit price concessions

and bad-debt considerations, for healthcare organizations. In addition to tightening the criteria for the reporting of bad debt, the update revises the contractual adjustment terminology regarding explicit price concession and introduces implicit price concession to account for the portion of self-pay balances owed by the patient with commercial insurance. Update 606 is effective for fiscal years beginning after December 15, 2018.

f. The Financial Accounting Standards Board (FASB) Accounting Standards Update 2016-02 (published February 2016) addresses leases (Topic 842). FASB issued this update in the spirit of transparency and comparability of financial statements among organizations. Leasing often allowed an organization to gain access to assets without providing the full presentation of the leasing transaction on the financial statements. This is especially true with operating leases. Generally speaking, Update 842 requires the lessee to present the lease liability (lease payments) and lease asset (right-of-use) for operating leases over 12 months. Update 842 is effective for fiscal years beginning after December 15, 2018.

VI. Sarbanes-Oxley Act of 2002

A. This federal corporate accountability legislation was passed in the aftermath of Enron's downfall and intended to improve governance and corporate practices. The legislation includes the following standards.

1. Accounting firms are prohibited from providing certain nonaudit services to a client contemporaneously with an audit.
2. Accounting firms are required to "timely report" to the board's audit committee material communications between the auditor and management.
3. Principal executive and financial officers are required to certify financial reports, subject to civil and criminal penalties.
4. Eligibility for audit committee membership, including no affiliation with the company or its subsidiaries, and specific duties of the audit committee are established.
5. The Securities and Exchange Commission (SEC) is directed to establish "minimum standards of professional conduct" for lawyers whose practice includes SEC matters.
6. Personal loans to directors and executive officers are prohibited.
7. Companies are required to maintain an internal control structure and procedures for financial reporting.
8. Companies are required to disclose whether they have a code of ethics for senior financial officers.

9. Disclosure of off–balance sheet transactions is required.
10. New record retention rules and penalties are established.

B. The act applies only to public companies, though many states are considering adopting similar legislation for nonprofits (e.g., New York).
C. Some nonprofits are holding themselves voluntarily to Sarbanes-Oxley standards.

Appendix 1.2
Economics Outline

I. Economics is the science of producing, distributing, and consuming material goods and services to make better decisions in a world of limited resources.
II. Economic systems
    A. Capitalism is based on private property rights with distribution decisions made by the free market based on ability.
        1. Adam Smith's theory was that an "invisible hand" guides the free market economy. Individuals who pursue their own self-interests actually produce economic results beneficial to society as a whole (Smith [1776] 2009).
        2. The government's role
            a. National defense
            b. Administration of justice
            c. Facilitation of commerce
            d. Provision of certain public works
    B. Socialism is based on private and government property rights with distribution decisions made by the government based on effort.
        1. Karl Marx defined socialism as a transitory stage between capitalism and communism. Socialism is classified by government ownership of all important property, and means of distribution of surplus by the government based on the formula "from each according to ability, to each according to need" (Marx [1848] 1998).
        2. The government's role: "dictatorship of the proletariat" during an economic class struggle
    C. Communism is based on public property rights with distribution decisions made by the public based on need.
        1. Karl Marx classified communism as the final and perfect goal of historical development characterized by (1) a classless society in which all people live by earning and no person lives by owning; and (2) the abolition of the wage system so that all citizens live and work based on the formula "from each according to ability, to each according to need."
        2. The government's role: no government
III. Free markets under capitalism
    A. Characteristics of free market
        1. There is a large number of buyers and sellers, each with a small share of the total business so that no single participant can affect market price.
        2. Buyers and sellers are unencumbered by economic or institutional restrictions, and they possess full knowledge of market prices and alternatives. As a result, they enter or leave markets whenever they wish.

B. Functions of free market
   1. Competitive prices through the law of supply and demand are established.
   2. Efficient use of resources is encouraged.

C. Theories of free market
   1. Classical—At market equilibrium (supply equals demand, therefore price remains constant), the economy attains full employment; supply creates its own demand; flexibility exists in wages, prices, and interest rates; and savings are invested.
   2. Demand side—At market equilibrium, the economy does not attain full employment, demand creates its own supply, wages and prices are "sticky," and savers and investors are separate groups of people, with each group having specific motivations.
   3. Supply side—At market equilibrium, the economy does not attain full employment; supply creates its own demand; flexibility exists in wages, prices, and interest rates; and savings are invested.

D. Policy implications of free-market theories
   1. Classical—Market is self-correcting; no policies are needed.
   2. Demand side—Market self-correction is possible; however, it may take a long time. Therefore, government intervention is necessary to stimulate the economy by regulating demand through large-scale government spending programs supported by increased taxes or increased money supply.
   3. Supply side—Market self-correction is possible; however, it may take a long time. Therefore, government intervention is necessary to stimulate the economy by stimulating supply (production) through tax reductions, nonmonetization of government deficits, and deregulation of certain industries.

E. Supply-side economics—Did it work during the 1980s?
   1. Efficiency
      a. The inflation rate fell from an annual average of 10.3 percent under President Carter to 3.9 percent under President Reagan.
      b. The unemployment rate fell from an annual average of 7.5 percent under Carter to 5.3 percent under Reagan.
      c. Per capita disposable income rose from $9,800 under Carter to $11,000 under Reagan.
      d. Interest rates declined from 12.5 percent under Carter to 8.5 percent under Reagan.
   2. Growth—The gross national product rose from an annual average of 2.7 percent under Carter to 3.0 percent under Reagan.

3. Deregulation—Modest gains were achieved under Reagan; most notable was the airline industry.
4. Equity—Families living in poverty increased from 11.9 percent under Carter to 13.7 percent under Reagan.
5. Stability—Deficits increased from an annual average of $60 billion under Carter to $190 billion under Reagan.

F. Regulation in the free market
1. Costs of regulation (Weidenbaum and DeFina 1981; Competitive Enterprise Institute [CEI] 2018)
a. Total costs = $1.9 trillion per year (CEI 2018)
b. Direct costs = 5 percent per year
c. Indirect costs, or compliance costs = 95 percent per year
2. Economic justifications for regulation
a. Public interest theory—to protect the public
b. Industry interest theory—to protect the industry
c. Public choice theory—to protect government

IV. Healthcare economics
A. External effects on healthcare economics
1. Federal debt (in billions) and as a percentage of GDP (U S Department of Treasury 2020; U S Department of Commerce Bureau of Economic Analysis 2020, 2021)

2011 = $14,790, 95.2 percent
2012 = $16,066, 100.8 percent
2013 = $16,738, 100.3 percent
2014 = $17,824, 101.7 percent
2015 = $18,150, 99.6 percent
2016 = $19,573, 104.6 percent
2017 = $20,245, 103.7 percent
2018 = $21,516, 104.5 percent
2019 = $22,719, 106.0 percent
2020 = $27,748, 96.5 percent

2. Federal budget surpluses (in billions) (Congressional Budget Office 2020)

2011 = ($1,299)
2012 = ($1,087)
2013 = ($680)
2014 = ($485)
2015 = ($439)
2016 = ($585)
2017 = ($665)
2018 = ($779)

2019 = ($984)
2020 = ($1,009)*
*as of January 2020, prior to COVID-19 impact

3. Aging population (US Census Bureau 2019)
   2016 = 15.2 percent aged 65 years or older (49.2 million)
   22.8 percent aged 17 years and younger (73.6 million)
   2060 = 23.4 percent aged 65 years and older (94.7 million)
   19.8 percent aged 17 years and younger (80.1 million)

B. Internal effects on healthcare economics
   1. Personal health expenditures by population cohort (CMS 2019)
      Ages 0–18 = 11.4 percent
      Ages 19–44 = 21.0 percent
      Ages 45–64 = 33.2 percent
      Aged 65 and older = 34.4 percent
   2. Health expenditures (in billions) and as a percentage of the gross domestic product (CMS 2020c)
      1960 = $27.2, 5.0 percent
      1970 = $74.6, 6.9 percent
      1980 = $255.3, 8.9 percent
      1990 = $721.3, 12.1 percent
      2000 = $1,369.7, 13.3 percent
      2010 = $2,596.4, 17.4 percent
      2011 = $2,687.9, 17.3 percent
      2012 = $2,795.4, 17.2 percent
      2013 = $2,877.6, 17.1 percent
      2014 = $3,029.3, 17.3 percent
      2015 = $3,205.5, 17.6 percent
      2016 = $3,347.4, 17.9 percent
      2017 = $3,487.3, 17.9 percent
      2018 = $3,649.4, 17.7 percent
      2019* = $3,814.6, 17.8 percent
      2020* = $4,014.2, 18.0 percent
      2021* = $4,217.1, 18.2 percent
      2022* = $4,456.0, 18.4 percent
      *projected data, does not include the effects of COVID-19
   3. Health expenditures per person (CMS 2020c)
      1960 = $146
      1970 = $355
      1980 = $1,108
      1990 = $2,843

2000 = $4,857
2010 = $8,404
2011 = $8,638
2012 = $8,908
2013 = $9,113
2014 = $9,518
2015 = $9,995
2016 = $10,379
2017 = $10,742
2018 = $11,172
2019* = $11,597
2020* = $12,118
2021* = $12,641
2022* = $13,261
*projected data, does not include the effects of COVID-19

4. Health expenditures by type of service, 2019 (CMS 2020b)
   Hospital care, 31.4 percent
   Professional service, 27.0 percent
   Home care, 3.0 percent
   Nursing homes, 4.5 percent
   Other residential and personal care, 5.1 percent
   Prescription drugs, 9.7 percent
   Administration and net cost of insurance, 7.6 percent
   Medical equipment and supplies, 3.7 percent
   Investment, 5.3 percent
   Public health, 2.6 percent
5. Health expenditures by source of funds, 2019 (CMS 2020b)
   Private health insurance, 31.5 percent
   Medicare, 21.1 percent
   Private out of pocket, 10.7 percent
   Medicaid, federal, 10.2 percent
   Medicaid, state, 6.0 percent
   CHIP, DOD, VA, 3.8 percent
   Other third party, 11.4 percent
   Investment, 5.3 percent
6. Health expenditures by percentage increase from previous year (CMS 2020a)
   2010 = 4.1 percent
   2011 = 3.4 percent
   2012 = 4.0 percent

2013 = 3.0 percent
2014 = 5.2 percent
2015 = 5.8 percent
2016 = 4.6 percent
2017 = 4.2 percent
2018 = 4.6 percent
2019 = 4.6 percent

Appendix 1.2 References

Centers for Medicare & Medicaid Services (CMS). 2020a. "Historical: National Health Expenditures: Aggregate and Per Capita Amounts." Modified December 16. www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.

——. 2020b. "Historical: National Health Expenditures by Source of Funds and Type of Expenditure: Calendar Years 2021–2019." Modified December 16. www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.

——. 2020c. "Projected: National Health Expenditures and Selected Economic Indicators, Levels and Annual Percent Change: Calendar Years 2012–2028." Modified April 15. www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.

——. 2019. "Historical: Total Personal Health Care Spending by Gender and Age Group, Calendar Year 2014." Modified December 17. www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.

Competitive Enterprise Institute. 2018. "The Cost of Regulation and Intervention." Chapter 3 of *Ten Thousand Commandments 2018*. Published April 19. https://cei.org/10KC/Chapter-3.

Congressional Budget Office (CBO). 2020. "Budget and Economic Data: Historical Budget Data; Jan 2020." Accessed August 16. www.cbo.gov/data/budget-economic-data#2.

Marx, K. (1848) 1998. *The Communist Manifesto*. Reprint, New York: Signet Classic.

Smith, A. (1776) 2009. *The Wealth of Nations*. Reprint, Blacksburg, VA: Thrifty Books.

US Census Bureau. 2019. "An Aging Nation: Projected Number of Children and Older Adults." Revised October 9. www.census.gov/library/visualizations/2018/comm/historic-first.html.

US Department of Commerce Bureau of Economic Analysis. 2021. "Gross Domestic Product, Fourth Quarter and Year 2020 (Second Estimate)." News release, February 25. www.bea.gov/sites/default/files/2021-02/gdp4q20_2nd.pdf.

——. 2020. "Gross Domestic Product as of June 25, 2020," Table 1.1.5. Accessed July 22. https://apps.bea.gov/iTable/download.cfm.

US Department of Treasury. 2020. "The Debt to the Penny and Who Holds It." TreasuryDirect. Updated August 11. www.treasurydirect.gov/govt/reports/pd/pd_debttothepenny.htm.

Weidenbaum, M. L., and R. DeFina. 1981. *The Rising Cost of Government Regulations*. St. Louis, MO: Center for the Study of American Business.

Appendix 1.3
Statistics Outline

I. Statistics is the science of collecting, organizing, presenting, analyzing, and interpreting numbers to make better decisions in a world of uncertainty.

II. Descriptive statistics
   A. Descriptive statistics are used to describe various features of a data set.
   B. Measures of central tendency
      1. *Mean*, or *average*, is derived by summing the observations and dividing by the number of observations.
      2. *Median* is derived by arranging the observations from smallest to largest and selecting the midpoint observation.
      3. *Mode* is derived by selecting the observation that occurs most often.
      4. *Modified mean* is derived by deleting the smallest and the largest observations.
      5. *Weighted mean* is derived by multiplying each observation by a volume, summing the results, and then dividing by the total volume.
   C. Measures of dispersion and shape
      1. *Range* is the difference between the largest and smallest observation.
      2. *Variance* is the average of the squared differences between each observation and the mean.
      3. *Standard deviation* is the square root of the variance.
      4. Shape
         a. Symmetrical—Mean and median are the same.
         b. Right or positive skewed—Mean exceeds the median.
         c. Left or negative skewed—Median exceeds the mean.
   D. The index number is derived by calculating the number in current year divided by the number in base year times 100.

III. Inferential statistics
   A. Inferential statistics are used to infer the characteristics of a sample to the characteristics of the population.
   B. Probability
   C. Hypothesis testing
   D. Linear regression and correlation are used to predict future events and the strength of the association between variables.
   E. Tests of significance
      1. The t-test is used to determine how likely it is that two mean scores differ by chance.
      2. Analysis of variance is used to determine whether a significant difference exists between two or more means.

3. Analysis of covariance is used to determine whether there is a significant difference between two or more means for groups that are initially unequal.

IV. Healthcare statistics
   A. *Adjusted average daily census* is derived by dividing the number of inpatient day equivalents (also called *adjusted inpatient days*) by the number of days in the reporting period.
   B. *Adjusted expenses per admission* is derived by removing expenses incurred for the provision of outpatient care from total expenses and then dividing by the total admissions in the reporting period.
   C. *Adjusted expenses per inpatient day* is derived by dividing total expenses by inpatient day equivalents (also called *adjusted inpatient days*).
   D. *Admissions* include number of patients, excluding newborns, accepted for inpatient service.
   E. *Average daily census* is the average number of inpatients, excluding newborns, receiving care each day during the reporting period.
   F. *Average length of stay* is derived by dividing the number of inpatient days by the number of admissions.
   G. *Expenses* includes all expenses for the reporting period.
      1. *Payroll expenses* includes all salaries and wages.
      2. All professional fees and those salary expenditures excluded from payroll are defined as *nonpayroll expenses* and are included in total expenses. *Labor-related expenses* is defined as payroll expenses plus employee benefits. *Nonlabor-related expenses* includes all other nonpayroll expenses. In accordance with the *AICPA Audit and Accounting Guide for Health Care Organizations* (AICPA 1996), *bad debt* has been reclassified from a "deduction from revenue" to an expense. However, for historical consistency purposes, expense totals may not actually include bad-debt expense.
   H. *Full-time equivalent personnel* is derived by adding the number of full-time personnel to one-half the number of part-time personnel.
   I. *Inpatient day equivalents* is derived by multiplying the number of outpatient visits by the ratio of outpatient revenue per outpatient visit to inpatient revenue per inpatient day, and adding the product (which represents the number of patient days attributable to outpatient services) to the number of inpatient days (can also be used to adjust patient days for skilled nursing facilities, rehabilitation, home care, etc.).
   J. *Occupancy rate* is the ratio of average daily census to the average number of statistical (set up and staffed for use) beds (AHA 1985).

K. Revenue—*Gross patient revenue* (inpatient and outpatient) is revenue from services rendered to patients, including payments received from or on behalf of individual patients. Net patient revenue is derived by subtracting contractual adjustments and charity care from gross patient revenue. Net patient revenue represents what the organization actually intends to collect. *Net total revenue* is net patient revenue plus all other revenue, including contributions, endowment revenue, government grants, and all other revenue not made on behalf of patients.

Appendix 1.3 References

American Hospital Association (AHA). 1985. *American Hospital Association Hospital Statistics: 1985 Edition.* Chicago: American Hospital Association.

American Institute of Certified Public Accountants (AICPA). 1996. *AICPA Audit and Accounting Guide for Health Care Organizations.* New York: AICPA.

CHAPTER 2

ORGANIZATION OF FINANCIAL MANAGEMENT

One of the signs of excellence in a manager is the ability to anticipate problems, not just react to them.

Sir Liam Donaldson, former chief medical officer of National Health Service, England

Learning Objectives

After completing this chapter, you should be able to do the following:

- Understand how healthcare organizations are organized
- Understand how chief financial officers receive their authority regarding the financial matters of the organization
- Identify the roles and responsibilities of the key financial managers
- Examine the alternative corporate structures available to healthcare organizations

Note: Terms shown in **boldface** in this chapter are defined in the margins and appear in the glossary. Terms in ***boldface italic*** do not appear in the margins but do appear in the glossary.