FUNDAMENTALS OF HEALTH CARE FINANCIAL MANAGEMENT

A Practical Guide to Fiscal Issues and Activities

Third Edition

STEVEN BERGER
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STEVEN BERGER
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To my wife, Barbara, and my children, Sam, Ben, Arlie, and Emmalee. They have kept their faith in me while I took the time to write this book. To them I am forever grateful.
Starting now, we will embark on a journey into the interesting and compelling world of the health care financial manager. Because of the nature of the work, and though not on the front line of the patient’s care, the health care financial manager needs to be involved in or apprised of all decisions related to the operations or planning of the facility. Because of this, the financial manager develops a unique understanding of the business of health care.

And whether the business is in hospitals, skilled nursing facilities, physician offices, home health agencies, psychiatric facilities, or any of the other operations doing business in this industry, the basic concepts are essentially the same. Health care and the way it is financed have several characteristics unique to this industry alone. Following are the most important.

1. The health insurance system separates the consumer from the buying decision. Because of this, the consumer seldom has had to make a rational choice in the amount or level of product consumption. This is the number one reason that the cost of health care is so high in America.

2. The health care system is pluralistic, a mixture of government and nongovernment providers and payers.

3. The payment system is technical and complex. Every payer has a different set of benefits, and often they are not spelled out clearly. Consumers (patients) may believe they have a certain set of benefits, but when they finally need care, they may find out that they are in fact not covered for that particular set of illnesses or therapies. This often puts the provider in the difficult situation of denying or postponing care until these coverage issues are settled.

4. Ultimately, though, health care is personal. And it affects everyone. No other industry provides the intensity of emotions engendered in health care. The patient, whose illness may lead to death—or in the case of maternity care, life—is always at personal risk. So are
the loved ones who congregate around the patient and the provider, often with great anxiety and trepidation.

This, then, is why health care, and the way it is financed, is so important. It helps explain why the role of the finance manager takes on great importance within the industry. The financial manager is responsible for the financial reporting and the financial plan (budget), both of which summarize financial results of the organization, actual and projected. These summaries are a direct reflection of the decisions made before the fiscal year begins and day to day as the year moves along. The astute financial manager, who needs to learn as much about every aspect of the organization’s operations as possible, is often in a better position than any other manager to assess the operation in an objective and nonpartisan manner.

At the same time, the health care financial manager will need to learn, understand, and absorb a series of rules, regulations, policies, and procedures that reflect the unique world of American health care practices and its finances. This book is dedicated to the proposition that the reader can learn much about the financial underpinnings of this industry. There is so much to know and so little time to learn it. The challenge is to make these complex ideas presentable in a basic text.

Imagine, if you will, an industry in which the billing rules for only one of its many payers, Medicare, is thousands of pages long. Then imagine that since 1997, Medicare’s enforcement division has been contending that some billing mistakes constitute fraud rather than honest errors.

Imagine, too, an industry in which the largest group of nongovernmental payers, known as health maintenance organizations (HMOs) or preferred provider organizations (PPOs), commonly referred to as managed care, attempt to limit the care given to their beneficiaries, the patients. This is done in the name of saving money for the premium payer, usually the employer. Yet many of these same insurers generally do not provide coverage for screening tests that could either rule out or determine illness that when caught early would cost these self-same insurers less money through less intensive treatments.

You get the idea. Crazy policies. Not always in the best interest of the patient. More than likely in the best interest of the insurer. But also ask yourself, when was the last time you reached into your own pocket to pay the full list price for your health care? Probably never. Very few
employed, elderly, or poor people in America have done so. And they do not often ask the question, which I do ask, “Why does health care cost so much?” The biggest part of the answer is because when one of your loved ones gets sick, you will spare no expense (primarily the insurance company’s money) to make sure that he or she gets well. The providers of care in America have therefore built their industry to respond to the needs and desires of the market.

The problem here is that what the market desires is conflicted. Because very few patients (customers) pay out of pocket, the patient’s desires are often at odds with the desires of the payers and employers who pay the premiums. Caught in the middle are the providers, attempting to be cost-efficient, provide quality outcomes, and produce high levels of patient satisfaction while earning a positive financial return on their investment.

How this situation came to be and how a particular provider contributes to the overall industry expenditures provide a case study for learning. This book will cover all the basic health care financial management issues, but from a distinct perspective. You, the reader, will get to act like a health care financial manager for the most common financial reporting period, a year. Starting on January 1, you will experience the highs and lows of a health care finance officer as he weaves his way through busy times and slow times (mostly busy) and through the conflicting issues that populate the health care financing landscape.

This particular book is written from the perspective of a finance officer for a hospital. However, many of the other primary industry providers are also profiled because this case-studied organization also operates a hospital-based skilled nursing facility, a home health agency, and a psychiatric unit, and it employs a dozen physicians in office practice.

Finally, this text is not intended as an academic treatise. Rather, it is designed to serve as a practical guide to demonstrate how an integrated health care finance division operates in this era, on a day-to-day basis. It is an attempt to meld practice with theory. As we go through the year, various concepts will be highlighted and highlighted again, just as often happens in reality. This will help clarify the issues that are of overriding importance to sound financial management.

August 2007
Libertyville, Illinois

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I would like to thank a number of people for bringing me to the point in my life when the opportunity to write this book coincided with the reality. On the professional side, I must thank two of the best bosses anyone could be lucky enough to have had, Ken Knieser and Jack Gilbert, for never telling me to stop doing what I thought was right. Thanks also go to John Dalton, for encouraging me to become a writer and editor of health care finance material more than twenty years ago now. Finally, my thanks go to Jim Curcuruto, who more than three decades ago was the first professional I worked with who took the time to stop what he was doing and guide my understanding of health care finance concepts.

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On the personal side, I am indebted to my family, who made the biggest sacrifice in the creation of this book. The nights and weekends I labored on the book often took me away from them. My wife, Barbara, kept the household together, maintaining a menagerie of very active
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children in a relative state of equilibrium. I am blessed to have four kids who keep me younger in spirit than in body. Sam, Ben, and Arlie make me smile all the time. But I doubt I would ever have been able to finish this book without my youngest daughter, Emmalee, looking over my shoulder every day to check my progress and whispering such encouragements as, “Come on, Dad, what do you mean you’ve written only one page since yesterday? Let’s move it, move it, move it!”

S.B.
THE AUTHOR

Steven Berger is the founder and president of Healthcare Insights, LLC (www.hcillc.com), which specializes in the teaching of health care general and financial management issues. In addition, Healthcare Insights has developed the dynamic INSIGHTS decision support software solutions for the health care industry.

Prior to his role at Healthcare Insights, which began in 2000, Berger was vice-president of finance for seven years at the 250-bed Highland Park Hospital in suburban Chicago. Before that, he had served as a hospital or health system finance officer in New York, New Jersey, and Missouri. These many diverse organizations included urban and suburban facilities, both academic and nonteaching, ranging in size from one hundred to four hundred beds. He began his career as a Medicare auditor for the Blue Cross Blue Shield Plan of Greater New York and has also worked for a small CPA firm in New York City.

Berger holds a bachelor of science degree in history and a master of science degree in accounting from the State University of New York at Binghamton. He is a certified public accountant (CPA), a Fellow of the Healthcare Financial Management Association (HFMA), and a Fellow of the American College of Healthcare Executives (ACHE). In his various roles with the HFMA, he has served as president of the First Illinois Chapter and a director on HFMA’s National Board of Examiners. In each of these capacities, Berger was part of a team that actively strived to improve the services available to the organization’s members.

In addition, over the past several years, he has presented many seminars on health care finance and general management issues throughout the United States and Canada, including three two-day courses: “Fundamentals of Healthcare Financial Management,” which is the basis of this book; “Turning Data into Useful Information: How to Effectively Collect, Analyze, and Report Financial and Clinical Data to Enhance Decision Making in Healthcare,” which trains both data users and data crunchers to understand each other’s needs and practical ways in which to meet those needs; and “Hospital Financial Management for the Non–Financial Manager,” which teaches clinical and operating managers
how to use financial tools and techniques to improve the financial results in their own departments. His newest two-day course is “The Zen of Budgeting: Improving the Outcome by Simplifying the Process,” which describes how the hospital can dramatically simplify its operating and capital budgeting process.

His work has been published in Healthcare Financial Management magazine, including an award-winning article, “Ten Ways to Improve Cost Management in Hospitals,” in 2004. He also published in 2000 a commentary in Modern Healthcare on the lack of training in the health care industry.

His books include the fourth edition of HFMA’s Introduction to Hospital Accounting, written with Michael Nowicki (Kendall Hunt, 2002; available at www.hfma.org); Understanding Nonprofit Financial Statements (BoardSource, 2003; available at www.boardsource.org); and The Power of Financial and Clinical Metrics: Achieving Superior Results in Your Hospital (ACHE, 2005; available at www.ache.org).

Berger and his wife, Barbara, have four active children who provide many fun-filled days. When not working, the family enjoys participating in all varieties of sports.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Recite the massive amount of dollars that flow through the health care industry
■ Describe the importance of health care financial management in America
■ Explain the role and objective of health care
■ Describe the twofold purposes of financial management
■ Recognize the categories of providers that make up the health care industry
■ Determine how a hospital finance administrator begins to operate within the structure of annual calendar of finance events
■ Build a hospital pro forma financial statement in order to determine if a major project should be approved

“Daddy, what do you do all day at work?” the seven-year-old asks plaintively.

“What do you mean?” blinks Samuel Barnes, the daddy.
“You know, like when you go out so early in the morning and then don’t come back until after other daddies are already home. What are you doing? Why does it take so long?” asks the curly-haired tot.

Sam has to think for a moment. “Well, honey, that’s a good question. I guess I’m out there trying to make the hospital I work for as successful as it can be.”

“But what do you do?”

“Susie, I’m in charge of all the money that comes into the hospital. I’m also responsible for all the money paid out to the people who work there. I also make sure that all the other people who send us stuff that we use to make the sick people better, like food and medicine, get paid.”

“Daddy, do you ever have any money left over after you pay these people?”

“Well, Susie, that’s the whole point. To be successful, you want to have as much left over as you can.”

“But what do you do with all that leftover money? Do you put it in the bank like I do with my allowance?”

“Well, sort of. But instead of putting it into the bank, we put it into a kind of bank that lends it out to other people who need money in their businesses. They then pay us back with a little extra money to thank us for letting them use our money for a while. That’s called interest.”

“So the hospital has all this leftover money and then you have even more money from these other people paying you interest. I’m glad that you work at a company that’s making money because I heard on the news that some people were losing their jobs. I guess you or any of the people you work with won’t lose their jobs.”

“Actually, Susie, I wish I could tell you it was that clear-cut, but it’s not. Part of my job is to make sure that the hospital makes as much money as we decided we wanted to make before the year starts. Sometimes that means we believe we will need less people working for us if we think less people will come to the hospital to be taken care of.”

“But,” Susie asks quizzically, “how can you know about all these things?”

“Ah, honey,” he says, “that’s a long story.”
It is one minute past midnight on January 1. Outside, the New Year’s revelers are just beginning their celebrations. Inside the bowels of the powerful computers of Ridgeland Heights Medical Center (RHMC), a fictional health care system, a different kind of ritual is taking place. At this moment, the automated pricing mechanism is executing its programming, effectively increasing the fifteen thousand or so charges related to individual services or supplies provided to patients. These increases, so carefully planned, are meant to help the organization improve its bottom line.

How these charges came to be, and why they are important, is only a small part of the story that constitutes the art of health care financial management. Financial management in practically any industry has its own policies, procedures, and practices. In most cases, generally accepted accounting principles (GAAP) and financial procedures require estimates and approximations based on the company’s, and the estimator’s, previous experience within the industry. This experience is often timeworn. Financial statements are produced month after month, year after year. Over time, most companies doing business in any industry report financial results in conformance with industry standards.

A standard is an approved or acceptable model as determined by an authority or by general consent. In the health care industry, standards represent the ability to properly report operating results for any particular period of time requested as well as the net assets of an organization.

For RHMC, the price increase, although not entirely desired by the organization’s administration because of its possible negative public relations, is vital to its continued financial success. The size of the price increase is a function of change in volume, severity, and expense, all forecast and budgeted by the medical center. These changes are the result of strategic planning initiatives, newly planned services, shifts in the payer mix, and demographic fluctuations. They are also related to expense increases or decreases projected as a result of the change in volume. And finally, they are related to the community’s perception of the health care organization’s specific pricing for individual services and total cost of care.

This book examines these issues and many more. To begin to understand health care financial management and many of its key components, we must build a framework from which to operate. This framework takes the form of a diary and a primer. It chronicles a year in the life of one health care institution and one health care financial administrator. It explores how this organization, the board of directors, and the clinical and financial executives go about making decisions and how these
decisions are then implemented. It further explores the organization through the natural life cycle of the institution, day by day and month by month, just as a real institution operates.

This book offers practical and informative points on health care decision making, usually from the financial point of view. In the end, the objective is to create greater understanding of how the industry operates on a detailed financial level and why it must do so. Our fictional medical center, Ridgeland Heights, was chosen because its bed complement of 256 falls in the range of a great many hospitals in the United States today. According to *Health, United States, 2006*, a recent edition of the annual compilation of U.S. health care statistics published since 1993 by the National Center for Health Statistics (NCHS) of the U.S. Department of Health and Human Services (HHS), of the 36.9 million admissions to all hospitals in 2004, some 6.9 million were made to hospitals in the range of 200 to 299 beds. When you add up the admissions of hospitals in the range from 100 to 399 beds, the result is 19.4 million, 53 percent of all admissions (NCHS, 2006, tab. 100). Consequently, this book is representative of more than half of the typical hospitals in the country.

Before we begin to explore health care financial management systems and techniques, it is necessary to first define some terms.

**WHAT IS HEALTH CARE?**

Health care is the field concerned with the maintenance or restoration of the health of the body or mind. This may seem obvious, but maybe it’s not. The health care industry currently encompasses much more than just hospitals and doctors. Although together they are associated with the majority of industry expenditures, a considerable number of other reputable health care providers make up the remainder. Figure 1.1 shows the current breakdown of expenditures within the health care industry.

It is important to recognize the breadth of this nearly $1.9 trillion industry. The health care industry is huge and has grown that way in the most dramatic fashion over the past four decades, really starting its climb in 1966 with the advent of the Medicare and Medicaid programs. These programs are explored in greater detail in Chapter Four. However, suffice it to say here that they opened the floodgates of money to the industry. At the time the programs began, the industry absorbed 5.7 percent of the gross domestic product (GDP) in the country (NCHS, 2006). GDP is the market value of goods and services produced within the United States. In the thirty-seven years 1996–2003, health care’s percentage of GDP grew to 15.9 percent, an astonishing 279 percent

Source: NCHS, 2006, tab. 123.
increase (NCHS, 2006). This means that as a nation, we have decided, either by intent or accident, to expend a considerable amount of additional national resources and wealth in the pursuit of our health. Not only is health care now the largest industry in America, but it is growing at a rate greater than general inflation, meaning that it will be absorbing an ever-greater percentage of GDP as time goes by.

It is also important to note that the 15.9 percent of U.S. GDP absorbed by health care leads the industrialized world by a large margin. The next five highest countries are Switzerland at 11.5 percent of GDP going toward health care, Germany at 11.1 percent, Iceland at 10.5 percent, Norway at 10.3 percent, and France at 10.1 percent (NCHS, 2006). So significantly more is spent on health care in the United States than anywhere else in the world. There are many reasons for this. First, Americans have more discretionary income than anyone else and have chosen to spend some of it on health care. Second, Americans have been trained since the end of World War II to expect unlimited treatment for illness. This training has come from organized medicine—defined as the American Medical Association, the American Hospital Association, the American College of Surgeons, and many more groups. Health care is big business, and major administrative services have sprung up to handle the load.

Figure 1.1 highlights the financial scope of the health care industry. As noted, it is almost $1,900,000,000,000—that’s a lot of zeros. It is estimated that by 2008, the industry will be spending well over $2.4 trillion. This means that tremendous resources are available to the companies that service patients—and tremendous opportunities. This money should be consumed in pursuit of the best possible outcomes, offered in the most consumer-friendly way and at the least possible cost. This is the role and objective of health care. The financial manager plays a large role in trying to achieve these outcomes through involvement and leadership in budget planning and reporting, charge setting, contract negotiations, and general financial consulting to the organization’s department managers.

WHAT IS MANAGEMENT?

Before looking for a definition of financial management, it is important to define general management. In most for-profit, investor-owned firms, management’s overarching objective is to maximize the owners’ or shareholders’ wealth. To accomplish this goal, management has been assigned certain roles and responsibilities, involving the skills of leading, planning, organizing, coordinating, motivating, and controlling. In the case of the health care industry, an overwhelming majority of
hospitals and skilled nursing facilities are classified as not-for-profit through section 501(c)(3) of the Internal Revenue Code. Still, even though their employers are not-for-profit, health care industry managers should be required to produce the best possible bottom line. They simply need to do so in the context of providing optimal patient care outcomes in the most efficient and satisfying manner.

In the for-profit world, “management must administer the assets of the enterprise in order to obtain the greatest wealth for the owner” (Berman, Weeks, and Kukla, 1994, p. 4). Therefore, management’s goal is to find the combination of earnings and risk associated with producing those earnings that yields the highest possible value.

In the not-for-profit world, earnings or profits are called margin. In the case of both for-profit and not-for-profit health care firms, the profit or margin is what remains after expenses, or costs, are subtracted from revenues. To reiterate, the role of management is to produce the best possible financial outcomes while minimizing risk to the organization. Not-for-profit health care providers place a somewhat greater emphasis on social goals than for-profit providers, but in the end, management’s success or failure—as defined by each organization’s board of directors—is primarily related to the quality of its bottom line.

WHAT IS FINANCIAL MANAGEMENT?

Financial management can now be defined as strategizing the organization’s financial direction as well as the performance of its day-to-day financial operations.

Therefore, financial management has a dual purpose. The first is to determine the strategic financial direction of the organization. This function is usually performed at the executive level of the financial ladder by the chief financial officer (CFO). The primary job is to prepare and present the organization’s strategic financial plan to the board for endorsement and approval. In many organizations, this job may also include the treasury function, which is charged with investing the organization’s financial assets in the most prudent manner as set down in board-approved investment policies.

The second purpose is management of day-to-day financial operations. The organization’s second-in-command finance officer, often called the controller, usually carries this out. This function means making sure that the payroll and the suppliers are paid and that the revenues generated by the operation are billed out in an accurate and timely manner and collected efficiently with a minimum of write-offs.
Financial management has a role within the overall context of general management. Sound financial management aids the general managers in carrying out their management responsibilities. According to Berman, Weeks, and Kukla (1994), “Financial management tools and techniques can aid management in providing the community with quality services at least cost by furnishing the data that are necessary for making intelligent capital investment decisions, by guiding the operations of certain hospital subsystems, and by providing the systems and data needed to monitor and control operations” (p. 4).

Making data available and helping analyze the financial implications of the information across the health care organization’s setting are therefore the primary roles of financial management. Financial management involves the finance staff in a number of highly visible and important matters:

- Setting prices for the services provided (often called gross charges). In recent years, this has also meant that these list prices have to bear some resemblance to cost if the hospital wants to be able to defend its practices within the context of “transparent pricing,” a trend that has taken on considerable importance in the eyes of consumer groups and in many cases the state and federal governments.
- Producing and analyzing the discounts (often called contractual allowances) taken by a third-party payer—defined as anyone other than the patient who pays for the patient’s services. The large third-party payers are Medicare, Medicaid, and hundreds of managed care organizations (MCOs)—often called health maintenance organizations (HMOs), preferred provider organizations (PPOs), or point-of-service organizations (POSs)—all across the country.
- Recording and analyzing cost information across the organization and at the department level. This involves comparing actual costs to budgeted costs and determining variance analysis; it may also involve a detailed cost accounting program.
- Preparing and reporting financial projections to help successfully guide the organization in its future endeavors. A short-term projection of up to a year into the future is called a budget, and a long-term projection of two to five years into the future is called a strategic financial plan.

**WHY IS FINANCIAL MANAGEMENT IMPORTANT?**

Financial management has a primary and a secondary role in the financial health of the health care organization. Its secondary role is reporting financial results periodically, usually monthly. Its primary role, however,
is as a broker of information. The people who control the information usually have quite a bit of power in any organization. The finance division of most organizations, and in most industries, has generally been the storer and reporter of information.

No organization can achieve success without the proper financial information on which to base its decisions. The whole purpose of having and using information is to make the most appropriate decisions. Making decisions is every manager’s number one priority. Making the proper decisions is a function of experience and appropriate information.

Also, keep in mind that there is a significant difference between information and raw data. Data streams inundate most managers all day long. Raw data are often useless, and sometimes harmful, in the process of making the best decision. The value of information is that it brings context to the data, presenting them in a format that enhances a manager’s ability to understand what is happening and to make a good decision.

Management has been described as the art of making decisions under uncertain and difficult conditions. Thus financial management can be said to be important because, if applied properly, it maximizes the operating manager’s ability to make difficult yet good decisions in the face of uncertainty by presenting information in the best possible format. In addition, it allows the finance division to maximize reimbursement (net revenue) for the health care organization. (This is covered in Chapter Four.)

Michael Nowicki (2004) provides a good description of the six major objectives of health care financial management, in addition to the accounting and reporting functions, which he identifies as the following:

1. To generate income
2. To respond to regulations
3. To facilitate relationships with third-party payers
4. To influence method and amount of payment
5. To monitor physicians
6. To protect the organization’s tax status

RIDGELAND HEIGHTS MEDICAL CENTER: THE PRIMARY STATISTICS

Ridgeland Heights Medical Center is a (fictional) medium-sized medical center in a northern Chicago suburb. For IRS purposes, it was classified as a community, not-for-profit hospital under Internal Revenue
Code section 501(c)(3) because of its charitable mission, dating back to 1925. In addition to its current complement of 180 acute care medical and surgical beds, it also has a 20-bed maternity unit, a 22-bed Medicare PPS-exempt psychiatric unit ("PPS-exempt" means that it is not subject to Medicare’s prospective payment system), a Medicare-certified home health agency (HHA) and hospice, and a 30-bed hospital-based skilled nursing facility (SNF).

Ridgeland Heights also owns ten primary care physician practice sites, which employ thirteen full-time physicians. This practice is managed through a corporate-affiliated management services organization (MSO), which also manages six nonowned primary care physician practices.

In addition, RHMC is half owner of a physician hospital organization (PHO), the other half owned by an independent practice association (IPA), a group of physicians legally organized to negotiate contracts with managed care organizations. The PHO negotiates contracts on behalf of both the medical center and the IPA. In many instances, this is well received by the managed care companies because of its time-saving and cost-reducing principles.

Volume indicators are critical to understanding any institution. A volume indicator generally defines the level of financial viability. RHMC provides both inpatient and outpatient services. Table 1.1 highlights the inpatient volumes for the year just ended as well as the current budgeted year.

Although the medical center always received a majority of its gross revenues from its inpatient services, the 11,000 or so inpatient admissions are now dwarfed by more than 180,000 outpatient services each year. (See Table 1.2 for the analysis.)

This development brought a series of unexpected consequences to the medical center. Although the administration had for several years talked about redefining its service lines to be somewhat more aligned with the outpatient business, it had not yet done so. The continuing decline in the inpatient census coupled with outpatient increases drove the powers that be to complete plans for a renovation and expansion, primarily for improved and updated outpatient and physician services. At the same time, the medical center decided to take some dramatic action with regard to its dwindling inpatient census.

**Managed Care Inroads**

Over the past few years, managed care companies have made significant inroads into RHMC’s primary and secondary service areas. In
### TABLE 1.1. 2007 Actual and 2008 Budgeted Inpatient Volumes, Ridgeland Heights Medical Center.

<table>
<thead>
<tr>
<th></th>
<th>Admissions</th>
<th></th>
<th></th>
<th>Patient Days</th>
<th></th>
<th></th>
<th>Length of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>2007 Actual</td>
<td>2008 Budget</td>
<td>Percentage</td>
<td>2007 Actual</td>
<td>2008 Budget</td>
<td>Percentage</td>
</tr>
<tr>
<td></td>
<td>of Beds</td>
<td></td>
<td></td>
<td>Variance</td>
<td></td>
<td></td>
<td>Variance</td>
</tr>
<tr>
<td>Medical and surgical</td>
<td>120</td>
<td>2,700</td>
<td>2,800</td>
<td>3.7</td>
<td>13,000</td>
<td>14,000</td>
<td>7.7</td>
</tr>
<tr>
<td>Intensive care</td>
<td>24</td>
<td>1,800</td>
<td>1,900</td>
<td>5.6</td>
<td>6,500</td>
<td>7,220</td>
<td>11.1</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>10</td>
<td>600</td>
<td>660</td>
<td>10.0</td>
<td>1,500</td>
<td>1,716</td>
<td>14.4</td>
</tr>
<tr>
<td>Maternity</td>
<td>24</td>
<td>2,000</td>
<td>2,200</td>
<td>10.0</td>
<td>4,000</td>
<td>4,400</td>
<td>10.0</td>
</tr>
<tr>
<td>Births</td>
<td>26</td>
<td>1,950</td>
<td>2,145</td>
<td>10.0</td>
<td>3,900</td>
<td>4,290</td>
<td>10.0</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>20</td>
<td>1,000</td>
<td>1,200</td>
<td>20.0</td>
<td>6,500</td>
<td>8,160</td>
<td>25.5</td>
</tr>
<tr>
<td>Skilled nursing</td>
<td>30</td>
<td>800</td>
<td>840</td>
<td>5.0</td>
<td>8,800</td>
<td>8,400</td>
<td>(4.5)</td>
</tr>
<tr>
<td>facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>254</td>
<td>10,850</td>
<td>11,745</td>
<td>8.2</td>
<td>44,200</td>
<td>48,186</td>
<td>9.0</td>
</tr>
</tbody>
</table>
TABLE 1.2. 2007 Actual and 2008 Budgeted Outpatient Visits, Ridgeland Heights Medical Center.

<table>
<thead>
<tr>
<th></th>
<th>2007 Actual</th>
<th>2008 Budget</th>
<th>Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department</td>
<td>19,000</td>
<td>20,000</td>
<td>5.3</td>
</tr>
<tr>
<td>Outpatient surgery</td>
<td>4,500</td>
<td>5,000</td>
<td>11.1</td>
</tr>
<tr>
<td>Same-day surgery</td>
<td>3,700</td>
<td>4,000</td>
<td>8.1</td>
</tr>
<tr>
<td>Observation patients</td>
<td>1,950</td>
<td>2,000</td>
<td>2.6</td>
</tr>
<tr>
<td>Home health services</td>
<td>26,000</td>
<td>30,000</td>
<td>15.4</td>
</tr>
<tr>
<td>Other outpatients</td>
<td>112,000</td>
<td>120,000</td>
<td>7.1</td>
</tr>
<tr>
<td>Totals</td>
<td>167,150</td>
<td>181,000</td>
<td>8.3</td>
</tr>
</tbody>
</table>

doing so, these companies have brought with them a utilization review philosophy that generally reduces access to care to those beneficiaries covered by insurance. This is not by accident. Employers, who usually foot the bills for employee medical insurance, grew tired of the seemingly never-ending round of double-digit premium increases each year throughout the 1980s. When old-style indemnity insurance, which generally paid the health care providers (hospitals, physicians, skilled nursing facilities, home health agencies, and so on) failed to reign in these increases, employers turned to managed care companies.

These companies claimed they could control the rate of premium increases using a series of strategies that would reduce both the number of health care provider contacts and the intensity of the services received. Here is a summary of the cost control strategies used by managed care companies:

**Utilization Controls**
- Preauthorization of necessity (before approval for service)
- Second opinion, to determine need for service or alternatives
Concurrent review and case management of continuing service necessity during a hospital stay

Quality management programs, monitoring treatment type and duration for outpatient services

Patient outcome research, to determine the efficacy of new clinical services

**Reimbursement and Payment Controls**

- Minimizing level of payment to service providers through tough negotiation
- Approval of payment methodologies that minimize provider incentives to continue treatment
- Imposition of patient copayment to discourage use of services

**RHMC’s Actions to Counter Dwindling Inpatient Census**

The rate of decline in the inpatient census was alarming to RHMC’s administrators. They recognized that the decline in the inpatient census was partially causing an increase in lower-paying outpatient services. Still, to maintain viability as a full-service, stand-alone medical center, the administrators knew that admissions had to be increased. There were only a few ways to do it:

1. Steal market share from other service providers (always an option in any business in any industry; the secret is not in the trying but in the succeeding). This could be attempted in a number of ways:
   - Improved consumer marketing or more of it. Historically, this is not the most effective means. Health care is an industry that has always resisted consumer marketing because referral is generally through a physician, or more recently through managed care contractual coverage.
   - Improved physician marketing or more of it.
   - A better mix of clinical services. This would be a much more effective strategy given the reasons that previous marketing strategies have not worked. A health care organization that can meet the demands of physicians and payers, as well as managing its costs, is likely to survive and thrive in the current climate of downsized institutions.
2. Grow market share by providing services that are not being offered in the service area. This could mean being on the leading edge of technology (a potentially expensive place to be) or assessing the local market through focus groups and surveys to determine the current needs, wants, and desires of the community. An example is complementary or alternative care services, as mentioned earlier in this chapter.

3. Grow market share by recruiting additional physicians at RHMC and encouraging physicians who practice at more than one hospital to practice exclusively at RHMC. This could be accomplished through enhanced service lines, upgraded or new technology, and joint venturing on ambulatory care centers (surgery, rehabilitation, imaging) that will drive increased market share.

**RHMC Decision Time**

Through its administration, RHMC decided to try a mix of solutions. It would perform more targeted marketing and advertising to highlight services where it already had a substantial clinical advantage as well as services that it wanted to build on. Yet the RHMC administration understood that the concept of target marketing and advertising in health care is complex because it is difficult to identify the decision makers who ultimately purchase the service. For instance, is it the patient, the patient’s family, the physician, the insurer, or someone else? The answer is, it depends on the particular health care service. Thus the administration intended to proceed carefully.

In addition, the medical center planned to build new services, particularly outpatient surgeries and services, which appear to be where industry growth will be greatest. Finally, it would put some of its limited financial and intellectual resources into developing more advanced clinical services (often called tertiary services) to differentiate itself from some of its other community-based, nonacademic teaching facility competitors.

**Financial Management Implications**

Almost every decision made by the health care organization’s administration has implications for financial management. The intended consequences should be anticipated and desired at the time the decision is made. There will also be unintended consequences, unforeseen results that seem to occur no matter how carefully the decision is made. In light of these realities, the finance division is expected to present the most
appropriate conservative estimate of the likely projected financial results. This usually means producing what is called a pro forma, a projected income statement incorporating all known assumptions. This should be done using assumptions that represent best-case, worst-case, and most likely scenarios.

**PRO FORMA DEVELOPMENT**

Developing pro formas is extremely important to the financial well-being of the organization. A pro forma is usually performed when the organization is planning to develop a new service or acquire any type of equipment, the capital cost of which exceeds some internally generated amount of money. It is also usually performed in conjunction with the organization’s strategic plan. This book goes into some detail on the concepts of strategic plan, strategic financial plan, capital goods, and capital budgeting in Chapter Three, but for now let’s assume that RHMC always performs pro forma analysis for all capital acquisitions costing more than $500,000.

**Net Present Value and Internal Rate of Return**

The art of pro forma development is best described as the ability to assemble a series of assumptions that lead to a go or no-go decision with respect to capital acquisition. This is generally accomplished by having the final result of the pro forma produce either a net present value (NPV) or internal rate of return (IRR) for the project.

NPV is defined as the present value of the future cash infl ow of an investment minus the investment’s cash outfl ow. Whereas NPV measures a project’s dollar profitability, IRR measures a project’s percentage profitability, or its expected rate of return (Gapenski, 1996). The computation summarizes quite a number of assumptions into a single percentage that has value for the decision maker. The organization may well have a “hurdle rate,” established for its IRR for a new project. This is defined as the minimum percentage return that the organization expects to achieve through funding the project. The hurdle rate reflects the percentage return on its investment that the organization wants to realize. It is a function of the amount of interest income it could earn if it were to invest in the stock or bond market and the additional risk associated with the volume and rate projections used in the pro forma. By concluding a pro forma with an IRR, it is easy, at a glance, to determine whether the hurdle rate has been exceeded, thus giving the decision maker the appropriate information with which to make the go or no-go decision.
The reason for establishing a hurdle rate and internal rate of return involves money (that is, the capital resources used to pay for all purchases, whether operating expenses or capital expenses). Money, the organization’s capital, is scarce. There is always a list of conflicting priorities to be funded. Therefore, it is imperative that any health care organization establish its own hurdle rate, know why it is doing so, and adhere to it to stay financially viable into the future.

**Volume Assumptions**

The most important feature of pro forma development is the “validity” or best-guess nature of the assumptions. The *most sensitive assumption* in any pro forma is that of *volume*. Absolutely no other assumption drives the bottom-line result as much as volume, because volumes drive three of the four essential elements of the income statement (gross revenue, net revenues, and variable expenses). The only element that it does not primarily control is fixed expenses. The age-old question is always how to verify, how to validate, or simply how to believe that the volumes being proposed are achievable in the future for a service that has never been performed at the organization in the past.

Various methods can be used to construct a best guess for volume. But again, because it is in the future, there is no guarantee that it will be achieved.

A good example of volume uncertainty and its potential validity can be seen in a pro forma that was developed at RHMC three years prior to the January of our discussion. The medical center decided it would make good clinical sense to install a magnetic resonance imaging (MRI) device, a highly sophisticated diagnostic radiology tool costing $1.75 million for the machine and another $250,000 for construction of the MRI suite. Up to that time, whenever physicians ordered MRI tests for patients, RHMC staff had to load the patients into an ambulance (at a cost of $60,000 a year) to be taken to an MRI provider twenty minutes away. An in-house unit would give better patient satisfaction and better physician satisfaction as a result of faster turnaround time on results. But it was the responsibility of the finance division to determine whether or not it would be a good financial investment.

Working with the radiology department manager, RHMC’s finance manager developed a series of assumptions (see Table 1.3). The radiology manager contributed the all-important verifiable volumes, while the finance manager developed the information on gross and net revenue. Volume is the most important number on the page because both revenues

#### CAPITAL COSTS ($)

<p>| | |</p>
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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Equipment (MRI)*</td>
<td>1,750,000</td>
</tr>
<tr>
<td>Construction, renovation*</td>
<td>250,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,000,000</strong></td>
</tr>
</tbody>
</table>

#### VOLUMES

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<tr>
<th></th>
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<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>Inpatient</td>
<td>350</td>
<td>371</td>
<td>393</td>
<td>417</td>
<td>442</td>
<td>1973</td>
</tr>
<tr>
<td>Outpatient</td>
<td>1,610</td>
<td>1,707</td>
<td>1,809</td>
<td>1,918</td>
<td>2,033</td>
<td>9,076</td>
</tr>
<tr>
<td>Total volumes</td>
<td>1,960</td>
<td>2,078</td>
<td>2,202</td>
<td>2,335</td>
<td>2,475</td>
<td>11,049</td>
</tr>
<tr>
<td>Total per day</td>
<td>8.00</td>
<td>8.48</td>
<td>8.99</td>
<td>9.53</td>
<td>10.1</td>
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</tr>
<tr>
<td>Charge per test</td>
<td>1,200</td>
<td>1,260</td>
<td>1,323</td>
<td>1,389</td>
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</table>
**REVENUE**

<table>
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<tr>
<th></th>
<th>420,000</th>
<th>467,460</th>
<th>519,939</th>
<th>579,276</th>
<th>644,705</th>
<th>$2,631,379</th>
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<tr>
<td><strong>Inpatient</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outpatient</strong></td>
<td>1,932,000</td>
<td>2,150,820</td>
<td>2,393,307</td>
<td>2,664,390</td>
<td>2,965,349</td>
<td>$12,105,866</td>
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<tr>
<td><strong>Total revenues</strong></td>
<td>$2,352,000</td>
<td>$2,618,280</td>
<td>$2,913,246</td>
<td>$3,243,665</td>
<td>$3,610,054</td>
<td>$14,737,245</td>
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**PAYER MIX (%)**

<p>| | | | | | | |</p>
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<th></th>
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<tbody>
<tr>
<td><strong>Medicare</strong></td>
<td>34.20</td>
<td>35.00</td>
<td>35.50</td>
<td>36.00</td>
<td>37.00</td>
<td></td>
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<tr>
<td><strong>Medicaid</strong></td>
<td>3.80</td>
<td>4.00</td>
<td>4.20</td>
<td>4.40</td>
<td>4.60</td>
<td></td>
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<tr>
<td><strong>Managed care</strong></td>
<td>26.80</td>
<td>30.00</td>
<td>33.00</td>
<td>36.00</td>
<td>39.00</td>
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<tr>
<td><strong>All other</strong></td>
<td>35.20</td>
<td>31.00</td>
<td>27.30</td>
<td>23.60</td>
<td>19.40</td>
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<td>100.00</td>
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### CONTRACTUAL ALLOWANCES (%)

**Inpatient**

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<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Medicaid</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Managed care</td>
<td>55.00</td>
<td>55.00</td>
<td>55.00</td>
<td>55.00</td>
<td>55.00</td>
</tr>
<tr>
<td>All other</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
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</table>

**Outpatient**

<table>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>60.00</td>
<td>60.00</td>
<td>60.00</td>
<td>60.00</td>
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<tr>
<td>Medicaid</td>
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<td>80.00</td>
<td>80.00</td>
<td>80.00</td>
<td>80.00</td>
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<tr>
<td>Managed care</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>All other</td>
<td>15.00</td>
<td>15.00</td>
<td>15.00</td>
<td>15.00</td>
<td>15.00</td>
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FREE CARE (%)

<table>
<thead>
<tr>
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<th>Inpatient</th>
<th>Outpatient</th>
</tr>
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<tbody>
<tr>
<td>All</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>other</td>
<td>0</td>
<td>0</td>
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</table>

INPATIENT CONTRACTUAL ($) 

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Medicaid</th>
<th>Managed care</th>
<th>All other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>143,640</td>
<td>15,960</td>
<td>61,908</td>
<td>14,784</td>
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<tr>
<td></td>
<td>147,000</td>
<td>16,800</td>
<td>69,300</td>
<td>13,020</td>
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<td></td>
<td>149,100</td>
<td>17,640</td>
<td>76,230</td>
<td>11,466</td>
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<tr>
<td></td>
<td>151,200</td>
<td>18,480</td>
<td>83,160</td>
<td>9,912</td>
</tr>
<tr>
<td></td>
<td>155,400</td>
<td>19,320</td>
<td>90,090</td>
<td>8,148</td>
</tr>
<tr>
<td>Total</td>
<td>236,292</td>
<td>246,120</td>
<td>254,436</td>
<td>262,752</td>
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<tr>
<td></td>
<td></td>
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<td>272,958</td>
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</table>
### OUTPATIENT CONTRACTUAL ($)  

<table>
<thead>
<tr>
<th></th>
<th>396,446</th>
<th>405,720</th>
<th>411,516</th>
<th>417,312</th>
<th>428,904</th>
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<tbody>
<tr>
<td>Medicare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>58,733</td>
<td>61,824</td>
<td>64,915</td>
<td>68,006</td>
<td>71,098</td>
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<tr>
<td>Managed care</td>
<td>181,222</td>
<td>202,860</td>
<td>223,146</td>
<td>243,432</td>
<td>263,718</td>
</tr>
<tr>
<td>All other</td>
<td>102,010</td>
<td>89,838</td>
<td>79,115</td>
<td>68,393</td>
<td>56,221</td>
</tr>
<tr>
<td>Total outpatient contractual</td>
<td>738,410</td>
<td>760,242</td>
<td>778,693</td>
<td>797,143</td>
<td>819,941</td>
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</table>

**TOTAL CONTRACTUAL ($)**  

<table>
<thead>
<tr>
<th></th>
<th>974,702</th>
<th>1,006,362</th>
<th>1,033,129</th>
<th>1,059,895</th>
<th>1,092,899</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREE CARE ($)</td>
<td>81,608</td>
<td>93,346</td>
<td>104,540</td>
<td>113,183</td>
<td>115,056</td>
</tr>
</tbody>
</table>

*Useful life: 5 years.*
and expenses are driven by it. In this case, the volumes were developed from two sources, one internal and one external.

The internal source was the number of MRI scans that RHMC was already sending to the outside provider annually. This number had great validity because it was historical. The external source was vendor-generated (usually suspect because the vendor is trying to sell its product). It consisted of the average number of MRI scans that should be needed at the medical center based on the number of current diagnostic radiology tests being performed. The vendor backed up the figures with a number of years of research. It is usually difficult to validate this type of claim, but it is important to try, particularly if the health care organization is considering spending $2 million. A survey of RHMC physicians most likely to order MRI scans can be used to validate the reasonableness of the vendor projection. In addition, external benchmarks of user rate per existing radiological procedure are available to help validate the projections.

**Revenue and Expense Assumptions**

Other aspects of the pro forma become almost as critical to ultimate success or failure of the venture. In this case, the published price per scan (the gross charge) needed to be set at a prevailing market rate, so various individuals performed “secret shopper” phone calls to other MRI providers within a thirty-mile radius. This helped the finance manager set prices for the types of scan performed by the MRI machine that should maximize the return to RHMC and be acceptable to the community.

Maximization of net revenue is a function of the number of Medicare, Medicaid, and managed care patients expected and in what percentages of the total. This is important because none of these payers reimburses the organization by its set price. Instead, Medicare and Medicaid mandate what they pay (no negotiations, thank you very much), while each managed care payer attempts to negotiate the lowest price that the provider is willing to accept.

Direct variable expenses for this new service are purely a function of volume. The number of employees, also known as full-time equivalents (FTEs), who must be hired is a function of the number of scans expected to be performed and the amount of time it takes to perform the tests. Because staffing costs generally account for most of cost of providing a service, it is useful to project conservatively (that is, anticipate a lower volume).
Fringe benefits are always a significant expense in any pro forma that has staffing expenses. There are two ways to reflect fringe benefits. One is to determine the exact cost. Fringe benefits are commonly represented by these items:

- Old-age survivor and disability insurance (OASDI) withholding, which is also known as Social Security
- Medicare Part A trust fund withholding
- Medical, dental, and life insurance
- Short- and long-term disability
- Pension expense
- Tuition reimbursement
- The value of sick, vacation, and holiday time off

The only amounts easily quantifiable are these:

- OASDI, which the federal government has set at 6.2 percent of an employee’s gross wages, with a cap ($97,500 in 2007)
- Medicare Part A trust fund, set by the federal government at 1.45 percent of an employee’s gross wage, without a cap

All other fringe benefits are much harder to quantify, if only because none of them are paid for as a percentage. Instead, they are all employee-specific, with criteria such as sex, age, family size, and employment longevity as factors.

Therefore, a second method to reflect fringe benefit cost on a pro forma is generally preferred and used. This is as a percentage of gross salary. Health care organizations differ in the percentage used to represent their particular institution. RHMC has settled on a 30 percent rate, which is reflective of its experience over a period of several years. Exhibit 1.1 shows an analysis of the fringe benefit rate.

The results, shown in Table 1.4, are presented in financial statement format with an IRR calculated over a five-year period. IRRs are easily calculated by any popular brand of electronic spreadsheet—a real time saver because the assumptions change constantly throughout the process. The 25.92 percent IRR seen in Table 1.4 is above RHMC’s hurdle rate of 14.0 percent. Thus this project was accepted because it exceeded the hurdle rate and was going to improve customer satisfaction and make testing more efficient for the on-site clinical staff.
EXHIBIT 1.1. Analysis of Fringe Benefits Percentage, Ridgeland Heights Medical Center.

1A. OASDI at 6.2% of gross salary (up to a maximum of $97,500 in 2007) 6.20%

1B. Medicare Part A trust fund at 1.45% of gross salary (no maximum cap) 1.45%

2. Non-FICA fringe benefits:
   Total non-FICA fringe benefit costs $4,600,000
   Total gross salaries $36,000,000
   Non-FICA fringe benefit percentage 12.78% 12.78%

3. Staffing replacement fringe benefits—average allowable days off:
   Sick 8
   Holiday 6
   Vacation 10
   Total allowable days off per year 24
   Total paid days per year 260
   Staffing replacement fringe benefit percentage 9.23% 9.23%
   Total fringe benefits as a percentage of gross salaries 29.66%

Convinced that this was a worthwhile project, the medical center administration recommended it for approval to the finance committee of the board of directors, which approved it. But as with all major projects, the finance committee wanted to track the investment over time. It required that projects costing more than $1 million be brought back to the committee annually for review.

So the finance manager, through finance staff, prepared an actual profit-and-loss statement for this program on an annual basis. The report was prepared in January 2007 so that at the February finance committee meeting, the CFO could present this second annual report on the MRI program that went live two years earlier, in January 2005. The results are presented in Table 1.5. As can be seen, this new clinical program is performing acceptably on the basis of financial return, doing better than budget on the bottom line in its first two years.
### TABLE 1.4. Proposed MRI Service: Pro Forma Statement of Revenues and Expenses, Ridgeland Heights Medical Center, July 2005.

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES ($)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross revenues</td>
<td>2,352,000</td>
<td>2,618,280</td>
<td>2,913,246</td>
<td>3,243,665</td>
<td>3,610,054</td>
<td>14,737,245</td>
</tr>
<tr>
<td>Less: Contractual allowances</td>
<td>974,702</td>
<td>1,006,362</td>
<td>1,033,129</td>
<td>1,059,895</td>
<td>1,092,899</td>
<td>5,166,987</td>
</tr>
<tr>
<td>Less: Free care allowances</td>
<td>81,608</td>
<td>93,346</td>
<td>104,540</td>
<td>113,183</td>
<td>115,056</td>
<td>507,732</td>
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<tr>
<td>Net revenues</td>
<td>1,295,690</td>
<td>1,518,572</td>
<td>1,775,578</td>
<td>2,070,587</td>
<td>2,402,099</td>
<td>9,062,526</td>
</tr>
<tr>
<td><strong>EXPENSES ($)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Expenses</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Salaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0 Technicians</td>
<td>90,000</td>
<td>94,500</td>
<td>99,225</td>
<td>104,186</td>
<td>109,396</td>
<td>497,307</td>
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<tr>
<td>1.0 Clerical</td>
<td>27,000</td>
<td>28,350</td>
<td>29,768</td>
<td>31,256</td>
<td>32,819</td>
<td>149,192</td>
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<tr>
<td>Total salaries</td>
<td>117,000</td>
<td>122,850</td>
<td>128,993</td>
<td>135,442</td>
<td>142,214</td>
<td>646,499</td>
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(Table 1.4 continued)

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<th>36,855</th>
<th>38,698</th>
<th>40,633</th>
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<th>193,950</th>
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<td>Fringes @ 30%</td>
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<td>Medical supplies</td>
<td>150,000</td>
<td>172,500</td>
<td>198,375</td>
<td>228,131</td>
<td>262,351</td>
<td>1,011,357</td>
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<td>Reduction of ambulance cost</td>
<td>(60,000)</td>
<td>(63,000)</td>
<td>(66,150)</td>
<td>(69,458)</td>
<td>(72,930)</td>
<td>(331,538)</td>
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<td>Total variable expense</td>
<td>242,100</td>
<td>269,205</td>
<td>299,915</td>
<td>334,749</td>
<td>374,299</td>
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**Fixed Expenses**

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<th>40,517</th>
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<td>120,750</td>
<td>126,788</td>
<td>133,127</td>
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<tr>
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<td>63,000</td>
<td>66,150</td>
<td>69,458</td>
<td>72,930</td>
<td>331,538</td>
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<td>42,000</td>
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<td>63,000</td>
<td>66,150</td>
<td>69,458</td>
<td>72,930</td>
<td>331,538</td>
</tr>
<tr>
<td>Office supplies</td>
<td>10,000</td>
<td>10,500</td>
<td>11,025</td>
<td>11,576</td>
<td>12,155</td>
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<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Marketing</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility lease</td>
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<td>210,000</td>
<td>220,500</td>
<td>231,525</td>
<td>243,101</td>
<td>1,105,126</td>
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<td>Interest</td>
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<tr>
<td>Miscellaneous</td>
<td>10,000</td>
<td>10,500</td>
<td>11,025</td>
<td>11,576</td>
<td>12,155</td>
<td>55,256</td>
</tr>
<tr>
<td>Total fixed expense</td>
<td>515,000</td>
<td>655,750</td>
<td>688,538</td>
<td>722,964</td>
<td>759,113</td>
<td>3,341,364</td>
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<tr>
<td>TOTAL CASH OUTFLOWS ($)</td>
<td>757,100</td>
<td>924,955</td>
<td>988,453</td>
<td>1,057,713</td>
<td>1,133,412</td>
<td>4,861,632</td>
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<tr>
<td>Net cash inflows or (outflows)</td>
<td>538,590</td>
<td>593,617</td>
<td>787,125</td>
<td>1,012,874</td>
<td>1,268,688</td>
<td>4,200,894</td>
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<tr>
<td>Less: Depreciation expense</td>
<td>400,000</td>
<td>400,000</td>
<td>400,000</td>
<td>400,000</td>
<td>400,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td>Net operating profit or (loss)</td>
<td>138,590</td>
<td>193,617</td>
<td>387,125</td>
<td>612,874</td>
<td>868,688</td>
<td>2,200,894</td>
</tr>
<tr>
<td>Internal rate of return ($)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.92%</td>
</tr>
<tr>
<td>IRR (2,000,000)</td>
<td>538,590</td>
<td>593,617</td>
<td>787,125</td>
<td>1,012,874</td>
<td>1,268,688</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 1.5. MRI Service: Annual Statement of Revenues and Expenses, Ridgeland Heights Medical Center, January 2008.

<table>
<thead>
<tr>
<th></th>
<th>2006 Budget ($)</th>
<th>2006 Actual ($)</th>
<th>Variance (%)</th>
<th>2007 Budget ($)</th>
<th>2007 Actual ($)</th>
<th>Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross revenues</td>
<td>2,352,000</td>
<td>2,418,000</td>
<td>2.8</td>
<td>2,618,280</td>
<td>2,983,500</td>
<td>13.9</td>
</tr>
<tr>
<td>Less: Contractual</td>
<td>974,702</td>
<td>1,056,062</td>
<td>8.3</td>
<td>1,006,362</td>
<td>1,226,784</td>
<td>21.9</td>
</tr>
<tr>
<td>allowances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Free care</td>
<td>81,608</td>
<td>76,549</td>
<td>−6.2</td>
<td>93,346</td>
<td>106,054</td>
<td>13.6</td>
</tr>
<tr>
<td>allowances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net revenues</td>
<td>$1,295,690</td>
<td>1,285,389</td>
<td>−0.8</td>
<td>1,518,572</td>
<td>1,650,662</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>salaries 2.0 Technicians</td>
<td>90,000</td>
<td>93,456</td>
<td>−3.8</td>
<td>94,500</td>
<td>97,434</td>
<td>−3.1</td>
</tr>
<tr>
<td>1.0 Clerical</td>
<td>27,000</td>
<td>25,555</td>
<td>5.4</td>
<td>28,350</td>
<td>27,654</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>2007</td>
<td>% Change</td>
<td>2008</td>
<td>2009</td>
<td>% Change</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Total salaries</td>
<td>117,000</td>
<td>119,011</td>
<td>-1.7</td>
<td>122,850</td>
<td>125,088</td>
<td>-1.8</td>
</tr>
<tr>
<td>Fringes @ 30%</td>
<td>35,100</td>
<td>35,703</td>
<td>-1.70</td>
<td>36,855</td>
<td>37,526</td>
<td>-1.80</td>
</tr>
<tr>
<td>Medical supplies</td>
<td>150,000</td>
<td>146,667</td>
<td>2.20</td>
<td>172,500</td>
<td>151,434</td>
<td>12.20</td>
</tr>
<tr>
<td>Reduction of ambulance costs</td>
<td>(60,000)</td>
<td>(60,000)</td>
<td>0.00</td>
<td>(63,000)</td>
<td>(63,000)</td>
<td>0.00</td>
</tr>
<tr>
<td>Total variable expense</td>
<td>242,100</td>
<td>241,381</td>
<td>0.30</td>
<td>269,205</td>
<td>251,048</td>
<td>6.70</td>
</tr>
</tbody>
</table>

**Fixed expenses**

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>% Change</th>
<th>2008</th>
<th>2009</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryogens</td>
<td>35,000</td>
<td>36,567</td>
<td>-4.50</td>
<td>36,750</td>
<td>37,550</td>
<td>-2.20</td>
</tr>
<tr>
<td>Equipment maintenance contracts</td>
<td>—</td>
<td>—</td>
<td>n/a</td>
<td>115,000</td>
<td>115,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Utilities</td>
<td>60,000</td>
<td>60,000</td>
<td>0.00</td>
<td>63,000</td>
<td>63,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Category</td>
<td>Previous Year</td>
<td>Current Year</td>
<td>Change</td>
<td>Previous Year</td>
<td>Current Year</td>
<td>Change</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>Legal and accounting (incl. billing)</td>
<td>40,000</td>
<td>42,000</td>
<td>0.00</td>
<td>40,000</td>
<td>43,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Insurance</td>
<td>60,000</td>
<td>63,000</td>
<td>0.00</td>
<td>60,000</td>
<td>63,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Office supplies</td>
<td>100,000</td>
<td>105,000</td>
<td>0.00</td>
<td>100,000</td>
<td>105,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Marketing</td>
<td>100,000</td>
<td>105,000</td>
<td>0.00</td>
<td>100,000</td>
<td>105,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Facility lease</td>
<td>200,000</td>
<td>205,000</td>
<td>0.00</td>
<td>200,000</td>
<td>205,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Interest</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10,000</td>
<td>9,996</td>
<td>0.00</td>
<td>10,000</td>
<td>9,996</td>
<td>0.00</td>
</tr>
<tr>
<td>Total fixed expense</td>
<td>515,000</td>
<td>525,000</td>
<td>0.00</td>
<td>515,000</td>
<td>525,000</td>
<td>0.00</td>
</tr>
<tr>
<td>TOTAL CASH</td>
<td>757,100</td>
<td>749,923</td>
<td>0.90</td>
<td>924,806</td>
<td>924,955</td>
<td>0.20</td>
</tr>
</tbody>
</table>

**OUTFLOWS**
<table>
<thead>
<tr>
<th></th>
<th>538,590</th>
<th>535,466</th>
<th>593,617</th>
<th>745,856</th>
<th>5625.60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash inflows or (outflows)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Depreciation expense</td>
<td>400,000</td>
<td>400,000</td>
<td>400,000</td>
<td>400,000</td>
<td>0.00</td>
</tr>
<tr>
<td>Net operating profit or (loss)</td>
<td>$138,590</td>
<td>$135,466</td>
<td>$193,617</td>
<td>$345,856</td>
<td>78.60</td>
</tr>
<tr>
<td>Volumes (number of tests)</td>
<td>1,960</td>
<td>1,860</td>
<td>2,078</td>
<td>2,210</td>
<td>6.40</td>
</tr>
<tr>
<td>Gross revenue per test ($)</td>
<td>1,200</td>
<td>1,300</td>
<td>1,260</td>
<td>1,350</td>
<td>7.10</td>
</tr>
</tbody>
</table>
LIVING WITH THE FINANCE COMMITTEE AND BOARD OF DIRECTORS’ CALENDAR

An important aspect of proper health care financial management is understanding the information needs of the people who are the ultimate decision makers in any organization, the board of directors. This is true whether the organization is set up as a taxable or a nontaxable entity. The board sets the policy direction for the organization, which is then carried out by the administration through its management team.

The board and its standing committees expect and require certain information, in a certain format, presented at committee meetings held at specified intervals. It is essential that delivery of the information expected by the board be accurate and timely. Many health care organizations have a calendar, published before the year begins, specifying which topics are discussed throughout the year.

The board of directors’ finance committee has specific authority in and responsibility to the organization, enumerated in the bylaws of the organization; for example:

- Present to the board for approval an annual budget consistent with the medical center’s plan for providing care to meet patient needs
- Present a long-term capital expenditure plan to the board for approval
- Review monthly and quarterly reports on financial matters
- Review and approve the budget of any special project or committee, when appropriate
- Annually review the sources of funding for the organization in conjunction with preparation of the budget
- Recommend independent auditors for the medical center

RHMC’s finance committee meets periodically to carry out its responsibilities. Exhibit 1.2 presents the finance committee calendar for the center. In addition to the routine matters that are brought forth at every meeting, the calendar clearly defines the topics to be formally reviewed in a defined time frame. As can be seen, the RHMC finance committee meets every other month except March, which is special because of an additional meeting dedicated solely to the organization’s strategic financial plan. Every organization determines its own preferred timing between meetings. Common intervals are monthly, bimonthly, and in some cases, quarterly.
Each item the finance committee requires to be reviewed is important, if only because the committee members are on the governing board, and this information aids in conducting their fiduciary responsibility.

### EXHIBIT 1.2. Annual Finance Committee Agenda, Ridgeland Heights Medical Center.

#### Routine Agenda Items, Every Meeting

<table>
<thead>
<tr>
<th>Item</th>
<th>Chapter in This Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Approval of minutes</td>
<td>2</td>
</tr>
<tr>
<td>2. Financial statement review, including review of financial ratios</td>
<td>5</td>
</tr>
<tr>
<td>3. Accounts receivable update</td>
<td></td>
</tr>
</tbody>
</table>

#### Bimonthly Standing Agenda Items

<table>
<thead>
<tr>
<th>Month</th>
<th>Item</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>1. Bond debt status</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2. Health insurance annual review</td>
<td>2</td>
</tr>
<tr>
<td>March</td>
<td>3. Strategic financial plan</td>
<td>3</td>
</tr>
<tr>
<td>April</td>
<td>4. Results of annual audit and management letter review</td>
<td>4</td>
</tr>
<tr>
<td>June</td>
<td>5. Human resource report, salary budget decisions</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6. Pension status and actuaries report review</td>
<td>6</td>
</tr>
<tr>
<td>August</td>
<td>7. Review next year’s budget assumptions</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>8. Annual materials management, inventory level review</td>
<td>8</td>
</tr>
<tr>
<td>October</td>
<td>9. Finalize and approve operating and capital budgets</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>10. Review progress toward management letter comments</td>
<td>10</td>
</tr>
<tr>
<td>December</td>
<td>11. Review malpractice insurance coverage</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>12. Review and approve auditors and fees</td>
<td>12</td>
</tr>
</tbody>
</table>

#### As-Needed Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information system plans</td>
<td>10</td>
</tr>
<tr>
<td>2. Investment opportunities</td>
<td></td>
</tr>
</tbody>
</table>
**Routine Matters**  
There are several items that the RHMC finance committee reviews at each meeting. The most important are the monthly financial statements. Although the committee meets every other month, it still receives individual monthly financial statements for review. At the meeting, the most recent financial statement is reviewed, and the prior statement is mentioned only if some event warrants discussion. Preparation and review of the financial statements by the finance division are discussed in Chapter Two.

The other routine item presented at every meeting is an analysis of the organization’s accounts receivable. Accounts receivable is often the largest current asset in a health care organization and has the most significant impact on daily cash flow. Smaller is considered better because any organization would much rather have cash assets to invest instead of non-interest-bearing receivables. Accounts receivable practices are discussed in Chapter Five; the all-important accounts receivable ratio, which is the number of days of revenue represented by the receivables, is discussed in Chapter Three.

The finance committee is primarily interested in the calculation of number of days of receivables, how this figure compares to recent months, and how it compares to the budget, in order to judge the performance of management. The committee is also interested in the amount of bad-debt write-off and whether or not it should be considered excessive. Finally, with respect to receivables, the committee is interested in the aging of the various open balances to judge whether management is allowing accounts to grow too old to collect.

**Periodic Review Matters**  
As can be seen from Exhibit 1.2, a number of areas are subject to periodic review by the finance committee. Each item, its importance, and the implications for financial management are discussed elsewhere in this book. For the moment, though, the real importance to financial managers is that they are expected to produce reports and information that allow the members of the governing board to pursue their duties. The periodic review calendar allows the financial managers to plan out their upcoming year, knowing the schedule they are required to keep.
YEAR-END CLOSING

At the same time the finance managers are preparing for the next finance committee meeting in February, they are engaged in one of the two most onerous tasks they are required to perform each year: the year-end closing. (The other is the budget process.) Although the regular monthly closing becomes routine, the year-end closing always requires an extraordinary amount of effort. This is because an outside accounting firm audits the financial books and records of the organization, and so the year-end balance takes on added importance.

Preparing for the auditors is an arduous and time-consuming task, particularly if the organization has not performed ongoing account analysis throughout the year. The auditor’s job is to validate the transactions that are reflected in the client’s financial statements—in this case, Ridgeland Heights Medical Center. Because it is the auditor’s role to determine that the financial statements “present fairly, in all material respects, the financial position (balance sheet) of [the organization], as well as the results of the operations, changes in net assets and cash flows for the years then ended, in conformity with generally accepted accounting principles (GAAP),” the auditors need to examine the underlying transactions (American Institute of Certified Public Accountants, 2006, p. 117).

Therefore, the finance staff of RHMC needs to give the auditors a series of analyses for every balance sheet account, listing by category and date the transactions made as well as the other side of each entry. If the staff performed this throughout the year, the task would be less onerous. However, many organizations have trouble maintaining and updating these analyses monthly and thus are required to re-create their annual transactions in a short time frame (say, within thirty days). This is necessary because most administrators and boards require the audit to be complete and the auditor’s report to be presented to the board within a short time period (two to three months) after the close of the fiscal year.

The staff and accounting director at RHMC do a better job than some of their peers and therefore do not face so great an obstacle in finishing their task. Still, the accounting director has created a list enumerating the tasks that the department faces in January and part of February (see Exhibit 1.3). This consumes most of the staff time during these two months.
### EXHIBIT 1.3. Year-End Accounting Procedures, Ridgeland Heights Medical Center, December 31, 2008.

<table>
<thead>
<tr>
<th>Financial Statement</th>
<th>Account Name</th>
<th>Chart of Accounts Name</th>
<th>Procedure</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash</strong></td>
<td>Petty cash accounts</td>
<td></td>
<td>Verify balances are correct</td>
<td>1/16/08</td>
</tr>
<tr>
<td></td>
<td>Accounts payable, checking</td>
<td></td>
<td>Complete December and all prior-month reconciliation; adjust G/L balance accordingly</td>
<td>1/16/08</td>
</tr>
<tr>
<td><strong>Payroll</strong></td>
<td>Payroll, checking</td>
<td></td>
<td>Complete December and all prior-month reconciliation; adjust G/L balance accordingly</td>
<td>1/16/08</td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td>Money market sweep</td>
<td></td>
<td>Tie out to bank statement</td>
<td>1/16/08</td>
</tr>
<tr>
<td></td>
<td>Unrestricted investments</td>
<td></td>
<td>Tie out to month-end investment schedule; adjust valuation allowance so all investments are stated at market value; verify that balance in unrealized gain/loss account is proper</td>
<td>1/19/08</td>
</tr>
<tr>
<td></td>
<td>Trusteed investments</td>
<td></td>
<td>Tie out to investment manager statement; verify that balance in unrealized gain/loss account is proper</td>
<td>1/16/08</td>
</tr>
<tr>
<td></td>
<td>Endowment fund</td>
<td></td>
<td>Tie out balance to statement; adjust for interest if necessary; verify that balance in unrealized gain/loss account is proper</td>
<td>1/16/08</td>
</tr>
<tr>
<td><strong>Patient accounts receivable</strong></td>
<td>Patient posted cash</td>
<td>Reconcile G/L balance to cash summary from patient accounts; adjust if necessary</td>
<td>1/20/08</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>Complete December reconciliation of accounts receivable trial balance to the general ledger; adjust if necessary</td>
<td>1/12/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refund clearing</td>
<td>Determine validity of balances; verify refunds issued in January; reclassify to liability section</td>
<td>1/16/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contra A/R, in-house and discharged, not final billed</td>
<td>Record adequate contra accounts receivable reserve to reflect accounts receivable at net realizable value</td>
<td>1/16/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowance for doubtful accounts (bad-debt reserve)</td>
<td>Test reserve by applying approved percentage allowances against appropriate aging category of receivables; recommend adjustment for appropriate aging category of receivables; recommend adjustment for excess/shortage of reserve requirement</td>
<td>1/12/08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Other accounts receivable</strong></th>
<th>Credit card clearing</th>
<th>Verify that the G/L balance represents December charges not yet reimbursed</th>
<th>1/16/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection agency clearing</td>
<td>Reconcile balances to collection agency statements; follow up on outstanding items</td>
<td>1/16/08</td>
<td></td>
</tr>
</tbody>
</table>
(Exhibit 1.3. continued)

<table>
<thead>
<tr>
<th>Inventory, prepaid, deferred costs</th>
<th>Pharmacy inventory</th>
<th>Adjust balance to physical inventory</th>
<th>1/16/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary inventory</td>
<td>Verify G/L balance per inventory schedule</td>
<td>1/16/08</td>
<td></td>
</tr>
<tr>
<td>Central supply inventory</td>
<td>Verify G/L balance per inventory schedule</td>
<td>1/16/08</td>
<td></td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td>Review schedule of all policies for completeness and accuracy; determine prepaid amount remaining at year end; adjust G/L if necessary; tie out amortized amount in 2007 per schedule to insurance expense on the income statement</td>
<td>1/14/08</td>
<td></td>
</tr>
<tr>
<td>Bond issues</td>
<td>Verify balances to amortized schedules; analyze actual bond issue costs paid and compare to estimate of bond issue costs used for amortization schedule; investigate differences; adjust if necessary</td>
<td>1/14/08</td>
<td></td>
</tr>
<tr>
<td>Annual financing costs</td>
<td>Verify zero balances—all 2007 costs should be expensed; balance only if amount prepaid for 2008</td>
<td>1/14/08</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed assets, depreciation</strong></td>
<td>Fixed assets</td>
<td>Reconcile December plant ledger reports to G/L, both by fixed asset category and in total; recommend adjustments and/or reclassification, if necessary; make all necessary adjustments for disposal of fixed assets; tie out net of all disposal adjustments to gain/loss in disposal on the income statement</td>
<td>1/26/08</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>Verify that all completed projects have been included in fixed assets at year end; validate balances in CIP as ongoing projects that have not been completed at year end</td>
<td>1/20/08</td>
<td></td>
</tr>
<tr>
<td><strong>Depreciation reserve</strong></td>
<td>Reconcile plant ledger reports to G/L, both by fixed asset category and in total; recommend adjustments and/or reclassification, if necessary</td>
<td>1/26/08</td>
<td></td>
</tr>
<tr>
<td><strong>Accounts payable, accrued expenses</strong></td>
<td>Accounts payable</td>
<td>Reconcile subsidiary ledger to general ledger</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Accrued accounts payable</td>
<td>Update schedule identifying balance in detail; determine propriety of accruals at year end; recommend adjustment if necessary</td>
<td>1/16/08</td>
<td></td>
</tr>
</tbody>
</table>
## (Exhibit 1.3, continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security deposits</td>
<td>Agree to schedule maintained by Facilities Department</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Accrued payroll</td>
<td>Determine if any adjustments are necessary due to void or any other reason</td>
<td>1/20/08</td>
</tr>
<tr>
<td>Interest payable</td>
<td>Verify payable balance includes current year expense for all bond issues not paid as of year end; tie out annual expense to debt schedules</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Accrued pension</td>
<td>Verify balance against actuarial report; adjust if necessary</td>
<td>1/20/08</td>
</tr>
<tr>
<td>Accrued malpractice</td>
<td>Test against 12/31/07 malpractice insurer report; round balances due to estimate</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Unemployment compensation</td>
<td>Adjust balance to estimated liability at year end based on historical claims; prepare schedule supporting calculation</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Workers’ compensation</td>
<td>Determine necessary accrual based on WC agent’s estimate of future claims and estimate of future liability based on unreported claims</td>
<td>1/16/08</td>
</tr>
<tr>
<td><strong>Long-term debt</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Third-party reserves</td>
<td>Determine adequacy of reserves and realizability of receivables; adjust if necessary</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Current retirement of long-term debt</td>
<td>Agree current portion for all bond issues to debt schedules; adjust, if necessary</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>Agree amounts payable for all bond issues to debt schedules</td>
<td>1/16/08</td>
</tr>
<tr>
<td>Unamortized bond discount</td>
<td>Agree unamortized discount for all applicable bond issues to amortization schedules</td>
<td>1/16/08</td>
</tr>
</tbody>
</table>
PRACTICAL TIPS

■ Develop a hospital policy stipulating that there must be pro forma financial statements for all capital projects or equipment that exceed a predetermined dollar amount.

■ Do not skimp on the amount of time spent developing the volume assumptions for any plan (such as a pro forma, strategic financial plan, or budget). Volume affects most of the important financial elements of these plans.

■ Develop an annual calendar of events for the board of directors’ finance committee so that specific agenda items will be discussed in a routine manner at each committee meeting.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss how the health care industry’s share of GDP affects the overall economy. Is too much money being spent for health care? Can America continue to spend this amount (or more) without sacrificing other areas of the economy? Why is it that we spend so much more than any other nation on earth?

2. Build a pro forma for a much needed hospital capital project or capital equipment. Be sure to spend the appropriate amount of time to validate the volumes. Finish the analysis with an internal rate of return or net present value conclusion.

3. Review the items in Exhibit 1.2, and determine which have the greatest opportunity for adjustments by the auditors. What can the finance staff do to reduce or eliminate audit adjustments?
LEARNING OBJECTIVES
After reading this chapter, you should be able to

- Recognize the three major ownership types in health care
- Recite the objectives of financial reporting
- Describe the six basic accounting concepts
- Enumerate the seven major stakeholders who use financial information
- State the five basic financial statements of a health care organization
- Describe, in detail, the elements of the five basic financial statements
- Recite the process that accountants use to prepare for the annual audit
- Recognize the six most sensitive accounts likely to receive an audit adjustment
- Review and analyze a bond status report

"Honey, you sure have been working some late nights the past few weeks," says Becky Barnes to her nearly exhausted husband, Samuel.
“Yeah, you know how it is,” says Sam. “We have the finance committee meeting in two weeks, and there’s some extra stuff to prepare for this month. In addition to the usual material, like the financial statements and accounts receivable report, we’re in the middle of the year-end closing and audit that follows. So it’s been a tough month.”

“I’m confused. I know you’ve been doing this health care financial management thing for a long time. But how can you, with only your finance background, know enough to deal with and understand all the things that are required in a clinical program like an MRI?”

“Well, you know, that’s a question I’ve been asked before,” Sam says to his long-suffering wife. “You’ve heard me say that I believe that no finance person, at no matter what level of responsibility, can be truly effective without knowing the operations of the business. This is true for manufacturing, banking, airlines, any industry. The only way to be sure the financial statements accurately reflect the results of operations is to know those operations. It’s imperative that the finance person learn how those operations work, whether through formal study, continuing education, or on-the-job training.”

“Yeah, I’ve heard you say that before,” Betty tells him. “But MRIs are just one clinical program. Being an intensive care nurse, I’m in some complicated clinical programs myself, and I know you’ve been involved in preparing the financial analyses for them. How can you be sure you’re being given all the information you need to put together the proper analysis?”

“Actually, the truth is that there’s never enough information,” Sam admits. “That’s because we’re dealing with the future, and no one can accurately predict the future. So we get as much information as we can about an entire program by asking questions developed over years of asking the same kinds of questions, review these analyses and outcomes over the ensuing years, determine the holes, and plug them in subsequent analyses.”

“Sam,” Betty says, “I know you haven’t missed much over the past few years, but it seems like it’s getting tougher and tougher
lately, with you working on shorter and shorter time frames with fewer and fewer staff people to help with the analysis.”

“Yes, Betty, you are right,” Sam says. “It’s the nature of this beast.”

It is a cold, clear, and crisp day in northern Illinois in early February. Although the ice and snow of the previous week cling to the narrow branches of dormant trees, creating a beautiful frozen tableau, the accountants of Ridgeland Heights Medical Center are busy at work. Their priority assignment is to finish preparing analyses required for presentation to the auditors by the third week of February. The auditors, from one of the Big Four international accounting and auditing firms, scheduled their usual three-week audit to be ready to present their findings at the April finance committee meeting.

Preparation and attestation of the year-end financial statement are a critical aspect of health care financial management. These statements are the backbone of the financial reporting and analysis of this $1.9 trillion industry. Because health care as an industry does not stand in isolation in this country, it is important that the reporting be accurate and timely so that industry statistics can be combined to obtain aggregate national data.

ACCOUNTING PRINCIPLES AND PRACTICES

As with other industries, health care has a set of principles and practices established through authoritative pronouncement, regulation, and historical precedent. All the books and records that are audited, whether in a for-profit or a not-for-profit organization, are required to follow generally accepted accounting principles. For the health care industry, GAAP is formally presented in the Audit and Accounting Guide for Health Care Organizations (AAG-HCO), published by the American Institute of Certified Public Accountants (AICPA) (2006).

The hierarchy of GAAP for not-for-profit organizations is described in paragraph 1.40 of the AAG-HCO. It states that not-for-profit organizations should follow the guidance in provisions of the Accounting Research Board (ARB), Accounting Principles Board (APB) opinions, and statements and interpretations issued by the Financial Accounting Standards Board (FASB), “unless the specific pronouncement explicitly
exempts not-for-profit organizations or their subject matter precludes such applicability.” The AAG-HCO also defines the GAAP hierarchy for government organizations. It further states that the guide applies to the following types of health care organizations:

- Clinics, medical group practices, individual practice associations, individual practitioners, emergency care facilities, laboratories, surgery centers, and other ambulatory care organizations
- Continuing care retirement communities (CCRCs)
- Health maintenance organizations
- Home health agencies
- Hospitals
- Nursing homes that provide skilled, intermediate, and less intensive levels of health care
- Drug and alcohol rehabilitation centers and other rehabilitation facilities

Here are the general definitions of the three major types of health care organizations as presented in the AAG-HCO (p. 2):

- **Not-for-profit, business-oriented organizations**, which are characterized by no ownership interests and essentially are self-sustaining from fees charged for goods and services. The fees charged by such organizations generally are intended to help the organization maintain its self-sustaining status rather than to maximize profits for the owner's benefit. Such organizations are exempt from federal and state income taxes and may receive tax deductible contributions from corporations or individuals that support their mission.

- **Investor-owned health care enterprises**, which are owned by investors or others with a private equity interest and provide goods or services with the objective of making a profit.

- **Government health care organizations**, which are public corporations and bodies corporate and politic. Also organizations are presumed to be governmental if they have the ability to issue directly (rather than through a state or municipal authority) debt that pays interest exempt from federal taxation.
All of the accountants at RHMC have formal accounting training and thus understand the background of these pronouncements. In addition, they are aware that interpretation of accounting rules for their industry is often covered in the AAG-HCO; consequently, each accountant keeps a copy within reach at all times.

As noted in Chapter One, RHMC is a not-for-profit corporation; it therefore follows the rules for that sort of organization. They are essentially the same whether the organization is a hospital, a skilled nursing facility, a psychiatric facility, or a home health agency. Physician office practices are generally some form of for-profit partnership or corporation and hence follow for-profit accounting rules.

OBJECTIVES OF FINANCIAL REPORTING

Because RHMC has a hospital-based skilled nursing facility, home health agency, and psychiatric unit, it employs these basic not-for-profit accounting rules across the various financial statements. It also follows the objectives of financial reporting that were set down and are summarized in the FASB’s Statement of Financial Accounting Concepts Number 1, which states that financial reporting should give information of the following types:

- Useful to current and potential investors, creditors, and other users in making rational investment, credit, and similar decisions
- Concerning the economic resources of an enterprise, the claims to those resources, and the effects of transactions, events, and circumstances that change resources
- Regarding an enterprise’s financial performance during a period
- Describing how an enterprise obtains and spends cash, about its borrowing and repayment of borrowing, about capital transactions, and about other factors that may affect liquidity or solvency
- Describing how management of an enterprise has discharged its stewardship responsibility for the use of enterprise resources
- Useful to managers and directors in making decisions in the interest of owners

Ultimately, the whole point of preparing, auditing, and disseminating the financial reports for an enterprise is to allow the stakeholders to
determine the financial performance of the organization. Stakeholders include the following individuals:

- For-profit equity shareholders
- Not-for-profit community board members and community members themselves
- Bondholders and their investments manager concerned about continuing solvency
- Politicians who charge governmental agencies with spending budgeted dollars

**BASIC ACCOUNTING CONCEPTS**

At RHMC, the accountants are well aware of the importance of their work. They are in fact extremely diligent in the care they give to preparing the financial statements. In addition, because of their accounting training, they are aware of the basic accounting concepts that have been developed over the years, and they follow them along with their peers. There are six basic accounting concepts of which they are particularly aware (this discussion is adapted from Berman, Weeks, and Kukla, 1994):

1. **Entity.** This concept expresses that the corporate structure, or entity, is capable of taking economic actions apart from the individuals running the entity. Accounts are kept for the business entity and reflect events that affect the business. This concept is further expanded by the “going concern” theory, which suggests that the entity will live on indefinitely, regardless of the individuals in control. This is important because it allows accountants to use a continuity assumption in valuing assets, rather than “fire sale” liquidation value at the end of each accounting period.

2. **Transactions.** This simple concept requires all financial transactions that affect an organization to be included in the accounting records and reports. This is necessary to ensure that accounting data and reports are dependable and valid. If all transactions are not included, then the financial records could be inaccurate, creating the possibility that the accounting numbers are massaged or finessed undesirably and inappropriately.
3. **Cost valuation.** This is a corollary to the transaction concept. It requires that all financial transactions be recorded at “cost,” that is, the price paid to acquire any item or good. Cost is preferable to any other valuation because it is determinable, definite, objective, and verifiable. Other valuation methods such as sale price and replacement cost are not always definite and may be a matter of conjecture or opinion. Although the cost method of valuation is not perfect, primarily because it does not properly value inflationary or deflationary trends in times of fluctuating prices, its merits outweigh the demerits.

4. **Double entry.** This is the granddaddy of all accounting concepts. Developed in 1492, it requires that accounting records be constructed in such a manner as to reflect two aspects of each transaction: the change in assets and the change in the source of financing (liabilities). Thus for accounting records to reflect the full effect of any transaction, two entries must be made.

5. **Accrual.** This concept acts as a guide in accounting for revenues and expenses. The accrual concept requires that revenues be recorded in the accounts when they are realized and that expenses be recorded in the period in which they contribute to operations. In practice, this means, for example, that supplies purchased and used at the end of a month should be recorded as expenses for that month. But if the supply distributor has not sent out an invoice for the goods, the accrual concept requires the organization’s accountants to estimate the value of the supplies and record it in that month’s financial records. This concept permits proper allocation of income and expenses to the appropriate fiscal period.

6. **Matching.** This concept requires that all associated revenues and expenses be matched in the financial records in any given month to properly determine net income. If it were not necessary to match related items, revenues, and expenses, then it would be possible to manipulate income from various types of activity to produce whatever operating picture is desired.

As the accountants prepare their entries, these concepts are second nature to them and used in all their work. They know it is critical that their work be accurate and timely. Accuracy is a function of properly applying the basic concepts. Timeliness is a function of management’s will and persistence. As the accountants prepare their automated and manual journal entries, they are repeatedly reminded of the lessons learned along the way.
BASIC FINANCIAL STATEMENTS OF
A HEALTH CARE ORGANIZATION

What the RHMC accountants are preparing are financial statements. The basic financial statements of a health care organization consist of a balance sheet, a statement of operations, a statement of changes in unrestricted net assets, a statement of cash flows, and footnotes (notes) to the financial statement (see Table 2.1).

It is important to note that every one of these five items must be present, or else the financial statement is not complete. Each item is a part of the whole, a whole that can tell the knowledgeable reader a great deal about the organization.

TABLE 2.1. Basic Financial Statements of a Health Care Organization.

<table>
<thead>
<tr>
<th>Financial Statement</th>
<th>Primary Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance sheet</td>
<td>Presents a snapshot of the financial condition of the health care organization at a single point in time</td>
</tr>
<tr>
<td>Statement of operations</td>
<td>Presents summarized revenues and expenses of an organization, resulting in a profit or loss, for a given period of time</td>
</tr>
<tr>
<td>Statement of changes in unrestricted net assets</td>
<td>Presents a summary of financial elements that caused a change in net assets during a given period of time</td>
</tr>
<tr>
<td>Statement of cash flows</td>
<td>Presents a summary of the assets and liabilities that caused a change in the main cash balances during a given period of time</td>
</tr>
<tr>
<td>Notes to the financial statement</td>
<td>Presents disclosure and discussion of the information underlying the numbers reported on the financial statements</td>
</tr>
</tbody>
</table>
USES OF FINANCIAL INFORMATION

As noted earlier in this chapter, the reason for preparing, auditing, and disseminating financial reports is to allow the stakeholders to determine the financial performance of the organization. Financial reporting is also important because it enhances the ability of stakeholders to make decisions about the organization. According to William Cleverly (1997), a professor of health care financial management, five uses of financial information may be important in decision making:

1. Evaluating the financial condition of an entity
2. Evaluating stewardship within an entity
3. Assessing the efficiency of operations
4. Assessing the effectiveness of operations
5. Determining the compliance of operations with directives

A number of stakeholders would want to be able to make appropriate decisions about the organization using financial information:

- **Governing board.** The board reviews the financial performance (the bottom-line results and the level of assets and liabilities—in other words, the financial condition) as well as the organization’s actual financial ratios compared to budget and industry benchmarks. The governing board is also interested in the auditor’s review of the organization’s internal financial controls during the attestation process, sometimes called the “management letter” (stewardship). This has become even more critical in light of the accounting scandals of the late 1990s and early 2000s. In addition, the passage of the Sarbanes-Oxley law (SOX), which applies to investor-owned, for-profit organizations, created an expanded duty for the governing board in the performance of its fiduciary duties. See Chapter Four for further discussion of SOX.

- **Senior management.** The same criteria apply here as with the governing board. In addition, senior management wants to review operating ratios such as departmental productivity (efficiency) and departmental budget variances (effectiveness).

- **Department management.** Managers review the results during the period to determine their efficiency (did they make their budget
numbers?) and to prepare analysis for any budget variances. Senior management should make managers accountable for their actual results compared to the budgeted goals, and consequences (both positive and negative) should be applied.

- **Investment bankers, rating agencies, and bondholders.** These groups determine, on the basis of the organization’s financial condition, whether the value of any outstanding bonds has decreased or increased during the reviewed period. Millions of dollars could be at stake in the secondary market for individuals or mutual fund holders.

- **Community.** Community members must determine if their resource is functioning appropriately. This may mean different things to different communities. For example, the standard in one community may mean that a not-for-profit’s board of directors prescribes that the organization should not earn a “profit” greater than 2 percent because if it does, the community may think it is “gouging” community members. Another community’s standard, however, may lead the not-for-profit organization to budget and achieve a much higher net margin.

- **Benefactors.** This is a subset of the community, inasmuch as most organizations or individuals who give charitable donations reside in or around the community. These donors want to know whether or not their donations are being used appropriately for an organization that will remain self-sustaining (again, as reflected in its financial condition).

- **Equity investors.** These are individuals and investment fund managers who are concerned with their investment and may require either stock price appreciation or dividends to maintain their participation with the stock.

**THE FINANCIAL STATEMENTS**

So we have theories, concepts, and practices of accounting that both the preparers and the users of financial statement information have been trained to analyze and understand. It is time to review the financial statements and the value they bring to users in understanding the financial health of the organization.

**Balance Sheet**

The order of financial statement presentation is always the same—the order listed in Table 2.1. This has been established over time. The balance
sheet is always first because of the age-old concept that places the organization’s assets, liabilities, and net assets or equity balance in a primary position ahead of periodic profit or loss (the income statement). The rationale is that an organization with a strong balance sheet can withstand a short run of losses or reduced profits, whereas an organization with a weak balance sheet will not be able to do so easily. An investor’s eye quite naturally looks first to the balance sheet and then the income statement.

Table 2.2 is the RHMC balance sheet at December 31, 2007. A significant amount of financial information can be extracted from the balance sheet alone. Yet it is also used in conjunction with the other parts of the financial statements, along with additional financial and volume-related information, to form a complete picture of the medical center’s financial resources.

**TABLE 2.2.** Balance Sheet, Ridgeland Heights Medical Center, December 31, 2007 (in thousands of dollars).

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>December 2007</th>
<th>December 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>1,200</td>
<td>2,000</td>
</tr>
<tr>
<td>Investments—short term</td>
<td>6,500</td>
<td>5,400</td>
</tr>
<tr>
<td>Total cash and cash equivalents</td>
<td>7,700</td>
<td>7,400</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>22,000</td>
<td>22,800</td>
</tr>
<tr>
<td><strong>Less:</strong> Allowance for doubtful accounts</td>
<td>(5,800)</td>
<td>(5,600)</td>
</tr>
<tr>
<td>Net patient receivables</td>
<td>16,200</td>
<td>17,200</td>
</tr>
<tr>
<td>Inventory</td>
<td>500</td>
<td>400</td>
</tr>
</tbody>
</table>
(Table 2.2 continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepaid expenses</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>Other current assets</td>
<td>900</td>
<td>700</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>24,800</td>
<td>25,300</td>
</tr>
<tr>
<td>Long-term investments—unrestricted</td>
<td>95,500</td>
<td>87,000</td>
</tr>
<tr>
<td>Trusteed investments</td>
<td>22,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Endowment fund investments</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Deferred financing costs</td>
<td>3,300</td>
<td>3,400</td>
</tr>
<tr>
<td>Other noncurrent assets</td>
<td>121,100</td>
<td>120,700</td>
</tr>
<tr>
<td>Property, plant, and equipment (PP&amp;E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land and land improvements</td>
<td>8,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Buildings</td>
<td>70,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>3,000</td>
<td>2,800</td>
</tr>
<tr>
<td>Equipment and fixtures</td>
<td>56,000</td>
<td>51,600</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>3,000</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total PP&amp;E</strong></td>
<td>140,000</td>
<td>125,400</td>
</tr>
<tr>
<td><em>Less: Accumulated depreciation</em></td>
<td>(72,000)</td>
<td>(61,000)</td>
</tr>
<tr>
<td><strong>Net PP&amp;E</strong></td>
<td>68,000</td>
<td>64,400</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td>$213,900</td>
<td>$210,400</td>
</tr>
</tbody>
</table>
## LIABILITIES

### Current Liabilities

<table>
<thead>
<tr>
<th>Liability</th>
<th>January</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>12,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Third-party liabilities</td>
<td>4,000</td>
<td>4,500</td>
</tr>
<tr>
<td>Current portion on long-term debt</td>
<td>3,500</td>
<td>3,400</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>19,500</td>
<td>17,900</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>120,000</td>
<td>123,400</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>4,000</td>
<td>4,100</td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td>124,000</td>
<td>127,500</td>
</tr>
<tr>
<td><strong>LONG-TERM LIABILITIES</strong></td>
<td>143,500</td>
<td>145,400</td>
</tr>
</tbody>
</table>

## NET ASSETS

<table>
<thead>
<tr>
<th>Asset</th>
<th>January</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealized gain (loss) on investments</td>
<td>2,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>67,900</td>
<td>61,500</td>
</tr>
<tr>
<td>Temporarily restricted</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Permanently restricted</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td><strong>TOTAL NET ASSETS</strong></td>
<td>70,400</td>
<td>65,000</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES AND NET ASSETS</strong></td>
<td>213,900</td>
<td>210,400</td>
</tr>
</tbody>
</table>
Although it is just one part of a complete financial statement, the balance sheet by itself can yield some interesting information applicable to internal or external users. Quick perusal of RHMC’s balance sheet highlights several matters of importance. First, it can be noted that RHMC has $213.9 million in total assets, a considerable amount.

Next, it can be noted that RHMC has three large groupings of assets: cash (in several forms), accounts receivable, and fixed assets. The large percentage of assets tied up in fixed assets (characterized as property, plant, and equipment, or PP&E) indicates that RHMC, illustrative of the industry as a whole, is capital-intensive. We will see later when we review the income statement (or statement of operations) that it is also labor-intensive.

Third, it is reported that there is $125.2 million in cash and investments on the asset side of the balance sheet (which is made up of cash of $1.2 million, short-term investments of $6.5 million, plus unrestricted long-term investments of $95.5 million and trusteed investments of $22 million). There is also $123.5 million of debt on the liability side ($120 million in long-term debt and $3.5 million as the current portion on long-term debt), which may indicate a highly leveraged financial position. The organization is able to determine its leverage position during ratio analysis (see Chapter Three).

Finally, it can be seen that RHMC has net assets of $70.4 million. Net assets in a not-for-profit organization are the equivalent of equity in a for-profit business. There are some technical aspects to net assets, particularly the concepts surrounding classification of unrestricted, temporarily restricted, and permanently restricted. In general, though, unrestricted net assets in most organizations constitute a large majority of the total net assets. At first glance, RHMC looks to be financially stable.

A word of interest is in order here. You can see that RHMC has only $400,000 in inventory on its balance sheet, a low dollar amount compared to the $213.9 million in total assets. This is one area where health care as a service industry differs considerably from most manufacturing and other industries, which have a considerably larger percentage of their total assets tied up in inventory.

**Statement of Operations**

The statement of operations (known as the income statement before publication of the AICPA’s updated health care audit guide in 1992) can give a knowledgeable reader both summary and some detailed information as to the periodic financial results of an organization. Depending on how many line items are shown in the statement of operations and the
amount of trending information conveyed, a reader could glean a wealth of intelligence.

For example, initial review of the RHMC income statement in Table 2.3 indicates that for the year ending December 31, 2007, the organization had an operating loss of ($1.2) million and a net margin of $6.4 million. Without additional trending information or ratio analysis, it appears that the organization has an operating bottom line problem.

**TABLE 2.3. Statement of Operations, Ridgeland Heights Medical Center, Year to Date Ending December 31, 2006 and 2007 (in thousands of dollars).**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2006</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient revenue</td>
<td>73,000</td>
<td>74,000</td>
<td>−1.35</td>
</tr>
<tr>
<td>Outpatient revenue</td>
<td>72,000</td>
<td>69,000</td>
<td>4.35</td>
</tr>
<tr>
<td><strong>Total patient revenue</strong></td>
<td>145,000</td>
<td>143,000</td>
<td>1.40</td>
</tr>
<tr>
<td><strong>Less:</strong> Contractual and other adjustments</td>
<td>(49,000)</td>
<td>(48,000)</td>
<td>2.08</td>
</tr>
<tr>
<td><strong>Less:</strong> Charity care</td>
<td>(2,600)</td>
<td>(2,200)</td>
<td>18.18</td>
</tr>
<tr>
<td><strong>Net patient service revenue</strong></td>
<td>93,400</td>
<td>92,800</td>
<td>0.65</td>
</tr>
<tr>
<td><strong>Add:</strong> Other operating income</td>
<td>3,300</td>
<td>2,500</td>
<td>32.00</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>96,700</td>
<td>95,300</td>
<td>1.47</td>
</tr>
</tbody>
</table>

| **EXPENSES**         |        |        |            |
| Salaries             | 36,000 | 34,000 | 5.88       |
| Contract labor       | 1,000  | 1,500  | −33.33     |
(Table 2.3 continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>2006</th>
<th>2007</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fringe benefits</td>
<td>7,000</td>
<td>6,800</td>
<td>2.94</td>
</tr>
<tr>
<td><strong>Total salaries and benefits</strong></td>
<td>44,000</td>
<td>42,300</td>
<td>4.02</td>
</tr>
<tr>
<td>Bad debts</td>
<td>4,600</td>
<td>4,400</td>
<td>4.55</td>
</tr>
<tr>
<td>Patient care supplies</td>
<td>15,500</td>
<td>15,000</td>
<td>3.33</td>
</tr>
<tr>
<td>Professional and management fees</td>
<td>3,600</td>
<td>3,600</td>
<td>0.00</td>
</tr>
<tr>
<td>Purchased services</td>
<td>5,400</td>
<td>5,600</td>
<td>-3.57</td>
</tr>
<tr>
<td>Operation of plant (including utilities)</td>
<td>2,600</td>
<td>2,500</td>
<td>4.00</td>
</tr>
<tr>
<td>Depreciation</td>
<td>11,000</td>
<td>10,500</td>
<td>4.76</td>
</tr>
<tr>
<td>Interest and financing expenses</td>
<td>7,400</td>
<td>7,600</td>
<td>-2.63</td>
</tr>
<tr>
<td>Other</td>
<td>3,800</td>
<td>5,200</td>
<td>-26.92</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>97,900</td>
<td>96,700</td>
<td>1.24</td>
</tr>
<tr>
<td><strong>Operation margin (loss)</strong></td>
<td>(1,200)</td>
<td>(1,400)</td>
<td>-14.29</td>
</tr>
</tbody>
</table>

**NONOPERATING INCOME**

<table>
<thead>
<tr>
<th>Item</th>
<th>2006</th>
<th>2007</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain (loss) on investments</td>
<td>1,200</td>
<td>600</td>
<td>100.00</td>
</tr>
<tr>
<td>Investment income</td>
<td>6,400</td>
<td>5,500</td>
<td>16.36</td>
</tr>
<tr>
<td><strong>Total nonoperating income</strong></td>
<td>7,600</td>
<td>6,100</td>
<td>24.59</td>
</tr>
<tr>
<td><strong>Net margin</strong></td>
<td>6,400</td>
<td>4,700</td>
<td>36.17</td>
</tr>
</tbody>
</table>
Yet it appears to be maintaining a relatively good overall net margin. Examination of the margins over time (trending) and in relation to other hospitals in its peer group (benchmarking) form the backbone of financial analysis. This will be discussed later in the book.

Ridgeland Heights’ margins were partly the result of $145 million in gross patient revenues, less discounts and charity care given of $51.6 million. Gross patient revenues are a manifestation of charging list price for all services rendered by the health care facility. The majority of the discounts were a consequence of contracting with managed care companies and accepting a variety of discounts through negotiation.

It should be noted that for the first time, the 1992 edition of the AAG-HCO took a position that gross patient revenue and contractual adjustments and charity care should no longer be reported on an audited financial statement. At that time, the industry had to adopt this for annual external reporting (as with the audited financial statement); however, in practice, monthly financial statements prepared for the administrators and the board continue to include this information. Health care facilities administrators know that gross patient service revenue can be an indicator of business growth or decline and is important in relation to variances between this year’s budgeted and the prior year’s revenue. The increase or decrease in contractual adjustments is likewise important to budgeted and prior year’s results. Large variance causes the reviewer to raise pertinent questions, such as what caused the change, is it part of a trend, and what can be done to improve it?

Interest income is the revenue earned on investment of excess funds made by the organization. RHMC has more than $120 million in excess funds; its investment policies determine the most appropriate mix of equities (stocks), bonds, and other financial instruments. As you can see, RHMC earned $6.4 million on investment of its money. That is a return of 5.33 percent. By itself, this return may not look substantial. Yet this represents only the interest paid out by its holdings in bonds and other fixed instruments and the dividends paid out by its stock holdings. It does not include the unrealized appreciation (or depreciation) in the price of stocks and bonds. The cumulative amount of these unrealized gains or losses is available on the balance sheet in the net assets section. For purposes of analysis, total investment return, which is reported internally, includes appreciation or depreciation of assets as a percentage.

“Other operating income” is an aggregation of disparate types of miscellaneous income not directly related to patient care. The most common type includes cafeteria revenue, revenue from drugs sold to
patients, sale of the silver in old X-ray film, and rebates for volume discounts from vendors. It should be noted that some of these items of other operating income are subject to income tax even though the health care organization is tax-exempt. A tax-exempt organization must file an IRS 990-T form along with its IRS 990 form for all appropriate items of other operating income that qualify as taxable.

“Salaries” is the most significant expense item on the statement of operations. This line includes only wages paid to its employees by the organization that are subject to employment taxes. Any work being carried out in the organization by individuals who are not subject to employment taxes is reported on the statement of operations as either “contract labor” or “purchased services.”

“Contract labor” represents laborers employed by an outside organization. The health care organization contracts with an outside entity to have its employees perform work. Contract labor often mounts if there is a shortage of certain types of skilled labor within the industry. For example, RHMC spent $1 million in 2007 on contract labor. Some of these funds were spent on physical therapists, while another significant amount was spent on registered nurses. In both cases, the funds were expended because there was a shortage of these specific personnel types in the region. The budget had assumed that the hospital could hire more of its own therapists and nurses, but it was not successful in doing so and hence needed to resort to these outside agencies, at twice the price.

“Purchased services” often reflects the engagement of outside help in a larger context. The organization’s administration may decide that it wants to outsource management of one or more departments to companies that specialize in certain skilled or unskilled areas rather than recruit and retain its own management staff. Therefore, RHMC purchases services for these areas (environmental, previously called housekeeping; laundry; operation of the physical plant; dietary; and information systems).

The “fringe benefits” line is an aggregation of several types of expenses paid for by the organization to enhance the quality of life for its employees or to comply with federal, state, and local laws. Development and magnitude of fringe benefit expenses was explored in Chapter One.

“Bad debts” represents the amount of gross charges that the provider of health care services will not collect from the financial guarantor of the individual who receives the health services. The financial guarantor could be the patient, the patient’s relative, or the third-party payer (an insurance company). Usually, it is not the insurance company but the patient or
family member who has to pay out of pocket, either for the entire scope of services or just a deductible or coinsurance amount. Here is a useful distinction between bad-debt expense and charity care write-off:

- Charity care: patients are *unable* to pay for the health care services received
- Bad debt: patients are *unwilling* to pay for the health care services received

Chapter Five discusses how the health care organization can know whether the patient is unwilling or unable to pay.

“Patient care supplies,” “professional and management fees,” “operation of plant,” and “other” expenses represent the normal costs of doing business in health care. For example, the line for patient care supplies includes medical supplies and drugs used in the patient’s care as well as mundane office supplies needed to run the operation. Professional and management fees include the cost of external auditors, attorneys, and consultants. Operation-of-plant costs represent the expenses of running the physical facility, such as the nuts, bolts, and screws used in minor repairs as well as the heat, light, and power bills paid to keep the facility operating.

“Depreciation” is the periodic portion of the cost of building the physical plant and purchasing all the capital equipment used within it. Depreciation is the only noncash expense on the statement of operations. It is determined by dividing the prior and current year’s original cost of building projects or capital equipment purchases by the estimated useful life of the asset. A review of RHMC’s statement of operations reveals that depreciation is the second largest expense. This is in keeping with the capital-intensive nature of the health care industry. Depreciation therefore has a large impact on the organization’s bottom line. Because of its size and the nature of the calculation, depreciation is subject to being finessed. There are three major ways an organization could attempt to manipulate its bottom line through the use (or misuse) of depreciation expense:

- Nonstandard estimated useful life
- An accelerated method of depreciation rather than a straight-line method
- Capitalization policy inconsistent with reasonable industry standards
Fundamentals of Health Care Financial Management

Nonstandard Estimated Useful Life. In theory, an organization could pick any useful life, which allows altering the bottom line of the statement of operations to suit its needs. In practice, however, the industry has adopted a generally accepted source for establishing asset lives: a pamphlet from the American Hospital Association titled Estimated Useful Lives of Depreciable Hospital Assets (2006). It was developed for two reasons:

1. GAAP would not permit a range of options for useful life. If allowed, there would be no “general acceptance.” External auditors wanted to be sure that an authoritative source was available.

2. Medicare was established in 1966 as a third-party payer that reimbursed providers for service based on cost. It did not want to pay more than reasonable cost, and so it also needed an authoritative source for the denominator of the calculation. Medicare stated, in the original 1965 legislation, that employing useful life as presented in the AHA booklet is deemed acceptable for cost-reporting purposes. This is still the case in 2008.

Accelerated Methods of Depreciation. The second major way for any organization to manage depreciation expense is through using any method that accelerates it. The most common method of depreciation is called straight line. It is simple to use; you divide the cost of the asset by the number of years of estimated useful life in the AHA guide. Table 2.4 shows a comparison of the straight-line method of depreciation with two accelerated methods: double declining balance and sum of the years’ digits.

The main point is that the method used can have a big impact on the total depreciation expense recorded in each accounting period. As you can see, the straight-line method literally smoothes the depreciation expense of each asset for each year of its estimated useful life. The two accelerated methods place a greater proportion of the expense in the early years and a smaller portion in the later years.

One reason to use an accelerated depreciation methodology is that a financial advantage can be gained from doing so. It needs to be done thoughtfully because, as you have seen, accelerating depreciation puts extra expense on the statement of operation, which makes the bottom line worse than perhaps it should be. But this is an established practice in the for-profit world because the income tax code gives favorable treatment. Specifically, because the tax code allows accelerated depreciation to be used for tax-reporting purposes, the extra expense that decreases the
# TABLE 2.4. Comparison of Straight-Line and Accelerated Depreciation Methods.

<table>
<thead>
<tr>
<th>Cost of Asset</th>
<th>Accelerated Depreciation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Straight-Line Method 300,000</td>
</tr>
<tr>
<td></td>
<td>Double Declining Balance (with Optimum Switch)* 300,000</td>
</tr>
<tr>
<td></td>
<td>Actual Optimum Declining Balance</td>
</tr>
<tr>
<td></td>
<td>Optimum Switch (Double Declining Balance)</td>
</tr>
<tr>
<td></td>
<td>Sum of the Years' Digits 300,000</td>
</tr>
<tr>
<td></td>
<td>Sum of the Years</td>
</tr>
<tr>
<td>Estimated useful life (years)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Annual depreciation ($)</strong></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>60,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>60,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>60,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>60,000</td>
</tr>
<tr>
<td>Year 5</td>
<td>60,000</td>
</tr>
<tr>
<td><strong>Total depreciation</strong></td>
<td>300,000</td>
</tr>
</tbody>
</table>

*The optimum switch method allows the organization to switch to straight-line depreciation after the straight-line method exceeds the double declining balance method. On a five-year life, the switch would occur in the fourth year. On a ten-year life, the switch would occur in the seventh year. Without optimum switch, the declining balance will extend many years past the original useful-life determination.
bottom line means that the for-profit organization pays less tax. Further, the organization is not harmed financially for doing so because depreciation is a noncash expense. The organization is in fact helped financially.

As stated earlier, most health care organizations in this country are not-for-profit. Therefore, there is no tax advantage to using accelerated depreciation. In addition, there is also no reimbursement advantage to using accelerated depreciation because Medicare is now almost totally non-cost-based, thanks to the 1997 Federal Balanced Budget Act. (Hospitals designated as “critical access” as defined in the 1997 act, as well as psychiatric, burn, cancer, and children’s hospitals, continue to be reimbursed through the Medicare cost report; more on this in Chapter Four.) With no tax advantage and no Medicare advantage, most not-for-profit organizations chose to stick with the easy and familiar straight-line method.

It turns out, as a result, that the only real advantage to using accelerated depreciation is operational. It makes sense to charge new capital acquisition a higher depreciation in the early years, when it needs little maintenance. Then in later years, it is financially responsible to charge the asset a lower level of depreciation when it needs and receives service and maintenance, which can be charged separately. Still, for simplicity’s sake, most hospitals use straight-line depreciation in the production of their financial statements.

Capitalization Policy Inconsistent with Industry Standards. Once again, Medicare has had a large impact in the area of capitalization policy. The question is, at what dollar level should a purchase be capitalized? When Medicare came into existence in 1966, it established a rule that defined a capital asset as having a useful life of at least two years and a cost over $500. Therefore, anything bought under $500 was, by definition, an operating expense. At that time, it was important to the Medicare program to use as small a dollar figure as possible because it wanted to limit its cost reimbursement. Although a Medicare provider could conceivably have set an internal capital policy at a higher level, there was no incentive to do so because it still had to report to Medicare at the $500 level.

Although Medicare changed its method of reimbursing for the capital related to acute inpatient care in 1990, thereby rendering some of the rationale no longer applicable, it was not until 1998 that Medicare revised its 1966 practice. Since 1998, Medicare has allowed providers to consider a purchase with a useful life of at least two years and cost of $5,000 and above to be considered capital (Health Care Financing Administration transmittal no. 402, June 1998. The current level can be found in HCFA Publication 15–1, sec. 108.1). This allows providers to
more properly classify many purchases as operating expenses, bringing more reality to operations and hence decreasing depreciation expense in the future.

Over the course of the last thirty years, RHMC has always followed the prescribed guideline, recognizing that it was in the best interest to use the AHA’s pamphlet along with the straight-line method and the $500 capitalization policy. However, it is pleased that the $500 level has at last been revised. RHMC has in fact decided to revise its capitalization to $2,500 next year. RHMC further recognizes that in doing so, it must allow additional operational budget dollars for those purchases that in prior years would have fallen into the $500 to $2,499 range.

Returning to Table 2.3, “interest and financing expenses” are a result of $123.4 million of prior-year tax-exempt bond debt on the liability side of the balance sheet. At the time the bonds were issued, the tax-exempt interest rate RHMC was able to obtain for 2007 was 5.5 percent (0.055 times $123.4 million equals $6,787,000 plus $600,000 in bond insurance fees, or a total of $7.4 million). This rate was 85 basis points less than the thirty-year taxable rate at the time the bond was issued. This amounted to savings of several million dollars that RHMC will not have to pay over the life of the bonds. The entire topic of interest and financing falls under the rubric of treasury management and is the subject of several books; we will touch on the topic briefly in Chapter Three when reviewing strategic financial planning.

The total of all the operating expenses are accumulated and reported on the “total expenses” line. This line has importance because it will be used in several ratios (metrics) that allow the hospital to determine its financial outcomes.

Below the operating expenses, the hospital is required to report its nonoperating revenues or expenses. On the RHMC statement of operations, there are two lines that are substantial.

The first reported nonoperating revenue and expense line is “gain (loss) on investments.” This is the profit or loss made when the organization or its investment managers sell any financial instrument held for investment. These instruments are usually bonds or stocks, and the difference between the purchase price and the selling price is always reported in the nonoperating section of the statement of operations.

The second reported nonoperating revenue and expense line is “investment income.” This is the actual dividend or interest income earned by the organization on its investible assets throughout the reporting period. RHMC had $125.2 million of these investible assets on its
Fundamentals of Health Care Financial Management

balance sheet ($7.7 million in current cash and equivalents plus $95.5 million in unrestricted long-term investments plus $22 million in trustee investments, which are proceeds of bonds). Based on the investment committee’s policies, RHMC was able to earn $6.4 million for the period (year), for an investment return of 5.11 percent ($6.4 million divided by $125.2 million).

Both of these items are placed in the nonoperating section of the statement under the theory that investment income is not part of the core business of the hospital and should therefore appear separate from the operating results. Some have argued that creates a mismatch between the interest expenses (in the operating section) and the interest income lines (in the nonoperating section), but nonetheless, GAAP requires that it be reported in this manner.

**Statement of Changes in Unrestricted Net Assets (or Equity)**

The statement of changes in unrestricted net assets (or equity; see Table 2.5) is the least used part of the financial statement. Its primary purpose is to roll forward the net assets from the end of the prior period to the current period. In many cases, the most common change in the unrestricted net assets from one period to the next is one of these:

- Excess of revenue over expense
- Any unrealized gain or loss on other than trading securities
- Net assets released from restriction used to purchase property and equipment

All positive results in any of these areas increase the organization’s net worth, and negative results decrease it.

Complex organizations may require separate statements to segregate the net assets into the three categories of unrestricted, temporarily restricted, and permanently restricted.

**Statement of Cash Flows**

The statement of cash flows (see Table 2.6) is often the most useful section of a typical financial statement. Although many readers of financial statements turn first to the income statement and then to the balance sheet in an attempt to understand an organization’s financial results and financial position, they often overlook the cash flow statement. At a
### TABLE 2.5. Statement of Changes in Unrestricted Net Assets, Ridgeland Heights Medical Center, Year to Date Ended December 31, 2006 and 2007 (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNRESTRICTED NET ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess of revenues over expenses</td>
<td>6,400</td>
<td>4,700</td>
</tr>
<tr>
<td>Change in net unrealized gains (losses) on other than trading securities</td>
<td>(1,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Increase (decrease) in net assets</td>
<td>5,400</td>
<td>2,700</td>
</tr>
<tr>
<td>Net assets, beginning of year</td>
<td>65,000</td>
<td>62,300</td>
</tr>
<tr>
<td>Net assets, end of year</td>
<td>70,400</td>
<td>65,000</td>
</tr>
</tbody>
</table>

### TABLE 2.6. Statement of Cash Flows, Ridgeland Heights Medical Center, Year to Date Ended December 31, 2006 and 2007 (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH FLOWS FROM OPERATING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase (decrease) in net assets</td>
<td>6,400</td>
<td>4,700</td>
</tr>
<tr>
<td>Change in net unrealized gains and losses on investments other than trading securities</td>
<td>(1,000)</td>
<td>(2,000)</td>
</tr>
<tr>
<td><strong>Changes in net assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adjustments to reconcile changes in net assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>11,100</td>
<td>10,500</td>
</tr>
<tr>
<td>Net accounts receivable (increase) decrease</td>
<td>1,000</td>
<td>(700)</td>
</tr>
</tbody>
</table>
(Table 2.6 continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other current assets (increase) decrease</td>
<td>(200)</td>
<td>(1,500)</td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(decrease) increase</td>
<td>2,000</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Other long-term liabilities (decrease) increase</td>
<td>(100)</td>
<td>200</td>
</tr>
<tr>
<td>Third-party settlement (decrease) increase</td>
<td>(500)</td>
<td>1,200</td>
</tr>
<tr>
<td>Current portion of long-term debt (decrease)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Net cash provided by (used in) operating activities</strong></td>
<td>18,800</td>
<td>11,500</td>
</tr>
</tbody>
</table>

**CASH FLOWS FROM INVESTING ACTIVITIES (INCREASE) DECREASE**

<table>
<thead>
<tr>
<th>Description</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net investments</td>
<td>(500)</td>
<td>—</td>
</tr>
<tr>
<td>Other noncurrent assets</td>
<td>—</td>
<td>(200)</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>(14,600)</td>
<td>(6,200)</td>
</tr>
<tr>
<td><strong>Net cash provided by (used in) investing activities</strong></td>
<td>(15,100)</td>
<td>(6,400)</td>
</tr>
</tbody>
</table>

**CASH FLOWS FROM FINANCING ACTIVITIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceeds from the issuance of long-term debt</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Payments on long-term debts</td>
<td>(3,400)</td>
<td>(2,500)</td>
</tr>
<tr>
<td><strong>Net cash provided by (used in) financing activities</strong></td>
<td>(3,400)</td>
<td>(2,500)</td>
</tr>
</tbody>
</table>

**Net increase (decrease) in cash and cash equivalents**

<table>
<thead>
<tr>
<th>Description</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net increase (decrease) in cash and cash equivalents</td>
<td>300</td>
<td>2,600</td>
</tr>
<tr>
<td>Cash and cash equivalents, beginning of year</td>
<td>7,400</td>
<td>4,800</td>
</tr>
<tr>
<td>Cash and cash equivalents, end of year</td>
<td>7,700</td>
<td>7,400</td>
</tr>
</tbody>
</table>

Supplemental disclosure of cash flow information—cash paid for interest: Cash paid for interest (net of amount capitalized) was $7,700,000 in 2007 and $7,500,000 in 2006.
glance, it gives the knowledgeable reader an interesting set of information regarding the organization’s sources and uses of cash.

The statement of cash flows has one purpose: to allow the reader to understand the financial statement elements that make up the change in cash in the organization’s operating checkbook. The statement begins by recording the organization’s change in net assets (which primarily consists of the bottom line). After that, all noncash items included in the bottom line, such as depreciation and amortization, are added back because the purpose of this statement is to recognize cash transactions only. Finally, the statement is designed to show the balance sheet items that increase and decrease an organization’s checkbook balance.

In the not-for-profit industry, the statement of cash flows is divided into cash flow from operations, investing activity, and financing activity. These designations represent cash flows from the organization’s principal activity (operations), investment and capital expenditure (investing), and proceeds of debt activity (financing). Although a for-profit organization does not use the same categorizations, the end result is the same, which is to describe net increase or decrease in cash and cash equivalent.

There are some interesting and useful line items on the statement of cash flows:

- **Capital expenditures.** This line shows the total change in capital expenditures during the reporting period. The changes involve acquisition of any new capital as well as any capital items that are discarded.

- **Proceeds from the issuance of long-term debt.** This line exhibits any long-term debt issued by the organization during the reporting period. Thus the reader can determine at a glance the amount of debt taken on by the organization.

- **Payments on long-term debt.** This line represents all principal payments made during the reporting period. It quickly isolates the amounts in question.

**Notes to the Financial Statements**

The notes have considerable importance for the overall quality of a financial statement. GAAP requires notes to be included in an audited statement. They add a level of understanding to the other four statements by describing various accounting concepts used by the reporting organization. In addition, the notes allow the organization to present
any message it wants to illuminate to statement readers. The notes give supporting detail that cannot easily be placed on the face of the financial statements themselves. Internal monthly financial statements often exclude a formal set of notes because it is assumed that the readers of these internal statements are already familiar with the information that may be included in the notes. Still, this assumption is not true at every company. The quality of the commentary provided on the internal financial statements should be reviewed for usefulness on a periodic basis.

PREPARING FOR THE AUDITORS

As stated earlier in this chapter, the RHMC accounting director and her accountants spent several weeks just prior to the end of the fiscal year as well as several weeks into the new calendar year engaged in once-a-year actions to get ready for the arrival of the auditors. They are paying special attention to preparing analyses to be given to the auditors for both balance sheet and income statement accounts. This is, in fact, the biggest difference between regular month-end and end-of-year closings.

During a regular month-end closing, the accountants are generally more concerned with getting the books closed, publishing the financial statement, and getting ready for the next month’s close. There is usually not enough time during a regular month-end closing to be concerned with the accuracy necessary in a year-end closing. This is because the senior administration and the board want to know the results of operations as soon as possible after the close of the month.

For the year-end closing, extra time is allotted for the close of the month and hence the year’s end. This is allowed because finance administration is aware that there will be extra scrutiny in the audit, and from a career viewpoint, it is much better to make sure that the accounting staff make all required accounting entries rather than have them proposed by the auditors. This extra time is always used for additional analysis, which, owing to time constraints, is not always performed during the rest of the year.

The tasks involved in a year-end closing were enumerated in Exhibit 1.3 in Chapter One. This is the baseline for the work paper analysis that is prepared by the RHMC accounting staff and given to the external auditors. The work paper is referred to as “prepared by client” (PBC); it allows the auditors to begin their audit already armed with the details behind the financial statement accounts. The extra closing time, coupled
with the PBC, permits a clean year-end financial statement and practically ensures that the auditors will not discover any financial transactions that should have been recorded but were not, were recorded in error and need to be eliminated, or were recorded in error and must be changed.

A couple of items are worthy of note. First, a health care facility is better served if it maintains good account analysis from month to month. This simply follows good management practices. Not maintaining monthly account analysis means that the administration and the accounting staff can be absolutely sure that the published financial statements are not as accurate as possible. Because of this, they do not know if a major adjustment will be required, which can make the already published statements misleading and get the accountants, the accounting director, or the chief financial officer fired.

Second, the six most sensitive accounts (that is, those most likely to receive audit adjustments in the financial statements) are the following:

1. Contractual adjustments (income statement)
2. Accounts receivable (balance sheet)
3. Allowance for doubtful accounts (ADA, balance sheet)
4. Bad-debt expense (income statement)
5. Allowance for contractual adjustments (ACA, balance sheet)
6. Due to or from third-party settlements (balance sheet)

These accounts are sensitive because determining the balance involves a great deal of estimation. There are, of course, accounting rules that set down proper estimation techniques. These are the rules that the auditors use when they do their analysis. But amazingly, many health care organizations want to follow these techniques but have trouble because of time or talent, or they decide they have a better way and choose to follow their own methodology. This often causes significant audit adjustments after the health care facility has closed its books for the year.

Some good advice to follow in this regard is always to ask your auditors to reveal the exact methodology they use to analyze these accounts. Ask them to explain their method, and once you have understood it, adopt it. If the health care organization is using the same methodology as the auditors, so long as there is no problem with the numerical input, there is no potential for audit adjustment. In other words, unless the facility has some reason not to adopt the auditor’s
method (perhaps it is only a long-standing tradition), just do it! It significantly minimizes the risk of adjustments, which is the name of the game in year-end preparation for the auditors.

ANALYSIS OF SENSITIVE ACCOUNTS

This chapter explains the financial statements and their elements, so this is a good opportunity to further discuss the six sensitive accounts just mentioned.

Contractual Adjustments

These have become the second largest line item on the income statement of many a health care organization, after gross revenue. This is because many organizations have chosen not to limit any increase to their gross charges (price list) while at the same time absorbing extraordinary increases in discounts (contractual adjustments) that they agree to give to third parties. Because of its size on the income statement, even a small discrepancy can have big consequences for earnings. The timing of the contractual adjustment on the patient’s account as well as the accuracy of the adjustment are crucial items that affect potential audit adjustments. Development of contractual adjustments is given detailed review in Chapter Four, along with the concept of net revenue generation.

Accounts Receivable

The concept of accounts receivable management is discussed in Chapter Five. It is a detailed analysis of methods to minimize the dollar level and aging of the amount owed to the health care facility for the services it has provided to patients (customers). The reason for this importance and sensitivity lies in its relative size and the percentage of assets that it represents. In most other industries, accounts receivable is usually the third largest current asset, behind inventories and cash. In health care, however, accounts receivable is often the largest noncapital asset. In addition, accounts receivable involves a high degree of detailed analysis to verify that the gross and net receivables on the books are in fact valid.

Allowance for Doubtful Accounts

One of the oldest and most time-honored concepts in accounting has its own special rules in the health care industry. Allowance for doubtful accounts represents the dollars subtracted from gross accounts receivable to help arrive at the net amount expected to be collected from all patients.
It is always an estimate, because it is impossible to know with certainty how many accounts receivable dollars will not be collected. Because of the high dollar value of ADA (which is often 10 to 30 percent of the gross accounts receivable, depending on each organization’s location and payer mix), there are significant implications for a bottom-line adjustment if not done appropriately. Preparation of a monthly ADA analysis is covered in detail and with examples in Chapter Five.

**Bad-Debt Expense**

This is sometimes called provision for bad debts. The finance committee keeps a close eye on this income statement line. This expense is called a provision because, like ADA, it is also an estimate. Indeed, it is specifically related to ADA: the higher the ADA in any accounting period, the higher the bad-debt expense, and vice versa. Bad-debt expense has a direct effect on the bottom line. Minimizing this expense depends on the kind of accounts receivable management practiced; in many cases, it also depends on the socioeconomic profile of the neighborhood in which the organization is located. Still, in the aspects that are controllable, the finance committee requires that these expenses not vary greatly from year to year without good reason. In addition, it is important that bad-debt expense be properly estimated throughout the year so that no large negative entry is made to the income statement in December or as the result of an audit adjustment.

**Allowance for Contractual Adjustment**

Like ADA, allowance for contractual adjustments is used to reduce the gross accounts receivable down to its net collectible value. ACA is an estimate of contractual adjustments that should be taken when the health care organization receives payment for services from the many third-party payers with which it has contracted. These third-party payers are usually categorized into Medicare, Medicaid, or managed care. Also like ADA, this allowance, or estimate, can have a meaningful impact on earnings. If the organization does not properly prepare its estimate, the audit adjustment can cause havoc with the year-end closing numbers. Detailed explanation of ACA is in Chapter Five.

**Due to or from Third Parties**

This is an accounting concept that has been used in most health care organizations since 1966, at the inception of Medicare. This balance sheet account represents the amount of money either owed to a third-party payer
by the provider (liability) or additional reimbursement owed by the payer to the provider (asset). This balance sheet account is necessary only if the type of reimbursement agreed to by provider and payer is cost-based and retrospective, which means that all payments throughout the year are only interim (temporary) and would be finalized (or finally settled) after a year-end cost report is filed. This was how Medicare originally reimbursed providers (who were then mostly hospitals). Since 1983, inpatient hospital reimbursement has changed and is no longer retrospective; all such rates are set before the year begins (they are thus “prospective”). Still, since passage of the Balanced Budget Act of 1997, most of the other health care industry types that Medicare reimburses have changed from retrospective to prospective (skilled nursing facility, home health agency, outpatient hospitalization, rehabilitation). Consequently, this line item will be considerably less sensitive in the future, and it will continue to diminish as previous years not yet resolved by the Medicare intermediary are taken care of and no additional settlements are required.

**FEBRUARY FINANCE COMMITTEE SPECIAL REPORTS**

As reported earlier, RHMC’s board’s finance committee meets bimonthly to review routine matters such as the operating results of the organization, as represented by the statement of operations (income statement), balance sheet, and statement of cash flows. Other routine items of interest are review of the accounts receivable balance and capital expenditures, budgeted and unbudgeted.

In addition, at every meeting, certain items are formally reviewed on a specific and periodic schedule. This is done so that these items, which have been deemed important but not requiring review at every meeting, are not forgotten. In February, two of these items are on the agenda.

**Bond Debt Status**

RHMC has issued $150 million of bond debt over the last several years. This is a substantial amount of money, particularly to the individuals and corporations that bought the debt. In fact, both the purchasers and the issuers of the debt (the latter represented by the RHMC board) have the same concerns. Namely, is the organization that issued the bond still financially viable and able to continue to repay principal and interest on the outstanding bond issue?

A good way to determine financial viability and ability to repay principal and interest on a bond issue is to use financial statement ratios. The capital structure ratio analysis given here was adapted from *The
Almanac of Hospital Financial and Operating Indicators (Ingenix, 2007). Three ratios are particularly important for this analysis:

1. Long-term debt to capitalization. This is defined as the proportion of long-term debt divided by the sum of long-term debt plus unrestricted net assets or equity. A high value for this ratio implies reliance on debt financing and may signal reduced ability to carry additional debt.

2. Debt-service coverage. This measures total debt-service coverage (interest plus principal) from the organization’s cash flow. A high value for this ratio indicates good ability to repay debt.

3. Cash flow to total debt. This is defined as the proportion of cash flow to total liabilities, current and long-term. It has been found to be an important indicator of future financial problems or insolvency.

These ratios are the ones most commonly used throughout the health care industry to measure bond repayment capability. The formulas for calculating these ratios are presented in Exhibit 2.1. We explore ratios further in the next chapter.

Because of their importance, these ratios are computed and presented on the financial statement each month for review and discussion by the finance committee. Still, once a year, the administration deems it important to prepare an in-depth review of the organization’s debt status for the finance committee. The review includes a summary of the bond debt expense for the past ten years and a discussion of any changes in the organization’s bond debt rating by the three major rating agencies (Moody’s, Fitch, and Standard & Poor’s). Table 2.7 shows the analysis and review.

**EXHIBIT 2.1. Selected Bond Repayment Ratios.**

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term debt to capitalization ratio</td>
<td>long-term liabilities / (long-term liabilities + unrestricted net assets)</td>
</tr>
<tr>
<td>Debt service coverage ratio</td>
<td>cash flow (total margin + depreciation expense) + interest expense</td>
</tr>
<tr>
<td></td>
<td>principal payment + interest expense</td>
</tr>
<tr>
<td>Cash flow to total debt</td>
<td>revenues and gains in excess of expenses and losses + depreciation</td>
</tr>
<tr>
<td></td>
<td>current liabilities + long-term debt</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Rate (%)</th>
<th>Principal ($)</th>
<th>Interest Expense ($)</th>
<th>Total Annual Payments</th>
<th>Debt Balance</th>
<th>Additional Expenses* ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>150,000,000</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>4.40</td>
<td>1,740,000</td>
<td>6,600,000</td>
<td>8,340,000</td>
<td>148,260,000</td>
<td>600,000</td>
</tr>
<tr>
<td>1997</td>
<td>4.70</td>
<td>1,900,000</td>
<td>6,968,220</td>
<td>8,868,220</td>
<td>146,360,000</td>
<td>600,000</td>
</tr>
<tr>
<td>1998</td>
<td>4.90</td>
<td>2,000,000</td>
<td>7,171,640</td>
<td>9,171,640</td>
<td>144,360,000</td>
<td>600,000</td>
</tr>
<tr>
<td>1999</td>
<td>5.00</td>
<td>2,100,000</td>
<td>7,218,000</td>
<td>9,318,000</td>
<td>142,260,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2000</td>
<td>5.20</td>
<td>2,220,000</td>
<td>7,397,520</td>
<td>9,617,520</td>
<td>140,040,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2001</td>
<td>5.30</td>
<td>2,320,000</td>
<td>7,422,120</td>
<td>9,742,120</td>
<td>137,720,000</td>
<td>600,000</td>
</tr>
</tbody>
</table>

*Additional expenses include (1) the cost of bond insurance at 40 basis points, or 0.4 percent (to receive a AAA rating from the bond rating agencies), (2) related consulting fees, and (3) related legal fees, all of which are being amortized over the life of the bond.

Note: Based on the ratio analysis of RHMC’s current financial statement, there has been no upgrade or downgrade of RHMC’s bond ratings by Moody’s, Fitch, or Standard & Poor’s.
<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
<th>Value 4</th>
<th>Value 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>5.30</td>
<td>2,440,000</td>
<td>7,299,160</td>
<td>9,739,160</td>
<td>135,280,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2003</td>
<td>5.30</td>
<td>2,660,000</td>
<td>7,169,840</td>
<td>9,829,840</td>
<td>132,620,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2004</td>
<td>5.40</td>
<td>2,820,000</td>
<td>7,161,480</td>
<td>9,981,480</td>
<td>129,800,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2005</td>
<td>5.40</td>
<td>3,100,000</td>
<td>7,009,200</td>
<td>10,109,200</td>
<td>126,700,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2006</td>
<td>5.50</td>
<td>3,300,000</td>
<td>6,968,500</td>
<td>10,268,500</td>
<td>123,400,000</td>
<td>600,000</td>
</tr>
<tr>
<td>2007</td>
<td>5.50</td>
<td>3,400,000</td>
<td>6,787,000</td>
<td>10,187,000</td>
<td>120,000,000</td>
<td>600,000</td>
</tr>
</tbody>
</table>
Health Insurance Annual Review
As in many towns around the country, the health care organization is the largest employer. There are several interesting twists here. Because RHMC is an employer as well as a health care provider, it knows better than most the costs associated with providing care for its employees. This is the cost of care, not the price of the care.

Therefore, when negotiating with a health insurer to cover its employees, RHMC is at an advantage and a disadvantage simultaneously. The advantage is knowing its own costs for providing care, which can serve as a measuring stick when the prospective health insurer makes a bid to insure the medical center’s employees. The disadvantage is that RHMC must negotiate with these same insurers for managed care contracts over other employers. It cannot reveal too much of the underlying cost structure without risking loss of some negotiating leverage on its other contracts.

The other interesting twist is that RHMC has learned that health care employees’ use of health services greatly exceeds that of employees in any other industry. This is no fluke; in fact, it makes a lot of sense. Because health care workers are exposed to these services every day as service providers, no mystery or fear is associated with them, and the potential benefits of the services are quite clear. Consequently, health care workers are the greatest users of health care services in the country. But knowing this, the health care insurer needs to charge health care providers a higher monthly premium rate than it would for workers in other industries.

Each year, the administration presents a wrap-up of the previous year’s health insurance information for the finance committee so that it can assess variance from budget and anticipate potential variances in the coming year. This is particularly important if the organization is self-insuring its employees’ medical coverage. Because RHMC self-insured its medical coverage in past years, this report to the finance committee is a required element of good general management. So even though RHMC currently offers regular insurance coverage in the current year, it continues to present this report. A summary appears in Exhibit 2.2.
PRACTICAL TIPS

■ Prepare an annual finance committee calendar and agenda, and use it to establish consistent analysis across each fiscal year.

■ Educate the finance committee on the meaning of the financial statement line items and their importance to strategy and operations.

■ Report all four of the financial statements to the finance committee at each meeting. Many hospitals only report the balance sheet and statement of operations, but all four statements have meaning and need to be presented.

■ Report these financial statements in GAAP format. Many nonconforming statements are being presented to finance committees. If the committees want to see statements that are nonconforming, the organization should still prepare GAAP statement to be included in the regular committee package so that a consistent format is maintained through the conforming GAAP audit statement.

EXHIBIT 2.2. RHMC 2007 Health Insurance Information.

■ During 2007, RHMC offered a single health insurance plan through ABC Healthcare, a midwestern regional-based health maintenance organization. We offered a preferred provider organization (PPO) plan that featured managed care benefits for the employee staying in the ABC network and indemnity-type benefits for going outside the ABC network.

■ The budget for health insurance for 2007 was $2.4 million. Actual premiums paid during 2007 were $2.0 million. The savings resulted from lower participation levels following staff reductions and a different mix of single/couple/family employee participation than what was budgeted.

■ Dental insurance continued to be offered through XYZ Dental Program. Two programs were offered: a dental maintenance organization (DMO) plan and an indemnity plan. These plans, which were fully paid for by the participating employees, had 400 participants in 2007. The 2007 premiums paid by the employees were $960,000.
Always ask your auditors to identify the exact methodology they use to analyze the financial statement accounts. Ask them to explain their methodology, and once you understand it, adopt it.

Be sure that depreciation of the fixed assets is based on the AHA’s Estimated Useful Lives of Depreciable Hospital Assets. This will ensure compliance with the Medicare cost report rules.

Prepare, every month, appropriate and substantial analyses for the six most sensitive financial statement accounts. It is the best way to avoid getting fired.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss the relationship between the five financial statement types. How are they specifically related? What elements of the financial statements are most important to the hospital’s operation?

2. Discuss the reasons why the six items most likely to receive an audit adjustment are so sensitive. Why should the health care organization spend so much time on each of these items?

3. Using the balance sheet and statement of operations in the chapter, calculate the three bond repayment ratios, and use it to determine the financial condition of the health care organization.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

- Value the purposes of developing a three-year strategic plan
- Understand the need to develop a five-year strategic financial plan
- Prepare a complete five-year strategic financial plan
- Recognize the importance of volumes, payer mix, and reimbursement rates in the strategic financial planning process
- Prepare an analysis of the eleven financial ratios that are most important to the hospital industry
- Set up an analysis of six operating ratios whose outcomes have important meaning to hospital performance
- Understand the key elements of a hospital capital plan and how this relates to the hospital’s strategic financial plan

Sam is restless. He has just begun to prepare information for his organization’s annual update of its strategic financial plan. But he is having a rare moment of doubt. At such times, he always does the right thing: he calls his ex-boss for some advice.
“Jim, I’ve got a problem, and I need your help,” says Sam to his ever-understanding and patient colleague and friend.

“Yeah? What’s up today?” asks Jim Jordan, who just happens to be the chief financial officer of a six hundred-bed academic medical center in the glorious state of Florida. Jim is always available to take a call from his former protégé.

“I’m about to start gathering information for the upcoming five-year strategic plan, and it seems like we just finished the work from last year. I’m having trouble redoing this year after year. I’ve forgotten what value we get from this exercise.”

Now, Jim—who is not only his facility’s CFO but also the senior vice president for strategic planning—is a patient man. He has to be, listening untiringly to Sam’s stream-of-consciousness, free-association ramblings. So he says, “Come on. Buck up. You’ve gotten into these funks before. It will pass; it always does.

“Let me remind you of something you told me just last year, Sam. You called me, and you were very excited. You were preparing last year’s plan, and you realized you’d made an assumption that Medicare reimbursement wouldn’t go down as much as had been predicted by one of those consultants that your hospital retains. Your reading of the literature led you to a better prediction. And since your administration listened to you last year instead of the other guy, the hospital didn’t have to cut an additional ten employees.”

“What? Oh my gosh, that’s right. I forgot about that. Actually, that was important for a number of reasons, particularly because the administration put more credence in my work for the first time. You are so right. As usual, you’ve been fabulous, Jim. Thanks a lot. How do you always do that?”

“Sam, Sam, Sam, I’ve told you this before. It’s not a matter of talking—you just need to listen.”

The month of March opened in a very promising fashion in Chicago. The weather was unusually warm, allowing people to shake off their winter blues. Unfortunately, the blue period lingered in the health care industry. As in the previous few years, a series of events further diminished both the reputation and the finances of industry participants.
Since 2003, dozens of not-for-profit hospitals and health systems have been targeted for lawsuits by law firms who charge that these hospitals were failing to live up to the charitable obligations in return for their tax exemptions (see Chapter One). Some hospitals and health systems settled these suits. Other lawsuits that have gone to trial have been thrown out by judges who have said that the organizations have not broken any common laws or statutes.

Yet these lawsuits have shone a negative spotlight on the industry and its billing practices. RHMC, like almost every hospital in the industry, has its own problems with its billing practices, which will be discussed in Chapter Five.

Meanwhile, the federal government was continuing its two-pronged attack on the industry’s financial and billing practices.

On the billing front, the feds decided that they had probable cause to conclude that a great deal of the industry was filing erroneous Medicare and Medicaid claims; this determination was made within the statutes of the 1863 Civil War law dubbed the False Claims Act. In addition to believing that these erroneous billings constituted fraud, the Office of Inspector General of the United States and many state attorneys general felt that they could raise their own revenues using the fining powers granted under the False Claims Act and enhanced as part of the 1996 Health Insurance Portability and Accountability Act (HIPAA).

On the financial front, passage of the federal Balanced Budget Act (BBA) in 1997 (which became effective in October of that year) exacerbated a decline in hospital reimbursements that had begun a few years earlier, concurrently with the increase in power and strength of the managed care industry. The BBA, which primarily affected Medicare reimbursements and to a lesser degree Medicaid, immediately began to have an impact on the financial bottom line of every segment of the health care industry. Hospitals were the first to feel the brunt of the $116 billion, five-year payment reduction. Home health agencies were also immediately affected and felt the impact from the Interim Payment System segment of the BBA, with 752 agencies shutting their doors in the first nine months after the October 1, 1997, implementation (Ngeo, 1998). Other segments of the industry, such as skilled nursing facilities and physician office practices, took their share of the legislation a year later. Further, hospital outpatient services were affected on August 1, 2000, upon implementation of the Hospital Outpatient Prospective Payment System (HOPPS), which used the Ambulatory Payment Classification (APC) system for reimbursement of services. Although the
industry started to emerge from the effects of the BBA in 2001 and 2002, by 2007 there were still significant parts of the industry, some in hospitals, others in physician practice, skilled nursing, or home health, that were negatively affected. In addition, the 2003 Medicare Modernization Act (MMA) had a further negative effect on most industry providers. (We will explore the BBA and the MMA and its many industry implications in Chapter Four.)

STRATEGIC FINANCIAL PLANNING: FIVE-YEAR PROJECTIONS

Meanwhile, back at Ridgeland Heights, the accounting and finance staff were gearing up to present the implications of the medical center’s new transparent pricing policy and charity care policies and several other significant operational changes to the administration. They do this through annual preparation and presentation of a five-year strategic financial plan.

A health care organization’s strategic financial plan can be defined as quantification of a series of strategic planning policy decisions. The strategic financial plan is meant to quantify the tactics surrounding the organization’s strategic plan. Any organization that aims to be financially competitive must possess a number of critical attributes and meet the following criteria (Kaufman and Hall, 1994):

- The chief executive has a clear financial vision.
- Management follows the simple rule that “what gets measured gets done.”
- Management understands and applies principles of corporate finance.
- Management has a sophisticated financial plan.
- The organization favors a quantitative capital allocation process.
- Management consistently applies quantitative decision support tools.
- Management sets annual financial goals and objectives, welcoming organizationwide input.
- The organization has a visible operating plan and disseminates its financial goals.
The organization has a strategic plan that takes the requirements of the capital market into account.

Management reduces expenses while improving service and quality.

Ridgeland Heights Medical Center believes in these attributes and attempts to follow them as closely as possible. In particular, the center updates its five-year strategic plan every year to remain current with contemporary strategic and financial changes within the industry. Doing so helps it manifest a number of the attributes just listed.

**Strategic Planning**

To begin a successful strategic financial plan, management must finalize its own strategic plan. This is updated every two or three years and presented for approval to the planning committee of the board of directors and then finally to the full board. The strategic plan can be defined as a statement of missions or goals (or both) required to offer guidance to the organization; it incorporates a set of programs or activities to which the organization commits resources during the plan period (Cleverly, 1997).

A strategic plan is imperative to the proper functioning of any successful organization. Yet in many places, the strategic plan is looked on as an inconvenience. Department heads, as well as administrators, may want to just “manage” (that is, simply operate their department or division without taking the time to determine where they are headed). The strategic plan focuses the organization on the important changes in demographics, payer mix, payer reimbursement methodology, physician recruitment and retention policy, new programs or other initiatives, strategic market share practices, and any other area pertinent to maintaining or improving the organization’s financial position.

It is important to note that both strategic planning and financial planning are the primary responsibility of the board of directors. To be sure, although senior administration has a role in carrying out the plans, the future vision of the organization begins with the board. The vision of the organization’s CEO is also highly relevant. The CEO serves as a link between the board (usually as a member) and management. The final link between the board and the administration involves the board’s setting key financial policy targets. These targets should include debt policy and profitability objectives (for instance, operating margin percentage and return on net assets) as well as a capital plan (Berger, 2005).
The strategic plan serves the following purposes:

- To identify key future issues and priorities
- To allow managers an opportunity to understand and contribute to the organization’s direction
- To identify the organization’s resource needs
- To determine capital allocation based on need
- To ensure that the strategic plan supports board policy

To determine these strategies, it is necessary to carry out the following procedure:

1. Assess external environmental conditions.
2. Assess internal environmental conditions, such as current organization issues.
3. Describe the strategic gap from the desired position to the current one with respect to organizational and environmental variables.
4. Identify competencies and resources needed to close the gap.
5. Determine strategic initiatives that can move the organization forward toward successful completion of the plan.
6. Allocate capital or operating dollars to each initiative.

After the strategic initiatives are determined, the organization needs to identify the tactics it will use to activate the strategies. The tactics are the actual steps the various departments take to implement those changes developed within the strategic plan. It is imperative that management be clearly aware that it will be held accountable for carrying out the tactics. Without accountability, the tactics have a great chance of not being implemented, thereby causing the strategic plan to fail.

**Converting Vision (Strategic Plan) into Financial Reality**

According to Cleverly (1997), there are four steps involved in developing a strategic financial plan: the organization must (1) analyze its financial position and prior growth patterns, (2) determine the growth in total assets needed for the planning period, (3) define an acceptable level of debt for both current and long-term categories, and (4) assess the reasonableness of the required growth rate in equity (net assets). RHMC generally follows these steps. After approval of the strategic plan, the finance department goes to work on the strategic financial plan. There
are a number of specific steps taken to translate the organization’s vision into financial reality. Some of them may be performed concurrently, while others need to await completion of previous steps.

At RHMC, the first step is for the finance officer to call a meeting of senior administration. The objective of the meeting is to determine volume changes over the next five years. This is often a result of market share analysis and the organization’s current and proposed market share position. For example, suppose that the organization’s current share across all markets (the primary one and all secondary markets) is 12 percent. Also let us suppose that the organization has determined that for it to enjoy continued success, it must increase market share to 18 percent, an increase of 50 percent. This is not the kind of change that happens easily. The quickest way to increase market share in the short term is to buy it. This, of course, presumes that there is a willing seller in the market. Numerous scenarios can play out if acquisition is the desired method of choice.

The next likely method for increasing market share is to determine the services that are most desired by the local market. A good way for the organization to make this determination is through surveys, both focused and general. They help determine the demand for any new or expanded services that are already being met, the alternative being to create demand for services that the market may not yet know it really wants.

There are many examples of what a demand analysis may uncover. For example, let’s say that an organization is in an area where a majority of its residents favor alternative medicine such as chiropractic, acupuncture, and massage therapy. Let’s say the survey reveals that 43 percent of the population has already used at least one of these therapies in the past twelve months. In this case, the organization can surmise that a lot of health care is being administered to local residents who are prospective patients, but without its input. Although this might be an interesting finding, it may not allow the organization to do anything to alter the situation.

A logical action plan might be to research these services and begin to offer them upon completion of an implementation plan. But in the health care industry, nothing is quite so simple. This is particularly true because of the hospital’s interdependence with its affiliated medical staff. All community-oriented hospitals and academic medical centers have bylaws that grant their medical staff a series of privileges to practice medicine in the facility, based on their academic and professional credentials.
Members of the medical staff are charged with checking the credentials of physicians new to the staff as well as periodically reviewing existing credentials. Whereas the credentialing committee may meet every month or every other month, the individual physician review usually occurs at intervals of two or three years, depending on the organization. A medical executive committee (MEC), sometimes called the medical board, represents the organization’s medical staff. The MEC is made up of elected and appointed physician representatives. Initial approval by the MEC is required for a physician to practice at the hospital, but because of the interdependence just mentioned, final approval is required by the full board of directors of the health care organization.

One other privilege granted to the MEC is its ability to decide and determine the kinds of medicine practiced in the organization. The MEC is made up of long-serving members of the medical staff who understand the community they serve and the general needs and desires of its resident population. They have specific roles and responsibilities with regard to medical practice performed in the facility. Specifically, the bylaws of health care organizations such as RHMC might have language saying “subject to the authority of the board, the MEC shall determine all policy and shall have the authority to make final decisions on all questions relating to the practice of medicine within the institution.”

Thus it is quite possible that there could be a major conflict between the organization’s administration and its medical staff, as represented by the MEC. The administration is eager to add what it perceives to be needed services (as well as increase its market share), while the MEC may reject this addition because it does not perceive alternative medicine as being in the best interest of the community—or the medical staff. The MEC may reason that there has not been enough academic peer review in regard to alternative medicine—meaning that the efficacy of the treatments has not been proved. In addition, it may reject any treatments not approved by the state’s medical professional licensing board. Any of these considerations may stymie the desire of the organization in question to use alternative medicine as a way to increase its market share.

**RHMC STRATEGIC FINANCIAL PLANNING**

With the foregoing discussion of strategic financial planning as a backdrop, it is now possible to develop a plan for RHMC.
**Volume Assumptions**

RHMC’s senior officers responsible for planning and implementation need to take the lead in determining the increase or decrease in volume over the upcoming five years. Although the crystal ball may be somewhat snowy, it is an essential part of an administrator’s job responsibility to do this prognostication with appropriate inputs. Several types of volume must be reviewed for both current and proposed programs:

**Inpatient Volume**
- Admissions and discharges
- Average length of stay
- Patient days

**Outpatient Volumes**
- Emergency department
- Same-day surgery
- Observation days
- Home health services
- Other outpatient (defined as other revenue-producing services rendered to outpatients):
  - Laboratory services
  - Radiology services (general, ultrasound, CT scanning, MRI)
  - Physical therapy, occupational therapy, speech therapy
  - Pharmaceutical (drug) sales
  - Renal dialysis
  - Other outpatient ancillary services

**Physician Office Visit Volume**
- Fee-for-service visits
- Capitated lives (or members)
- Relative value units (RVUs)

The volumes should be arrayed to show the trends over the past two to four years. This enables the administrators to make an informed
decision on future volume as they review their market share assumptions. The future volumes are generally described as a percentage increase or decrease from current volume, by year.

RHMC has conducted an analysis of its current market to determine the various volume assumptions and reviewed certain areas:

■ The demographics of the organization’s service area (particularly the age trend)
■ The projected population growth rate of the area
■ The current age of the physician staff
■ The shifting criteria for inpatient admissions as dictated by various insurance companies
■ The continuing shift from inpatient to outpatient care

Thus RHMC’s summarized volume assumptions looks like this:

■ Acute care volume is expected to decline each year:
  - Discharges decline 2 percent per year
  - Length of stay declines 4 percent per year
  - Thus patient days decline 6 percent per year

■ Emergency department volume is expected to increase 4 percent per year.

■ Other outpatient and physician volumes are projected to increase 8 percent per year.

**Payer Mix**

Another major set of assumptions projects the percentage mix of third-party insurance companies making payments on behalf of clients (employers, employees, and individual subscribers). It is important to determine the potential mix of payers simply because each payer is likely to be paying a different amount to RHMC for the same services. This is usually based on each insurance company’s ability to negotiate its best rate with RHMC (referred to as the provider of services). The insurer’s ability to negotiate a better or worse rate with the provider is generally a function of unique market conditions and the provider’s need to capture the volume offered up by the insurer.

Payers vary dramatically, reflecting the dominating nature of the Medicare and Medicaid programs, the quality of HMO plan managers,
the effectiveness of PPOs plan managers, and the lack of cost control among POS plans. In addition, there are the unique reimbursement associated with worker’s compensation and motor vehicle accidents and the diminishing role of commercial insurers. Finally, the industry constantly redefines the concepts inherent to patient-pay or self-pay patients, which often depend on the socioeconomic conditions of the community around the health care organization. In some communities, self-pay means “pay,” while in other areas, it really means “no pay.”

In this year’s strategic financial plan, RHMC has once again performed a review based on actual data from the current year. It has examined current trends in various health insurance companies and employer fringe benefit areas. From this review, RHMC administration has adopted the payer mix assumptions seen in Table 3.1.

**Rates and Reimbursements**
The next major set of assumptions involves reimbursement rates, which represent the net revenue the health care organization expects from the various payers throughout the industry. In this industry, there is one dominant payer: the federal government. The two primary programs

<table>
<thead>
<tr>
<th>Table 3.1. Current and Projected Payer Mix.</th>
<th>Current Year (%)</th>
<th>Annual Change, Next Five Years (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>38</td>
<td>1.0</td>
</tr>
<tr>
<td>Medicaid</td>
<td>6</td>
<td>0.0</td>
</tr>
<tr>
<td>HMO, managed care</td>
<td>16</td>
<td>0.5</td>
</tr>
<tr>
<td>PPO, managed care</td>
<td>14</td>
<td>0.5</td>
</tr>
<tr>
<td>Workers compensation</td>
<td>4</td>
<td>0.0</td>
</tr>
<tr>
<td>Commercial insurers</td>
<td>8</td>
<td>-1.0</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>-1.0</td>
</tr>
</tbody>
</table>
covered by the government are Medicare and Medicaid. The federal
government pays 100 percent of its agreed rates (not the organization’s
charges) for services rendered to Medicare recipients. In addition, the
federal government pays at least 50 percent of the rate for services
rendered to Medicaid recipients while each state government pays a
varying percentage that makes up the 100 percent.

Between Medicare and Medicaid, the government pays more than
50 percent of every health care dollar directed to providers. (The Medi-
care and Medicaid programs are examined in more depth in Chapter
Four.) Still, it is important to note that for purposes of the strategic
financial plan, making one’s best guess on the direction of the Medicare
and Medicaid programs in the near future—say, the next five years—is
essential to a quality outcome.

After the Medicare and Medicaid programs, the next largest payer
group is categorized as managed care. The term managed care is a
catch-all for a variety of health insurance that is designed to limit the
cost of health care through a range of utilization and reimbursement
techniques. The various managed care companies attempt to reduce
costs by focusing on lowering the price paid to the provider, limiting the
volume of care rendered to subscribers, and reducing the intensity of
services used.

Managed care concepts are reviewed in Chapter Four. For purposes
of the strategic financial plan, it is important to recognize the implica-
tions of the reduction strategies used by these companies. Managed care
methodology favors reduction in admissions and length of stay, thereby
further reducing the number of days that the subscriber spends as an
inpatient in a health care facility. The chosen methodology also cuts
outpatient visits wherever possible. In addition, managed care compa-
nies negotiate aggressively with providers to secure the best (that is,
lowest) prices possible.

There are more than a dozen reimbursement methodologies that
managed care companies may attempt to negotiate and impose. The
easiest way to express the discount taken off of the provider’s list
price of services (usually called gross charges) is as an overall percent-
age. This allows the provider to summarize a list of various managed
care contracts into one consistent number for calculation, analysis, and
trending. The summary for rate payers is usually expressed as shown in
Table 3.2.

Keep in mind that the percentages in Table 3.2 are fully blended
between inpatient and outpatient rates. They are usually determined and
March 93

Implications for Operating Expenses

Projecting operating expenses over a five-year time horizon carries the same high risk of uncertainty as was encountered in projecting gross revenues. In the case of expenses, at least two main assumption sets must be determined: volume and inflation. Like revenues, all variable expenses are a function of projected volume. Therefore, it is appropriate to use the projected volume changes that have been previously accepted as one multiplier for variable expense change.

There is also a need to project change in inflation for all operating expenses, whether variable or fixed. Some people may consider this nothing more than a guessing game. Prior-year inflation rates, arrayed by major expense category, can be found in a number of places. It is somewhat harder to find any company or service, whether proprietary or in the public domain, that projects the inflation rate by category over a coming five-year time frame. RHMC uses a variety of publications and information as projection sources for predicting inflation in the strategic financial plan.

An underlying and unyielding assumption that needs to be determined before finalizing the five-year plan is the margin target that the organization requires annually. This is necessary for the organization to determine whether its assumptions will produce the results that it

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tr>
<td>HMOs</td>
<td>30</td>
<td>32</td>
<td>35</td>
<td>38</td>
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<tr>
<td>PPOs</td>
<td>18</td>
<td>21</td>
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<td>29</td>
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<tr>
<td>Medicare</td>
<td>46</td>
<td>48</td>
<td>50</td>
<td>52</td>
<td>54</td>
</tr>
<tr>
<td>Medicaid</td>
<td>68</td>
<td>69</td>
<td>70</td>
<td>71</td>
<td>72</td>
</tr>
</tbody>
</table>
Fundamentals of Health Care Financial Management

Every organization has its own margin target, depending on a variety of factors including organization culture, board requirements, demographics of the organization’s service, payer mix, service mix, and tax status (exempt or for-profit), among many others.

RHMC has determined that the appropriate annual operating margin required for the five-year plan is 4 percent, a figure that is slightly higher than the median 2005 operating margin for Standard & Poor’s (3 percent) and Fitch Ratings (2.8 percent). It is therefore supportable at the board level and within the community. Assumptions on operating expenses for RHMC are thus expressed in the strategic financial plan this way:

*We expect salaries and wages to increase at a rate of 3.5 percent per year over the following five years.*

*Controllable nonsalary inflation increases are assumed to be 3.0 percent per year.*

*Pharmaceutical supply inflation is expected to increase by 10 percent per year.*

*Additional reductions of $500,000 per year in nonsalary expense must be assumed to achieve targeted goals.*

*As a result of net revenue reduction, to meet a targeted level of a 4 percent operating margin, the staffing level needs to be reduced by a total of 10 percent, from 1,000 FTEs to 900 at the end of the fifth year.*

In addition to the assumptions listed in the strategic financial report to the finance committee and the board of directors, the organization’s administration also takes the opportunity to supply an analysis and conclusion. In the case of RHMC, the summary and conclusion for the upcoming five-year period show the following:

*The ability to generate the targeted bottom line results is compromised by the expected impact of managed care growth in the service area. In addition, achieving the high level of projected outpatient growth is a critical factor.*

*The growth of managed care as a percentage of the overall payer mix coupled with declining reimbursement requires dramatic reduction in operating expense to maintain targeted margin and cash*
requirements. The magnitude of these cost reductions is consistent with those presented in the previous plan.

Compared to the prior plan, the level of planned capital expenditure has been reduced by more than $5 million.

The baseline strategic financial plan is essentially an operating plan assuming current market share. Market share is an integral part of the strategic plan. If successful, increased market share dramatically improves the results of this financial plan.

Concern about possible community reaction to real or perceived reduction in customer service or patient care quality as staff reduction occurs may override the realization of cost reduction and margin targets.

RATIO ANALYSIS

The assumptions used by administration lead to several financial and operational conclusions. Specifically, to meet the 4 percent operating margin target, the strategic financial plan indicates a number of directions that the organization may take. If it is unable to improve the future financial condition through volume and revenue assumptions, it must take appropriate action on the expense side. In addition, the five-year future financial statements that are developed through this process create a series of ratios that are essential to the analysis and action plans being prepared. Finally, the analysis can be used to determine that future ratios will exceed the level required by bond covenants.

Ratios force the user to take two seemingly unrelated bits of data and create a result that has deeper meaning. The result often allows the information user to trend and benchmark the result, shaping a direction for action. For example, a simple ratio that validates this notion is the net margin ratio. The net margin ratio is net margin divided by total revenues, both of which are taken from the statement of operations. The result, expressed as a ratio, has more meaning than the two underlying numbers.

Consider these points:

- In 2006, RHMC had a net margin of $4.7 million on total revenue of $100.8 million. In 2007, its net margin was $6.4 million on total revenue of $103.1 million. By themselves, these numbers may not have much meaning.
If all you knew about an organization was that it earned $4.7 million or $6.4 million, would you think the organization did well financially? Well, what is the base of revenue these earnings represent? Those earnings on $100 million in total revenues would be better than the same earnings on $1 billion of total revenue.

Consequently, developing a ratio that reflects the underlying value of the equation is important. In this case, running the numbers through the equation results in net margin ratios for 2006 and 2007 of 4.7 percent and 6.2 percent, respectively.

This is better, but it still does not give us final information for decision making. For this we need to see the results over time (trends) and against competitors and peers (benchmarking). However, determining the ratio itself does complete the first step.

In health care, several external services use ratio analysis to make decisions for their clients or themselves. The most likely use of ratios for an external user is to determine how well the organization did in relation to others. This is always done by bond rating agencies (Moody’s, Fitch, Standard & Poor’s), usually annually and occasionally quarterly. The ratings are continuously updated to evaluate the ongoing financial health of the organization with bonds that have been issued and are still outstanding.

There are literally dozens of ratios available for computation. Perhaps the best source of ratio analysis available in this industry is the annual *Almanac of Hospital Financial and Operating Indicators*, published by Ingenix. This book usually runs to more than five hundred pages, and the 2007 edition presents 147 financial indicators or ratios against a variety of peer groupings. There is also commentary, analysis, and explanation of the various ratios.

**Bonding-Related Ratios**

For the health care financing community, as already mentioned in Chapter Two, the three most important ratios involved in bond repayment are long-term debt to capitalization, debt-service coverage, and cash flow to total debt. These were fully described and their calculations shown in Chapter Two.

**Other Ratios**

There are a number of other ratios that are always evaluated in the mix of bond rating because of their influence in the overall financial health of the organization (Exhibit 3.1 shows the actual equations):

Operating margin
\[
\frac{\text{total operating revenue} - \text{total operating expenses}}{\text{total operating revenue}}
\]

Net (excess) margin (%)
\[
\frac{\text{total operating revenue} - \text{total operating expenses} + \text{nonoperating revenue}}{\text{total operating revenue} + \text{nonoperating revenue}}
\]

Cash on hand (days)
\[
\frac{(\text{cash and cash equivalents} + \text{board-designated funds for capital}) \times 365}{(\text{total operating expenses} - \text{depreciation and amortization expenses})}
\]

Accounts receivable (days)
\[
\frac{\text{net patient accounts receivable} \times 365}{\text{net patient revenue}}
\]

Average payment period (days)
\[
\frac{\text{total current liabilities} \times 365}{(\text{total operating expenses} - \text{depreciation and amortization expenses})}
\]

Current ratio (x)
\[
\frac{\text{total current assets}}{\text{total current liabilities}}
\]

Cushion ratio (x)
\[
\frac{\text{cash and cash equivalents} + \text{board-designated funds for capital}}{\text{estimated future peak debt service}}
\]

Long-term debt to capitalization
\[
\frac{\text{long-term liabilities}}{\text{long-term liabilities} + \text{unrestricted net assets}}
\]
Debt service coverage

\[
\frac{\text{cash flow (total margin + depreciation expense) + interest expense}}{\text{principal payment + interest expense}}
\]

Average age of plant (years)

\[
\frac{\text{accumulated depreciation}}{\text{depreciation expense}}
\]

Capital expense (%)

\[
\frac{(\text{interest expense + depreciation and amortization expenses})}{\text{total operating expenses}}
\]

**Profitability Ratios**

- Operating margin
- Net margin

**Liquidity Ratios**

- Days cash on hand
- Accounts receivable in days
- Average payment period
- Current

**Capital Structure**

- Cushion
- Long-term debt to capitalization
- Debt service coverage
- Average age of plant
- Capital expense percentage
There are benchmarks for all of these ratios. They are usually reported as the median value of a list of organizations somewhat similar to yours. The median is usually defined as the organization in the sample that is exactly in the middle of the pack when the values are arrayed from highest to lowest. Several rating organizations collect and disseminate benchmarks; see Table 3.3 for the values they report.

**Operating Margin and Net Margin.** Operating margin and net margin ratios involve either the operating results or net results as a function of net revenue. The operating margin ratio can be considered useful when trended against its peers. This allows the organization to determine if its financial direction is positive or negative. Meanwhile, the net margin ratio can be trended against itself or compared to local, regional, and national benchmarks to determine whether the organization’s financial outcomes are favorable or not.

**Days Cash on Hand.** Another ratio that is used in determining total cash available to liquidate or pay off annual operating expenses is days cash on hand. The available cash includes long-term investments that can be converted to cash in less than one year (generally without decreasing the value of the investment). Bond investment managers and holders of the organization’s tax-exempt bonds are interested in this ability to meet short-term obligations. If the benchmark is approximately 170 days of cash on hand, then it is important for the organization to meet, if not exceed, this. A high ratio compared to benchmarks is always preferable.

**Days in Accounts Receivable.** Days in accounts receivable is used by bond rating agencies and internal operational management to assess the value of potential cash tied up in accounts receivable. There are also numerous opportunities to benchmark this ratio, which allows administration to determine if accounts receivable management is effective. The concepts behind accounts receivable management and the implications of this ratio are explored in Chapter Five.

**Average Payment Period.** The average payment period is somewhat tied to ratios that assess cash level and the organization’s ability to pay its debts. In this case, the debt being liquidated specifically refers to current liabilities. The largest current liability is usually trade vendor payables. A bond rating agency would review this ratio to determine whether the organization is in line with industry standards for payment periods. This is not a detailed review of the payable balance but rather a result derived from financial statement information. If either the investment manager or the organization is interested in getting behind the numbers, an external rating agency such as Dun & Bradstreet will give details.
### TABLE 3.3.  **Key Hospital Financial Statistics and Ratio Medians, Ridgeland Heights Medical Center, December 2006.**

<table>
<thead>
<tr>
<th></th>
<th>RHMC 2007 Actual</th>
<th>RHMC 2012 Strategic Financial Plan</th>
<th>Standard &amp; Poor's</th>
<th>Fitch Ratings</th>
<th>Solucient</th>
<th>Ingenix</th>
<th>Premier Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>549</td>
<td>222</td>
<td>898</td>
<td>1,478</td>
<td>647</td>
<td>4,574</td>
<td></td>
</tr>
<tr>
<td>Operating margin (%)</td>
<td>-1.2</td>
<td>-1.2</td>
<td>3.0</td>
<td>2.8</td>
<td>3.5</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Net (excess) margin (%)</td>
<td>6.6</td>
<td>3.3</td>
<td>5.0</td>
<td>4.8</td>
<td>5.4</td>
<td>n/a</td>
<td>4.5</td>
</tr>
<tr>
<td>Days cash on hand (days)</td>
<td>433.5</td>
<td>460.2</td>
<td>160.0</td>
<td>163.9</td>
<td>117.0</td>
<td>62.6</td>
<td>n/a</td>
</tr>
<tr>
<td>Accounts receivable (days)</td>
<td>63.3</td>
<td>52.5</td>
<td>50.1</td>
<td>50.1</td>
<td>51.8</td>
<td>52.9</td>
<td>49.7</td>
</tr>
<tr>
<td>Average payment period (days)</td>
<td>81.9</td>
<td>62.0</td>
<td>58.7</td>
<td>62.50</td>
<td>51.4</td>
<td>51.0</td>
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<tr>
<td>Current ratio (x)</td>
<td>1.27</td>
<td>1.90</td>
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<td>n/a</td>
<td>2.00</td>
<td>2.06</td>
<td>2.39</td>
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<tr>
<td>Cushion ratio (x)</td>
<td>Long-term debt to capitalization (%)</td>
<td>Debt service coverage (x)</td>
<td>Average age of plant (years)</td>
<td>Capital expenses (%)</td>
<td></td>
<td></td>
<td></td>
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<td>-------------------</td>
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<td>----------------------------</td>
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<td></td>
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</tr>
<tr>
<td>9.50</td>
<td>62.5</td>
<td>2.28</td>
<td>6.55</td>
<td>18.8</td>
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<td>14.10</td>
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<td>2.90</td>
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<td>12.60</td>
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<td>7.0</td>
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<tr>
<td>12.30</td>
<td>43.0</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<td></td>
<td></td>
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<tr>
<td>6.70</td>
<td>36.4</td>
<td>3.94</td>
<td>9.64</td>
<td>6.8</td>
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<tr>
<td>n/a</td>
<td>26.3</td>
<td>n/a</td>
<td>14.12</td>
<td>6.1</td>
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<td>n/a</td>
<td>31.1</td>
<td>n/a</td>
<td>n/a</td>
<td>4.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Current Ratio. Current ratio describes an organization’s ability to use current assets to pay off current liabilities. As long as the ratio is above 1.0, the liabilities should be extinguishable without problem. Still, a current ratio closer to 2.0 is considered good. To achieve a higher current ratio (which is preferable), the organization needs to increase current assets or decrease current liabilities.

Cushion Ratio. This ratio is used to determine the amount of cash and cash equivalents available to pay off future peak debt service (which is defined as the largest annual interest expense and principal payments on the existing debt). A high ratio—one that continually exceeds benchmarks—is always preferable.

Long-Term Debt to Capitalization. This is defined as the proportion of long-term debt divided by the sum of long-term debt, plus unrestricted net assets or equity. A high value for this ratio implies reliance on debt financing and may signal reduced ability to carry additional debt.

Debt-Service Coverage. This measures total debt-service coverage (interest plus principal) from the organization’s cash flow. A high value for this ratio indicates good ability to repay debt.

Average Age of Plant. Average age of plant is an important and underrated ratio that represents the relative age of the organization’s plant and capital equipment. In this case, a low result compared to benchmarks is preferable because it designates the equivalent of a new or at least more modern physical plant. Even if the organization does not build a completely new plant, this ratio accounts for all capital renovations and equipment replacement that have taken place.

Capital Expenses as a Percentage of Total Expenses. Capital expense as a percentage of total expense is linked to the average age of plant because any capital expenditures affect both ratios.

There are differing views on the value of this ratio. One school of thought suggests that because higher expenses for capital lead to higher depreciation expenses and thus lower operating and net margins, any expended capital should pay for itself through a return-on-investment calculation. The thinking is that any capital that does not pay for its annual depreciation may well need to be paid for by decreasing FTEs. Trading FTEs for capital purchase may be a good idea only if it is done with foreknowledge. However, it is not uncommon in this industry for capital purchases to be made without enough financial analysis.

Still, the Advisory Board (1996) has made a case that organizations with higher-than-average capital expenses as a percentage of physical assets, as well as higher capital expenditures per bed, create an enduring
advantage if the capital purchases are made to expand or establish new
services. Thus the Advisory Board highlights the investor-owned health
care system HCA and suggests that heavy reinvestment of profit in plant
and equipment is likely to magnify an advantage over time.

Further in-depth analysis of these and other ratios can be found in

**Operating Ratios**

There is more to ratio analysis than just bond rating. Ratio analysis can
be extremely useful in understanding the organization’s operations. The
following are some useful operating ratios:

- Full-time equivalents (FTEs) per adjusted patient days (APD)
- Salaries, wages, and fringe benefits as a percentage of total revenues
- Expenses per APD (EPAPD)
- Expenses per adjusted discharge (EPAD)
- Revenue per FTE
- Length of stay

Exhibit 3.2 shows the ratio calculations.

*FTEs per APD.* The most common ratio used in the health care
industry to measure overall productivity is FTEs per APD. Full-time
equivalent represents the wages being paid to an employee who is des-
ignated as full time, which in most organizations means the employee is
paid (but does not necessarily work) for 2,080 hours annually (fifty-two
weeks, forty hours per week). APD is a calculation that attempts to con-
vert outpatient revenue into an equivalent inpatient day.

Some controversy surrounding this widely used equation has sprung
up in recent years. FTEs per APD has become an established bench-
mark throughout the industry. Yet it is fraught with inconsistency.
The numerator (FTEs) is highly susceptible to manipulation, while the
denominator is a poor equalization factor for converting outpatient ser-
VICES into an inpatient equivalent.

In the case of the numerator, the total number of paid (or worked)
hours is divided by the number of hours in the period under study (for
instance, if a week is 40 hours, a biweekly period would be 80 hours, and
a year would be 2,080 hours). The problem is that most organizations
collect and report only the hours paid to employees, but not the hours
EXHIBIT 3.2. Operating Ratio Formulas.

Adjusted patient days = \( \frac{\text{total revenue}}{\text{inpatient days}} \times \frac{\text{Inpatient revenue}}{\text{inpatient days}} \)

Adjusted discharges = \( \frac{\text{total revenue}}{\text{inpatient discharges}} \times \frac{\text{inpatient revenue}}{\text{inpatient discharges}} \)

Salaries, wages, and fringe benefits as a percentage of net revenues

\[
\frac{\text{salaries expenses} + \text{total fringe benefits expenses}}{\text{total revenues}}
\]

Expenses per adjusted patient day = \( \frac{\text{total expenses}}{\text{adjusted patient days}} \)

Expenses per adjusted discharge = \( \frac{\text{total expenses}}{\text{adjusted discharges}} \)

Revenue per FTE = \( \frac{\text{total revenues}}{\text{total FTEs}} \)

Average length of stay (days) = \( \frac{\text{patient days}}{\text{total discharges}} \)

**Note:** The formula for FTEs per adjusted patient day is given in Table 3.4.

paid for contract labor or purchased services. So if an organization wants to manipulate the FTEs-per-APD calculation to make overall productivity look better, it can outsource many of its services to nonemployees.

Inpatient and outpatient revenues consist of different service components and levels of severity. They are not comparable. Most hospital charge masters (which generate the list price for every service and supply) are not completely based on any established costing methodology. Instead they have evolved over time without ongoing review for consistency. Because of this, outpatient services may have become overweighted or underweighted, making the denominator a poor factor for such an important benchmark.
In the case of the denominator, the equation used to convert outpatient revenue into inpatient day equivalents is significantly flawed. This equation was created many years ago, when 85 to 90 percent of hospital revenues were derived from inpatient services and the remainder was outpatient. At the time, this equation did a moderate job of conversion. But in the early twenty-first century, when outpatient revenues equaled or exceeded 50 percent of total revenues in hospitals and integrated delivery systems, the service equivalent no longer worked.

*Salaries, Wages, and Fringe Benefits as a Percentage of Total Patient Service Revenue.* Staffing costs as a percentage of total revenue is a better ratio to measure overall productivity than FTEs per APD. It was popularized by HCA, which saw the problems inherent in the FTEs-per-APD equation. Currently with almost two hundred hospitals, HCA needed a ratio that was reliable and consistent. This one removes the question of whether all outsourced hours have been accounted for and whether or not the APD equation does a good enough job in converting outpatient services. Furthermore, Fitch Ratings has been presenting very good analyses of this ratio since 2000, allowing not-for-profit hospitals to determine medians for each year as well as trend the values of the benchmarks against its own outcomes. This has become very useful for the hospital industry.

The ratio includes all salary dollars paid out plus all dollars paid to contract labor and service companies for staffing expenses. Further, it includes all dollars paid out in fringe benefits because they are fully attached to salaries. The resulting ratio measures the level of labor costs in relation to the revenues being generated by the organization. A downward trend is preferred. Better financial performance usually results when labor costs can be minimized.

RHMC decided to take a compromise position in the controversy. Although it is aware that the FTEs-per-APD ratio has consistency problems, the organization still wants to capture the data and at least measure the trends against its own performance over time. Continuing to use the ratio against its own prior performance eliminates one of the two problems plaguing the ratio: the contract labor component. It does not, however, eliminate the problem that the conversion factor is flawed. At the same time, RHMC has adopted the salaries, wages, and fringe benefit ratio as an adjunct.

When RHMC started to use the ratio, it went back three years to see whether it was trending favorably or unfavorably. In fact, although FTEs per APD was trending favorably downward, salaries, wages, and fringe benefits as a percentage of total revenue were trending unfavorably.
upward. This is another indication of the problem inherent with the FTEs-per-APD ratio. Table 3.4 summarizes the input and output of the two equations.

**TABLE 3.4. Analysis of FTEs per APD Versus Salary, Wages, and Fringe Benefits as a Percentage of Net Revenues, Ridgeland Heights Medical Center, Years Ended 2005–2007.**

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FTES PER ADJUSTED PATIENT DAYS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTEs</td>
<td>880</td>
<td>1000</td>
<td>980</td>
</tr>
<tr>
<td>Patient days</td>
<td>46,000</td>
<td>45,500</td>
<td>44,200</td>
</tr>
<tr>
<td>Inpatient revenue ($)</td>
<td>73,000</td>
<td>74,000</td>
<td>78,000</td>
</tr>
<tr>
<td>Outpatient revenues ($)</td>
<td>65,000</td>
<td>69,000</td>
<td>76,000</td>
</tr>
<tr>
<td>Total revenues ($)</td>
<td>138,000</td>
<td>143,000</td>
<td>154,000</td>
</tr>
<tr>
<td><strong>CALCULATION OF ADJUSTMENT TO PATIENT DAYS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total adjusted patient days per ear</td>
<td>86,959</td>
<td>87,926</td>
<td>87,267</td>
</tr>
<tr>
<td>Number of days in the year</td>
<td>365</td>
<td>365</td>
<td>365</td>
</tr>
<tr>
<td>Number of adjusted patients per day</td>
<td>238.2</td>
<td>240.9</td>
<td>239.1</td>
</tr>
<tr>
<td>Ratio: FTEs per adjusted patient days</td>
<td>3.69</td>
<td>4.15</td>
<td>4.10</td>
</tr>
</tbody>
</table>
RHMC’s FTEs per APD in 2007 were recorded as 4.10. According to various reputable benchmarks published around the country, this would be considered very good from the standpoint of productivity measures and cost containment. But as an example of how this ratio is often falsely portrayed, it is important to know that RHMC outsources its laboratory services. It has been estimated that these services are equivalent to 105 FTEs for the organization. If they were accounted for in the equation, the FTEs per APD for the year 2007 would increase from 4.10 to 4.54, still a respectable ratio but not as good as before. The salaries, wages, and fringe benefits as a percentage of total revenue ratio are similarly affected because the expense is treated as a purchased service, not as contract labor. This highlights how any ratio can be distorted.

Expenses per Adjusted Patient Day and Expenses per Adjusted Discharge. The EPAPD and EPAD expense ratios are closely related. The numerator is the same while the denominator is either inpatient patient days or discharges adjusted for outpatient services provided. Because this is primarily an operational ratio and not one used by bond rating agencies, there are fewer external services having benchmarks. However, the EPAD ratio is available annually through the Solucient
100 Top Hospitals analysis, published annually in *Modern Healthcare*. Expanded information and analysis is also available directly through Solucient. Other consulting services produce proprietary expense-per-APD ratios established through analysis of many clients.

These ratios are particularly important to hospital administrators because they demonstrate actual cost performance. In addition, because they can be benchmarked and trended, they are extremely useful as an overall indicator of how well or poorly the organization is performing over time and against like organizations.

*Revenue per FTE*. Revenue per FTE is an interesting ratio because it is one of the few that cut across other industries. Most other industries routinely capture and report revenue per employee as an operational productivity value. In this service industry, a health care organization generally earns less revenue per employee, but this should not deter evaluation of this ratio. By capturing the ratio, the organization can strive to continuously improve its revenues.

*Length of Stay*. Length of stay is one of the most ubiquitous ratios in health care. Almost every segment of the industry uses it. Hospitals, psychiatric facilities, skilled nursing facilities, and children’s hospitals all capture this measure and use it to continuously compare themselves against prior measurements as well as outside benchmarks.

It should be recognized, however, that this ratio is only one component of operational understanding. Organizations have been attempting (successfully) to reduce length of stay since Medicare changed its method for reimbursing hospitals in 1983. Upon implementing what it calls Diagnosis Related Groups (DRGs), Medicare went from paying costs per day (per diem) to paying according to the illness for which the patient was being treated. Because it was not in the organization’s best financial interest to keep patients for a long period of time, care plans were established to allow the patient to be discharged sooner than before DRG reimbursement was adopted.

Still, there is a big issue that needs to be analyzed in reviewing the length-of-stay ratio or in benchmarking length of stay against other organizations or your own organization. The length of a patient’s stay is often a function of the severity of the illness. The industry has spent many years developing numerical equivalents for patient severity or acuity. The most common statistic used as a proxy for severity is called the case mix index (CMI). CMI is the accumulation of the case weights for all the Medicare inpatients who have been discharged from the hospital over a defined time period. The average CMI is 1.00, but it varies
from 0.40 for the most common case of labor and delivery to over 16.00 for a tracheostomy. When looking at length-of-stay statistics, it is also important to incorporate a severity indicator.

THE CAPITAL PLAN AND ITS RELATIONSHIP TO THE STRATEGIC PLAN

The annual strategic financial plan compels the organization to continuously update its capital plan to determine capital requirements and its relationship to available cash and investments. These steps are performed concurrently with operating projections. The process used to execute the capital plan is often organized in seven basic steps:

1. Defining the institution’s capital position
2. Identifying ongoing capital requirements
3. Quantifying the debt capacity and identifying the level of risk capital
4. Defining the primary funding and financing problems and setting key goals
5. Developing and evaluating financing alternatives
6. Establishing a master capital plan
7. Preparing an implementation plan

RHMC believes in these steps and follows them closely. It performs an annual update of the capital plan in conjunction with the strategic financial plan update.

The centerpiece of the capital plan is identification of ongoing capital requirements (step 2). To do so, the medical center has to make a series of capital assumptions linked to the strategic plan and the strategic financial plan, which are moving along just ahead of the capital plan. These assumptions relate to decisions on whether to purchase, lease, or build necessary capital. In any case, the dollar value associated with acquisition is the critical feature after the organization decides what to acquire.

Table 3.5 illustrates RHMC’s ongoing capital requirements. As can be seen, it is a five-year plan that summarizes various types of planned capital acquisition. In addition to the budgeted routine capital items, special nonroutine capital items are featured. These special line
Routine Capital Items

The line item for routine capital budgets generally consists of much of the equipment that is needed in areas such as laboratory, radiology, and cardiology as well as the nursing floors. As stated in Chapter Two, this is applicable only for purchases where the price exceeds whatever is stipulated in the organization’s capitalization policy and has an estimated useful life greater than one year.
Information Technology

The capital line for IT has gotten much more respect over the past few years. Prior to the mid-1990s, the health care industry spent less than 2.5 percent of its capital for information technology. This compares unfavorably to the 5 to 7 percent spent by the manufacturing, insurance, and banking industries. Being behind these other industries meant that the right amount of information was not collected, reported, or analyzed in either the financial or the clinical side of the health care business. This created an opportunity for those in the health care industry to gain a competitive advantage over one another through technology. Toward the end of the 1990s, most health care providers got the message (aided by the well-publicized Y2K scare, which predicted that all the world’s computers were going to crash at 00:00:01 on January 1, 2000).

At RHMC, the administration started to understand its lack of effective information technology support in 1999, when it began to allocate a greater portion of scarce capital resources to IT. It now makes a point of separately breaking out this line and spending for IT in the most appropriate manner. Some of the allocated money is projected to be spent in a continuous stream on upgraded IT infrastructure, such as new fiber optic cabling and distribution closets, costing $1.2 million. In addition, in the early twenty-first century, the industry, given a strong push by the federal government, determined that acquisition and implementation of clinical decision support IT systems as well as computerized patient records were part of the future of health care. Significant funds were therefore allocated by many hospitals during this period. For RHMC, this is budgeted over the next three years at a price of $11 million, a down payment on a complete system. The issue of information technology in health care is discussed in greater detail in Chapter Ten.

Facility Improvements and Upgrades

As in other industries, health care needs to remain reasonably current with its physical plant. RHMC projects the amount of money it believes will be need over the next five years to keep its plant modern. In addition, this line is used to allocate capital funds for new major projects that involve acquisition of new or expanded facilities, whether through construction, purchase, or capital lease. RHMC has allocated funds for projects such as major renovation of two of its medical and surgical units, projected to cost $2 million each; a new renal dialysis unit with sixteen patient stations, projected to cost $1.6 million; and a newly expanded emergency department that is projected to cost $2.5 million.
Property Acquisition

Property acquisition is an important and often overlooked line, particularly dependent on the location of the health care facility. In the case of RHMC, it is landlocked, surrounded on all four sides by residential housing. To expand, it must allocate funds to buy up all of the single-family housing that comes on the market within the target area designated by the administration and approved by the board. This policy also allows solicitation of the homeowners in the target area to sell to the organization based on the appraised market value. RHMC’s target area consists of two streets directly adjacent to the campus. Once it acquires all the houses along the block, the organization will be able to incorporate the area into the existing health care zone, tear down the houses, build new structures, and expand service offerings. It is important to note that this is a long-term strategy that has the opportunity to succeed for the next administrator.

Physician Recruitment

Another line item that has sprung up since the early to mid-1990s, when hospitals began in earnest to employ physicians, is recruitment. This helped change the face of the industry in a fundamental way. Hospitals began to recruit and employ physicians in response to the rapid buildup of managed care health plans throughout the country. The defining feature of the managed care plan was its insistence that covered beneficiaries (members) always see a primary care physician (PCP) before any advanced care would be covered (paid for) by the plan. Hospital care, whether inpatient or outpatient, was considered specialized care. Hospitals wanted to remain in some control of their volume and knew that physicians they employed would refer their hospital business to them.

So hospitals began to employ physicians, some in a bigger way than others. There are two primary ways to acquire a physician practice: buy an existing practice or establish a new one by employing young physicians just out of residency programs.

Each method has its own issues; however, the hospital spends capital money in either case. Purchasing an existing practice requires the transfer of funds from the hospital to the physicians in the group to pay for their existing assets. Establishing a new practice requires the hospital to fund significant start-up costs, sometimes for as long as three to five years, until the practice is self-sustaining.

In any case, the capital needs for physician recruitment became significant for health care entities in the late 1990s and show no signs of
slowing down. RHMC was caught up in the physician employment frenzy, as were its immediate competitors. They all found themselves having to allocate considerable sums in their long-term financial plan. However, it needs to be pointed out that the balloon burst on hospital-based physician practice acquisition sprees in many areas of the country in 1998 and 1999. This coincided with the devastation of investor-based physician practice management companies. Nevertheless, RHMC and its competitors still feel the need to continue their acquisition policy in the community in order to maintain some form of control over their patient referral pattern.

**Physician Medical Office Space**

If a health care system is going to employ physicians, it will obviously need to find them a place to practice. RHMC has allocated funds to either build or capital-lease new facilities for physicians to practice. Even if the organization does not employ physicians, it may want to build medical office space to attract physicians to practice there.

**Capital Affordability**

An important aspect of this five-year capital budget is the cumulative total, which is used to determine if the organization can indeed afford all of it. There are several ways to determine how much money the organization can afford to spend on capital equipment. RHMC uses three:

- Spending equivalent to annual depreciation expense
- Spending equivalent to a percentage of annual depreciation expense
- Spending equivalent to adequate cash flow

The first form of spending listed is a tried-and-true method used by organizations in many industries. Because depreciation is a noncash expense on the statement of operations, most administrators believe it is acceptable to spend depreciation money on capital acquisition—and many do. It is the equivalent of turning capital funding into operational funding every year.

As for the second form of spending, even though many health care organizations allocate and spend 100 percent of their annual depreciation expense on capital acquisition, this may not be the most efficient or effective use of these funds. It was noted earlier in the chapter that the RHMC administration is currently proposing a $5 million reduction in
its five-year capital expenditure plan because of the negative impact these purchases would have on the bottom line.

In fact, there are organizations that routinely spend only 70 to 80 percent of their depreciation expense on capital purchase to maintain a lower future depreciation expense. This is done knowingly because these organizations do not want to trade FTEs for depreciation, as was already reviewed earlier in the chapter.

Spending pegged to cash flow is a variation on spending equivalent to annual depreciation. Like the depreciation calculation, it reflects annual depreciation but further takes into account any principal (and possibly interest) payments that the organization is already committed to making. Thus the calculation is designed to compensate for the extra cash outlays previously approved by hospital administration.

To conclude, understanding these three methods at least allows a health care organization to make an informed decision regarding which method to use and the various implications.

In summary, the capital plan is the culmination of the strategic plan process, setting the stage for the approved capital acquisitions that the organization will be permitted to make in the coming years. RHMC's diligence in preparing and updating the strategic plan, the strategic financial plan, and the capital plan has allowed it to maintain healthy margins. It has also aided projecting both the best and the worst into the future. In doing so, this diligence has turned plans into action with forethought. This is the mark of good management.

With all the work that had been performed by the RHMC staff and the quality of the analysis presented by its administration, the board of directors approved the updated five-year strategic financial and capital plan at its special March meeting. Specific application of the capital plan will be implemented during the annual capital budgeting process, which commences in June. See Chapter Six for initiation of the annual capital budget.

For an excellent discussion of capital planning and its implication for health care organizations, see Best Practice Financial Management (Kaufman, 2006).

**PRACTICAL TIPS**

- Develop a five-year strategic plan, based on the organization's three-year strategic plan. Use it as the primary basis for the one-year capital and operating budgets.
Always take the most amount of time in developing the volume assumptions for any plan (strategic plan, strategic financial plan, capital and operating budgets). The volumes are the most important assumptions in any plan because they largely determine the gross and net revenues and the variable expenses.

Prepare an analysis for your hospital organization of the eleven financial ratios contained in Table 3.3. Then compare your outcomes with the benchmarks. What conclusions can be drawn? Are there any gaps that need to be explained? Explain them!

Prepare a trend analysis for your hospital organization of the six operating ratios contained in Exhibit 3.2. Discuss any issues that are relevant based on the results.

Develop a five-year capital plan that provides the hospital with sufficient information to determine its capital requirements and the relationship to available cash and investments.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss the importance of the three-year strategic plan. How does it relate to the hospital’s future financial health? What if the hospital was not required to prepare such a plan? What impact would it have on financial and operating outcomes?

2. Discuss the needs for hospitals to spend the time developing the five-year strategic financial plan. What benefits can be gained by the hospital. What would be the results if this plan were not developed on a routine basis?

3. Gain access to one hospital’s balance sheet and statement of operations. [A good source is www.guidestar.org, where many 501(c) (3) hospital IRS 990s, which include these statements, are stored.] Develop an analysis of the eleven financial ratios, and draw some conclusions. Try to access at least three years of information so that a trend can be observed.
CHAPTER

4

APRIL

LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Recite an overview history of the Medicare program since its inception in 1966, its various components, and how they affect hospitals today

■ Determine how the Medicare Diagnosis Related Groups (DRGs) and Ambulatory Payment Classifications (APCs) work and their impact on hospital net revenues

■ Recognize the implications of Medicaid reimbursement and its impact on hospital net revenues

■ Understand the implications of the 1997 Balanced Budget Act (BBA) on hospital reimbursements then and now

■ Determine the implication of the Medicare Modernization Act of 2003 on the hospital industry

■ Determine the issues surrounding managed care and its reimbursement methods along with its impact on hospital net revenues

■ Describe the key elements of the Medicare Cost Report and its importance to hospital net revenues

■ Understand some of the issues surrounding the Sarbanes-Oxley Act and its impact on hospital-audited financial statements
Sam Barnes pants heavily as he lunges at a well-placed kill shot delivered with pinpoint precision by his opponent, Joel Hogan.

“Ugh! Missed again,” Sam grunts.

“Sam, what’s the matter with you?” asks his friend and racquetball partner of the past several years.

“I don’t know. Well, OK, maybe I do know. Even though you know I love to play racquetball and it keeps me in decent shape, I’ve been unable to find enough energy to maintain my conditioning over the past several weeks.”

“Well, I’ve noticed that you seem to have lost a step or two over the past couple of months,” Joel says with an air of pleasure in his voice. “So what the heck is going on with you?”

“I’ve been thinking a lot about what I do at work. And it sure seems like things are closing in on this industry. A few years ago, the biggest thing that came down the pike was the Balanced Budget Act. It cost the industry plenty of money, and yet it seems as if all the people out there had no concept of the major changes that took place because of it. It was true that the feds needed to save a lot of money to keep the Medicare trust fund solvent, but doing it on the backs of hospital and home health providers led to a host of service cuts. That made services less accessible to the very people who need them—the sick, the old, the poor.”

“OK,” Joel replies, “but the feds are going to do this with or without your approval. And didn’t I hear that they gave back some of the money in 1999 and 2000 anyway? Why are you letting this sap your energy?”

“Yeah, you’re right. The industry did get some of the cuts in the Balanced Budget Refinement Act in 1999 and then in the Budget Improvement and Protection Act in 2000. And while the industry has continued to recover in small ways, I am convinced it just is not enough to sustain the needs of the 300 million Americans out there. I’m convinced that the policymakers don’t have a complete picture of the provider’s role. And sometimes I can’t really help how I feel. You know I’m pretty passionate about my work. It’s more than a job with me. I care about the quality of the services we offer at Ridgeland. Just
as important, I care about the perception of quality throughout the industry. If one provider gets a bad name, it usually paints a black mark on the rest of us. And it’s been a real struggle to maintain the quality. We’ve cut close to $200 billion since 1998, throughout the industry.”

Joel is perplexed. “So what do you plan to do about it? Are you planning to take any action or just wallow in pity and despair?”

“That’s just the problem. At the moment, I haven’t quite figured it out, but I know I’ll keep working on it till I do. Right now, though, I plan to refresh myself by beating your sorry body at this game.”

April Fools Day at Ridgeland Heights Medical Center should be a time for some practical jokes and a little bit of frivolity, but no. The medical center is continuing to reduce expectations as a result of some significant decreases to revenue. The lowered expectations are having a negative impact on employee morale. Although the administration is trying to counter the prevailing mood by creating a positive environment, it is not working. The administration makes a point of staying in close touch with staff to explain the revenue changes, but the fact remains that the changes have added new pressure to the organization.

Most of RHMC’s constituency is well aware of the belt tightening that has taken place. The medical staff have noticed. They see that there are fewer nurses on the floor to take care of patients. The nurses have noticed, recognizing that employees who resign are not being replaced as fast as before. They know this because they are being asked to work quite a bit more overtime. They believe it to be the effect of tightening staff. The remaining clinical staff have noticed too; they are aware that the nurses are more tired and more critical than before as they work ever longer hours.

The administration has noticed. The prized patient satisfaction scores, which everyone in the organization was once so proud of, are in decline. Over the previous two years, the organization managed to maintain scores in the range of the 90th percentile across a set of four hundred peer hospitals. RHMC had in fact managed to move into the high nineties during several of those months, in all three rated areas (inpatient, outpatient ancillary services, and emergency department).
Yet over the past few months, satisfaction was starting to show some obvious deterioration.

Unfortunately, though the effects are obvious, the constituents are misdiagnosing the causes. Coincidentally, in the middle of revenue reduction efforts by many of the third-party payers, the industry is in its third major nursing shortage in twenty years. As RHMC’s administration assembled much of the staff over the past three months to explain the revenue reduction problem, it made a great effort to communicate its commitment to patient care and patient satisfaction. In fact, the current year’s budget included an increase to the nursing staff, not a decrease. However, the message has been lost in the continuing depression caused by ongoing overwork.

At RHMC, the reduction in revenue was a function of its payer mix. RHMC identifies its payer mix to analyze and understand the source of its revenues. Payer mix is based on gross revenues. For the current year, it stands as follows:

- Medicare: 38 percent
- Medicaid: 6 percent
- HMO managed care: 16 percent
- PPO managed care: 14 percent
- Worker’s compensation: 4 percent
- Commercial insurers: 8 percent
- Other: 14 percent

In this case, in all of its payer mix, RHMC is fairly representative of the national average except for Medicaid. Because of its location in a relatively affluent community, there are not as many Medicaid-eligible residents. Table 4.1 shows the RHMC payer mix and how it compares to the national average. Because RHMC has almost 40 percent of its total revenue stream coming from Medicare, it is extremely important for the administrators to understand the roots of the reimbursement reductions. Even more important, they must make decisions on how to operationalize changes that need to be made because of the current and continuing revenue reductions.

The roots of revenue reduction were set many years ago during creation of the federal Medicare and Medicaid programs, as well as the more recent rise of managed care.
TABLE 4.1. **Payer Mix: RHMC Compared to National Averages for Hospitals.**

<table>
<thead>
<tr>
<th></th>
<th>RHMC (%)</th>
<th>National Average, 2004 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>38</td>
<td>28.6</td>
</tr>
<tr>
<td>Medicaid</td>
<td>6</td>
<td>17.3</td>
</tr>
<tr>
<td>Other government</td>
<td>2</td>
<td>10.4</td>
</tr>
<tr>
<td>Private health insurance and other private funds</td>
<td>42</td>
<td>40.5</td>
</tr>
<tr>
<td>Out-of-pocket</td>
<td>12</td>
<td>3.3</td>
</tr>
</tbody>
</table>


**MEDICARE AND MEDICAID NET REVENUE CONCEPTS**

Medicare and Medicaid reimbursement dollars are crucial to the financial health of America’s health care system. The following discussions reflect the policies, processes, and procedures surrounding these programs.

**The History of Medicare and Medicaid**

Medicare and Medicaid, known legally as Title XVIII and Title XIX of the Social Security Act, were enacted in 1965. Medicare was created to provide health insurance to most American citizens age sixty-five and over and to certain disabled people under age sixty-five. Medicaid was created as a state-operated program to provide publicly financed health care coverage for the poor. These programs, which were signed into law by President Lyndon B. Johnson on July 31, 1965, became effective on July 1, 1966 (Pearman and Starr, 1988).

In recent decades, the Medicare program has received considerably more publicity and press than Medicaid. This may well be the result of two particular factors. First, Americans over sixty-five, through experience, have learned to use the system to their advantage, meaning that
they have more political clout than Medicaid patients. In addition, Medicare costs more than Medicaid and is thus more likely to have a positive impact on expenditure savings and entitlements. Finally, Medicare is a single federal government program, applied equally across all beneficiaries throughout the country, while Medicaid is a federal and state program that is really fifty distinct programs.

In addition, Medicare, which originally had only two components in 1966, Part A and Part B, now has four distinct parts (A, B, C, and D). Part A (called the hospital insurance program) primarily covers inpatient hospital and surgery services, posthospital skilled nursing care, some home health services, and hospice care. In 1972, the Part A fund also began covering patients with end-stage renal disease (ESRD) and certain organ transplants. Medicare Part B (called the supplemental medical insurance program) primarily covers physician services, outpatient medical and surgical services, and independent laboratory services. Part C, which was one result of the 1997 Balanced Budget Act, established a series of alternative Medicare programs, available to the beneficiary, and acting more like commercial managed care. Part D is the primary outcome of the 2003 Medicare Prescription Drug Improvement and Modernization Act, which added some prescription drug coverage to the traditional Medicare indemnity model.

Each coverage type is financed independently and differently. Part A services are paid through a trust fund financed by a special form of Social Security tax on earnings. The money is accumulated and collected through employer and employee contributions. The Medicare tax is equal to 1.45 percent of salaries and wages payable by both the employer and the employee, for a total of 2.9 percent. (Self-employed individuals are required to pay both parts of the tax.) In addition, although non-Medicare Social Security taxes have an annual maximum above which the taxes end, there is no annual maximum for the Medicare contributions.

Part B services are financed through patient premiums and general federal tax revenues. When Medicare was implemented in 1966, 50 percent of the Part B services were financed through premiums. Over the years, as increases in patient premiums failed to keep up with increasing costs of service, the percentage of the Part B services financed by premiums dropped to approximately 25 percent. Therefore, the federal treasury now finances 75 percent of Medicare Part B services. This 25 percent level was codified into law with the Balanced Budget Act. Therefore, premium increases are now automatically calculated and passed on to the beneficiaries each year.
Part C was created as part of the BBA. It allows for the expansion of HMO and PPO plans for Medicare beneficiary. The funding for Part C is the same as the funding for Parts A and B. All beneficiaries that opt for a Medicare Advantage–type plan (Medicare+Choice became Medicare Advantage as part of the MMA Act of 2003) have to pay for a Part B premium. So the federal government is reimbursing the insurance plans that have chosen to participate in the Medicare Advantage program at a funding level made up of Part A payments—at 100 percent of the average annual per capita costs (AAPCC)—and Part B payments. Each plan has the option of charging additional premiums, copayments, and deductibles as part of its offering.

Part D funding comes primarily from the Part A trust fund and beneficiary premiums. On the beneficiary side, there is a $265 deductible and a 25 percent coinsurance up to $2,400 in total drug costs, followed by the so-called doughnut hole, where the beneficiaries pay 100 percent of drug costs until they have spent $5,451 on drugs ($3,850 from their own pocket), beyond which they pay just 5 percent of drug costs. All this is in addition to an average annual premium of $328 (Kaiser Family Foundation, 2006).

Getting passage of the Medicare bill was President Johnson’s number one priority in 1964 and 1965. Several previous presidents had tried and failed to get some form of legislation passed that offered health insurance to various segments of the American population. President Truman proposed a national health insurance program during his term; it was defeated by Congress. Presidents Eisenhower and Kennedy advocated some form of national health insurance. In fact, Kennedy campaigned on a promise that he would propose a national health insurance program that would protect the elderly regardless of their finances.

Given the long-standing advocacy of national health insurance by various presidents and the failure to pass it, obviously there were heavy political forces arrayed against programs of this kind. The two greatest opponents to federalized health insurance were the American Medical Association, representing the nation’s physicians, and the American Health Insurance Association (now known as the Health Insurance Association of America), representing the nation’s private insurance companies. Physicians were concerned that federalization of health insurance would lead to a decline in the quality of care; private insurance companies were concerned that federalization would drive them out of business.
Still, Johnson’s landslide victory in the 1964 election and his single-mindedness in promoting his Great Society programs allowed him to push Congress hard for passage. Ultimately, the Part A program was adopted to pay primarily for hospital inpatient services; Part B was adopted as a way of separating physician payments from the hospital side. Finally, to appease a number of constituencies that wanted means-based health insurance, Medicaid was adopted as a state-operated, income-based supplemental plan.

**Impact of Medicare and Medicaid on Provider Net Revenues**

One interesting aspect of both Medicare and Medicaid is that they had an explosive financial effect on the industry. Medicare and Medicaid were expensive and expensive. Prior to these programs, small hospitals and individual solo physician practices dominated a cottage industry. There was a lot of charity care given by and to health care providers because many patients were very poor and could not afford the care they needed. Passage of the Medicare and Medicaid programs turned health care into a true industry.

All of a sudden, as of July 1, 1966, money was plentiful. It was as if a gigantic spigot had opened. Dollars gushed, so much so that within six weeks of Medicare’s birth, Johnson ordered an inquiry into the rising cost of medical care. Figure 4.1 shows the rise in Medicare outlays and beneficiaries from 1967 through 2005; Figure 4.2 shows the rise in Medicaid outlays and enrollees from 1972 through 2003.

The only constant is a significantly upward slope on the cost lines. Medicare went from paying out just under $5 billion in 1967 to expenditures of $335.3 billion in 2005, a 63-fold increase over this thirty-eight-year time span (National Center for Health Statistics, 2006). Meanwhile, Medicaid expenditures increased from $6 billion in 1972 to $233.2 billion in 2003 (NCHS, 2006). This is a significant reason why health care is now a $1.9 trillion industry.

Interestingly, there was a break in the upward surge of Medicare expenditures between 1995 and 2000. This is not a coincidence. It is a direct result of the 1997 Balanced Budget Act, passed by Congress and signed by President Bill Clinton. It dramatically reduced Medicare spending for three years, resulting in significant revenue reductions for hospitals, skilled nursing facilities, physician practices, and home health agencies. We will examine the Balanced Budget Act later in this chapter.


Sources: NCHS, 2000, tab. 136; 2006, tab. 140.
In addition, it should be noted that the Medicare program calls for patients to pay a deductible to the provider of service for the health care rendered. Insurance deductibles are generally developed to discourage usage because these fees are supposed to be paid directly by the consumers of service out of their own pocket. The Medicare hospital deductible is meant to represent the cost of a first-day stay in a hospital. Therefore, to further understand the caliber of hospital cost increases between 1966 and 2007, it is interesting to note that whereas the original inpatient hospital deductible was $40 in 2007, it is $992—a 25-fold increase over forty-one years (Centers for Medicare and Medicaid Services, 2006).

Medicare and Medicaid fueled the great expansion of health care inflation in the country. As stated in Chapter One, when health care was a sleepy industry prior to 1966, it absorbed just 5.7 percent of the nation’s gross domestic product (GDP). In the years through 2004, the percentage of GDP has grown to 16.0 percent (NCHS, 2006, tab. 120), a 280 percent increase. There have been three beneficiaries of this increase:

- Providers, who have been able to expand access to patient care (and make money doing so)
- Patients, most of whom may never have had greater access to high-touch, high-tech health care
- The community, which has saved many of its most valuable resources; and its residents, who, because of the increased access to medical care, no longer die prematurely

**Implication for Ridgeland Heights Medical Center**

RHMC’s growth over the past forty-one years imitates that of Medicare. Once a sleepy community hospital, RHMC, like many of its competitors, expanded exponentially when Medicare opened up the floodgate of money. Previously, a hospital could not count on full payment for many of its services. Now Medicare was guaranteeing payment for basic services as well as a whole new range of care. Skilled nursing home care for one hundred days and unlimited home health care services would now be reimbursed from a payer with seemingly unlimited resources (Medicare). Medicaid would now guarantee the rest of the skilled nursing home care, after depletion of the patient’s financial resources. In either case, the provider of care knew it would be paid.

In the case of physician services, the new revenue streams were enormous. Before Medicare, physicians often wrote off bills for the elderly
because these patients could not afford to pay. Even worse, there were many patients who did not want to accept charity and would therefore not present themselves for needed care. They would get sicker and often die. In fact, the advent of Medicare in 1966 had a dramatic and positive effect on the death rate in America. According to government records, the death rate for all causes dropped by 41 percent between 1960 and 2003 for all persons aged sixty-five to seventy-four. Figure 4.3 shows declines in the death rate overall as well as for heart disease and stroke.

**CALCULATION OF MEDICARE AND MEDICAID CONTRACTUAL ADJUSTMENTS**

With the advent of Medicare and Medicaid in 1966, hospitals and other health care providers began to do something they had never done before on their financial statements: they recorded contractual adjustments on the income statement and allowances for these contractual adjustments on the balance sheet.

**FIGURE 4.3. Death Rate per 100,000 Resident Population Aged Sixty-Five to Seventy-Four.**

*Source: NCHS, 2006, tabs. 35–37.*
A contractual adjustment is the discount the provider agreed to accept from the insurance company (the third-party payer) for providing health care to that company’s beneficiary. Prior to 1966, the most prevalent third-party payer was various Blue Cross plans across the country. Blue Cross offered “indemnity insurance” coverage for its beneficiaries, which meant that Blue Cross generally paid the entire bill that was submitted, without a discount. Medicare changed the rules. If providers wanted to serve Medicare patients, they were required to accept the payments being offered.

**Medicare Net Revenue Concepts**

Medicare started off as a cost-based payment system. It agreed to pay the total cost of services given to beneficiaries. But there were no caps on these costs originally, so there was an incentive for health care providers to take on new costs and grow their businesses. And they did. Meanwhile, Medicare developed a plethora of reimbursement methodologies for paying for the disparate services that it covered.

Exhibit 4.1 summarizes the many types of Medicare reimbursement prior to and subsequent to the 1997 Balanced Budget Act (BBA). The biggest change, until 1997–1998 and the BBA, was in inpatient reimbursement.

As previously stated, Medicare originally reimbursed all services at cost. But as costs exploded, Medicare quickly moved to put a cap on them—unsuccessfully until 1983, when it adopted a new prospective payment system (PPS) reimbursement methodology for inpatient services. It was called Diagnosis Related Group (DRG) reimbursement.

DRG reimbursement had a dramatic effect on how the industry operated. It changed the provider’s incentive. Prior to DRGs, Medicare reimbursed all of the provider’s costs at the percentage of Medicare patient utilization. DRGs reimbursed the provider a fixed price per case, regardless of the cost of providing the care. Therefore, providers had to adapt to a new reality, become more cost-conscious, and really begin to understand their cost structure for the first time.

**DRGs: How They Work** DRG reimbursement takes approximately 12,500 individual diagnoses available to physicians in the United States (available through the *International Classification of Diseases*, ninth edition, clinically modified for the United States—also known as the ICD-9-CM codes) and looks at whether surgery was associated with the case. It also takes into account the patient’s age, sex, and the existence of complications or comorbidities. Then, using a computer...
## EXHIBIT 4.1. Medicare Payment Methodologies.

<table>
<thead>
<tr>
<th>Medicare Covered Service</th>
<th>Payment Method Before the 1997 Balanced Budget Act</th>
<th>Payment Method After the 1997 Balanced Budget Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient hospitalization</td>
<td>Diagnosis-Related Groups (DRGs)</td>
<td>Prospective (1983): Diagnostic related groups (DRGs)</td>
</tr>
<tr>
<td>Capital-related costs</td>
<td>Limited cost based through 2001, quasi-prospective reimbursement</td>
<td>Prospective (2000): 100% Federal Case Rate</td>
</tr>
<tr>
<td>Outpatient surgery, radiology, and diagnostic services</td>
<td>Blend of hospital-specific costs and national rates</td>
<td>Prospective (2000): Ambulatory Payment Classifications (APCs)</td>
</tr>
<tr>
<td>Physician services</td>
<td>Resource based relative value scale</td>
<td>Prospective (1992): Resource Based Relative Value Scale (RBRVS)</td>
</tr>
<tr>
<td>Skilled nursing care</td>
<td>Cost based with “reasonable cost limits”</td>
<td>Prospective (1998): Resource Utilization Groups (RUGs)</td>
</tr>
<tr>
<td>Home health services</td>
<td>Cost based with per-visit limits</td>
<td>Prospective (2000): Home health PPS</td>
</tr>
<tr>
<td>Organ transplants</td>
<td>Cost based</td>
<td>Prospective (1998): Resource-Based Relative Value Scale (RBRVS)</td>
</tr>
<tr>
<td>Hospice care</td>
<td>Four different types of reimbursement depending on the service</td>
<td>Mixed: Four different types of reimbursement, depending on the service</td>
</tr>
<tr>
<td>End-stage renal disease</td>
<td>Per-treatment fee</td>
<td>Prospective (1972): Per-treatment fee</td>
</tr>
<tr>
<td>Acute rehabilitation</td>
<td>Cost based, but limited to special “target” rates</td>
<td>Prospective (2002)</td>
</tr>
<tr>
<td>Critical-access hospitals</td>
<td>Diagnosis-Related Groups (DRGs)</td>
<td>Retrospective: Cost-based reimbursement</td>
</tr>
</tbody>
</table>
April

Prescription drugs     Not covered     Fee-schedule methodology, with limitations

Prospective payment systems (PPS) exempt hospitals and units such as psychiatric, children’s hospitals, hospitals outside the United States, and distinct part hospitals  Cost based, but limited to special “target” rates

<table>
<thead>
<tr>
<th>Medicare Covered Service</th>
<th>Payment Method Before the 1997 Balanced Budget Act</th>
<th>Payment Method After the 1997 Balanced Budget Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescription drugs</td>
<td>Not covered</td>
<td>Fee-schedule methodology, with limitations</td>
</tr>
<tr>
<td>Prospective payment</td>
<td>Cost based, but limited to special “target” rates</td>
<td>Retrospective: Cost based, but limited to special “target” rates</td>
</tr>
<tr>
<td>systems (PPS) exempt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hospitals and units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>such as psychiatric,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>children’s hospitals,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hospitals outside the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>distinct part hospitals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

program called a grouper, all of these data are crunched to determine which one of almost six hundred or so DRGs the patient belongs to.

Interestingly, the DRGs were not originally developed to be used as a reimbursement tool for the Medicare program. They were developed by researchers at Yale University and Yale–New Haven Hospital in the mid-1970s to facilitate clinical analysis. All of the ICD-9-CM codes that fall into each individual DRG are supposed to use approximately the same amount of resources. They are supposed to act similarly. But in actuality, many DRGs are not homogeneous, and therefore the average price assigned to a DRG by the Medicare program creates problems for the provider.

Still, as we have now seen, the feds were looking for a way to contain total Medicare reimbursement for inpatient services and move away from cost-based reimbursement. Ultimately, they selected the DRG methodology and established pricing equivalents for each Diagnosis Related Group. As you can see from Figure 4.1, this does not appear to have been successful in containing costs.

Under the PPS, case weights are assigned to each DRG. These case weights are then multiplied by the individual hospital’s base rate to determine each DRG price for each hospital. It does not matter what the hospital charged for all of the services rendered during the patient’s stay; if the patient was a Medicare beneficiary, the hospital is paid only the DRG
rate. The difference between the gross charges (hospital prices) and the DRG payment (Medicare reimbursement) is recorded as a contractual adjustment on the income statement and as a Medicare contractual allowance (discount) to accounts receivable on the balance sheet.

For example, assume that RHMC had a base rate of $4,000. Mary Smith, the patient, generated gross charges of $10,000 for her stay in the hospital. The DRG for her stay had a case weight of 1.5. Therefore, RHMC expects to be paid $6,000 (1.5 times $4,000) for her stay. Medicare will pay 100 percent of this DRG amount to RHMC, minus Smith’s annual deductible of $992.

The accounting debits and credits for this case are represented as follows.

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable (balance sheet)</td>
<td>Various gross charges (income statement)</td>
</tr>
<tr>
<td>$10,000</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

To post the various gross charges as the fee for services rendered to the patient:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual adjustment (income statement)</td>
<td>Contractual allowance (balance sheet)</td>
</tr>
<tr>
<td>$4,000</td>
<td>$4,000</td>
</tr>
</tbody>
</table>

To record the write-down of Mary Smith’s account to reflect the expected reimbursement, at the time of billing:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash—received from Medicare</td>
<td>Accounts receivable—Mary Smith</td>
</tr>
<tr>
<td>$5,008</td>
<td>$6,000</td>
</tr>
<tr>
<td>Cash—received from Mary Smith (patient)</td>
<td></td>
</tr>
<tr>
<td>$992</td>
<td></td>
</tr>
</tbody>
</table>

Record cash received from Medicare and the patient to zero out the patient’s account.

**APCs and How They Work** After viewing and reviewing the positive financial outcomes of the DRG system for inpatient acute hospitalization, Congress mandated that outpatient hospitalization also be brought under a prospective payment system. The federal government, through the 1997 BBA, determined that the Outpatient Prospective Payment System (OPPS) would go into effect on October 1, 1998. Although neither that date nor a series of subsequent “live” dates were met, the OPPS did become effective August 1, 2000.

The Department of Health and Human Services’ Centers for Medicare and Medicaid Services (CMS) determined that the prospective payment methodology that would be used to reimburse hospitals was
the Ambulatory Payment Classification (APC) system. It was a dramatic departure from the prior cost-based system of reimbursement, and it caused a big change in how hospitals had to register, charge, code, and bill for Medicare outpatient services.

APC categorizes outpatient procedure codes into clinically and financially homogeneous groups. To do this, the system uses outpatient procedure, visit, and supply codes taken from the Healthcare Common Procedure Coding System (HCPCS) and the Physician’s Current Procedural Terminology (CPT-4) coding schemes. Each APC is assigned a fixed payment amount for the facility fee or technical component of a patient’s visit. The provider of service receives the amount of this APC as payment in full, after it is adjusted for the hospital’s wage index.

There are some exceptions to the outpatient services that are assigned APCs. These exceptions generally involve outpatient services that were already being reimbursed on either a fee schedule or some other prospectively determined rate satisfactory to the government. APC-excluded services include the following:

- Ambulance services
- Physical and occupational therapy
- Speech and language pathology services
- Renal dialysis services paid under a composite rate
- Laboratory services paid under the clinical diagnostic laboratory fee schedule
- Nonimplantable durable medical equipment and prosthetics
- Services and procedures that require inpatient care
- Influenza virus, hepatitis B, and pneumococcal vaccines
- Packaged services, such as anesthesia and pulse oximetry
- Corneal tissue processing and transporting

To create a uniform and homogeneous set of APCs, the system needed to create a large number of APCs. When the system was established in August 2000, there were 662 of them arrayed across eight major categories. As of January 1, 2007, there are 868 arrayed over the eight categories. Exhibit 4.2 summarizes the APCs that appear in each category.

<table>
<thead>
<tr>
<th>Payment Service Indicator</th>
<th>Type of Service</th>
<th>Total Number of PCs</th>
<th>Service Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Pass-through drugs and biologicals</td>
<td>19</td>
<td>New drugs or biologic agents whose costs are significant in relation to APC payment amounts</td>
</tr>
<tr>
<td>H</td>
<td>Pass-through device, brachytherapy source, and radiopharmaceutical</td>
<td>55</td>
<td>New pass-through devices and the like whose costs are significant in relation to APC payment amounts</td>
</tr>
<tr>
<td>K</td>
<td>Non-pass-through drugs</td>
<td>298</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Services that are paid only in partial hospitalization program</td>
<td>2</td>
<td>Psychiatric outpatient day treatment programs</td>
</tr>
<tr>
<td>S</td>
<td>Outpatient significant procedures not subject to same-day multiple procedure discounting</td>
<td>185</td>
<td>CT scans, MRIs, and other major diagnostic services</td>
</tr>
<tr>
<td>T</td>
<td>Significant procedures where 50 percent same-day multiple procedure discounting applies</td>
<td>254</td>
<td>Most traditional ambulatory surgery</td>
</tr>
<tr>
<td>V</td>
<td>Medical visits for which payment is allowed</td>
<td>10</td>
<td>Emergency department and clinic visits</td>
</tr>
<tr>
<td>X</td>
<td>Ancillary services</td>
<td>45</td>
<td>Radiology tests, EKGs, and pulmonary tests</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>868</td>
<td></td>
</tr>
</tbody>
</table>
Each APC is assigned a weight by the government. This weight is then multiplied by the national APC payment rate and hospital-specific wage index to determine the provider’s reimbursement for the services rendered or supplies dispensed. For the year 2007, the average cost of an outpatient service before weighting is applied (the conversion factor) is 61.468. There are several other nuances to the APC rules, but this summary is a starting point from which to understand its complexities. Providers needed to take dramatic steps to minimize possible reimbursement losses under APCs, particularly through poor operational procedures and processes.

From the contractual adjustment prospective, APCs work like DRGs. The amount of reimbursement expected by the provider must be subtracted from the gross price generated on the charge description master to write down the posted charges to realizable value. As already seen in this chapter, DRGs and APCs are just two of many payment methods that may be used to reimburse health care providers. Medicare has several other methodologies for various types of providers (as noted in Exhibit 4.1).

Medicaid, which is a state-run program, allows each state to determine the payment method to providers and uses many methods according to patient type (inpatient, outpatient, physician, home health, skilled nursing care, and so on). Managed care payers also use a variety of payment methods when determining the provider’s net revenues. Still, the concept of contractual adjustment remains the same. Once you know and understand that there are various reimbursement methods, it becomes easier to prepare contractual allowances monthly for the financial statements. We will examine the various types of managed care reimbursements later in this chapter.

**Medicaid Net Revenue Concepts**

Over the years, Medicare has received considerably more press than Medicaid. This is primarily because Medicare is a national program administered with mostly consistent rules across the United States, affecting a politically astute constituency, the elderly, who have been known to vote politicians in or out of office. Medicaid, in contrast, is a national program but controlled and administered by the fifty states in widely differing ways. Although the federal government mandates the specific entitlements that each and every state must give to Medicaid recipients, the states are allowed to determine the socioeconomic level of their residents who will be eligible. Because Medicaid is a program
designed for the poor, beneficiaries are generally disfranchised to a
greater extent than politically connected Medicare beneficiaries.

Medicaid differs considerably from Medicare in its required
benefits and level of payment to the provider. Because it is state-
administered and state-financed, the states are continuously struggling
to balance the level of provider payment with their own budget con-
straints. In fact, in the past, states struggled with federally inspired
"unfunded mandates," which require specific entitlements to be included
in the Medicaid program but do not include any new money coming
from Washington.

There is one particularly surprising revelation in the Medicaid
program that is not generally reported. Figure 4.4 shows the trend of
Medicaid recipients from 1972 to 2003 according to eligibility type as a
percentage of the total. Figure 4.5 isolates the year 2003 and compares
and contrasts recipients as a percentage of total versus recipient pay-
ments. As can be seen, in 2003, patients sixty-five years of age or older
made up only 7.8 percent of total Medicaid beneficiaries, yet they
accounted for 22.7 percent of total Medicaid expenditures.

The primary reason for this is that though Medicare pays for only
the first one hundred days in a skilled nursing facility (SNF), Medicaid
pays for any unlimited stay that is deemed medically necessary. It is
often the case that someone of Medicare age, when requiring chronic
care in an SNF, exhausts the assets accumulated throughout a lifetime
after Medicare pays for the first hundred days. The individual then
becomes Medicaid-eligible. Because the chronic illnesses treated in an
SNF are often costly and may very well last until death, Medicaid has
become the largest individual line item in the budget of almost every
state, averaging almost 22 percent of the total in 2004 (State Coverage
Initiatives, 2006). By contrast, children under the age of twenty-one,
who make up 47.8 percent of Medicaid-eligible recipients, account for
only 17.1 percent of Medicaid expenditures (NCHS, 2006).

In any event, Medicaid programs around the country have been
notorious in underpaying for the services rendered to their beneficiaries.
Providers have had to scramble to make up the net revenue shortfall
engendered by providing services to Medicaid patients. The hospitals
and physicians particularly affected are generally located in inner-city and
rural areas, where economically challenged citizens live. These hospitals
may have a Medicaid payer mix approaching 20 to 40 percent. Added
to their Medicare payer mix, which could average 40 to 60 percent, they
often suffer in maintaining operating margins that would allow for
capital replacement or expansion, paying proper to maintain their

Note: Figures may not add to 100 percent due to rounding.

Source: NCHS, 2006, tab. 140.
workforce. In some cases, they may even have to close their doors, thus complicating access to health care in their community.

RHMC is in the enviable position of being located in a socioeconomically advantaged area. Its Medicaid payer mix is only 6 percent, and it has been able to offset Medicaid shortfalls relatively easily; thus the expected net revenues from Medicaid and the ensuing contractual adjustments do not have a major detrimental effect on the organization’s bottom line.

**IMPLICATIONS OF THE BALANCED BUDGET ACT OF 1997**

As the history of the Medicare program is written, a significant development occurred in 1997. The following is an in-depth analysis of the implications of the Balanced Budget Act of 1997 at the time of implementation as well as its lasting impact.

**FIGURE 4.5. Medicaid Recipients and Payments by Category, 2003.**

*Note: Figures may not add to 100 percent due to rounding.*

*Source: NCHS, 2006, tab. 140.*
Despite Medicare’s attempt to reign in payment to providers, particularly with the advent of DRGs in 1983, it was deemed unsuccessful. The continuing upward spiral of provider payments was having a detrimental impact on the Part A trust fund. Remember that the fund is financed through a Social Security (Medicare tax) payment from employers and employees. It turns out that between 1966 and 1996, the Part A trust fund accumulated an excess of almost $120 billion. This was net inflow from workers minus net outflow to providers. Still, Medicare prognosticators estimated actuarially that the trust fund would be depleted within five years.

The problem was not on the inflow side. It was estimated that the Medicare trust fund would continue to take in as much in ensuing years as before. It was clear, however, that the outflows were about to increase dramatically because of the perception of alleged provider fraud and abuse, increasing health care options available to Medicare beneficiaries, and improving benefits for staying healthy.

In addition, there was great concern over growth in the population over sixty-five, characterized by the march of the baby boomers approaching the age of Medicare eligibility. Consequently, members of Congress came together to pass the most dramatic piece of health legislation since the inception of Medicare in 1966. Called the Balanced Budget Act (BBA) of 1997, it changed the way Medicare reimbursed for all the services provided to its beneficiaries. This included outpatient services, home health care, skilled nursing care, hospice, graduate medical education, rural providers, and physicians. The BBA also changed some of the reimbursement concepts in the Medicaid program.

The legislation was designed to save the Part A trust fund $116.4 billion over the five-year period from October 1, 1997, to September 30, 2002. Savings were expected to be generated in specific areas:

- Hospitals: $44.1 billion
- Skilled nursing facilities: $16.2 billion
- Home health agencies: $9.5 billion
- Beneficiary premium increases: $13.7 billion
- Medicare + Choice: $18.5 billion
- Physician services: $5.3 billion
- All other: $9.1 billion
- Total BBA savings: $116.4 billion
The initial savings generated in the very first year (fiscal year 1998) had a significant impact. There were three big changes:

1. Zero increase in the annual update factor. In 1983, at the advent of the DRG system, Medicare promised to update each provider’s base rate by an inflation factor predicated on a market basket of health care goods and services. However, over the years, Medicare generally allowed an increase in the market basket of hospital goods and services minus about 1 percent. At the birth of the BBA, to produce the needed savings, Congress further determined that there would be no increase in the annual update factor for the 1998 fiscal year (FY). Future updates in fiscal years 1999, 2000, and 2001 were to be at the market basket minus 1.8 percent, 1.1 percent, and 1.1 percent, respectively.

2. Correction of a formula-driven overpayment. This item, included in the BBA, is a correction of a calculation error. Expected to save more than $2 billion alone, it was instituted immediately, on October 1, 1997, and reduced provider payments proportionately.

3. Change in home health services reimbursements. The BBA represented a significant change to the cost-based reimbursement system that existed for home health services for so many years. Although Congress ultimately wanted home health services for Medicare beneficiaries to be reimbursed on a prospective system by FY 2000, it created an interim payment system (IPS) as of FY 1998 to begin capturing savings immediately.

Keep in mind that government figures showed that of the 2.4 million home health patients in 1996, fully 73 percent were sixty-five years of age or older (NCHS, 2000). Providers were therefore receiving a majority of their home health service reimbursement from the payer that cut their payments 15 to 20 percent. In addition, the IPS put new restrictions on the number of visits Medicare reimburses and a new cost limit per beneficiary. The combined effect of these reductions significantly hurt both freestanding and hospital-based programs, resulting in the termination of more than 750 home health programs in the first nine months of the IPS.

The devastation of the home health service sector of the industry was evident. As can be seen in Figure 4.6, between 1997 and 1998 alone, the home health agency segment of the industry lost more than 9 percent of its revenue, while the hospital industry experienced a paltry 3.2 percent increase. Congress took notice; between early 1999 and late 2000, it passed two major bills, which were signed by the president, designed to reinstate some of the more onerous cutbacks engendered in the 1997 BBA.
The first of the reinstatement acts was known as the Balanced Budget Refinement Act (BBRA) of 1999. It was designed to restore approximately $11.9 billion over five years to hospitals, health systems, and other providers that had been cut in the BBA. In addition, the Medicare Choice payers had $4 billion restored. Still, some of the restoration was just a freeze in additional cuts that were scheduled to take effect during fiscal years 2000–2002. A small measure of relief was granted for skilled nursing facility and therapy services, home health services, and some hospital inpatient services, such as a delay in cuts for indirect medical education scheduled for 2000. Here is an analysis of the act in this context:

- Hospital outpatient care: $6.1 billion
- Skilled nursing facilities: $2.7 billion
- Home health care: $1.3 billion

![Graph showing change in health care industry revenues, 1997–1998.](image)

**FIGURE 4.6. Change in Health Care Industry Revenues, 1997–1998.**

*Source: NCHS, 2000, tab. 118.*

**Balanced Budget Refinement Act of 1999**

The first of the reinstatement acts was known as the Balanced Budget Refinement Act (BBRA) of 1999. It was designed to restore approximately $11.9 billion over five years to hospitals, health systems, and other providers that had been cut in the BBA. In addition, the Medicare Choice payers had $4 billion restored. Still, some of the restoration was just a freeze in additional cuts that were scheduled to take effect during fiscal years 2000–2002. A small measure of relief was granted for skilled nursing facility and therapy services, home health services, and some hospital inpatient services, such as a delay in cuts for indirect medical education scheduled for 2000. Here is an analysis of the act in this context:

- Hospital outpatient care: $6.1 billion
- Skilled nursing facilities: $2.7 billion
- Home health care: $1.3 billion
Rural hospitals: $800 million
Teaching hospitals: $600 million
PPS-exempt hospitals: $300 million
Disproportionate-share hospitals: $100 million
BBRA total: $11.9 billion

Still, the biggest relief that was granted in the BBRA was the significant amount of additional funding assigned by Medicare to what was then the upcoming APC program. In its initial representations to the hospital industry, Medicare budgeted an average 5.7 percent loss for outpatient reimbursements affected by the Outpatient Prospective Payment System. With the dollar amount assigned under the BBRA, the government now stated that rather than a loss, each hospital would earn an average of 4.6 percent on the APC program. The mechanism for this increase was a transitional payment system that reimbursed hospitals in addition to their OPPS payments during the first three years of the PPS if their payments were less than their pre-PPS payments in 1996 (determined according to formula). These payments did begin a process of relief that helped many hospitals and other health service providers start a financial rebuilding process.

**Benefits Improvement and Protection Act of 2000**

After the passage of the Balanced Budget Refinement Act, the industry immediately began a further lobbying campaign to restore additional cuts that had been made in the original Balanced Budget Act. Restoration of $11.9 billion was not considered to be sufficient, so beginning in early 2000, a variety of provider-based advocacy groups carried on further lobbying in the halls of Congress. They pointed out to lawmakers that the industry had absorbed more cuts than were originally intended and that further relief was needed. The end result was passage, late in 2000, of the Benefits Improvement and Protection Act (BIPA).

This act had a continuing positive impact on improving revenues for health care providers. It was worth an estimated $11.55 billion to providers over five years as well $11 billion to Medicare+Choice payers. There were several areas of relief for the providers:

- Restoration of the full market basket index for hospital inpatients for fiscal year 2001 (October 1, 2000–September 30, 2001). The return of the 1.1 percent reduction in FY 2001 (from 2.3 percent
under the BBA to 3.4 under the BIPA), along with a reduction of the market basket of only 0.55 percent in FY 2002 and 2003, returned $3.7 billion to hospital providers.

- Restoration of the full market basket for hospital outpatients for fiscal year 2001 of 1.0 percent (from 2.4 percent to 3.4 percent), which was worth $1.1 billion over five years.

- Increase of the indirect medical education adjustment back to 6.5 percent. This is worth $1.0 billion over five years.

There are several other adjustments in the BIPA, the entire impact of which can be seen in this list:

**Financial Analysis of the BIPA of 2000**

- Hospital inpatient care: $3.70 billion
- Hospital outpatient care: $1.10 billion
- Medicaid disproportionate-share hospitals: $1.45 billion
- Medicare disproportionate-share hospitals: $1.25 billion
- Teaching hospitals: $1.00 billion
- Medicare bad-debt increase: $700 million
- Home health care: $680 million
- Rural hospitals: $630 million
- Long-term care hospitals: $300 million
- Skilled nursing facilities: $350 million
- Rehabilitation hospitals: $200 million
- Hospice: $130 million
- Psychiatric and mental health hospitals: $300 million
- Increased renal dialysis composite rate: $50 million
- BBRA total: $11.55 billion

In general, however, the impact of both the BBRA and the BIPA was to restore confidence to many providers and provider types in 2001.
Impact of the Balanced Budget Act on Medicaid

The BBA also had some effect on Medicaid reimbursement. Although not as extensive as the Medicare impact, there are a few changes worth noting. The most interesting was the decision by Congress to repeal the Boren Amendment to Medicaid administrative rules, which required state Medicaid programs to reimburse providers at a “reasonable and adequate” rate. During the early and middle years of the 1990s, skilled nursing facilities and hospitals had used the Boren Amendment to successfully sue states for higher Medicaid fees.

The SNFs had the most at stake because Medicaid paid for almost 50 percent of all SNF care in 1995 but only 15 percent of hospital costs that year. As noted earlier in this chapter, Medicaid has traditionally underpaid for services rendered to its beneficiaries, and in the 1990s, the Boren Amendment was the only tool that providers had to rectify the situation.

Some other changes that the BBA made to Medicaid include clauses to pay providers at the lower Medicaid rate when patients have dual eligibility for Medicare and Medicaid and expansion of Medicaid eligibility and benefits. Finally, there was an increase of $4 billion to extend health coverage to five million low-income, uninsured children. Under this program, formally known as the State Children’s Health Insurance Program (SCHIP) and dubbed “KiddieCare” by some, the states were granted significant discretion in how to spend this money. In fact, since inception of the program in late 1997, there have been improvements in Medicaid coverage for children under age twenty-one.

In a report released by the Kaiser Commission on Medicaid and the Uninsured titled SCHIP Turns 10: An Update on Enrollment and the Outlook on Reauthorization from the Program’s Directors (Smith and others, 2007), the following four conclusions about the SCHIP program are remarkable:

1. SCHIP has helped to reduce the rate of uninsured among low-income children.
2. Outreach and eligibility simplification boosts enrollment.
3. SCHIP has improved children’s access to care and quality of care.
4. Issues around financing are SCHIP’s biggest challenge.

SCHIP has continued to play a significant role in placing millions of needy children on the Medicaid rolls in the first decade of the twenty-first
century and is one of the great success stories to come out of the Balanced Budget Act.

**IMPLICATION OF THE MEDICARE MODERNIZATION ACT OF 2003**

In 2003, in response to a pent-up demand for prescription drug coverage in the traditional Medicare program, a compromise of sorts was reached between Republicans who wanted to privatize Medicare and Democrats who wanted to expand Medicare coverage. The Medicare Modernization Act (MMA) was signed by President George W. Bush in December 2003 and immediately became the largest increase in the Medicare program since its inception. Although the 1983 PPS act and the 1997 BBA had significantly more changes, both of those acts were designed to stem the outflow of payment dollars to providers. The 2003 MMA, on the other hand, currently has an estimated program cost of $534 billion over the following ten-year period. (Curiously, when the Bush administration lobbied for the bill in 2003, the CMS administrator, Thomas Scully, told Congress that the estimated additional cost would be about $400 billion over ten years. It was later revealed that the Medicare actuary working on the estimate had determined that the more likely amount would be between $500 and $600 billion but was ordered not to disclose this higher amount to Congress.)

The MMA went beyond the new drug benefit provisions, which took effect in 2006. Other provisions included $25 billion for provider payment improvements with incentives for hospitals to report quality data to the government; replacing Medicare+Choice with Medicare Advantage; allowing people with high-deductible health insurance policies to use health savings accounts (HSAs) to shelter some income from taxes; and allowing drug importation from Canada after the drugs are certified as safe.

Most providers throughout the industry initially felt the pressure of lowered operating margins caused by lower BBA-generated Medicare reimbursements. A *Modern Healthcare* article reported that 1998 was shaping up as the first time in the thirty-two-year history of Medicare that the outflow to providers would be less than that of the previous year (Weissenstein, 1998). In fact, a look back at Figure 4.1 shows that the BBA significantly reduced Medicare expenditures for the first three years of its existence. And as expected, the Medicare payment reduction was affecting all providers, but particularly those with a high Medicare payer mix of patients. In addition, it was having a compounded negative
Fundamentals of Health Care Financial Management

effect on organizations that provided inpatient and outpatient services, home health services, skilled nursing care, and physician services.

Ridgeland Heights was just such a provider. It had been able to beat its 4 percent budgeted operating margin for a number of years with some ease, given its location and favorable payer and service mix. Yet the 1998 budget year was the beginning of a three-year downward spiral in operating margin, induced in part by the BBA. For the 1998 budget year, the administration recommended to the board that the operating margin be cut to 3 percent (a reduction from the prior year of only a single percentage point but a reduction of 25 percent from the previous year’s 4 percent budgeted target) to account for expected BBA revenue reductions. The organization’s financial analyst estimated that the reduction from Medicare cuts alone would be more than $1 million in the first year—just over 1 percent of operating margin. In addition, the administration was not able to devise expense reductions on the short notice given by the federal government for the 1998 budget year.

In the three years following inception of the BBA, RHMC experienced declining profitability that was mirrored throughout the industry. Many providers were unable to adapt new strategies to offset some of the revenue decreases associated with the act. To maintain or increase the bottom line during the Medicare BBA era, providers needed to develop new programs, initiate new services within existing programs, adjust their payer mix, adjust their case mix, and cut their expenses—a tall order. Indeed, most not-for-profit providers were unable to implement many of these items. In fact, in early December 2000, the American Hospital Association (AHA) reported that nearly half the nation’s hospitals did not make enough money in 1999 to maintain operations and stay competitive. The AHA reported that the aggregate hospital profit margin sank to 4.7 percent, its lowest level since 1994. The report, Hospital Statistics 2001, stated that 48.6 percent of hospitals had profit margins of less than 3 percent, compared to 42.2 percent reporting profits below that threshold in 1998. Finally, 32.1 percent of hospitals lost money in 1999, compared to 26.6 percent in the red in 1998.

Fast-forward to 2006, and we find that the industry has improved its profitability handsomely. For example, Fitch, one of the industry’s Big Three bond rating agencies, has reported median hospital operating and net margins for its rated hospitals in 2006 as 2.8 percent and 4.8 percent, respectively. This compares very favorably with the 1.2 percent operating margin and 3.0 percent net margin reported by Fitch in 2001. In fact, Figure 4.7 shows that there has been a consistent climb in the margins

since 2001. This reflects favorable cost containment management (as a result of hospitals returning their attention to their core business), favorable Medicare and in some cases managed care rate increases, continued revenue cycle management, operating efficiencies that came as a direct result of investments in quality and information technology, and generally improved business growth, particularly with outpatient services.

Along with its many peer hospitals around the country, RHMC attempted to initiate a series of steps to return profitability to the board-mandated 4 percent. It was aided by additional reimbursements to be received thanks to the BBRA, the BIPA, and the additional quality-based reimbursement increases linked to the MMA. We will review the budget steps in detail starting in Chapter Six, “June,” when RHMC kicks off its annual budgeting process.

MANAGED CARE NET REVENUE CONCEPTS

Medicare and Medicaid shortfalls from the BBA were not the only thing affecting the bottom line of many health care entities. The continuing rise of managed care in America was having negative financial consequences for many providers. Managed care is generally defined as a range of utilization and reimbursement techniques designed to limit costs while ensuring quality of care. To reduce costs, a managed care plan must focus on price, volume, and intensity of service. These cost reduction techniques (noted in Chapter One) have played havoc with the operating margin of many a health care provider.

Health insurance of the managed care type has overwhelmed and overtaken the traditional indemnity plan that was the primary form of health insurance in this country during the past fifty years. Although managed care has been around almost as long, it was mostly confined to the Kaiser plans in the western United States. Throughout the rest of the country, insurance companies were paying providers close to or at 100 percent of their submitted charges. However, as stated in Chapter One, these charges by providers and payments by the insurance companies were having a detrimental effect on the real health care payers: employers. In the late 1980s, employers revolted against the continuing rise of health insurance premiums and switched to managed care plans. The results, as seen in Figure 4.8, were dramatic. Managed care plans came from almost nowhere in 1976 to give coverage for over eighty million Americans by 1999. As we are about the observe, however, the theory

and practice of managed care are not often aligned, which led to the substantial decline in managed care involvement from 2000 to 2005.

The managed care plan has a variety of methods for reimbursing the providers servicing the plan’s enrollees. In every case, reimbursement for services is less than what the providers received previously.

**Methods for Managed Care Company Reimbursement of Hospitals**

*Inpatients*
- Per diem (defined dollar amount per day; most common method)
- Percentage of charges (second most common method)
- Charges (not common)
- Diagnosis Related Groups (DRGs)
- Medicare rates plus add-on percentage
- Carve-outs of various services
- Case rate
- Bundles for hospital and physician services
- Bed leasing
- Capitation
- Penalties and withholding, to create incentives for shorter stay or lower level of care

*Outpatients*
- Fixed procedure rates (fee schedules)
- Percentage of charges to maximum payment
- Ambulatory Payment Classifications (APCs) and Ambulatory Patient Groups (APGs)

**Methods for Managed Care Company Reimbursement of Physicians**

- Fee schedule by CPT code (most common method for primary care and specialty physicians)
- Capitation (second most common method for primary care physicians), including withholds, penalties, and bonuses
Charges (not common)
Percentage of charges
CMS (Medicare) Resource Based Relative Value Scale (RBRVS) rate plus $x$ percent
Carve-outs
Retainer
Salary
Hourly rate
Global fee
Bundled case rate
Modifying reimbursement on the basis of performance (quality measures, patient satisfaction measures)

Not only do managed care companies have all of these ways to reimburse providers, but the providers could contract with dozens of managed care companies during any given year. This means that the provider, whether a hospital, a physician, a home health agency, or an SNF, needs a mechanism or tool to keep track of the type of deal being signed. Otherwise, it cannot prepare monthly financial statements that include managed care contractual adjustments.

Providers have had to make significant adjustments in operating structure to accommodate the decreased reimbursements from managed care organizations (MCOs). Because an MCO offers less expensive premiums to its subscribers, it must procure services from a provider at less expense. So it negotiates a contract with a provider offering payments. At the same time, the MCO offers a plan to subscribers (beneficiaries) that generally limit the benefits. A plan of this sort generally comes in three flavors:

1. **HMO plans.** An HMO is a formally organized health care system that combines delivery and financing functions. The fixed monthly premiums paid to the HMO are generally lower than those for a traditional indemnity plan. In return for these lower premiums, the members of the plan must use the providers in the plan’s network. It is a limited-choice plan for members, traditionally requiring that a primary care physician (PCP) be the gatekeeper for all other specialty services, although recent years have seen movement by these plans to offer patients more choice for providers and less PCP gatekeeper activity.
2. **PPO plans.** A PPO is a health care financing and delivery program that creates a financial incentive for the consumer to use a selected panel of preferred providers. The difference between an HMO and a PPO is not always significant. The HMO typically locks the member into using its panel of providers, but PPO members are more likely to be steered to use the PCP that they select at their initial visit through lower deductibles and copayments. The PPO all too often has a clause allowing the member to use specialist providers outside the preferred panel. When this occurs, the member has to pay additional fees for the services.

3. **Point-of-service (POS) plans.** Also called an open-access product, in a POS plan, the members (enrollees) are permitted to choose a provider outside the main panel without referral from a PCP. In fact, most POS plans do not even require the member to sign up with a PCP. Coverage is offered under a financing mechanism similar to traditional indemnity and is available anytime service is desired. Benefits for services received outside the main panel are typically less comprehensive than HMO benefits, are significantly more expensive than the HMO managed care product, and include a higher deductible, coinsurance, or copayment.

The original managed care model was the HMO type of plan. In the early 1990s, the PPO plan appeared as employers were looking for additional choices in health insurance options for their employees. The POS plan was offered in the mid-1990s; it accelerated in the late 1990s as employees began complaining about the lack of choice offered in provider panel plans. The most interesting aspect of this movement to POS plans is that it looks, feels, and operates much like the traditional indemnity plan that employers rejected in the early 1990s because of the high price of premiums.

It is a simple equation: the greater the choice, the higher the insurance premium. The more limited the choice, the lower the insurance premium.

Still, the biggest difference between POS and indemnity plans is that under a POS plan, the provider no longer receives charges as a payment. Instead, some kind of negotiated discount has been agreed to by provider and payer.

Finally, in the first decade of the twenty-first century, many employers offer all three types of plan to their employees, including consumer-driven health plans (CDHPs), which are essentially high-deductible PPO and POS plans. These plans allow employees to choose the type of
plan they want and the level of premium the employee is willing to pay, based on the coverage offered by each plan. Around 2005, these plans began gaining popularity with employers as another way to lower their health care costs. Using the high-deductible methodology, the employer typically pays lower premiums and the employee bears the burden of increased out-of-pocket expense. There are two prevailing effects to health care providers under this methodology: (1) increased self-pay portion of a claim to collect, which most times correlates with an increase in uncollectible dollars, and (2) the use of PPO provider reimbursement schedules coinciding with the higher self-pay portion. Increasing the patient’s portion of the bill and being paid by the MCO at a PPO or lower rate schedule adds risk to the bottom line for all providers. The net effect is always a decrease in net revenue.

Regardless of the type of plan offered, the provider has to determine the final payment for the services rendered and record the difference as a contractual adjustment. The total contractual adjustment applied to the monthly gross charges gives the provider a clear idea if it is doing a good or bad job of negotiating contracts with the various managed care organizations with which it does business. For example, suppose that an analysis of managed care contractual adjustments looks like this:

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed care contractual adjustments</td>
<td>$28,000,000</td>
<td>$33,000,000</td>
</tr>
<tr>
<td>Total gross revenues</td>
<td>$143,000,000</td>
<td>$154,000,000</td>
</tr>
<tr>
<td>Managed care contractual adjustments as a percentage of total gross revenues</td>
<td>19.6 percent</td>
<td>21.4 percent</td>
</tr>
</tbody>
</table>

Providers can learn a lot about themselves by performing appropriate analysis of their managed care payer mix. For example, in this summary data set, the managed care contractual adjustment increased by 1.8 percentage points. On first impression, this seems like a small amount. Yet the percentage increase between years is actually 9.2 percent (1.8 divided by 19.6). This is in fact a substantial increase between years, and it negatively affects the bottom line by $2,816,000 ($33,000,000 minus $30,184,000, the latter amount being the managed
care contractual adjustment that the organization would have discounted if it had been able to maintain a 19.6 percent contractual adjustment percentage). Another way to look at this is to note that the increase in managed care revenue is 17.9 percent, while the increase in contractual adjustments is 19.6 percent. This is not a good combination.

Clearly, there are many steps that the organization can take to analyze this increase. The ultimate purpose of the analysis is to make an informed decision on the need for the organization to meet its changing revenue streams. These are some questions that could be asked:

Was the change in contractual percentage a result of a change in the mix of MCOs with which we contract?

Was the change a result of poor inpatient utilization of services? For example, did the length of stay increase beyond the budget? (This question would apply to fixed payment schedules like DRG and case rate.)

Was there a change in the mix of inpatient and outpatient utilization of services beyond what was projected?

Are we, as an organization, being paid appropriately by the MCOs? Have they properly performed their own contract analysis?

Are we being paid correctly by the MCOs? Have we confirmed they are paying according to the contractual agreement we signed?

Providers may be contracting with two MCOs or two hundred. This usually depends on the level of managed care penetration in a particular geographical region. The greater the penetration, the more sophisticated the provider must be to be able to negotiate, bill, collect, and analyze the various contracts. Most providers have found that they need an automated system into which they can load the terms of contracts to get accurate and timely information on the net revenue expected to be generated per case, whether inpatient or outpatient.

These various automated systems, usually called contract payment analyzers or contract management systems, may be attached to the organization’s main computerized billing system or freestanding and interfaced with the billing system. The output from these systems is the primary source for posting managed care contractual adjustments. The difference between gross charges and contractual adjustments becomes the posted net revenue for all the managed care accounts. These systems also allow the provider to determine if the managed care company has
made accurate and timely payment of the net amount expected. Contract management systems are essential to a quality financial management outcome in hospitals. It has also been shown to pay for itself within the first year of operation. Yet according to unscientific surveys that have been conducted across hundreds of classes from 2000 to 2005, it appears that only 30 percent of all hospitals are using this type of system in their organizations (Berger, 2005). Clearly, a lot of improvement is still available for many of the hospitals and health systems in the United States.

PREPARATION OF THE MEDICARE AND MEDICAID COST REPORT

The Medicare and Medicaid cost report is the primary means for the federal government to monitor hospital costs. The following section highlights the major issues surrounding this report.

For a hospital fiscal year ending in December, April is the month when processing of the Medicare and Medicaid cost report heats up. CMS rules require that the cost report be filed with the fiscal intermediary within 150 days of the end of the fiscal year. The purpose of the cost report is to provide means of reconciliation between interim payments and actual reimbursement for specific reimbursable items (Medicare bad debts, disproportionate share, and so on) and to help gather data to set prospective payment rates for future years.

Filing the cost report has been required since the beginning of the Medicare program in 1966. It was particularly necessary when Medicare reimbursed all of its services at cost. This remained true until 1983, when Medicare changed its reimbursement for inpatient services from a retrospective cost-based methodology to the fixed prospective payment of DRGs. Cost reports were required for all of the other hospital services still reimbursed at cost. The only way to determine the cost apportionment for these services was to continue preparing the cost report. The big difference was that a year-end payable or receivable for inpatient services no longer applied. Another major change occurred in 2000, when outpatient reimbursement was converted from cost-based to prospective reimbursement (APCs).

The Medicare cost report is designed in a reasonably logical way to allow the preparer (provider) and the payer (Medicare) to understand the development of each year’s report. Exhibit 4.3 shows the major elements of the cost report. Each element helps clarify an organization’s Medicare cost.
The Medicare cost report has had a significant impact on the health care industry. Medicare mandated provider preparation of the cost report to determine its required settlements, but the cost report and its costing methodology became a de facto standard for cost accounting in the industry. Before 1966 and the advent of Medicare, most of the industry had no need for any type of cost accounting system, sophisticated or not. Most hospitals were small, and much of their revenue was generated from a small set of charges and a lot of donations. Medicare and


<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Determine Medicare allowable costs</td>
</tr>
<tr>
<td>B</td>
<td>Stepdown costs of nonrevenue (overhead) departments to revenue-producing departments</td>
</tr>
<tr>
<td>B-1</td>
<td>Statistics used to allocate overhead department costs</td>
</tr>
<tr>
<td>C</td>
<td>Determination of the ratio of costs to charges (RCC) used on worksheet D to develop Medicare’s proportionate cost</td>
</tr>
<tr>
<td>D, D-1, D-4 (D series)</td>
<td>Determination of Medicare’s total portion of provider’s cost (including pass-through items, limits under the Tax Equity and Fiscal Responsibility Act of 1982, outpatient ancillary costs)</td>
</tr>
<tr>
<td>E</td>
<td>Determination of Medicare’s “final settlement” with the provider</td>
</tr>
<tr>
<td>G</td>
<td>Presentation of the provider’s financial statements</td>
</tr>
<tr>
<td>H</td>
<td>Determination of hospital-based home health agency “final settlement”</td>
</tr>
<tr>
<td>I</td>
<td>Determination of hospital-based renal dialysis costs</td>
</tr>
<tr>
<td>K</td>
<td>Determination of hospital-based hospice costs</td>
</tr>
<tr>
<td>L</td>
<td>Calculation of final capital payments</td>
</tr>
<tr>
<td>M</td>
<td>Determination of rural health clinic settlement</td>
</tr>
<tr>
<td>S</td>
<td>General information, including patient days, and wage rates used to determine regional wage indexes</td>
</tr>
</tbody>
</table>
Medicaid reimbursement ushered in the era of health care as a business nationally. Consequently, the Medicare cost report primarily required that hospitals use a specific type of cost-finding technique called *step-down*. The very name is representative of how the technique looks. (It is interesting to note that cost reports using the stepdown allocation methodology were developed by New York Blue Cross in its contracting with providers in the 1950s and later adopted by Medicare in 1966.)

The stepdown method of cost finding organizes the health care facility’s costs so that overhead expenses are properly allocated to revenue-producing cost centers. Departments that most likely have overhead costs related to the other overhead departments are allocated (or closed) earlier than others. The allocation is based on statistics that have been refined over the years to permit the best apportionment of overhead.

Table 4.2 displays the stepdown methodology. As can be seen, the actual stepdown (worksheet B in Medicare parlance) looks like a descending staircase as it moves from left to right. This example is a summary of a complete stepdown. It does not include all the lines or all the columns but is instead presented to illustrate how the initial stepdown methodology works.

The following list identifies sample nonrevenue departments whose costs must be allocated to a revenue-producing department on a statistical allocation basis:

<table>
<thead>
<tr>
<th>Nonrevenue Department</th>
<th>Statistical Allocation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building depreciation</td>
<td>Square feet</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>Salaries</td>
</tr>
<tr>
<td>Information services</td>
<td>Machine time spent</td>
</tr>
<tr>
<td>Plant operations</td>
<td>Square feet</td>
</tr>
<tr>
<td>Environmental services</td>
<td>Square feet</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>Full-time equivalent staff</td>
</tr>
<tr>
<td>Administration</td>
<td>Total expenses</td>
</tr>
<tr>
<td>Central supply</td>
<td>Supply expenses</td>
</tr>
<tr>
<td>Laundry</td>
<td>Pounds</td>
</tr>
<tr>
<td>Materials management</td>
<td>Supply expenses</td>
</tr>
<tr>
<td>Patient accounting</td>
<td>Inpatient and outpatient revenue</td>
</tr>
<tr>
<td>Medical records</td>
<td>Time spent</td>
</tr>
<tr>
<td>Food services</td>
<td>Meals</td>
</tr>
<tr>
<td>Nursing administration</td>
<td>Nursing hours</td>
</tr>
<tr>
<td>Pharmacy</td>
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<tr>
<td>Allocation Methodology</td>
<td>Salaries ($)</td>
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<tr>
<td>Depreciation on buildings</td>
<td>2,500,000</td>
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<td>Depreciation on equipment</td>
<td>2,000,000</td>
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<tr>
<td>Employee fringe benefits</td>
<td>3,243,000</td>
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<tr>
<td>Administration and general</td>
<td>1,500,000</td>
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<tr>
<td>Maintenance and repairs</td>
<td>200,000</td>
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<tr>
<td>Operation of plant</td>
<td>400,000</td>
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<td>Laundry and linen</td>
<td>200,000</td>
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<tr>
<td>Environmental services</td>
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<td>Medical records</td>
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<td><strong>Total nonrevenue departments</strong></td>
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<tr>
<td>Inpatient medical and surgical nursing</td>
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<td>Inpatient intensive care nursing</td>
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<td>Cardiology</td>
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<td>Physical and rehabilitation medicine</td>
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<td>Central supplies</td>
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<td>Drugs</td>
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<td>Emergency department</td>
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<td><strong>Total revenue-producing departments</strong></td>
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<td><strong>Total costs</strong></td>
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<tr>
<td>Maintenance and Repairs (square feet)</td>
<td>Operation of Plant (square feet)</td>
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**RATIO OF COSTS TO CHARGES**

The purpose of the stepdown is to allocate overhead costs in order to create total costs for the revenue-producing departments so that ultimately these total costs can be compared to the total charges for each revenue-producing department. This comparison is known as the cost-to-charge ratio (or the ratio of cost to charges, RCC). The charges for those services provided to Medicare patients are then multiplied by this ratio to determine the cost of rendering care to Medicare patients.

Here is a summarized version of this calculation:

Cardiology direct costs (per worksheet A): $5.0 million
Cardiology allocated costs (per worksheet B): $4.0 million
Total cardiology costs (final column, worksheet B): $9.0 million
Total cardiology charges (per worksheet C): $18.0 million
Overall cost-to-charge ratio: 0.50
Outpatient cardiology charges for Medicare beneficiaries: $4.0 million
Outpatient Medicare cost for cardiology services: $2.0 million

**Implications and Sensitivity of Medicare Cost Reporting**

In this example, outpatient services were used instead of inpatient services because, as you now know, inpatient services have not been reimbursed under a cost-based system since 1983. By 2001, Medicare had phased out almost all remnants of the cost-based system. As noted, the 1997 BBA required Medicare to adopt prospective, non-cost-based reimbursement for hospital-based outpatient (ambulatory) services, home health services, skilled nursing facilities, and rehabilitation services. Psychiatric services are transitioning to a PPS methodology, as are long-term acute-care (LTAC) hospitals. The only hospitals still cost-reimbursed are cancer hospitals, burn centers, and critical-access hospitals (CAHs), which are hospitals with twenty-five beds or less, generally located in rural areas.

Yet it is certain that the Medicare cost report will survive. This report is the still most comprehensive financial statement required for every hospital provider in the United States. No other source combines overall charge information with high-level cost and statistical information. Such data are especially valuable to competitors in tracking their
neighbor’s operation because it is fully available under the Freedom of Information Act to anyone who requests it. When these data are coupled with billing information from the Medicare Medpar claims and billing file (an accumulation of all the financial and clinical data included on the bills submitted to the Medicare program for reimbursement), health policy experts and analysts are able to spot trends that would not be obvious without such data.

Each year, RHMC’s financial analysts gear up to collect the required information. Cost and charge information is assembled from figures available in the hospital’s books. Statistical information is collected and prepared using time-honored techniques; all information is double-checked for accuracy. Like a tax return filed with the government, the cost report is an official document that supports the claim that payment was made to the provider by Medicare. The RHMC financial analysts take this preparation seriously. They have had heavy-duty training, attending many continuing education seminars over the years. They study the literature and pay attention to all the new pronouncements issued by Medicare throughout the year. Most of these pronouncements are published in the Federal Register, now available daily on the Web at www.gpoaccess.gov/fr/index.html.

Furthermore, the financial analysts and their bosses are well aware of previous government efforts to review cost report submissions for fraud. Since its inception in 1966, each hospital’s Medicare fiscal intermediary has reviewed cost reports for reasonableness and completeness. Where errors were found during the audit that affected the final annual reimbursement, either positively or negatively, the intermediary made the changes; payments without interest were made, by either the health care organization or the government; and the cost report year was closed. In the recent past, however, the federal government staged some high-profile raids on the corporate offices of major for-profit providers, alleging that two sets of books were being kept, the regular set and a “reserve” set.

As with income tax policy and practice, there are gray areas in the Medicare regulations. Many providers in the health care industry believe it is permissible to submit a cost report that includes items that have not yet been deemed black or white by the government. Yet it is uncertain whether a submitted request for additional reimbursement will ultimately withstand government scrutiny. Conversely, GAAP requires that organizations take a conservative approach in booking revenues. This is essentially where an irresistible force meets an immovable object. Most hospitals that take an aggressive or disputed position in filing the cost
report also book a reserve against the amounts that they are uncertain of receiving. Section 115 of the Provider Reimbursement Manual (HCFA Publication 15–2, titled “Cost Reports Filed Under Protest”) states that “you are permitted to dispute regulatory and policy interpretations through the appeals process established by the Social Security Act. Include the nonallowable item in the cost report in order to establish an appeal issue, and the disputed item must pertain to the cost reporting period for which the cost report is filed.” In the recent past, the government has taken the position that these reserves represent the equivalent of a second set of books, on the basis of action it has taken against a couple of large integrated delivery systems.

Although there is not too much left to dispute in the later years of this decade because essentially only critical-access hospitals are still cost-reimbursed, providers that believe Medicare regulations allow them to report certain disputed expenses would be well advised to send a cover letter with their annual cost report submission explaining that a disputed position has been taken. The industry continues to monitor developments in these and other cases because of their applicability to most health care providers.

PRESENTATION OF THE AUDITED FINANCIAL STATEMENTS TO THE FINANCE COMMITTEE

As members of RHMC’s administration continue to monitor and respond to ongoing revenue reduction issues, the bimonthly finance committee meeting is upon them. Although operations are currently being maintained through a mix of small expense reductions, the operating margin is nonetheless being negatively affected.

Meanwhile, the centerpiece of the April finance committee session is once again the presentation of the previous year’s audited financial statement by the partner of the external accounting and auditing firm retained by RHMC. The audit partner has a particular agenda that she wants to present to the committee. This agenda has changed substantially since the inception of the Sarbanes-Oxley Act of 2002. Although SOX legally applies only to publicly held companies “and other ‘issuers,’” many accounting firms have adopted many of its key provisions for not-for-profit entities.

SOX applies not only to the “issuers” (which we will define as the health care facilities) but also to their outside auditors. Under Section 404 of SOX, all companies subject to the reporting requirements must
include in their annual reports a management report on the company’s internal controls over financial reporting (AICPA, 2006, p. xiv). All publicly held for-profit health care entities must comply with the SOX provisions. Still, RHMC has chosen voluntary to subject itself to the provisions because it feels that the extra reporting provisions enhance its community standing and ensure excellent compliance with internal controls. This is an issue that RHMC management and its board believe in strongly. SOX actually gave this board an opportunity to show its leadership strength by adopting its provisions.

RHMC’s auditing firm is pleased to have SOX provisions applicable to RHMC. It shows the firm that RHMC management was trying to manage in an extremely professional manner and that board leadership was evident. Thus as the auditing partner begins her presentation, she compliments management for its forthrightness during the audit. The partner then continues her presentation, which includes an overview of the health care industry as well as some of the current risks inherent in the business. Formal risk assessments are now an integral part of the enhanced SOX provisions. The partner then reviews any unusual circumstances surrounding the audit. Finally, she presents the financial results of the audit. From the point of view of management, an important finding is the lack of any audit adjustment. This means that the financial statements that have been presented monthly by the finance administrator are valid and fair. This allows the board finance committee to continue to place trust in current management.

**Implications of Management Letter Comments Proposed by the Auditors**

In recent years and in line with new SOX provisions and eight new “statements on auditing standards” related to risk assessment that became effective on or after December 15, 2006, the auditors prepare a review of the internal controls of the organization. This review is made into a report and submitted to the finance committee, commenting on any material weaknesses in financial controls that have been uncovered. This is an essential part of the audit and is given great weight by the board members. It is one of the few times that the board gets to see behind the curtain through independent eyes whether management is doing what it says it is doing.

Management of RHMC is quite aware of the weight given to this report by the finance committee. But the finance administrators have always welcomed publication of this report. They have been trained to
understand the importance of internal controls right down to the detail level (where the auditors dwell). They know that the best way to avoid any type of misappropriation is to maintain proper internal controls. RHMC’s finance administrators have a history of performing various types of operational and financial reviews, proactively, to understand their systems, uncover any problems, and fix them. Operational reviews that have been performed in the recent past include the following:

- Information system risks and control assessment
- Treasury management risk assessment
- Cost report risk assessment
- Materials management risk assessment
- Accounts payable audit and assessment
- Patient registration and accounts receivable process assessment

This year, as in the past several years, the auditors did not discover any significant financial or operational issues to present. This reaffirmed for the finance committee that management was acting properly in preserving the assets of the organization. The auditors did, however, comment on the organization’s fraud and abuse compliance efforts and the need to continue being diligent in its efforts. Other than that important comment, the auditors stated they were pleased with the controls.

Finally, as is done every year, the organization’s entire management, which includes the president and chief executive officer, the chief operating officer, the chief financial officer, and the chief strategy officer, were dismissed from the meeting so that the audit partner could give the members of the finance committee—acting in their capacity as the audit committee—a private assessment of management. Because this particular management group had been together for more than five years, it is presumed that the audit partner was giving the board members the same clean bill of health in private as she gave in public.

PRACTICAL TIPS

- Always know your organization’s payer mix (overall, as well as the breakdown between inpatient and outpatient levels). Use it when analyzing outcomes from volumes, gross revenues, and net revenues.
To record contractual adjustments on the hospital financial statements properly, be sure you have a complete understanding of each of Medicare's reimbursement methodologies as described in Exhibit 4.1.

Understand the implications of each reimbursement change at the federal or state level. The impact may be great or small, but each one is cumulative and must be properly analyzed and presented to the administration as information that affects bottom-line outcomes.

Use a commercial contract management system to compute the financial impacts for each managed care company's reimbursement methodologies. This system should also be able to give the organization financial outcome information on a real-time basis.

Always be completely up-to-date with Medicare regulations when preparing the annual Medicare cost report. Use outside consultants either to prepare the report, if time does not permit the organization to stay current, or to review the completed report, if the organization feels comfortable with its knowledge base.

Have a complete understanding of the management letter comments prepared by the organization's outside (external) auditors, and be sure to develop action plans to correct any identified problems.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss the implications of the Medicare and Medicaid programs on the financial outcomes of U.S. providers of care. Also discuss the changes in the clinical health of the U.S. population because of the existence of the Medicare and Medicaid programs. What would either look like if these programs had not existed over the past forty years?

2. Using the payer mix information in Table 4.1, determine the changes in the hospital's net revenue (up or down) if the RHMC percentages moved to the national averages. (Make broad dollar assumptions for the five payer lines in order to start this analysis. Hold your dollar assumptions constant.)

3. Discuss why most managed care companies would rather reimburse hospitals on a per diem basis rather than using a discount from gross charges.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

- Thoroughly understand the elements that comprise the hospital revenue cycle and its management
- Recognize the seven most important areas of the revenue cycle
- Identify the importance of the Office of Inspector General’s annual work plan to hospital revenue cycle management
- Review overarching goals that can be set for monitoring the planned results in any revenue cycle department
- Expound on the importance of the registration process in the revenue cycle and why it should report to the finance division
- Calculate the allowance for doubtful accounts and the bad-debt expense in a hospital
- Calculate the allowance for contractual adjustments in a hospital

Sam is working on a presentation to the finance committee when his phone rings. Angela Renfro, the organization’s revenue cycle manager, is on the line.
“Angela, what’s up?”

“Sam, I’ve got this problem that I want to talk to you about.”

“OK, tell me about it.”

Angela is a little tentative. She seems unsure how to begin.

“Well, I don’t know if you’ve noticed, but the accounts receivable balance has been going up the last several weeks.”

“Actually, Angela, I did notice,” Sam replies, somewhat amused. “I was going to call you tomorrow to see what’s going on. On my first quick review, I thought I noticed the percentage of accounts older than 120 days from discharge was growing, but I haven’t done a complete review yet.”

“That’s just my point,” she fairly screams. “It’s not the older accounts that are the problem. In fact, if you look at the accounts stratified by age, you’ll find, as I did, that the receivable dollars in all the billed accounts are decreasing. The trouble is in the accounts where the patients have been discharged but no bills have been produced.”

“What? Oh my gosh. You know, I haven’t been looking at the discharged, not-final-billed category recently because it was doing so well. I just forgot about it for a while. Do you know why all of a sudden it’s out of control?”

Angela is agitated; Sam imagines her squirming in her seat.

“Well, ever since the organization restructured management and moved responsibility for the health information management [HIM; formerly medical records] department from you to the operations director, I’ve noticed that they’ve lost some of their focus on the financial aspects of the HIM function. Then the manager told me that he lost some of his coding staff to out-of-state moves and pregnancies. With limited staff, they thought they’d concentrate on some other clinical medical records issues rather than the coding and abstracting completion, which I need before the bill can drop.”

Aaaarrrgghhh! Sam thinks. He says, “I hate to use this expression, but you know, I told them so. When they restructured, I warned them this could—and probably would—happen. Management is
really just a function of focus. Unless the finance division is responsible for all aspects of the finance function, there’s no accountability. OK, so how many receivable dollars are tied up just waiting for the coding to take place?"

“It’s already almost five million dollars. This is just about ten extra days in the accounts receivable balance at our average revenue of half a million a day.”

“OK, so I’d better have a talk with the HIM manager and her boss to make sure we get a whole lot of focus back on this issue, pronto. I sure do hate to have responsibility for something without the authority.”

“Yep. I know what you mean.”

May in the northern regions of the United States is a time of great promise. The frost of winter is finally gone. The April rains have subsided, and the flowers are beginning to bloom in earnest. A rebirth takes place among the frigid-fingered inhabitants of the northern climes. At RHMC, this reemergence from winter’s cold is usually cause for celebration. Men start to bring out their spring suits, shedding the wool of winter. Women are happy to put away some of their warm-weather outfits and replace them with lighter-weight and more flexible fashions.

The accounting and finance staff continue to do the jobs for which they are responsible. It is one of the two times of the year when there is traditionally a slightly lighter load of work. The year-end functions are behind them, and the budgeting has not yet really begun. This is a purging month for the staff as they perform their own spring cleaning, rifling through the files (electronic and paper) to delete and reorganize as appropriate. This, however, is not the case for staff and managers responsible for billing and collecting patient accounts.

FUNDAMENTALS OF REVENUE CYCLE MANAGEMENT

The month of May typically holds no particular milestone in the world of revenue cycle management at RHMC, which is an hour-by-hour, day-to-day task that involves dozens of small but important transactions. Managers of the revenue cycle function are most often task-oriented and driven to achieve the various goals set by the organization’s
administration. These goals are often an aggregation of important aspects of management. At RHMC, the goals are as follows:

- Improving patient service and satisfaction
- Improving employee satisfaction (morale)
- Improving the quality of the department’s outcomes
- Reducing the dollars in overall net accounts receivable in relation to the net revenues being generated (called “days in accounts receivable”)

Achieving these goals is hard, but not unlike achieving the goals of any other management position. One difference is that the revenue cycle manager (RCM) is one of the few people in management positions who hold the fate of the rest of the organization in their hands. Numerous health care organizations live from hand to mouth. Said another way, the only way the organization may be able to meet its payroll or pay its vendors is for the RCM to collect cash on the outstanding bills. No collections, no payroll.

The RCM understands this. It is true because revenue cycle production is constantly monitored by the administration, often daily. Although the administration is primarily concerned about daily cash receipts, the RCM has a significantly more complex set of productivity measures, which, once met, turn the generation of patient bills into cash.

Figure 5.1 identifies the elements of a complete hospital revenue cycle. It is clear that the cycle is complex. The ability to successfully manage this cycle takes skill, gumption, perseverance, and time. Each item has significant implications for the nature and quality of ultimate cash collection.

Within the cycle, eight areas must be specifically highlighted because of their overriding importance:

1. Preregistration, precertification, and insurance verification
2. Coding and reimbursement: documentation capture
3. Coding and reimbursement: coding
4. Coding and reimbursement: timeliness
5. Denials management
6. Denials management: fraud and abuse issues related to billing
7. Managed care arrangements and negotiation
8. Performance monitoring
- Establish objectives
  - Establish performance standards and measures
  - Determine and establish inpatient and outpatient revenue cycle policies and procedures
  - Determine HIPAA requirements
  - Coordinate revenue cycle-friendly managed care contracting

**FIGURE 5.1.** The Hospital Revenue Cycle.
Preregistration, Precertification, and Insurance Verification

Of all the important concepts in accounts receivable management, precertification, preregistration, and insurance verification are the most important. The quality and speed of the collection process at the time of billing and thereafter is completely dependent on the quality and skill exhibited during precertification and insurance verification at the time of preregistration. The importance of these areas in holding down days in receivables will become apparent later in this chapter when we discuss which division the patient registration department should report to.

Precertification and insurance verification are important because they have become vital to recognize and capture the patient’s or employer’s policy information, which is usually located on the patient’s insurance card. The registration department is responsible for determining the preauthorization requirements for every patient who presents for services, whether as an inpatient or outpatient, and verifying benefits with the appropriate managed care company. Determining accurate demographic (name, address, telephone number, next of kin, and so on) and insurance information (guarantor’s name, address, telephone number, exact policy number, and so on) is the most important function the patient registration department performs. The patient accounting department relies completely on the quality of this information to be able to perform timely billing and collection activity.

Coding and Reimbursement: Documentation Capture and Review

The ability of the HIM department to ensure optimal reimbursement within the revenue cycle for inpatient or outpatient accounts is wholly dependent on the quality of documentation. Documentation is the written record of care provided during a patient’s stay. An old saying, “If it isn’t documented, it didn’t happen,” sums it up perfectly. Documentation of services and the distinctions made by clinicians (physicians and nurses) contemporaneously during the stay are critical to the ability to maximize reimbursement.

This is also a legal distinction. More and more, health care organization coding of services is being challenged. There is a much stronger presumption of innocence if the organization is able to document the level of clinical services required by the patient and provided by the organization.
One of the best ways to ensure capture of quality documentation is to make training available for all the people involved in this effort. The most important people involved in documentation are the floor nurses, the utilization review nurses (sometimes called care managers), and the physicians. The toughest group to train is the physicians, because they usually do not work for the organization, they may believe they have no stake in improving documentation, and they were never taught in medical school that documentation equals better reimbursement and generally do not want to learn it now.

But it is absolutely necessary to make sure that this training is carried out appropriately and effectively. The difference between, for example, a DRG without a comorbidity or complication (CC) and a similar case with a CC could be several thousand dollars. Physicians who understand these distinctions are actually creating a better medico-legal record of the case. Thus any documentation training needs to emphasize that improved documentation is always worthwhile for all the participants involved.

RHMC is fully aware of these distinctions and understands that improved documentation equals improved reimbursement. It is also aware that the best way to improve documentation is to invest heavily in training. Therefore, after the inception of the DRG program for inpatient reimbursement by Medicare in 1983, an outside consulting firm was hired that specializes in documentation training. The hospital then made the training mandatory for utilization review nurses and HIM coders. It also included in the training a number of physicians who have substantial practices at the hospital. In addition, the hospital made sure to offer this same training to any new employees who started in these areas subsequent to the original training.

Finally, RHMC contracted with this same consulting firm to perform quarterly sample reviews to determine that all documentation was properly included and that coding for reimbursement purposes was accurate. The consulting firm used the same coding books and rules employed by Medicare. Because it had taken these steps, RHMC was comfortable that it was complying with the difficult billing requirements of the Medicare program, even though reimbursement for its inpatient cases had improved. It was a case study in how to do better by doing better.

Because of the significant success of the inpatient program, the hospital brought back a consulting firm in 1999 to review steps of this same type for the APC program. Once again, documentation training was performed for the crucial employees and physicians who would
most affect the quality of the billing. This was done to ensure that all the legal requirements were being met and that the hospital was receiving proper reimbursement for the services that were being rendered.

Coding and Reimbursement: Coding

One of the primary functions of the finance division is to maximize reimbursement. The best way to do this is to maximize the quality of clinical documentation. This gives coders the best opportunity to apply for the highest level of reimbursement, where appropriate. In addition, every health care organization needs to give coders the best available tools, such as up-to-date coding books and automated software.

It is definitely appropriate for any health care organization to maximize reimbursement. It is legal, moral, and proper to apply for the best available reimbursement so long as the documentation is reflective of the care provided, it supports the coding, and the coding supports the billing.

There are many technical aspects to the coding function. The most important detail is the ability to convert clinical documentation into clinical coding. Coding comes in many forms. The four most prevalent coding formats are the following:

- **ICD-9-CM:** *International Classification of Diseases*, ninth edition, clinically modified for the United States. In Chapter Four, we saw that ICD-9-CM codes are the most important element in creating the diagnostic-related group (DRG), and the DRG is how Medicare reimburses a hospital for an inpatient stay.

- **HCPCS:** *Healthcare Common Procedure Coding System*. ICD-9-CM is used as the basis for Medicare inpatient reimbursement. Meanwhile, the Center for Medicare and Medicaid Services (CMS), which was formerly known as the Health Care Financing Administration (HCFA) and is the regulatory body for the Medicare program, uses HCPCS, a uniform method for health care providers and medical suppliers to code for their professional services, procedures, and supplies and thus obtain reimbursement for Medicare outpatients.

- **RBRVS:** *Resource Based Relative Value Scale*. This is the method Medicare has defined to reimburse for physician office services. It is based on HCPCS codes.

- **CPT-4:** *Physician’s Current Procedural Terminology*, fourth edition. This is a systematic listing of procedures and services performed by physicians. It is the most widely accepted coding methodology in the United States.
Whether the coder works for a hospital, a physician’s office, or any other health care entity that receives part of net revenues from the use of coding, it is always important to remember the primary significance of coding is to maximize reimbursement within the full extent of the law. When the revenue cycle staff prepares to send out a bill to any third-party payer that reimburses for services using these codes, the staff are always aware of the revenue implications of coding.

**Coding and Reimbursement: Timeliness**

There is one other specific and critical aspect in the coding cycle. The patient’s bill cannot be sent out to the third-party payer until the coding is completed and validated. Here are the specific steps involved in this procedure:

1. The physician documents the patient’s final diagnosis.

2. Various service units (radiology, laboratory, cardiology) complete all the written (documented) test results, and they are received by the HIM coders.

3. All clinical information relevant to the most proper coding of each patient’s stay is abstracted from the medical chart.

4. The coding itself is performed by the coder, who now has all the relevant information.

Regarding step 3, information often becomes available just after the patient’s discharge. A lab test can add significantly to the severity of the case by necessitating an additional ICD-9-CM code. This extra code could make a big difference in the final DRG that may improve the organization’s reimbursement. 

Managing this medical records function (coding) has great bearing on the ability of the billing department to send out a timely bill. Another truism of the health care industry is that the RCM is responsible for the entire accounts receivable balance, whether or not the individual has control over all the functions described in the earlier list. In many cases, the RCM does not always have control over all those functions. Therefore, he or she has to use excellent management skills to become best friends with the HIM manager and the coding supervisor in order to accomplish the primary goal of timely billing. The reality is that untimely coding can cause unbilled accounts to skyrocket and add millions of dollars and many days to the accounts receivable. (We will
return to the issue of timeliness and control, particularly as it relates to patient registration issues, later in this chapter.)

**Denials Management**

Denials management has become a very hot issue in hospital financial management in recent years. Managing denials is a multipart process. It involves understanding the various reasons given by third-party payers to deny the hospital’s payment claim. These multiple reasons need to be understood at a very basic level by the revenue cycle manager and to a similar extent by the finance administrators. Denials can have a significant impact on the organization’s contractual adjustments (balance sheet) and bottom line (income statement). Denials by third-party payers (including Medicare) have grown dramatically over the past decade and have taken a real bottom-line toll in many cases.

An article in the *Wall Street Journal* states that doctors are increasingly complaining that the payers use complex, opaque claims systems to confound their efforts to get paid fairly for their work (Fuhrmans, 2007). A physician office administrator is quoted as saying, “The insurers outcode us, they outsmart us and they have more manpower.” Doctors, clinics, and hospitals are therefore investing in software systems costing them each hundreds of thousands of dollars to help them navigate insurers’ systems and to head off denials. And the expense is apparently worth the cost. According to the article, it is estimated that denials are costing medical providers and insurers around $20 billion a year—about $10 billion for each side—in unnecessary administrative expenses, according to a 2004 report by the Center for Information Technology Leadership, a nonprofit health technology research group based in Boston. The article also states that roughly 30 percent of physicians’ claims are denied the first time around. It is clear that denials management is a hugely important and rapidly evolving element in revenue cycle management.

**Denials Management: Fraud and Abuse Issues**

**Related to Billing**

Issues of fraud and abuse in billing for services are multifaceted and complex. The Medicare and Medicaid programs want to be sure that they are paying only for the services required and used by their beneficiaries. On an annual basis, the Office of Inspector General (OIG), which is an arm of the Department of Health and Human Services,
<table>
<thead>
<tr>
<th>Area for Review</th>
<th>Action and Intent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payments for observation services versus inpatient admission for dialysis services</td>
<td>Determine whether payments were made for inpatient admissions for dialysis services when the physicians’ orders stated the level of care as admission to observation status.</td>
</tr>
<tr>
<td>Inpatient rehabilitation payments: late assessments</td>
<td>Determine the accuracy of Medicare payments for inpatient rehabilitation stays when patient assessments are entered late. By law, admission and discharge assessments must be entered and transmitted within defined time limits or payment is reduced.</td>
</tr>
<tr>
<td>Inpatient hospital payments for new technologies</td>
<td>Review payments made to hospitals for new services and technologies. New technology payments consist of payments for new medical services and technologies meeting the clinical payments definition of “new” that are demonstrated to be inadequately paid otherwise under the DRG system. The OIG will examine the costs associated with the new devices and technologies to determine whether the reimbursement is appropriate.</td>
</tr>
<tr>
<td>Outpatient department payments</td>
<td>Review payments to hospital outpatient departments under the outpatient hospital PPS to determine the extent to which they were made in accordance with Medicare laws and regulations. The OIG will review the appropriateness of payments made for multiple procedures, repeat procedures, and global surgeries.</td>
</tr>
<tr>
<td>Home health outlier payments</td>
<td>Determining whether outlier payments to home health agencies were in compliance with Medicare laws and regulations.</td>
</tr>
</tbody>
</table>
Skilled nursing facility payments for day of discharge

Determine whether Medicare is inappropriately paying SNFs for services on the day of discharge. Medicare regulations state that the day of discharge is not a day of billable services for SNFs.

Skilled nursing facility consolidated billing

Determine whether controls are in place to preclude duplicate billings under Medicare Part B for services covered under the SNF PPS and assess the effectiveness of common working file edits established in 2002 to prevent and detect improper payments.

Physicians’ payment to providers of care for initial preventive physical examination

Evaluate the impact of the initial preventive physical examination (IPPE) on Medicare payments and physician billing practices.

creates a work plan of what it believes are the biggest areas of fraud and abuse in claims processing. The areas targeted for substantial review in 2007 are summarized in Exhibit 5.1.

It is pretty obvious that the government is serious about fraud and abuse in billing. The table is not comprehensive, yet some of the areas listed are given more weight than others. It is not known which of these areas is considered most heavily weighted, but some supposition can be gleaned from the OIG’s work in the recent past and the probability of a greater monetary return for the government (Gardner, 1998). Since the appearance of Gardner’s article, the OIG has continued to bring charges against many health care providers and contractors.

In fact, in a four-year period (FY 1997 through FY 2000) since the Healthcare Fraud and Abuse Control Program was implemented under the 1996 Health Insurance Portability and Accountability Act (HIPAA), the OIG reported overall savings of more than $47.3 billion.

At this time, more than twelve thousand individuals or entities were excluded from the Medicare program. The report is available at http://oig.hhs.gov/semann/index.htm.

It is principally because of extraordinary results of this kind that the government’s focus on fraud and abuse, with a strong emphasis on Medicare billing issues, will not abate. The RCM and the organization’s
billing staff therefore need to be aware of all the billing rules all the time to stay legal in this important operation.

Several areas probably represent the risk of greatest exposure. The first is upcoding of patient bills. This usually involves an inpatient or emergency department case and is a function of claiming higher reimbursement than is deserved because the clinical documentation does not support the claim. This is unlike the situation mentioned earlier involving RHMC, where improved documentation led to higher reimbursements.

Upcoding achieved prominence when a Wall Street Journal article in early 1997 highlighted how it works and why it can cost Medicare so much money. In a nutshell, the article explained that the DRG system and the codes needed to drive it are so cumbersome that the DRGs, codes, and guidelines fill two volumes totaling more than 2,600 pages, making it extremely difficult to claim proper reimbursement. In fact, health care providers often downcode as well as upcode because of the difficulty that these issues entail (Lagnado, 1997).

The federal government continues to review issues of upcoding for pneumonia cases involving DRGs 89 and 90 and the significant difference in their case weights. The article pointed out that DRG 90 (simple pneumonia, which has no secondary complication) might have a reimbursement rate of $2,791, while DRG 89 (pneumonia with complications) may have a reimbursement rate of $4,462, a difference of $1,671, or 60 percent. This amount can be “earned” by adding a complication, where appropriate, to the patient’s chart; it is often only an issue for the provider, whether physician or utilization review nurse, to pay a little more attention to some of the secondary clinical issues and test results. Health care organizations have been hiring consultants to teach documentation and coding maximization to improve their reimbursements. As the chief financial officer of a major academic medical center said in the article, “It is like hiring a tax expert to make sure you took all your deductions.” This is an ongoing area of concern for the government, as expressed by the OIG reports.

A second area of concern is accuracy of physician visit coding. As with the coding issues described for inpatient hospitalization, Medicare also reimburses physicians through use of codes, known as evaluation and management (E&M) codes. Also as with DRGs, physicians or their staff might code the visit at a higher level than is permitted based on the documentation. The OIG believes it has done enough sampling to indicate that this is a high-profile area to pursue.
It is imperative that health care financial managers who have responsibility for billing or reporting gross and net revenues and receivables should go annually to at least one continuing education class or seminar held around the country on the fraud and abuse billing topic; several sessions would be better. Along with staying abreast of the current literature, this is the best way to maintain knowledge and expertise in this highly volatile area. Expanded discussion of the nonbilling fraud and abuse areas can be found in Chapter Seven.

**Follow-Up: Managed Care Arrangements and Negotiations**

At this moment in the health care industry, managed care volume may amount to 20 to 50 percent of most organizations’ net revenues. This may well be the case in any large segment of the industry: hospitals, physician practices, SNFs, and home health agencies. Many of these organizations are large enough to have personnel responsible for negotiating managed care contracts and patient registration and billing. In such organizations, it is imperative that the departments responsible for these patient financial services be given a seat at the negotiating table. Their job at the table should be to ascertain that the negotiator agrees only to terms and conditions that can be appropriately administered by the departments. If this is not done, there is a very good chance that the organization will be stuck with lost revenue, increased accounts receivables, and increased bad debt.

These problems are the result of the failure to properly precertify, preauthorize, or bill in a timely manner, which may be the result of lack of coordination between the managed care negotiator and patient financial services personnel.

**Performance Monitoring**

Several accounts receivable management processes highlighted in this chapter suggest ways to improve department outcomes. They may seem terrific in theory, but the results may be quite different in practice. The primary method that is used to determine whether improvements have in fact been made is first to determine the baseline of the process you are measuring and then to monitor the process outcomes periodically (daily, weekly, monthly, quarterly, annually). These outcomes allow the RCM and administration to understand in which direction the outcomes are heading, up or down.
Earlier in the chapter, RHMC’s goals for its patient accounting department were identified as improving patient service and satisfaction, improving employee satisfaction (morale), improving the quality of the department’s outcomes, and reducing the dollars in overall net accounts receivable in relation to the net revenues being generated. Each of these goals can be numerically measured and monitored. One of the RCM’s job requirements is to help set these goals and then achieve them. The best way to set goals in these areas is to use benchmarks, which can be applied in various ways. In setting initial goals, for example, measuring the current year’s results against prior results would be only a fair use of benchmarking. Yet this may be particularly appropriate if the organization is unable to find external benchmarks. The biggest advantage of this process is that it allows the organization to gauge the direction of results—in other words, at least determine if things are getting better or worse against prior performance. The biggest disadvantage of this process is that it does not allow an organization to determine if performance is poor, good, or excellent compared to peers.

RHMC has set specific numerical goals in all four of the categories it has chosen to measure. Exhibit 5.2 presents the various goals for RHMC’s patient accounting department.

- **Improving patient service and satisfaction.** RHMC subscribes to a customer survey service company. More than four hundred health care organizations from around the country are part of the benchmark group. Three of the questions asked on the survey, which goes to all inpatients and outpatients who have been discharged, relate to patient accounting functions. The goals are set high to achieve a ranking in the top 10 percent of the group. The results are monitored monthly, feedback is presented to the staff, and improvements are constantly sought to improve the rankings.

- **Improving employee satisfaction (morale).** RHMC also subscribes to an employee opinion service benchmarking group. Employee morale is measured through an ongoing survey process. The RCM is able to measure the satisfaction of the staff in two ways. First, it can be measured against scores from prior periods to determine the direction in which morale is trending. Second, satisfaction can be assessed against published national norms. RHMC’s goal is to achieve an 90 percent satisfaction rating from its own employees.

- **Improving the quality of the department’s outcomes.** These goals are extremely important to the organization’s revenue cycle
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department manager. The setting of high goals allows the manager to improve the department’s processes, thereby improving outcomes. Management has identified error rates as a critical quality outcome driver. Reduction in error rate always improves outcomes and productivity by obviating rework. Therefore, major emphasis is always placed

<table>
<thead>
<tr>
<th>Measure</th>
<th>Goal</th>
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<tbody>
<tr>
<td>Improving patient satisfaction and service</td>
<td></td>
</tr>
<tr>
<td>■ Reduce patient complaints received</td>
<td>&lt;6 patient complaints per unit per year</td>
</tr>
<tr>
<td>■ Improve scores on patient satisfaction survey</td>
<td>&gt;93rd percentile in all categories</td>
</tr>
<tr>
<td>■ Improve closure on every patient query received by the department</td>
<td>&gt;98%</td>
</tr>
<tr>
<td>■ Improve employee productivity in collection unit</td>
<td>40 quality calls per day per employee</td>
</tr>
<tr>
<td>Improving employee satisfaction</td>
<td></td>
</tr>
<tr>
<td>■ Improve employee satisfaction scores</td>
<td>&gt;80% score on employee opinion survey</td>
</tr>
<tr>
<td>■ Reduce disputes brought to human resource department</td>
<td>Zero disputes brought to HR</td>
</tr>
<tr>
<td>Improving quality</td>
<td></td>
</tr>
<tr>
<td>■ Reduce billing errors</td>
<td>&lt;2% error rate</td>
</tr>
<tr>
<td>■ Reduce time taken to post cash</td>
<td>Post all cash on day of receipt</td>
</tr>
<tr>
<td>■ Improve timely posting of contractual adjustments</td>
<td>98% of contractual adjustments are posted within 24 hours after billing</td>
</tr>
<tr>
<td>Reducing days in accounts receivable</td>
<td></td>
</tr>
<tr>
<td>■ Reduce net days in accounts receivable</td>
<td>&lt;55 days</td>
</tr>
</tbody>
</table>
on identifying and then correcting areas where errors crop up. For example, a significant focus is production of clean claims (bills) to third-party payers. Clean claims are paid much more expeditiously, so the revenue cycle department spends time monitoring both electronic and manual claims production for errors. In general, the department strives to keep its error rate under 2 percent.

- Reducing the dollars in overall accounts receivable in relation to net revenues being generated. This is the most commonly cited measurement and benchmark in the health care industry. There are many sources for the measure, popularly known as days in accounts receivable. The problem with this benchmark is that there are so many ways to calculate it. Accounts receivable is often cited in both gross receivable and net receivable terms; either may be used as the numerator. In addition, it is also possible to calculate the denominator using daily gross or net revenues. Finally, some organizations report only a portion of their receivable pay classes as gross and other pay classes as net. It makes for a confusing measurement and benchmark.

RHMC has solved this problem by using the only days in accounts receivable measure that is considered reliable as a benchmark: net accounts receivable divided by daily net revenues. These net amounts are available on the balance sheet and income statement. In addition, and more important, net figures are reported on the annual audited financial statements, where gross revenues have been reduced by contractual adjustments to net expected value and gross receivables have been reduced by allowance for doubtful accounts (ADA) and allowance for contractual adjustments (ACA) to their most likely value. Because these are audited figures, this is the most reliable set of measures available to use as a benchmark for days in accounts receivable. RHMC’s goal is to achieve forty-eight days in accounts receivable, which, according to several of the benchmark services, would place the organization favorably vis-à-vis the industry median.

There is an interesting side note to this key financial indicator. The median days in accounts receivable dropped from sixty-two days in 2002 to just over fifty days in 2006 according to Fitch Ratings (2006). This unprecedented decline is the result of the industry’s recognizing the importance of minimizing the accounts receivable on the balance sheet by collecting the monies it is owed. Consequently, what was once a good result in the metric just a few years ago, such as fifty-five days, is now considered unfavorable.
PATIENT REGISTRATION: TO WHICH DIVISION SHOULD IT REPORT?

One issue not ordinarily discussed in print has a major impact on managing accounts receivable and the revenue cycle: the question of to which division in the organization the patient registration department should report. The answer often goes a long way in determining days in accounts receivable. Around the time that Medicare came into being in 1966, many patient registration departments reported to the operating division, not the finance division. There was a good reason for this. As a cottage industry, the primary means of payment was cash receipts from the patients themselves or from a handful of third-party payers. It was easy to identify the payer, and doing so did not require much training. In addition, there were no great financial consequences involved in improperly identifying the payer because there were no preauthorization requirements or billing deadlines that would cause coverage denial for services rendered.

As already noted in Chapter Four, the commencement of Medicare turned health care services from a cottage industry into a major one. Identification of the actual payer became more critical because many payers, including the indemnity insurers, sold varying coverage to employers under the same policy name.

Many administrators throughout the industry recognized that with these changes came a shift in the responsibility of the patient registration department. Although still extremely concerned about customer satisfaction, it was clear that capture of insurance and demographic information became the critical aspect of effective accounts receivable management, as noted earlier in this chapter.

Over the next ten to fifteen years, many health care organizations—particularly hospitals, which usually separated the registration function from the billing function—moved the reporting responsibility of patient registration from the operating division to the finance division. It is a truism in the industry that the best way to turn accounts receivable into cash is to perform preregistration and registration functions correctly, accurately, and quickly. Put another way, as was stated earlier in this chapter, the front end of the receivable cycle is considerably more important than the back end.

Precertification, preregistration, insurance verification, and registration represent the front end, while bill production, bill submission, third-party follow-up, and collection activities represent the back end.
Good back-end processing is possible only if the front-end systems and procedures are flawless. Current contracts between providers and payers demand that the provider capture lots of specific data at the time of the patient’s registration. Without correct capture, there is a good chance that the payer will delay or deny the claim (not pay it because the provider did not meet the technical specifications of the contract).

The RCM is fully responsible for collecting accounts receivable and for the level of bad debt being generated. If the patient registration function does not report directly either to the RCM or to a finance director, there is every possibility that accounts receivable will not be at the level required by the administration or board.

Yet anecdotally, there has been a trend in recent years of having the registration department report to operations rather than finance. The explanation most often cited is that admissions and registration functions are performed at the front door of the hospital for many patients; the patient’s experience as a customer begins there. Hence, the reasoning goes, only the operations division can provide the kind of positive patient experience so fervently sought.

There are two big fallacies in this argument: first, that the operating division can collect demographic and insurance information that is equal to or better than what the finance division can, and second, that the finance division cannot provide customer service and satisfaction equal to or better than what the operating division can.

Neither of these notions is true. Most health care finance professionals will tell you that collecting accurate insurance information is extremely difficult. The reason for the difficulty is related, first, to the incredible complexity of rules and regulations inherent in Medicare inpatient and outpatient billing and, second, to the number of managed care companies that currently populate the landscape. Every managed care company has a set of coverage provisions for its beneficiaries that often differ from those of its competitors. A different set of preverification steps and standards have to be followed. Making things even worse, within the same managed care company (as was shown in Chapter Four), there can be several kinds of plan. Because of this, when a registrar is presented with a patient’s insurance card, there is no guarantee that payment is ensured. Different plans mean different benefits. Even the same employers may have three or four plans.

The first priority of the registration manager must be accurate and timely collection and processing of the patient’s demographic and insurance information. The best way to accomplish this priority goal is
through relentless staff training on insurance. This training should cover all the nuances of the information contained on the insurance card. In addition, it should emphasize the implications of various preauthorization, precertification, and second-opinion requirements contained in the diverse insurance plans within the organization’s service area.

Although customer service must always be emphasized, there is an inherent conflict between properly collecting a patient’s demographic and insurance information and the patient’s desire to get immediate treatment. Health care organizations would like to register patients in the same manner as a hotel. But it is important to recognize that an insurance card is not a credit card. The finance division constantly tries to balance customer service requirements with the need to collect timely and accurate information. Unfortunately, many operating divisions simply do not grasp the seriousness of the financial implications inherent in maintaining vigilance in this area, and they generally place the patient’s desire for speedy registration ahead of the requirements imposed by the insurance industry. After all, the operations division is not responsible for accounts receivable at the board level. Thus the level of accounts receivable is influenced by the decision of which division is responsible for this information collection effort.

CALCULATION OF THE ALLOWANCE FOR DOUBTFUL ACCOUNTS AND BAD-DEBT EXPENSE

Doubtful accounts and bad-debt expense are key aspects of revenue cycle management. One aspect that has significant implications for the income statement is calculation of the allowance for doubtful accounts (ADA). On the balance sheet, the ADA is a contra account to the accounts receivable asset line. It reduces the gross receivable by the amount calculated to be uncollectible. Sometimes referred to as the reserve for bad debt, the ADA calculation encompasses some interesting twists; as stated in Chapter Two, it is one of the six extremely sensitive items likely to receive an audit adjustment if done poorly.

Bad-debt expense is the other side of the double-entry bookkeeping in the ADA calculation. (Bad-debt expense is another of the six most sensitive financial statement items.) Most health care organizations use a four-sided approach to ADA and bad-debt reporting. The four financial statement accounts that are always involved in this calculation are accounts receivable, allowance for doubtful accounts, bad-debt expense, and bad-debt write-offs.
The ADA is the key to the entire set of equations. Every health care organization needs to perform a detailed analysis each month to determine the proper ADA balance. The ADA calculation attempts to measure the projected amount of recorded accounts receivable that cannot be collected at that month’s end. For financial statement purposes, it is the GAAP method used to write down the gross receivable to its estimated realizable value.

Table 5.1 shows an ADA calculation used by Ridgeland Heights Medical Center. The most important features of the calculation are use of an aging schedule and stratification by major pay classes. These concepts value accounts by the length of time they have been outstanding and the quality of the payer class within which each patient was registered. In the latter example, it is a truism of the industry that some payers will surely convert the receivables of their beneficiaries to cash once the claim has been determined to be proper. This is the case even if the account ages beyond a reasonable period. RHMC has also stratified its receivables between inpatient and outpatient accounts because of the various payment methodologies that may be employed.

The results of this monthly analysis are the amount of dollars that will be recorded as the ADA on the balance sheet. Because of this, it is imperative that the revenue cycle manager and the finance administrators review the changes in the ADA monthly to determine causes for any significant change to the ADA. This review may well highlight good or bad changes within various payer categories that need to be corrected immediately.

Table 5.2 presents the analysis of a complete ADA, bad-debt expense, bad-debt write-off, and recovery of bad debt. This schedule is prepared following completion of the detailed ADA calculations. There are some significant implications in this schedule. It is important to note that the bad-debt expense reported on the income statement is a function of three columns: the calculated ADA, actual bad-debt write-offs, and actual recovery of bad-debt write-offs.

To prepare this schedule, the organization must have already recorded the actual write-off of patient accounts, according to the bad-debt write-off policy. In addition, it must also record any cash collected by the agencies engaged by the organization to perform intensive collection work on accounts of patients who did not pay their bills. Using this methodology, the result of the equation yields the actual bad-debt expense (also called provision for bad debts) that is recorded on the income statement.
<table>
<thead>
<tr>
<th>INPATIENT ACCOUNTS</th>
<th>Less:</th>
<th>Allowance for Contractual Adjustments</th>
<th>Adjusted 0–30 days</th>
<th>31–60 days</th>
<th>61–90 days</th>
<th>91–120 days</th>
<th>121–150 days</th>
<th>151–180 days</th>
<th>Over 180 days</th>
<th>Total Billed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medicare receivable ($)</strong></td>
<td>1,782,084</td>
<td>(1,015,788)</td>
<td>766,296</td>
<td>852,582</td>
<td>264,409</td>
<td>161,301</td>
<td>73,747</td>
<td>14,970</td>
<td>7,562</td>
<td>128,664</td>
<td>1,690,854</td>
</tr>
<tr>
<td><strong>Medicare allowance (%)</strong></td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>10.00</td>
<td>20.00</td>
<td>25.00</td>
<td>35.00</td>
<td>50.00</td>
<td>15.80</td>
<td>Medicare allowance ($)</td>
<td>38,315</td>
</tr>
<tr>
<td><strong>Medicaid receivable ($)</strong></td>
<td>107,285</td>
<td>(432,972)</td>
<td>(325,687)</td>
<td>36,451</td>
<td>122,285</td>
<td>118,464</td>
<td>39,360</td>
<td>37,500</td>
<td>40,208</td>
<td>Medicaid allowance ($)</td>
<td>(16,284)</td>
</tr>
<tr>
<td><strong>Medicaid allowance (%)</strong></td>
<td>5.00</td>
<td>6.00</td>
<td>10.00</td>
<td>15.00</td>
<td>20.00</td>
<td>30.00</td>
<td>50.00</td>
<td>60.00</td>
<td>17.50</td>
<td>Medicaid allowance ($)</td>
<td>(16,284)</td>
</tr>
<tr>
<td><strong>Managed care receivable ($)</strong></td>
<td>878,541</td>
<td>(556,180)</td>
<td>322,361</td>
<td>1,440,125</td>
<td>1,117,852</td>
<td>558,417</td>
<td>429,685</td>
<td>230,325</td>
<td>161,410</td>
<td>Managed care allowance ($)</td>
<td>12,894</td>
</tr>
<tr>
<td><strong>Managed care allowance (%)</strong></td>
<td>4.00</td>
<td>6.00</td>
<td>10.00</td>
<td>15.00</td>
<td>17.00</td>
<td>25.00</td>
<td>25.00</td>
<td>30.00</td>
<td>11.20</td>
<td>Managed care allowance ($)</td>
<td>12,894</td>
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<td>-------------------------------------------</td>
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<td>------------</td>
<td>------------</td>
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<td></td>
</tr>
<tr>
<td>All other receivable ($)</td>
<td>256,895</td>
<td>256,895</td>
<td>118,947</td>
<td>64,698</td>
<td>53,770</td>
<td>18,899</td>
<td>16,491</td>
<td>137,418</td>
<td>513,942</td>
<td>770,837</td>
<td></td>
</tr>
<tr>
<td>Allowance (%)</td>
<td>30.00</td>
<td>30.00</td>
<td>40.00</td>
<td>50.00</td>
<td>60.00</td>
<td>70.00</td>
<td>85.00</td>
<td>98.00</td>
<td>63.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other allowance ($)</td>
<td>77,069</td>
<td>35,684</td>
<td>25,879</td>
<td>51,860</td>
<td>32,262</td>
<td>13,229</td>
<td>14,018</td>
<td>134,670</td>
<td>384,669</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total inpatient receivable ($)</td>
<td>3,024,805</td>
<td>(2,004,940)</td>
<td>1,019,865</td>
<td>2,448,105</td>
<td>1,569,243</td>
<td>941,901</td>
<td>596,562</td>
<td>346,604</td>
<td>1,501,272</td>
<td>7,643,403</td>
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<tr>
<td>Inpatient reserve ($)</td>
<td>111,993</td>
<td>166,908</td>
<td>163,113</td>
<td>169,522</td>
<td>127,930</td>
<td>97,030</td>
<td>630,385</td>
<td>1,548,918</td>
<td>1,548,918</td>
<td></td>
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</tr>
<tr>
<td>Total inpatient reserve (%)</td>
<td>10.98</td>
<td>6.82</td>
<td>10.39</td>
<td>18.00</td>
<td>21.44</td>
<td>27.99</td>
<td>34.22</td>
<td>41.99</td>
<td>17.88</td>
<td></td>
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</tr>
</tbody>
</table>

**OUTPATIENT ACCOUNTS**

<table>
<thead>
<tr>
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<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Medicare receivable ($)</td>
<td>1,239,377</td>
<td>(2,335,665)</td>
<td>1,096,288</td>
<td>703,717</td>
<td>933,793</td>
<td>408,121</td>
<td>249,968</td>
<td>185,515</td>
<td>89,856</td>
<td>436,316</td>
</tr>
<tr>
<td>Allowance (%)</td>
<td>5.00</td>
<td>5.00</td>
<td>6.00</td>
<td>13.10</td>
<td>20.00</td>
<td>25.00</td>
<td>50.00</td>
<td>70.00</td>
<td>15.80</td>
<td></td>
</tr>
<tr>
<td>Medicare allowance ($)</td>
<td>(54,814)</td>
<td>35,186</td>
<td>56,028</td>
<td>53,464</td>
<td>49,994</td>
<td>46,379</td>
<td>44,928</td>
<td>305,421</td>
<td>536,584</td>
<td></td>
</tr>
<tr>
<td>Medicaid receivable ($)</td>
<td>95,464</td>
<td>(264,174)</td>
<td>168,710</td>
<td>33,418</td>
<td>46,354</td>
<td>52,374</td>
<td>17,530</td>
<td>21,100</td>
<td>3,385</td>
<td>54,593</td>
</tr>
<tr>
<td>Allowance (%)</td>
<td>5.00</td>
<td>5.00</td>
<td>6.00</td>
<td>9.00</td>
<td>12.00</td>
<td>18.00</td>
<td>23.90</td>
<td>44.80</td>
<td>17.50</td>
<td></td>
</tr>
<tr>
<td>Medicaid allowance ($)</td>
<td>(8,436)</td>
<td>1,671</td>
<td>2,781</td>
<td>4,714</td>
<td>2,104</td>
<td>3,798</td>
<td>809</td>
<td>24,458</td>
<td>31,899</td>
<td></td>
</tr>
<tr>
<td>Managed care receivable ($)</td>
<td>1,501,256</td>
<td>(900,256)</td>
<td>1,225,365</td>
<td>1,395,822</td>
<td>751,254</td>
<td>648,952</td>
<td>482,541</td>
<td>315,965</td>
<td>2,152,748</td>
<td>6,972,647</td>
</tr>
<tr>
<td>Allowance (%)</td>
<td>4.00</td>
<td>6.00</td>
<td>10.00</td>
<td>14.00</td>
<td>18.00</td>
<td>30.00</td>
<td>35.00</td>
<td>41.00</td>
<td>11.20</td>
<td></td>
</tr>
<tr>
<td>Managed care allowance ($)</td>
<td>24,040</td>
<td>73,522</td>
<td>139,582</td>
<td>105,176</td>
<td>116,811</td>
<td>144,762</td>
<td>110,588</td>
<td>882,627</td>
<td>1,597,108</td>
<td></td>
</tr>
<tr>
<td></td>
<td>925,652</td>
<td>925,652</td>
<td>475,812</td>
<td>544,813</td>
<td>364,785</td>
<td>287,596</td>
<td>215,874</td>
<td>135,896</td>
<td>842,095</td>
<td>2,866,871</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>All other receivable ($)</td>
<td>925,652</td>
<td>475,812</td>
<td>544,813</td>
<td>364,785</td>
<td>287,596</td>
<td>215,874</td>
<td>135,896</td>
<td>842,095</td>
<td>2,866,871</td>
<td>3,792,523</td>
</tr>
<tr>
<td>Allowance (%)</td>
<td>30.00</td>
<td>30.00</td>
<td>40.00</td>
<td>50.00</td>
<td>60.00</td>
<td>70.00</td>
<td>85.00</td>
<td>98.00</td>
<td>63.30</td>
<td></td>
</tr>
<tr>
<td>All other allowance ($)</td>
<td>277,696</td>
<td>142,744</td>
<td>217,925</td>
<td>182,393</td>
<td>172,558</td>
<td>151,112</td>
<td>115,512</td>
<td>825,253</td>
<td>2,085,191</td>
<td></td>
</tr>
<tr>
<td>Total outpatient receivable ($)</td>
<td>3,761,749</td>
<td>(3,500,095)</td>
<td>2,438,312</td>
<td>1,576,534</td>
<td>1,204,046</td>
<td>905,030</td>
<td>545,102</td>
<td>3,485,752</td>
<td>13,075,558</td>
<td>13,337,212</td>
</tr>
<tr>
<td>Outpatient reserve ($)</td>
<td>238,486</td>
<td>253,122</td>
<td>416,316</td>
<td>345,746</td>
<td>341,466</td>
<td>346,051</td>
<td>271,836</td>
<td>2,037,759</td>
<td>4,250,782</td>
<td></td>
</tr>
<tr>
<td>Total outpatient reserve (%)</td>
<td>91.15</td>
<td>10.38</td>
<td>14.25</td>
<td>21.93</td>
<td>28.36</td>
<td>38.24</td>
<td>49.87</td>
<td>58.46</td>
<td>31.87</td>
<td></td>
</tr>
<tr>
<td>Total receivables ($)</td>
<td>6,786,554</td>
<td>(5,505,035)</td>
<td>4,886,417</td>
<td>4,490,025</td>
<td>2,518,435</td>
<td>1,800,608</td>
<td>1,251,634</td>
<td>784,817</td>
<td>4,987,024</td>
<td>20,718,961</td>
</tr>
<tr>
<td>Total reserves ($)</td>
<td>350,479</td>
<td>420,030</td>
<td>579,429</td>
<td>515,267</td>
<td>469,396</td>
<td>443,081</td>
<td>353,872</td>
<td>2,668,144</td>
<td>5,799,699</td>
<td></td>
</tr>
<tr>
<td>Total reserve (%)</td>
<td>27.35</td>
<td>8.60</td>
<td>12.90</td>
<td>20.46</td>
<td>26.07</td>
<td>35.40</td>
<td>45.09</td>
<td>53.50</td>
<td>26.36</td>
<td></td>
</tr>
</tbody>
</table>
# TABLE 5.2. Analysis of ADA, Bad-Debt Expense, and Bad-Debt Write-Offs, Ridgeland Heights Medical Center, Twelve Months Ended December 31, 2007.

*(in dollars)*

<table>
<thead>
<tr>
<th></th>
<th>Opening Balance: ADA</th>
<th>Ending Balance: ADA*</th>
<th>Total Change in ADA</th>
<th>Add: Write-Offs</th>
<th>Less: Recoveries</th>
<th>Provision for Bad Debts (Bad-Debt Expense)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>January</strong></td>
<td>5,600,000</td>
<td>5,650,300</td>
<td>50,300</td>
<td>381,284</td>
<td>71,483</td>
<td>360,101</td>
</tr>
<tr>
<td><strong>February</strong></td>
<td>5,650,300</td>
<td>5,680,244</td>
<td>29,944</td>
<td>366,704</td>
<td>59,648</td>
<td>307,056</td>
</tr>
<tr>
<td><strong>March</strong></td>
<td>5,680,244</td>
<td>5,734,135</td>
<td>53,891</td>
<td>397,964</td>
<td>82,288</td>
<td>315,676</td>
</tr>
<tr>
<td><strong>April</strong></td>
<td>5,734,135</td>
<td>5,849,672</td>
<td>115,537</td>
<td>325,659</td>
<td>81,815</td>
<td>243,844</td>
</tr>
<tr>
<td><strong>May</strong></td>
<td>5,849,672</td>
<td>5,726,047</td>
<td>(123,625)</td>
<td>347,965</td>
<td>66,027</td>
<td>281,938</td>
</tr>
<tr>
<td><strong>June</strong></td>
<td>5,726,047</td>
<td>5,870,367</td>
<td>144,320</td>
<td>398,836</td>
<td>62,172</td>
<td>336,664</td>
</tr>
<tr>
<td><strong>July</strong></td>
<td>5,870,367</td>
<td>5,806,077</td>
<td>(64,290)</td>
<td>395,683</td>
<td>48,892</td>
<td>346,790</td>
</tr>
<tr>
<td><strong>August</strong></td>
<td>5,806,077</td>
<td>5,916,173</td>
<td>110,096</td>
<td>396,589</td>
<td>76,539</td>
<td>320,050</td>
</tr>
<tr>
<td><strong>September</strong></td>
<td>5,916,173</td>
<td>5,884,859</td>
<td>(31,314)</td>
<td>365,754</td>
<td>70,494</td>
<td>295,260</td>
</tr>
<tr>
<td><strong>October</strong></td>
<td>5,884,859</td>
<td>5,700,357</td>
<td>(184,502)</td>
<td>520,376</td>
<td>57,874</td>
<td>462,502</td>
</tr>
<tr>
<td><strong>November</strong></td>
<td>5,700,357</td>
<td>5,752,043</td>
<td>51,686</td>
<td>521,569</td>
<td>86,546</td>
<td>435,023</td>
</tr>
<tr>
<td><strong>December</strong></td>
<td>5,752,043</td>
<td>5,800,000</td>
<td>47,957</td>
<td>446,987</td>
<td>101,098</td>
<td>345,889</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>5,600,000</td>
<td>5,800,000</td>
<td>200,000</td>
<td>4,865,370</td>
<td>864,877</td>
<td>4,000,494</td>
</tr>
</tbody>
</table>

*As calculated on the detailed Allowance for Doubtful Accounts worksheet.*
RHMC management and finance administration review these schedules in detail every month because of the schedule’s importance to both the balance sheet and the income statement. In addition, it is the best set of summary schedules available for the administration to determine the adequacy of the reserve for bad debt, as well as the performance of the collection agencies being used to back up the organization’s regular set of in-house collectors. Because these schedules involve two of the six most sensitive types of accounts, this is a critical monthly review of great importance.

**CALCULATION OF THE ALLOWANCE FOR CONTRACTUAL ADJUSTMENTS**

The other major allowance that reduces the gross receivable is the ACA. Like the ADA, the ACA is an estimate. In this case, it results from determining the amount of money in the gross receivable that will not convert to cash because of stipulations in contracts with the organization’s various payers, particularly Medicare, Medicaid, and managed care. GAAP requires that “the provision for contractual adjustments and discounts be recognized on an accrual basis and deducted from gross service revenues to determine net service revenues” (AICPA, 2006).

Again, as stated in the health care audit guide (AICPA, 2006):

> Amounts realizable from third-party payers for healthcare services are usually less than the provider’s full established rates for those services. The realizable amounts may be determined by the following:

- Contractual agreement with other plans (such as Blue Cross plans, Medicare, Medicaid, or HMOs)
- Legislation or regulations (such as workers’ compensation or no-fault insurance)
- Provider policy or practices (such as courtesy discounts to medical staff members and employees or other administrative adjustments)

Table 5.3 is the analysis that RHMC uses to determine its monthly ACA. Several points need to be made regarding this schedule.

First, the Medicare portion of the unbilled account is higher than the other categories because of specific rules and regulations involved in billing Medicare inpatient accounts. The largest portion of the unbilled
TABLE 5.3.  Analysis for the Allowance for Contractual Adjustments (ACA), Ridgeland Heights Medical Center, Month Ended December 31, 2007.

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Medicaid</th>
<th>Managed Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPATIENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unbilled accounts (in-house and discharged, not yet billed) ($)</td>
<td>1,782,084</td>
<td>107,285</td>
<td>878,541</td>
</tr>
<tr>
<td>Billed accounts ($)</td>
<td>n/a*</td>
<td>511,246</td>
<td>710,544</td>
</tr>
<tr>
<td>Subtotal ($)</td>
<td>1,782,084</td>
<td>618,531</td>
<td>1,589,085</td>
</tr>
<tr>
<td>Contractual adjustment discount rate (%)</td>
<td>57</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td>Allowance for contractual adjustment ($)</td>
<td>1,015,788</td>
<td>432,972</td>
<td>556,180</td>
</tr>
<tr>
<td><strong>OUTPATIENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unbilled accounts (discharged, not yet billed only) ($)</td>
<td>1,239,377</td>
<td>95,464</td>
<td>1,501,256</td>
</tr>
<tr>
<td>Billed accounts ($)</td>
<td>3,007,286</td>
<td>234,754</td>
<td>1,961,267</td>
</tr>
<tr>
<td>Subtotal ($)</td>
<td>4,246,663</td>
<td>330,218</td>
<td>3,462,523</td>
</tr>
<tr>
<td>Contractual adjustment discount rate (%)</td>
<td>55</td>
<td>80</td>
<td>26</td>
</tr>
<tr>
<td>Allowance for contractual adjustment ($)</td>
<td>2,335,665</td>
<td>264,174</td>
<td>900,256</td>
</tr>
</tbody>
</table>

*No allowance is necessary for Medicare inpatient billed accounts because 100 percent of these accounts are automatically contractualized at the time of billing by the computer system’s DRG grouper.*
category, in this case, is known as “discharged, not yet billed.” The unbilled category is made up of different types of account: patients who are in-house (for example, in their hospital bed) at midnight of the balance sheet date and those who have been discharged but whose bill has not yet been produced by the organization.

Second, only a portion of the inpatient managed care billed accounts are being written down to the ACA because many of these accounts have already been written down to their estimated contractual net expected receivable at the time of billing (see Table 5.1). RHMC uses a special software program (generically known as a contract management system) that generates the actual net revenue figure. The software emulates actual provisions of each managed care contract and then reviews each inpatient discharge for those provisions and automatically calculates the reimbursement. Therefore, no additional accrual for ACA is needed because the account has already been written down.

Third, the contractual adjustment discount rate is supposed to represent the average of all accounts that have been processed over the past month. These amounts change from month to month, but on a small scale. A large change may occur if a high-volume managed care contract is signed at a discount rate that is significantly higher than the average. The other big reason a change may occur is a large change in Medicare reimbursement rules. This would usually happen on October 1 of any year, which is the beginning of the federal fiscal year.

Fourth, there is no in-house category for outpatients because by their nature, they are meant to receive services on the day they are registered and should not be categorized as occupying a bed.

Fifth and finally, it is clear that there is no ACA for the accounts called “all other receivables” on the ADA schedule. These are primarily self-pay accounts, and as such there is no formal discount contract between the organization and its patients. Thus there is no allowance, provision, or need for self-pay contractual adjustment.

The results of the monthly ACA are used to reduce the total balances on the ADA schedule before an allowance for bad debt is calculated. If this were not done, the organization would be double-counting some of its discounts against gross receivable.

Once again, RHMC staff and management spend significant time on this analysis each month because of its effect on both the balance sheet and the income statement. Variance analyses are also performed across time periods and against various pay classes to establish whether there have been any measurable changes, and if so, where.
In summary, management of accounts receivable and the revenue cycle is a crucial part of the overall management of any health care organization. The responsibility for timely and efficient collection of cash under strict regulatory requirements is not for the faint of heart. RHMC has had the good fortune to retain the same RCM for the past several years. She has maintained her technical ability to manage through constant reading of industry literature and attendance at continuing education seminars throughout the year. The rapid pace of change in the industry has demanded continued vigilance, particularly in this area. RHMC has been reasonably successful thus far.

**PRACTICAL TIPS**

- Be sure to set up overarching goals for the revenue cycle department.
- Use the high-level goals as a means to create revenue cycle metrics that are aligned with both finance division and organizational goals.
- Create a flowchart for the organization’s revenue cycle, and make sure that all the tasks are aligned with each other and maximize the organization’s outcomes.
- Make sure that the registrars receive maximum training and comprise the highest level of skill within the revenue cycle (more than the billers and follow-up personnel). The quality of their work has a greater effect than anything else on the results of the revenue cycle.
- Provide maximum training for all parties involved in patient documentation. This means the HIM coders, case management nurses, and particularly the physicians.
- Write penalties into the medical staff bylaws that require physicians to complete their patient charts in a timely manner so that coding can be completed promptly. This will allow the organization to get all its bills out in an optimum time frame.
- Be sure to acquire denials management software that allows the organization to identify, track, and trend where its claims (billing) denials are originating. With this information, take action to minimize or prevent such denials.
- Review the OIG’s annual work plan, and take actions to ensure that your organization is in compliance.
- Have the patient registration department report to the finance division.
DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss the pros and cons of having the patient registration department report to the finance division or the operating division. Determine to which it should report.

2. Review the OIG’s current work plan and determine actions the organization can take to minimize governmental penalties.

3. Review the entire depth and breadth of the revenue cycle in Figure 5.1. Are there any elements that appear unnecessary or extraneous? Which elements take the most time for the organization? Which take the least? Why?
LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Discuss the twenty-four steps to preparing an operating budget
■ Understand during which month the budget should be presented to the finance committee and the board of directors
■ Recognize the five methods used to budget volumes in a health care facility
■ Understand the seven major steps in the development of the criteria-based capital budget
■ Identify the fourteen major steps to preparing the capital budget
■ Discuss the major responsibilities of the accounting and finance departments
■ Develop an understanding of a board of directors–level pension report

Rick Samuelson, the president and chief executive officer of Ridgeland Heights Medical Center, is in a quandary. His thirty-five years of experience in health care organizations in general, fifteen of them at RHMC,
are not helping him at the moment. The organization is about to begin its annual budget process, and he knows he faces a dilemma.

“Sam,” he barks at his finance officer, “what’s our chance of doing good financially next year? I’m pretty concerned about some of the trends that we’ve been experiencing over the past few years. It has been several years since the Medicare Balanced Budget Act blew up our net revenues and affected our health system, and we still haven’t fully recovered to the extent we should.”

“Well, you’re right. It’s absolutely true that our bottom line eroded because of all those issues. In fact, as you know, the Medicare BBA issues are only a part of it. We have been having significant problems negotiating what we feel are appropriate rates with managed care companies. We know they’ve been having their own problems with the cost of claims they’re paying for medical services. So along with the premium increases they’ve passed through to subscribers over the past couple of years, they’re also trying to make it up by asking us for additional payment reductions. We also have the growing problem of the increasing uninsured population and their inability to pay our charges.”

“OK, but what are we going to do about the current financial issues and the future budget planning we have to do now?”

Sam is happy to respond to the question.

“There are only a few common ways that we can have a positive impact on the bottom line. They’re all tried-and-true methods, but none of them is easy. The best way to improve our operating margin, now and in the future, is to enhance our inpatient admissions and outpatient volume. That’ll generate additional gross and net revenues. As long as our variable expenses are less than net revenues, our margins will improve.”

“But, Sam, we haven’t been able to make the kind of progress in the area that we want.”

Sam has heard it before.

“Rick, I know that. First of all, we need to be more innovative in this regard. More volume means we need to gain market share from other providers, especially since the population of our service area
isn’t growing. Second, we haven’t tried hard enough to implement cost reductions in a logical way, using some very specific cost analysis tools that highlight possible areas of improvement. Finally, we haven’t attempted to perform process improvements in a meaningful and effective way. This could free up many of our revenue-producing departments to accept additional volume, leading to additional income.”

“OK, you’re right. We’ve had this conversation more than once. But in the past, you wanted to do this before our bottom line eroded, so it was hard to convince our stakeholders to take these issues seriously.”

“Yeah, well, if we’d done some of these things previously, because the strategic financial plan predicted it, we’d be in better shape for the near future. In any case, those three areas are what we need to do to survive and thrive now and in the future.”

June in northern Illinois is lovely. Spring has sprung with full force, and warm breezes are easily felt on the bare arms and legs of joggers and the pedestrians strolling leisurely through the parks around the region. Summer is on its way, and vacation plans are in full swing. It is sometimes hard to get people to concentrate on their jobs as they discuss their getaway destinations.

That, however, is not the case at Ridgeland Heights Medical Center. Because its fiscal year ends on December 31, June is the month that the budget process starts in earnest for the upcoming year. The finance division staff, who are responsible for the entire budget process, have geared up for initializing this important function. The amount of work ahead is daunting when taken as a whole. As a result, the process is broken down into smaller pieces that are more easily digestible. Starting in June, the budget process will keep the finance and accounting staff occupied until just before New Year’s Day.

**BUDGET PREPARATION: THE BEGINNING**

June is the month that RHMC begins its annual rite of passage, drafting the operating and capital budgets. In its logical sequence, the annual budget follows the strategic financial plan (discussed and described in Chapter Three), which follows preparation of the strategic plan. The
logic of the sequence allows the organization to express its vision and long-term goals in the strategic plan, express the best numerical forecasting in the five-year strategic financial plan, and develop that into a projection or budget one year into the future.

There are quite a number of steps to preparing and presenting the annual budget. Exhibit 6.1 identifies the steps usually needed in preparing an operating budget. These twenty-four steps require four to six months, depending on philosophy. They involve managers in every facet of operations. In addition, a critical set of stakeholders who must be accessed, solicited, and appeased are the physicians linked to the organization, either in an employment capacity or in an affiliate relationship.

**BUDGET CALENDAR**

The planning tool that RHMC uses to design and maintain this annual project is a budget calendar. Separate calendars are prepared for the operating budget and the capital budget. The calendars make time frame expectations clear to all individuals participating in the project. Exhibit 6.2 is the operating budget calendar used by RHMC. It is divided into four columns, each having an important function:

1. **Responsible parties.** This column shows who is involved in each individual step.

2. **Activity.** This column identifies each of the budgeting steps to be followed.

3. **Date.** This is the critical column. Each date listed must be met, or else the whole budget process will be unsuccessful, and that must never be allowed to happen. This column is monitored incessantly to avoid any slippage.

4. **Meeting location and time.** This column lets the responsible parties know where and when to show up.

There is a crucial reason why the dates on the budget calendars are never allowed to slip. The budget is a plan designed by management that must be approved by the board of directors to allow management to operate the organization on a day-to-day basis. The board and its finance committee have their own calendars with future agendas that are also strictly adhered to. In the case of RHMC, the calendars have been designed so that all affected parties are aware well in advance of the crucial meeting dates and activities and can clear their calendars accordingly.
### EXHIBIT 6.1. Steps in the Process of Preparing an Operating Plan and Budget.

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Strategic Planning Steps</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Environmental statement</td>
<td>Analyzes of the organization's current operating environment.</td>
</tr>
<tr>
<td>2</td>
<td>General objectives and policies</td>
<td>Gives the budgeting effort a uniform direction for optimal use of available resources. Objectives assume a macro view focusing on broad goals. Policies have a narrower focus, aiming at clarifying the details of budget preparation and establishing basic internal operating parameters.</td>
</tr>
<tr>
<td>3</td>
<td>Assumptions</td>
<td>Provides statements that project future events and the resulting future environment.</td>
</tr>
<tr>
<td>4</td>
<td>Operating policy decisions</td>
<td>Set program priorities and establish funding guidelines.</td>
</tr>
<tr>
<td>5</td>
<td>Operating objectives</td>
<td>Translate operating priorities into specific measurable goals that are obtainable within the budget period.</td>
</tr>
<tr>
<td></td>
<td><strong>Administrative Steps</strong></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Budget preparation manual</td>
<td>Describes the mechanics of preparing the operating plan and budget.</td>
</tr>
<tr>
<td>7</td>
<td>Projection package</td>
<td>Provides information for communicating either the raw data necessary for decision or making actual decisions between levels of management.</td>
</tr>
<tr>
<td>8</td>
<td>Projection package approval</td>
<td>Requires examination of volume estimates against past performance and the impact of such factors as changes in the demographic character of the organization's service area, technological changes, historical trends, and managed care penetration.</td>
</tr>
<tr>
<td></td>
<td>Administrative package</td>
<td>Communicates budget preparation instructions and information to department line management.</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Administrative package approval</td>
<td>Ensures that revisions are included and the package is complete.</td>
</tr>
</tbody>
</table>

**Communications Steps**

<table>
<thead>
<tr>
<th></th>
<th>General budget meeting</th>
<th>Formally initiates the annual planning and budget preparation process for departmental management.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Technical budget meeting</td>
<td>Focuses on the specific mechanics of the budget procedures and budget preparation; this usually involves a series of meetings with the revenue-producing service areas.</td>
</tr>
</tbody>
</table>

**Operational Planning Steps**

<table>
<thead>
<tr>
<th></th>
<th>Administrative meetings (revenue-producing departments)</th>
<th>Translate the environmental statement, assumptions, operating policies, and objectives into projects and activities at the level of revenue-producing departments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Decision package</td>
<td>Identifies the new activities being requested, with their costs and alternatives, based on the decisions made in step 13.</td>
</tr>
<tr>
<td>14</td>
<td>Rank order of decision packages</td>
<td>Involves a series of consecutive meetings wherein succeeding levels of management integrate and rank-order the various decision packages prepared in step 14.</td>
</tr>
<tr>
<td>15</td>
<td>Revenue budget preparation</td>
<td>Uses data from the projection package to calculate the initial revenue budget, under the current charge structure.</td>
</tr>
</tbody>
</table>
### Budgeting Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Detailed specifications</td>
</tr>
<tr>
<td>18</td>
<td>Tentative budget completion</td>
</tr>
<tr>
<td>19</td>
<td>Final administrative review</td>
</tr>
<tr>
<td>20</td>
<td>Budget completion</td>
</tr>
<tr>
<td>21</td>
<td>Board approval</td>
</tr>
<tr>
<td>22</td>
<td>Communication of budget approval to department management</td>
</tr>
<tr>
<td>23</td>
<td>Implementation</td>
</tr>
<tr>
<td>24</td>
<td>Feedback</td>
</tr>
</tbody>
</table>
**EXHIBIT 6.2.** Ridgeland Heights Medical Center 2009 Operating Budget Calendar.

<table>
<thead>
<tr>
<th>Responsible Parties</th>
<th>Activity</th>
<th>Dates</th>
<th>Meeting Location and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive and administrative staff, selected nursing and ancillary department managers, finance staff</td>
<td>Kickoff meeting for volume projections</td>
<td>June 1, 2008</td>
<td>Meeting Room 1, 2:00–3:30 PM</td>
</tr>
<tr>
<td>Executive and administrative staff, finance staff</td>
<td>Approve projected 2008 and budgeted 2009 admissions, lengths of stay, and patient days by service; approve projected 2008 and budgeted 2009 outpatient trends by ancillary service</td>
<td>June 26, 2008</td>
<td>Meeting Room 1, 2:30–4:00 PM</td>
</tr>
<tr>
<td>Finance staff</td>
<td>Issue 2009 operating budget calendar</td>
<td>July 1, 2008</td>
<td></td>
</tr>
<tr>
<td>Finance staff</td>
<td>Compute gross revenues and contractual adjustments, based on volumes, payer mix and projected contract negotiations</td>
<td>July 11, 2008</td>
<td></td>
</tr>
<tr>
<td>Event Description</td>
<td>Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive and administrative staff, finance staff, accounting staff</td>
<td>Review salary and nonsalary assumptions: Merit increase percentage Full-time equivalent (FTE) target level Benefit costs Inflation by category</td>
<td>July 14, 2008</td>
<td>Meeting Room 1, 10:00 AM–12:00 PM</td>
</tr>
<tr>
<td>Finance administration, finance staff</td>
<td>Review gross revenues and contractual adjustments; validate payer mix</td>
<td>July 15, 2008</td>
<td>Finance Department conference room 12:30–2:00 PM</td>
</tr>
<tr>
<td>Executive and administrative staff, finance staff</td>
<td>Review 2009 budgeted income statement developed by Finance Department based on prior high-level assumptions; determine price increase targets; revise salary and nonsalary assumptions</td>
<td>July 18, 2008</td>
<td>Meeting Room 1, 8:00–10:00 AM</td>
</tr>
<tr>
<td>Finance staff</td>
<td>Issue 2008 projected and 2009 budget worksheets to department managers</td>
<td>July 25, 2008</td>
<td></td>
</tr>
<tr>
<td>Finance staff</td>
<td>Conduct budget training</td>
<td>Various</td>
<td>Accounting Department conference room</td>
</tr>
<tr>
<td>Role/Staff</td>
<td>Task Description</td>
<td>Dates/Location</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td></td>
</tr>
<tr>
<td>Department managers</td>
<td>Complete and return budget worksheets</td>
<td>August 15, 2008</td>
<td></td>
</tr>
<tr>
<td>Appropriate vice</td>
<td>Review and finalize department budget revisions</td>
<td>August 18–28, 2008</td>
<td></td>
</tr>
<tr>
<td>and administrators</td>
<td></td>
<td>August 29, 2008</td>
<td></td>
</tr>
<tr>
<td>Appropriate vice</td>
<td>Return budget worksheet to the finance department</td>
<td>August 29, 2008</td>
<td></td>
</tr>
<tr>
<td>presidents and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>administrators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive and</td>
<td>Validate or adjust 2009 budget projections; obtain preliminary approval of budget</td>
<td>September 9, 2008</td>
<td></td>
</tr>
<tr>
<td>administrative staff</td>
<td></td>
<td>Meeting Room 1, 1:00–3:00 PM</td>
<td></td>
</tr>
<tr>
<td>Finance staff,</td>
<td>Conduct final review and approval of 2009 budget, review human resource</td>
<td>September 17, 2008</td>
<td></td>
</tr>
<tr>
<td>executive and administrative staff</td>
<td>committee packet</td>
<td>Meeting Room 1, 9:00–11:00 AM</td>
<td></td>
</tr>
<tr>
<td>Finance staff,</td>
<td>Prepare drafts for the human resource committee</td>
<td>First draft (Sept. 12)</td>
<td></td>
</tr>
<tr>
<td>executive and</td>
<td></td>
<td>Final comments (Sept. 14)</td>
<td></td>
</tr>
<tr>
<td>administrative staff</td>
<td></td>
<td>Final draft (Sept. 19)</td>
<td></td>
</tr>
<tr>
<td>(as appropriate for</td>
<td></td>
<td>Mailing date (Sept. 26)</td>
<td></td>
</tr>
<tr>
<td>document and packet</td>
<td></td>
<td>Committee meeting (Oct. 3)</td>
<td></td>
</tr>
<tr>
<td>review)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance staff,</td>
<td>Prepare drafts for the finance committee</td>
<td>First draft (Sept. 30)</td>
<td></td>
</tr>
<tr>
<td>executive and</td>
<td></td>
<td>Final comments (Oct. 2)</td>
<td></td>
</tr>
<tr>
<td>administrative staff</td>
<td></td>
<td>Final draft (Oct. 7)</td>
<td></td>
</tr>
<tr>
<td>(as appropriate for</td>
<td></td>
<td>Mailing date (Oct. 14)</td>
<td></td>
</tr>
<tr>
<td>document and packet</td>
<td></td>
<td>Committee meeting (Oct. 21)</td>
<td></td>
</tr>
<tr>
<td>review)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Presentation of the Budget for Approval

An important concept to note in preparing the budget calendar is the actual and total times required. Ultimately, the preparers and the reviewers must have the budget ready for the designated finance committee meeting that precedes the board meeting at which final approval will be requested.

An interesting question that this often raises is, “how long before the beginning of the new year should the budget be presented to the board for approval?” The answer depends on the particular culture and needs of each organization. Still, there are some guidelines that can help answer the question.

The most common time frame used by health care organizations is to present the budget in the first, second, or third month before the new budget year begins. There are pros and cons to each time frame (see Exhibit 6.3). The organizational culture, in this regard, can be conservative or liberal, from the perspective of the board, senior administrators, or the finance division preparers.

The board may be more or less comfortable having the budget approval under its belt early rather than late so that it can get on with other important business. Or the board might like to know that the budget package it is approving is based on the absolute latest volume information available. The finance preparers, on the other hand, aware of the mountains of data that go into preparation and the amount of work still required to produce reports for the department managers, will opt for the longest time before the new year begins. Finally, senior administrators are usually neutral, opting for the time frame that causes the least disruption for department managers, without denying the wishes of the board.

Budget Calendar Time Frame

Once it is clear when the budget needs to be ready for the finance committee and the board, it is important to determine all the steps that need to be taken to prepare and complete the budget. The RHMC budget calendar presented in Exhibit 6.1 summarizes all the major activities that need to be completed.

To determine when the very first budget steps have to be taken in any given budget year, it is imperative to know three things:

1. The date that the budget must be presented to the board
2. The amount of time needed between budget activities
3. The amount of time needed for each activity
# EXHIBIT 6.3. When Should the Budget Be Presented to the Board of Directors for Approval?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>70 to 90 Days Before the Next Budget Year Begins</strong></td>
<td></td>
</tr>
<tr>
<td>■ There is more time to prepare and deliver the results of the approved budget to the department managers.</td>
<td>■ The data and information used to project volumes are not as current as most of the managers and administrators would like in projecting subsequent-year financials.</td>
</tr>
<tr>
<td>■ There is more time that can be used if the finance committee or the board decides not to approve the budget for any reason.</td>
<td></td>
</tr>
<tr>
<td><strong>40 to 60 Days Before the Next Budget Year Begins</strong></td>
<td></td>
</tr>
<tr>
<td>■ There is a reasonable amount of time available for the finance division to prepare and deliver the results of the approved budget to the department managers.</td>
<td>■ There may not be enough time, before the new year begins, to produce a remedial budget plan and package if the board decides not to approve the budget.</td>
</tr>
<tr>
<td>■ The data and information used to prepare the budget, particularly the volumes, are appropriately current, yet not too stale.</td>
<td></td>
</tr>
<tr>
<td><strong>10 to 30 Days Before the Next Budget Year Begins</strong></td>
<td></td>
</tr>
<tr>
<td>■ The data and information used to prepare the budget, particularly the volumes, are the most current available.</td>
<td>■ There is no time remaining to produce a remedial budget for the board before the new year begins if the proposed budget is rejected.</td>
</tr>
<tr>
<td>■ There may be not enough time to prepare and deliver the results of the approved budget to the department managers before the new year begins.</td>
<td></td>
</tr>
</tbody>
</table>
A key concept in budget timetable preparation is acknowledging the date the budget is needed and then calculating backward from that date. In the case of RHMC, whose fiscal year ends December 31, the key dates are determined counting backward from the month in which the board wants to approve the budget. At RHMC, there is a tradition of going to the board for approval during the October finance committee and board cycle. There is a practical reason for this. At RHMC, the board and its committees meet only every other month, in even-numbered months (February, April, June, August, October, and December). Therefore, the only possible choice for this organization is October or December, and the December time frame does not afford enough time to prepare the budget results after board approval.

The board of a health care organization may be constituted to meet every month, every two months (as at RHMC), or as infrequently as every three months. Again, it depends on the organization’s needs and culture. For a board that meets monthly, the likely approval point is the November meeting, which has the most balanced set of pros and cons. It is also possible for a board that meets every other month to set its schedule to the odd-numbered months (January, March, May, July, September, and November), which would allow the organization to use the more practical November meeting for presentation of the budget. Finally, it is possible for the board and finance committee to hold a special meeting once a year, in November, with an agenda devoted only to the budget, if they so choose.

**Budget Calendar Steps**

Once the end date is known and the start date for all the designated budget activities have been worked out, it is important to know there is a definite order of activity to be followed so as to produce the best possible budget results. Certain activities must be performed before others. To proceed, several budget steps must be accomplished in the kickoff month of June. The calendar lists these opening-month activities in June:

- June 1: Kickoff meeting for volume projections (hold meeting)
- June 26: Approval of projected 2008 and budgeted 2009 admission, length of stay, and patient days by service
- Also June 26: Approval of projected 2008 and budgeted 2009 projected outpatient trends by ancillary services (hold meeting)

These activities are discussed later in this chapter.
**VOLUME ISSUES**

Many activities are listed on the budget calendar. The most important one is to determine projected and budgeted inpatient and outpatient volume. Absolutely no other projection is as crucial to the overall budget outcome as volume. The volumes drive three of the four major financial elements of the budget: gross revenues (along with the master price list), net revenues (along with the payer mix and reimbursement rates), and variable expenses. The only major financial element not driven by volumes is fixed expenses.

Several methods can be used to budget volumes in a health care institution: historical trends, demographic changes, new services, physician issues and inputs, and wishful thinking.

**Historical Perspective**

The most common method used to project and budget volume is to review the current volumes and those in the recent past (say, the previous two or three years) and extend that trend line into the future. This forecasting can be done through regression analysis. Although this is the most common method used by health care institutions, it is fraught with danger. As they say in mutual fund advertising, past results are no guarantee of future earnings. Nothing that happened in the past (even just last month) may have any bearing on the future. It is important to be aware of past volume, but the organization also needs to include many other factors in its analysis—demographic changes, new services, physician inputs—to be confident that the budgeted volumes have a reasonable chance of being attained.

**Demographic Changes**

Adding any known or suspected demographic changes to the trend in historical volume contributes significantly to refining the validity of the budget. It is imperative that the organization be aware of population change in its service areas. This is necessary to determine current and projected community needs and evaluate which, if any, programs must be expanded, contracted, established, or closed.

Demographic changes can have wide-ranging impact on volume and the success or failure of various program offerings. For example, let’s say that a real estate developer has just bought up a 1,000-acre tract of farmland in the organization’s service area with the express intent of
building two thousand single-family housing units meant to be marketed to young, growing families. It is important for the organization to be aware of this development. It can then attempt to determine inpatient and outpatient volume increases that may accrue to pediatrics, obstetrics, and labor room services and budget accordingly.

An example of a demographic change that could decrease volume is closure of a major manufacturing plant in town. The health care organization, which may have come to rely on the volume and revenue generated from plant employees, now has to downsize services to reflect possible reduction in the area population. Any and all known demographic changes should be reflected in short-term budgeting. It is essential that the organization employ someone to monitor these shifts and report them to the administration and the finance staff promptly. This function is usually the responsibility of the planning and marketing departments.

**New Services**

Another set of major items needing consideration alongside the historical perspective are volumes for any new services or programs, such as diabetes, sickle cell anemia, or chest pain clinics, that the organization has planned to add in the upcoming budget year. For example, adding an MRI system is supposed to produce new volume for the radiology department. Because most new services are required to present a pro forma projection of profit and loss before approval of the service, the volume will be available to add to the budget. In reviewing the pro forma for the MRI in Chapter One, it was shown that volume projections are the critical driver of revenues and expenses. Essential evaluation was performed to determine the most likely volume projection. This is necessary for any new service proposed and accepted.

**Physician Issues and Input**

Another element crucial to successful volume budgeting is awareness of current physician satisfaction and any issues that may be affecting use of services. All patient volumes are a function of physician referral to the health care organization. Physicians are, by their nature, analytical and skeptical. Their long years of training and their responsibility for a patient’s life or death make them very demanding. They want the health care organization to be highly efficient and give them the latest state-of-the-art equipment so they can provide the highest level of patient care.
Physician issues can often complicate completion of the operating budget. It is important for the administration to constantly monitor the state of employed or affiliated physician office practices for any demographic, managed care, or structural changes that could have an impact on the ability of the physician to continue a former referral pattern to the organization. In addition, many physicians split their practice between two or more health care providers. It is important for the organization to know which physicians are splitters. Because they often have to drive between their practices, which can take a lot of time and effort, some of these physicians eventually decide to give it up. It is a great advantage for an organization to be the recipient of the splitter’s full-time attention. This could have a major positive effect on the budget year volume. Conversely, should a competitor organization get all the business, the budget volume would have to be adjusted downward.

Finally, in the past few years, many physicians have decided to go into competition with the hospitals at which they practiced. This was particularly true of surgeons and radiologists, who opened their own for-profit ambulatory surgical centers and freestanding imaging services. At any hospital where this activity takes place, it is imperative that the volume changes (usually negative) get properly incorporated into the budget. More important, the hospital must have a good idea if any of its physicians are planning to open a new and competitive service before final plans are made. Doing so allows the hospital to work with its physicians on alternative models, such as joint ventures, which would allow for different volume and financial outcomes.

**Wishful Thinking**

A concept that is sometimes used in volume budgeting is wishful thinking. This is often employed as the means to balance a budget that for one reason or another does not come out right the first time. If the budgeted bottom line does not meet board expectations using the techniques just described, wishful thinking may be employed to boost the volumes and revenues accordingly. Unfortunately, because it is not based on any established method, it is unsupportable. However, this fact does not always stop health care administrators from using it. Finance managers and their staff should be ever vigilant in attempting to discourage this form of volume budgeting. If used, it will only delay the inevitable decisions to properly size the institution.
June 1: Volume Kickoff Meeting

With all of this information as a backdrop, the finance division staff assigned to the budget calls a meeting with administrative staff and selected ancillary department managers to discuss upcoming volume issues. The first thing they look at is the trend of historical inpatient and outpatient volumes. The key inpatient volume drivers are admission and length-of-stay statistics, which result in the total number of patient days. The key outpatient driver is usually the number of tests or examinations performed.

During this meeting, the clinical managers and the finance staff review historical trends, discuss the current status, and speculate on the future prospects for volumes. The primary issues are these:

- Any change in physician practices involving physicians currently on active staff
- Any known additional physician practices that may be entering the service area
- Any additional services that may be added based on newly acquired technologies
- Any other change in services that adds or subtracts volume

All of these items are instructive but not definitive. They aid the department manager in projecting next year’s volumes. Still, the administration may well desire a specific set of budgeted volumes to achieve a certain measure of profitability. If all of these items do not equal the desired changes, the managers have to determine additional steps to achieve them. Generally, this means greater marketing and promotion within or outside the service area, more focused managed care negotiation leading to additional patient load or improved level of service, and the results of customer satisfaction in attracting new patients to the institution. All of these issues are discussed and debated during the volume kickoff meeting on June 1. No specific conclusions are drawn, but the meeting sets up a framework for subsequent action.

June 26: Approval of Projected 2008 and Budgeted 2009 Inpatient and Outpatient Volumes

Subsequent to the kickoff meeting, the finance staff holds several one-on-one meetings with various clinical managers to solicit specific feedback regarding where managers believe volume in their departments is
heading. All of this input is incorporated into the analysis presented to the administration during the June 26 budget meeting to approve subsequent period volumes. The finance administrator presents the analysis developed by the staff to the assembled members. The clinical managers’ assumptions are summarized, distilled, and explained at this time.

These assumptions are debated and discussed. Some assumptions may appear to be too high or too low, depending on the assembled members’ knowledge and experience. The administrators are always interested in understanding any new service lines or ideas from physicians that have been projected by their clinical managers. In general, though, the budget assumptions presented by the finance staff are approved. Any changes generated at the meeting are incorporated into the next iteration of the budget package.

Table 6.1 shows the organization’s 2008 projected actual volumes as well as those they are budgeting for 2009 by inpatient unit. Similarly, Table 6.2 illustrates 2008 and 2009 budgeted outpatient visits. This is the result of discussion involving all of the items described.

Overall, the clinical managers, along with the administration, believe that inpatient days will increase 9 percent next year, while outpatient visits will increase 8.3 percent. These volume changes are fully incorporated into gross and net revenue budgets as well as the variable expense budget calculations. The one warning that always emerges from this meeting is that these projections and volumes are subject to change depending on the budgeted operating margins that emerge from using these numbers.

**CAPITAL BUDGETING: JUNE**

While the operating budget time line is being established and moving along to implementation, the capital budget process must also be underway. Because the operating budget bottom line includes depreciation expense, it is essential that the capital budget be completed prior to completion of the operating budget. The capital budget determines the capital equipment to be acquired; buildings to be renovated, built, or leased; amounts to be spent; and the estimated useful life assigned to each of these assets. These elements allow the finance staff to determine the depreciation expense that must be included in the following year. In addition, any approved capital items that have operating revenues or expenses attached need to be added to the operating budget before it is finalized.

<table>
<thead>
<tr>
<th></th>
<th>Admissions</th>
<th></th>
<th>Patient Days</th>
<th></th>
<th>Length of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Beds</td>
<td>2008 Projected</td>
<td>2009 Budget</td>
<td>Variance (%)</td>
<td>2008 Projected</td>
</tr>
<tr>
<td>Medical and surgical</td>
<td>120</td>
<td>2,700</td>
<td>2,800</td>
<td>3.7</td>
<td>13,000</td>
</tr>
<tr>
<td>Intensive care</td>
<td>24</td>
<td>1,800</td>
<td>1,900</td>
<td>5.6</td>
<td>6,500</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>10</td>
<td>600</td>
<td>660</td>
<td>10.0</td>
<td>1,500</td>
</tr>
<tr>
<td>Maternity</td>
<td>24</td>
<td>2,000</td>
<td>2,200</td>
<td>10.0</td>
<td>4,000</td>
</tr>
<tr>
<td>Births</td>
<td>26</td>
<td>1,950</td>
<td>2,145</td>
<td>10.0</td>
<td>3,900</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>20</td>
<td>1,000</td>
<td>1,200</td>
<td>20.0</td>
<td>6,500</td>
</tr>
<tr>
<td>Skilled nursing facility</td>
<td>30</td>
<td>800</td>
<td>840</td>
<td>5.0</td>
<td>8,800</td>
</tr>
<tr>
<td>Totals</td>
<td>254</td>
<td>10,850</td>
<td>11,745</td>
<td>8.2</td>
<td>44,200</td>
</tr>
</tbody>
</table>
In Chapter Three, capital plan development concepts were reviewed in some detail as they relate to the strategic financial plan. The various types of capital assets available for acquisition were discussed in that chapter. During the strategic planning process, the amount of money available for the annual capital budget was determined. Because the funding amounts and sources are already known, the main purpose of the annual capital budget is to identify the specific capital items to be acquired. The problem in almost all health care organizations is deciding which capital projects should be funded. It is a classic question, and there have been few good solutions over the years. The issue is to determine reasonably and efficiently how to allocate scarce resources—money available for capital.

The most common method, past and present, is characterized by decision making in the legendary smoke-filled room. Administrators would get together once a year with a wish list of items requested by department management. The list includes requests from various physicians who spend their time in those particular departments. Despite the

<table>
<thead>
<tr>
<th></th>
<th>2008 Projected</th>
<th>2009 Budget</th>
<th>Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department</td>
<td>19,000</td>
<td>20,000</td>
<td>5.3</td>
</tr>
<tr>
<td>Outpatient surgery</td>
<td>4,500</td>
<td>5,000</td>
<td>11.1</td>
</tr>
<tr>
<td>Same-day surgery</td>
<td>3,700</td>
<td>4,000</td>
<td>8.1</td>
</tr>
<tr>
<td>Observation patients</td>
<td>1,950</td>
<td>2,000</td>
<td>2.6</td>
</tr>
<tr>
<td>Home health services</td>
<td>26,000</td>
<td>30,000</td>
<td>15.4</td>
</tr>
<tr>
<td>Other outpatients</td>
<td>112,000</td>
<td>120,000</td>
<td>7.1</td>
</tr>
<tr>
<td>Totals</td>
<td>167,150</td>
<td>181,000</td>
<td>8.3</td>
</tr>
</tbody>
</table>
amount of money being requested here, financial analysis may not be
performed or required in many hospitals. In general, the administrator
with the most clout, the loudest voice, or the most enthusiastic perfor-
ance may get a pet project approved while worthy projects are
bypassed because of a less than optimal backroom performance by its
administrative champion.

This is not, nor has it ever been, a good situation. Yet it persists,
first, because the powerful have had no incentive to change it and, sec-
ond, because no really good alternative that incorporates financial and
nonfinancial criteria has been presented to the industry. At RHMC, the
finance administrators were tired of the infighting and lack of consis-
tency exhibited at this annual rite of frustration. On the lookout for
a better way to develop and control the capital funding process, they
were recently introduced to a new method of criteria-based capital
budgeting.

In a nutshell, the solutions involve innovative organizational pro-
cesses with supporting quantitative evaluation tools. Criteria-based capital
budgeting aids the health care organization in its need to allocate
capital to maintain state-of-the-art clinical and facilities equipment
while concurrently developing ambulatory facilities, physician networks,
and information technology. It also involves many decision makers
from across the organization as part of an ongoing strategic planning
process. Finally, it allows the organization to objectively evaluate capital
proposals against established criteria and against proposals compet-
ing for the same scarce resources. The steps in the criteria-based capital
budgeting process are as follows:

1. Evaluate decision criteria.
2. Classify proposed expenditures.
3. Collect information.
4. Evaluate proposals.
5. Set strategic priority weights.
6. Calculate value scores.
7. Sort proposals on benefit-cost ratio.

Exhibit 6.4 shows RHMC’s budget calendar with all of these con-
cepts incorporated. In addition, the calendar is designed to run concur-
rently with the operating budget and finish in time to be presented
### EXHIBIT 6.4. *Ridgeland Heights Medical Center 2009 Capital Budget Calendar.*

<table>
<thead>
<tr>
<th>Responsible Parties</th>
<th>Activity</th>
<th>Dates</th>
<th>Meeting Location and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive and administrative staff, finance staff</td>
<td>Validate strategic plan criteria</td>
<td>June 1, 2008</td>
<td>Meeting Room 2, 9:00–10:00 AM</td>
</tr>
<tr>
<td>Proposal reviewers, accounting staff, facilities management information systems management, materials management</td>
<td>Train all staff assigned to review capital proposals</td>
<td>June 10, 2008</td>
<td>Meeting Room 2, 2:00–4:00 PM</td>
</tr>
<tr>
<td>Proposal writers, all department management</td>
<td>Review the capital budgeting software; train all department management on the data elements required for a clean capital budget request</td>
<td>June 13–20, 2008</td>
<td>Meeting Room 2, 3:00–4:00 PM</td>
</tr>
<tr>
<td>Proposal writers, all department management</td>
<td>Allow department managers access to capital budget software upon completion of training</td>
<td>June 20, 2008</td>
<td></td>
</tr>
<tr>
<td>Proposal writers, all department management</td>
<td>Submit 2008 capital budget by department through electronic software located on manager's desktop</td>
<td>July 11, 2008</td>
<td></td>
</tr>
</tbody>
</table>
(Exhibit 6.4. continued)

<table>
<thead>
<tr>
<th>Role</th>
<th>Activity Description</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance staff</td>
<td>Review all capital proposals for completeness of all required information fields</td>
<td>July 12–23, 2008</td>
</tr>
<tr>
<td>Proposal reviewers</td>
<td>Review capital proposals within the established time frames; the review is performed online at the reviewer's desktop</td>
<td>July 24–August 6, 2008 Reviewer's office computer</td>
</tr>
<tr>
<td>Proposal evaluators</td>
<td>Discuss in detail all proposals over $100,000 and train all proposal evaluators</td>
<td>August 11, 2008 Meeting Room 2, 1:30–5:00 PM</td>
</tr>
<tr>
<td>Pool evaluators</td>
<td>Discuss pool proposals</td>
<td>August 12, 2008 Meeting Room 2</td>
</tr>
</tbody>
</table>

Meeting Room 2
Information systems 9:00–10:30 AM
Construction and renovation 10:30 AM–12:00 PM
Patient care 12:30–2:00 PM
Medical technology 2:00–3:30 PM
Market development 3:30–5:00 PM
<table>
<thead>
<tr>
<th>Role</th>
<th>Task Description</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal evaluators</td>
<td>Evaluate proposals online at the reviewer’s desktop</td>
<td>Aug. 12–15, 2008</td>
<td>Evaluator’s office computer</td>
</tr>
<tr>
<td>Pool evaluators</td>
<td>Hold pool consensus meetings</td>
<td>Aug. 22–25, 2008</td>
<td>Meeting Room 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Information systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction and renovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9:00–10:30 AM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10:30 AM – 12:00 PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Patient care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12:30 – 2:00 PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medical technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:00 – 3:30 PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Market development</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3:30 – 5:00 PM</td>
</tr>
<tr>
<td>Proposal evaluators</td>
<td>Hold proposal consensus meeting for all proposals over $100,000</td>
<td>Aug. 25, 2008</td>
<td>Meeting Room 2, 3:00–5:00 PM</td>
</tr>
<tr>
<td>Proposal and pool evaluators</td>
<td>Revise ratings, if necessary, on the reviewer’s desktop</td>
<td>Aug. 26–28, 2008</td>
<td>Evaluator’s office computer</td>
</tr>
<tr>
<td>Proposal evaluators</td>
<td>Discuss results of evaluations; review of the 2008 capital budget for the last time</td>
<td>Sept. 4, 2008</td>
<td>Meeting Room 2, 9:00–10:00 AM</td>
</tr>
</tbody>
</table>
simultaneously. The key characteristic of the budget is incorporation of the key strategic plan criteria. These criteria become the principal drivers of the capital decision process. Rather than decisions based on the gut, in the old smoke-filled rooms, the organization now has a criteria-based capital decision process.

In the case of RHMC, the administration has first to validate its strategic plan criteria. Although an organization with board-approved strategic plan criteria should be making operational decisions on this basis, such is not always the case. Health care organizations often give lip service to the strategic plan without making financial resources available to achieve stated goals. In the criteria-based capital decision process, the strategic plan criteria serve as the foundation for ultimate outcomes: which capital assets are funded.

The remaining steps in the June capital budget calendar involve training various staff, both technical and administrative, on their roles. If the individual is a proposal reviewer, for instance, she is trained to ensure that each capital proposal contains all of the data required before it can be moved on to the proposal evaluator. The proposal reviewer cares about the technical aspects of the capital request, such as whether it involves certain tasks:

- It requires additional consideration (electrical, facilities).
- It needs special computer hookups or special training for the technical staff (information technology).
- It necessitates special negotiations on price or contract terms (materials management).
- It creates special funding requirements (accounting).

The proposal evaluators examine each of the proposals, how it stands up on its own merits, how it compares to all the other projects on a criteria basis, and whether the organization is well served in its overall commitment to the strategic plan.

Both groups are trained in the month of June on use of the software that resides on their desktop personal computers. The software itself is on a computer server attached to the organization’s local area network (LAN). Every individual involved in the process has access to the LAN. Using this software at RHMC creates a highly efficient situation. Everyone has access to the same timely information. Because the process eliminates paper, all proposals are consistently presented to the
evaluator, are easy for the accounting staff to administer, and facilitate ongoing updating of each project by the proposal writer and the evaluator.

As the month of June moves forward, these initial steps in the capital budget are performed. In later months, the meat of the capital budgeting process becomes more evident.

The training steps allow the finance staff to teach department managers how to input all the required elements for each capital request. Upon completion of this training in June, the managers are given access to the actual software on their PCs. They are then expected to submit all of their capital budgets back to the finance staff by July 11.

ACCOUNTING AND FINANCE DEPARTMENT RESPONSIBILITIES

Lost in the shuffle of all the fundamental issues that have been reported is some of the routine business performed by the accounting and finance department. In many health care organizations (as highlighted at the end of Chapter Five), the accounting department is responsible for preparing an accurate and timely financial statement. In addition, it is also responsible for preparing and paying all the employees through the payroll function and all the trade vendors through the accounts payable function. It is also accountable for all financial analyses (which usually include the cost accounting function), maintenance of the price list (from which gross revenue is determined), and the reimbursement function (preparation of the Medicare cost report) and the budget. Here is a summary of the major responsibilities of the accounting department:

**General Accounting**

- Capture of all of the organization’s financial transactions during each accounting period (usually monthly), carried out through use of paper accounting transactions or through an electronic interface to subsidiary ledgers and journals
- Production of accurate, timely, organizationwide financial statements
- Collection of information and completion and submission of all IRS tax returns, whether for-profit or not-for-profit returns
Preparation and facilitation of financial analysis for the external auditors

Facilitation of all appropriate internal auditing functions

**Accounts Payable**

- Timely collection of all invoices from trade vendors
- Three-way matching of purchase orders, receiving dock receipts, and invoices to validate that all goods were authorized for purchase, were received, and are being billed by the vendor correctly
- Timely payment to trade vendors within terms of payment, or sooner if a discount for prompt payment is being granted

**Payroll**

- Collection of all payroll hours being requested and authorized for payment during each of the organization’s payroll periods; this may be carried out through paper time cards or electronic time and attendance systems
- Validation and verification of all payroll hours, determining that all payroll policies and procedures were applied correctly by all of the department managers
- Timely payment of salaries and wages to employees
- Timely payment to pension plans

**Budgeting**

- Development and timely completion of the organization’s operating, capital, and cash budgets
- Compilation and submission of all board-level budget packages

**Strategic Financial Planning**

- Development of the five-year strategic financial plan
- Development of the five-year capital needs analysis and plan
**Reimbursement**

- Completion of Medicare and Medicaid annual cost reports
- Coordination of all government audits and reports, including census reports
- Modeling of all new and revised managed care contracts, to improve negotiation
- Monthly analysis of contractual adjustments
- Maintenance of highly accurate net revenue calculations for financial analysis
- Maintenance of the chargemaster (price list) and annual analysis of potential and actual price increase

**Financial Analysis and Decision Support**

- Development and maintenance of the cost accounting system, including determination of variable and fixed costs and direct and indirect costs
- Maintenance and reporting from the decision support system; this allows operating managers to have the financial information needed to make proper decisions
- Development of all pro forma financial analyses
- Development of all other financial analyses
- Coordination in gathering all data required by various health care associations and rating agencies (American Hospital Association, state and local health care associations, Standard & Poor’s, Moody’s, Fitch)
- Coordination in gathering all data required by the selected benchmarking service (Ingenix, Solucient, Premier, Data Advantage) for reporting and analysis

**Other Responsibilities**

- Processing of property and casualty insurance programs
- Monitoring of the pension plan and program; accounting coordination with the actuary assigned to the plan
It is hard to say which of the items on the list are most important, but it is no understatement to suggest that being late with the payroll checks, even by ten minutes, is the quickest way to lose the confidence of the entire organization. This would be true from the chief executive officer all the way down to the nonskilled staff. Missing a payroll deadline causes all kinds of trouble between the organization and its employees. Even when there is clear and direct communication about the cause of the problem, rumors begin to run rampant. It is vital not to miss a payroll. There are only a few reasons the payroll would ever be late, and two of them are somewhat common. First, the computer may break down. This is not likely, but it is possible. Payroll systems are extremely mature and stable. They were one of the first applications designed for computers more than fifty years ago. Still, anything can happen. Good management suggests building redundancy into computerized systems. This could mean paying for a duplicate system and keeping it available if and when the initial system goes down. Or it could mean creating manual downtime procedures, which are typically less expensive than an automated solution but cause more work in the event they are needed.

The second (unfortunately) common reason for ever being late on payroll is if an organization runs out of money. It has been known to happen in some organizations having either temporary or long-term financial difficulty. This is a much more problematic situation than just having the computer break down.

Not paying employees on time has numerous detrimental impacts on the organization as well as the employees. Most employees count on their paychecks to meet basic needs for themselves and their families, such as paying for rent, food, clothing, and transportation. If their paychecks are not available as expected, particularly if they already know that the organization is having financial difficulties, they begin to question the long-term viability of the organization. This inevitably leads to the staff looking for new jobs in other organizations, which begins a negative cycle of staff defection that weakens an already shaky situation.

Good management in this situation suggests that the payroll is always the first payment priority. This seems obvious, but as a practical matter, it is not always easy. For example, though it is possible to delay payment to trade vendors that supply the organization with medical and surgical supplies, there are times when those vendors demand payment or threaten not to ship supplies that may be needed for surgical cases on the schedule for tomorrow.
The other situation that a financially stressed organization should never allow itself to become involved in is not paying the government for withheld payroll taxes. It must always be remembered in collecting these payroll taxes for various government agencies, the organization is acting as the government’s agent. These funds cannot be used to pay for anything else, including medical supplies or the payroll itself. Payroll taxes are usually owed to the government within two to three days of payroll distribution. Penalties and interest are assessed immediately following that time period. Also, it is important to note that the administrators and any other staff who are responsible for making decisions regarding when to pay the payroll taxes are personally liable for the taxes, penalties, and interest if the organization is unable to satisfy the debt. This is true even if the organization or the individuals successfully discharge other debts in a bankruptcy proceeding.

**JUNE FINANCE COMMITTEE SPECIAL AGENDA ITEMS**

The June meeting of the finance committee provides another opportunity for management to present important information.

**Human Resource Report**

There are several reasons for presenting the report of the board-level human resource committee at the June finance committee meeting. Most important is to allow management to present analyses of the level of local and regional salaries and employee fringe benefits to the committee, which is charged with making recommendations and approving annual changes in these areas.

It is important to have goals related to this requirement. There are significant issues surrounding recruitment and retention policies. RHMC strives to maintain a certain level of compensation and benefits compared to the rest of the region. It is able to make this decision by accessing a variety of local and regional health care associations and labor bureaus from other industries. It is then able to determine whether or not it is maintaining the desired percentile compensation level.

The human resource committee and human resource administrator are aware that it is in the organization’s best interest to maintain a competitive position in the marketplace. In fact, many human resource professionals would prefer that their organization take an aggressive position in the marketplace, especially if it can be afforded. This allows
the organization to recruit the best potential candidates, which helps reduce the turnover rate, lower expenditures for recruitment advertising, and improve overall employee morale.

The report given to the human resource committee in June is preliminary. It allows the committee to understand the current levels in the marketplace and ask any relevant questions. Committee members come together again in September to be asked to approve the levels recommended by management in final development of the budget.

**Pension Status and Actuary Report Review**

Once a year, RHMC’s management gives the finance committee an update on the organization’s pension plan. This is important because the board has a fiduciary responsibility to its employees to maintain the pension funds in a sound manner while ensuring that the funds earn a return appropriate to the pension portfolio’s risk. The finance committee is interested in whether or not the market value of the pension assets continues to exceed the present value of all accrued benefits. So long as this is the case, the organization is not in an underfunded position with respect to its defined benefit pension plan.

Exhibit 6.5 highlights the items of major interest to the finance committee. Presented in this format every year, the report helps the finance committee understand various aspects of pension obligations, including minimum and maximum funding requirements established by the federal government’s ERISA laws (established in the Employee Retirement Income Security Act of 1974). It also includes the actuarially determined net periodic pension costs to be recorded on the income statement, as stipulated by Statement of Financial Accounting Standards (SFAS) number 87 as well as the present value of accumulated plan benefits (stipulated under SFAS number 35).

Because the ERISA and SFAS methodologies are different, technically complex, complicated, and required, the annual report to the finance committee is meant to be a simplified analysis. RHMC’s finance officer verbally reports on some of the key assumptions used as input by the actuary to produce the results. Some of the key assumptions are the discount rate used, the expected rate of return on the plan’s investments, and the expected rate of compensation increases.

In this case, the finance committee is pleased that the annual pension report shows an increase in assets over accrued benefits. The members are additionally pleased to learn that according to the
EXHIBIT 6.5.  
**RHMC Pension Status: 2008 Actuarial Report.**

The report of our actuarial consultant was updated effective January 1, 2008, for the defined benefit plan. The following key items are highlighted compared to the prior year’s results.

1. Market value of assets increased by $3 million, from $23 million on 1/1/07 to $26 million on 1/1/08.

2. Present value of all accrued benefits increased by $1 million, from $20 million to $21 million. The present value of all accrued benefits breaks down as follows:

<table>
<thead>
<tr>
<th></th>
<th>1/1/07</th>
<th>1/1/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active vested employees</td>
<td>$7,000,000</td>
<td>$7,400,000</td>
</tr>
<tr>
<td>Active nonvested employees</td>
<td>$1,000,000</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Retired employees</td>
<td>$8,000,000</td>
<td>$8,300,000</td>
</tr>
<tr>
<td>Terminated vested employees</td>
<td>$4,000,000</td>
<td>$4,200,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$20,000,000</td>
<td>$21,000,000</td>
</tr>
</tbody>
</table>

3. Assets over accrued benefits increased by $2 million, from $7 million to $9 million.

4. Normal cost (defined as the amount that is required to fund the benefits expected to be earned in the current year) increased by $40,000, from $680,000 to $720,000.

5. Normal cost as a percentage of compensation decreased by 0.1 percent, from 2.4 percent to 2.3 percent.

6. The minimum required contributions for 2006, 2007, and 2008, are $400,000, $700,000, and $0.

7. Actual beneficiary payments in 2007 were $800,000. Expected beneficiary payments in 2008 are $840,000.

8. Pension expense for the accounting years ending December 31, 2007 and 2008, were $600,000 and $750,000, respectively.
previous funding level and interest income earnings over the past year, they will not be required to pay any cash into the pension fund next year.

**PRACTICAL TIPS**

- Be sure to develop your budget calendar so that it can be put in the hands of the operating managers at least thirty days before the start of your new fiscal year.
- Use the volume methods that have the greatest opportunity for the organization to develop a reasonable projection. In no event should wishful thinking be employed.
- Always use the criteria-based capital budget method rather than the politically motivated traditional capital budget. It is much more effective, has a better outcome, and is less stressful for everyone involved in the process.
- Always pay your payroll and payroll taxes on time.

**DISCUSSION QUESTIONS AND ACTIVITIES**

1. Discuss the most important steps in the operating budget process. Why are these more important than other steps? What impacts do they have on the timeliness, effectiveness, and quality of the budget?

2. Discuss the most important steps in the capital budget process. Why are these more important than other steps? What impacts do they have on the timeliness, effectiveness, and quality of the budget?

3. Compare the different responsibilities of the accounting and finance departments, and determine if there are any responsibilities that can be eliminated or any that may need to be added.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Determine which operating budget method is better—top-down or bottom-up

■ Understand the general concepts in development of the gross charges (revenues) budget and the contractual adjustments budgeted dollars to be applied against the gross charges

■ Discuss the importance of the staffing budget and the elements of full-time equivalent (FTE) development

■ Recognize the major elements of fringe benefit expenses and the concepts for developing budget dollars for them

■ Determine the major elements that need to be included in a capital budget request form in order to comply with criteria-based capital budget policies

■ Recite major elements of Medicare’s fraud and abuse statutes

■ Discuss the key elements and major need for a hospital corporate compliance plan

■ Understand the major reasons for the existence of the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) and its impact on hospital finances and operations
“Dad, you were right. This is a long story. Is it over yet?” asks the reasonably perplexed eight-year-old Susie.

Sam takes a deep breath. He wants to explain the story in the simplest of terms but is apparently having little success at the moment. All he can say is, “Oh, come on, honey. This story is just getting interesting. There’s so much more to it than I’ve already told you.”

She smiles—such a cute kid.

“I’m glad you’ve been telling this to me as a bedtime story. It sure has helped me get to sleep a lot easier. I think I understand some of what you’ve told me. I guess I never knew how your place made money. I didn’t know that your company had to make money so you could get paid. That’s pretty cool. But I still don’t understand why your company doesn’t get paid all the money you charge to people when you take care of them. I know that when we go to the supermarket, we have to pay the lady at the checkout counter for the food and stuff we have in our cart.”

“You’re so right, and that’s pretty perceptive of you.”

“Dad, what does ‘perceptive’ mean?”

“Oh, never mind; don’t worry about that. In any case, I do have to pay the lady at the checkout counter the amount of money that she rang up on her cash register. But what you’re forgetting is that some of the things we bought were already discounted by the store or by the people who made the food and gave it to the store to sell. My company is doing the same thing. We’re agreeing to discount our services to the people who are paying for them—the insurance companies. The big difference between the supermarket and us is that we don’t have any shelves to put our discounted prices on. Another difference is that we may only give those discounts to certain people who have insurance from companies that want to make a deal with us, not to everybody. It’s kind of like people in the supermarket who have coupons. They pay less than other people for the exact same food because they have coupons.”

“I think I get some of it. But from the way you’ve been telling the story, it still seems unfair. It sounds like they just want to pay you a lot less than you want from them,” says the still perplexed youngster.
“Yeah, it’s true that some companies want to pay us less. But that’s probably OK for our family. You see, part of the reason that my company pays me is to make sure that they know how much money we can discount and still have a certain amount left over at the end of the year.”

“Well, I sure am glad that you like doing it, because I’m not sure it sounds like a lot of fun to me.”

Warm breezes waft off Lake Michigan, blowing thin, wispy clouds against a high, light blue sky. Sunbathers and sunburners are lying all across a hot, white sandy beach. Summer is in full swing in the northern climes. Young and old alike enjoy the nice change in the weather. They know that it is fleeting. Winter is always just around the corner, waiting to bring its arctic blasts down on the town.

So there is always great enjoyment this time of the year. Schools are out, temperatures are in the eighties, and for many people, vacations have begun or will begin soon. The reality rarely meets or exceeds expectations, but the psychology of summer is having its dazzling effect. People around town are smiling easily; the pace of life has slowed as many stop to enjoy the weather. That is, for all but the finance staff at Ridgeland Heights Medical Center.

BUDGET PREPARATION: THE MIDDLE MONTHS

July is the month when the budget becomes the top priority of the accounting and finance department. June was devoted to preliminary work, but July is when the heavy lifting begins. There are several critical meetings scheduled that shape the financial prognostications for the upcoming year. The July operating budget calendar is abundant with weighty issues:

July 1: Issue 2009 operating budget calendar
July 11: Compute gross revenues and contractual adjustments
July 14: Review salary and nonsalary assumptions (hold meeting)
July 15: Review gross revenues and contractual adjustments and validate payer mix (hold meeting)
July 18: Review 2009 budgeted income statement, determine price increase targets, and revise salary and nonsalary assumptions (hold meeting)
July 25: Issue 2008 projected and 2009 budgeted worksheets to department managers

All of these steps require a great deal of effort, and the finance staff are prepared to perform their tasks with rigor and vigor.

**Which Is Better: Top-Down or Bottom-Up Budgeting?**

As the organization continues its annual budget process, an age-old question is once again revived: Which budgeting technique is better for the organization, top-down or bottom-up? The answer usually depends on who is responding and the stake he or she has in it. It is a highly charged issue, of particular concern to department managers who have to live with the consequences of the answer.

Top-down budgeting is defined as revenues and expense levels imposed by the administration and directed down to the manager who is expected to achieve them. Bottom-up budgeting is defined as revenue and expense levels determined by each department manager and aggregated to establish the organizationwide budget.

There are several implications to using either technique. Exhibit 7.1 highlights the pros and cons of each.

One key issue is control: Who’s got it, and how are they going to exercise it? As is common in any hierarchical organization, control is held at the top. But in this case, control is not really the most important issue. The really big issue is information management. Who’s got it, and how is it going to be used? The overriding problem in budget management is achieving a targeted operating margin that is acceptable to the finance committee and the board. When department managers are given control of their own departmental budgets, they often have no good way of knowing what departmental contribution is needed to achieve the financial targets.

Now the next logical question is, Why doesn’t the administration tell each department what bottom-line contribution is needed and then just let the managers achieve it? The answer is perhaps obvious: if the administrators give managers this information, they are effectively mandating the bottom line, which is once again top-down budgeting. It is a circular argument. Although managers want to be able to control their departmental budgeted volumes, revenues, and expenses, allowing them to do so potentially compromises the bottom line.

Another possible problem arises when managers are given control of producing their budget assumptions, particularly volume. Managers
are hardworking, diligent, loyal, and smart. Like all human beings, they are also focused on their own welfare. Whether or not they are permitted to participate in an incentive compensation plan, they all have an annual review of their performance for the purpose of determining their annual pay raise. The managers are always evaluated against established goals. Obviously, they will attempt to establish goals that are easily achievable to maximize their accomplishments during the annual review. Therefore, budgeted volumes, which drive budgeted revenues, that are established by managers are typically not aggressive. This

<table>
<thead>
<tr>
<th>EXHIBIT 7.1. Pros and Cons of Top-Down and Bottom-Up Budgeting.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top-Down Budgeting</strong></td>
</tr>
<tr>
<td><strong>Pros</strong></td>
</tr>
<tr>
<td>Administration maintains control of the assumptions that determine the targeted operating margin.</td>
</tr>
<tr>
<td>There is less chance of the managers needing to redo their work to “balance the budget” as the assumptions change.</td>
</tr>
<tr>
<td><strong>Bottom-Up Budgeting</strong></td>
</tr>
<tr>
<td><strong>Pros</strong></td>
</tr>
<tr>
<td>Managers who set their own budgets will be more invested in the process and the future outcomes.</td>
</tr>
<tr>
<td>The budgeted volumes may be closer to reality, causing less budget variance in the upcoming year.</td>
</tr>
</tbody>
</table>
generally makes it more difficult for the formulated budget to produce the targeted volumes required by the board.

So what’s the answer? To minimize manager frustration from being asked to change their own assumptions repeatedly throughout the budget process, the top-down technique is favored. Top-down budgeting also measurably shortens the process by six to eight weeks because it minimizes rework caused by unusable volume and revenue assumptions. Managers are often willing to accept and cooperate in the top-down budgeting process if the pros and cons are explained to them, the overall hospital volume concepts are understood up front, and the ongoing budget process is constantly communicated. They may still not like it, but they learn to live with it.

**July 1: Issuing the Budget Calendar**

Although there was some considerable amount of preliminary work performed in June facilitated by the finance staff with input from many of the clinical managers, the budget calendar is first issued on July 1. As explained in some detail in Chapter Six, the purpose of the budget calendar is to create expectations of the duration and timing of the project for all participants. This is done by establishing meeting times and places for the various get-togethers that are required for good communication on some complicated and demanding issues. The calendar sets the agenda for the next four months’ work.

**July 11: Computation of Gross Revenues and Contractual Adjustments**

Between June 28 and July 11, one of the key steps in preparing and executing a valid budget process is being performed in the back room of the finance department by some of its most valuable members, the financial analysts. The current and subsequent years’ annual gross revenues and contractual adjustments are being calculated on the basis of the volumes approved at the June 26 budget meeting. At RHMC, the finance staff members with expertise in these areas are determining volume, gross revenue, and net reimbursement.

This determination is built on many assumptions. In addition to the inpatient and outpatient volume, other items must be projected to develop a valid and viable revenue budget. First, there is the detailed payer mix, highlighting many of the various clinical service areas and
the inpatient and outpatient service side. Second, the payment levels for the entire payer mix are projected. Every conceivable and known change in payment level is essential for this process to succeed. The financial analyst may need to rely on other individuals in the organization for help. For example, it is now common to have a full-time employee negotiating managed care contracts. This person has to make a best guess on the discount levels projected for the upcoming year, as the basis on which the organization develops the net revenue budget. Third, gross revenues are broken down by inpatient and outpatient services. This is required to develop projected contractual adjustments. As always, the calculation for contractual adjustments is gross revenue minus net revenue (or expected payment).

To determine the actual contractual adjustments, it is necessary to know gross revenue, segregated into actionable categories.

The organization takes the various financial and statistical elements available and arranges them into usable criteria for analysis. The output of this extensive analysis is a summary sheet, used by the finance administrator at the budget meeting scheduled with the entire administration for July 18. Table 7.1 shows the summary gross revenue, contractual adjustment, and net revenue worksheet.

On the worksheet, we see these net revenues (gross revenue minus contractual allowance), across the same five column headings of actual, budget, and projected periods:

- 2007 actual: $95 million
- 2008 budget: $94 million
- June 2008 actual: $50.07 million
- 2008 projected: $98.55 million
- 2009 budget: $98 million

These are some of the key features of the worksheet:

- Total gross revenues segregated by inpatient and outpatient areas, with no price increase
- Total contractual dollars projected for the upcoming budget year
- Total contractual dollars as a percentage of gross revenue for prior years, projected current year, and upcoming budget year
- Net revenues projected for the current year and budgeted for the upcoming year
### TABLE 7.1. Revenue and Contractual Analysis, Ridgeland Heights Medical Center, 2008 Projected and 2009 Budget.

<table>
<thead>
<tr>
<th>Gross Revenue ($ thousands)</th>
<th>Share of Gross Revenues (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPATIENT</strong></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>36,000</td>
</tr>
<tr>
<td>Medicaid</td>
<td>2,000</td>
</tr>
<tr>
<td>Managed care</td>
<td>30,000</td>
</tr>
<tr>
<td>All other</td>
<td>6,000</td>
</tr>
<tr>
<td>Total</td>
<td>74,000</td>
</tr>
<tr>
<td><strong>OUTPATIENT</strong></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>23,000</td>
</tr>
<tr>
<td>Medicaid</td>
<td>1,000</td>
</tr>
<tr>
<td>Managed care</td>
<td>36,000</td>
</tr>
<tr>
<td>All other</td>
<td>9,000</td>
</tr>
<tr>
<td>Total</td>
<td>69,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>59,000</td>
</tr>
<tr>
<td>Medicaid</td>
<td>3,000</td>
</tr>
<tr>
<td>Managed care</td>
<td>66,000</td>
</tr>
<tr>
<td>All other</td>
<td>15,000</td>
</tr>
<tr>
<td>Total</td>
<td>143,000</td>
</tr>
</tbody>
</table>

Gross revenues ($ thousands)

*Less: Grand Total Contractual Adjustments ($ thousands)*

Net revenues ($ thousands)

Contractual adjustment as a share of gross revenues (%)
<table>
<thead>
<tr>
<th>Contractual Allowance ($ thousands)</th>
<th>Contractual Adjustment as a Share of Gross Revenues (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2007</strong> Actual 2008 Budget</td>
<td><strong>June 2008 Actual 2008 Projected 2009 Budget</strong></td>
</tr>
<tr>
<td>16,500  21,000  10,000  19,500  24,000</td>
<td>45.8  55.3  52.6  50.6  60.0</td>
</tr>
<tr>
<td>1,500  1,500  800  1,500  1,800</td>
<td>75.0  75.0  76.2  75.0  75.0</td>
</tr>
<tr>
<td>8,200  10,700  5,200  11,000  13,500</td>
<td>27.3  34.0  32.1  33.7  39.7</td>
</tr>
<tr>
<td>1,200  2,000  900  1,700  2,000</td>
<td>20.0  30.8  27.3  25.4  26.3</td>
</tr>
<tr>
<td>27,400  35,200  16,900  33,700  41,300</td>
<td>37.0  45.1  42.7  42.2  49.2</td>
</tr>
<tr>
<td><strong>2007</strong> Actual 2008 Budget</td>
<td><strong>June 2008 Actual 2008 Projected 2009 Budget</strong></td>
</tr>
<tr>
<td>12,000  14,500  7,300  15,000  19,000</td>
<td>52.2  55.8  56.2  57.3  63.3</td>
</tr>
<tr>
<td>800  800  400  800  800</td>
<td>80.0  80.0  76.9  76.2  80.0</td>
</tr>
<tr>
<td>7,000  8,500  4,000  8,700  10,000</td>
<td>19.4  22.4  20.0  22.3  23.8</td>
</tr>
<tr>
<td>800  1,000  400  800  900</td>
<td>8.9  9.1  6.7  7.0  6.9</td>
</tr>
<tr>
<td>20,600  24,800  12,100  25,300  30,700</td>
<td>29.9  32.6  30.6  32.5  35.7</td>
</tr>
<tr>
<td><strong>2007</strong> Actual 2008 Budget</td>
<td><strong>June 2008 Actual 2008 Projected 2009 Budget</strong></td>
</tr>
<tr>
<td>28,500  35,500  17,300  34,500  43,000</td>
<td>48.3  55.5  54.1  53.3  61.4</td>
</tr>
<tr>
<td>2,300  2,300  1,200  2,300  2,600</td>
<td>76.7  76.7  76.4  75.4  76.5</td>
</tr>
<tr>
<td>15,200  19,200  9,200  19,700  23,500</td>
<td>23.0  27.6  25.4  27.5  30.9</td>
</tr>
<tr>
<td>2,000  3,000  1,300  2,500  2,900</td>
<td>13.3  17.1  14.0  13.7  14.1</td>
</tr>
<tr>
<td>48,000  60,000  29,000  59,000  72,000</td>
<td>33.6  39.0  36.7  37.4  42.4</td>
</tr>
<tr>
<td><strong>2007</strong> Actual 2008 Budget</td>
<td><strong>June 2008 Actual 2008 Projected 2009 Budget</strong></td>
</tr>
<tr>
<td>143,000  154,000  79,070  157,550  170,000</td>
<td></td>
</tr>
<tr>
<td>48,000  60,000  29,000  59,000  72,000</td>
<td></td>
</tr>
<tr>
<td>95,000  94,000  50,070  98,550  98,000</td>
<td></td>
</tr>
<tr>
<td>33.6  39.0  36.7  37.4  42.4</td>
<td></td>
</tr>
</tbody>
</table>
This is a significant worksheet. A considerable amount of time is devoted to reviewing this worksheet both at the July 15 meeting with the finance administrators and then at the July 18 meeting when the finance administrators present it to the assembled administration.

**July 14: Review of Salary and Nonsalary Assumptions**

Although the organization’s reimbursement specialist is concentrating significant time and effort on the gross and net revenue calculations, a couple of other finance members are working on the expense side of the equation. At this administrative meeting, the only issues that are discussed involve projecting upcoming expense increases. This is somewhat similar to certain of the techniques used during the strategic financial planning meetings held in March (see Chapter Three). The finance administrators use this meeting to facilitate a series of discussions on four specific expense topics so as to be able to complete the preliminary budget:

1. Full-time equivalent (FTE) level
2. Wage and salary increase or decrease
3. Fringe benefit level and increase or decrease
4. Controllable nonsalary expense change

**Full-Time Equivalent Level** FTE level is always the most important part of the meeting. Health care is an extremely labor-intensive industry. Labor costs—defined as all salaries, wages, contracted labor, and fringe benefits—typically make up between 40 and 55 percent of all expenses in a typical health care organization. On the hospital side of the industry, some providers have as much as 60 percent of their expenses tied up in labor costs, while others may spend as little as 36 percent on the same set of expenses.

The most important driver of labor costs is the amount of staff used. Labor costs are a product of pay rate times the number of people employed. Each factor has a significant impact on the total salary and fringe benefit costs. But of the two, only the number of employees is controllable by management. Pay rate is almost always a function of labor market conditions. As an employer, the health care organization has to pay the going rate in the marketplace for its employees, or else it will not be able to recruit or retain staff. Management has greater control over the number and mix of staff in every department of the organization. Mix is a considerable driver of overall salary expense.
Because labor costs are so substantial, it is of paramount importance that the organization attempt to size its workforce properly so as to maximize results. In health care, the challenge is to create the best possible patient experience coupled with excellent clinical outcomes without overspending for those services. This spending objective is continuously challenged by the clinical staff (spearheaded by the nursing administration) and often provoked by many of the organization’s staff physicians.

Determining the right staff size is not easy. Health care, like other industries, has adopted benchmarking techniques in the arsenal of analysis tools. In health care, however, benchmarking FTEs is fraught with peril. As was already explored in Chapter Three, FTEs per adjusted patient day, the most common industry benchmark, is highly susceptible to manipulation and produces a poor benchmark. The alternative benchmark—salaries, wages, and fringe benefits as a percentage of total revenues—is a better measure of productivity. To use it in the annual budget analysis, however, the dollar value of the projected FTEs must be converted into this percentage. This can be easily accomplished, and at RHMC, the percentages associated with alternative models are always presented.

During this meeting, prior-year trends of total FTEs, FTEs per adjusted patient day, and salaries, wages, and fringe benefits as a percentage of total revenues are presented, along with the values associated with the current projected year and the upcoming budget year. These organization totals are supplemented by detailed departmental information. This allows the administrative reviewers to identify staffing trends within the various departments to make informed budgeting decisions. Table 7.2 displays the divisional FTE summary page used in the budgeting process at RHMC, backed up by department totals within the various divisions.

**Wage and Salary Increases** Increases in wages and salaries are often not problematic for a health care organization to calculate. In a non-union shop, the organization accesses benchmark information from the health care industry around its region as well as increases predicted for other industries within the region that may be competing for the same pool of employees. This information is available through national and local hospital associations and other labor organizations. The finance staff merely calculates the impact of two or three potential increases
### TABLE 7.2. Divisional FTE Summary, Ridgeland Heights Medical Center, Budget Year Ending December 31, 2009.

<table>
<thead>
<tr>
<th></th>
<th>2008 Budget</th>
<th></th>
<th></th>
<th>2009 Budget</th>
<th></th>
<th></th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regular</td>
<td>Overtime</td>
<td>Total</td>
<td>Regular</td>
<td>Overtime</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Patient care services (nursing)</td>
<td>480.4</td>
<td>14.8</td>
<td>495.2</td>
<td>484.4</td>
<td>16.8</td>
<td>501.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Clinical services (ancillary services)</td>
<td>215.8</td>
<td>5.0</td>
<td>220.8</td>
<td>218.6</td>
<td>7.1</td>
<td>225.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Medical administration</td>
<td>11.0</td>
<td>—</td>
<td>11.0</td>
<td>12.0</td>
<td>—</td>
<td>12.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Financial management</td>
<td>105.4</td>
<td>2.0</td>
<td>107.4</td>
<td>104.7</td>
<td>2.0</td>
<td>106.7</td>
<td>−0.7</td>
</tr>
<tr>
<td>Human resource management</td>
<td>23.7</td>
<td>—</td>
<td>23.7</td>
<td>25.0</td>
<td>—</td>
<td>25.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Facilities management</td>
<td>86.0</td>
<td>2.9</td>
<td>88.9</td>
<td>87.0</td>
<td>4.3</td>
<td>91.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Information systems management</td>
<td>60.1</td>
<td>2.0</td>
<td>62.1</td>
<td>66.0</td>
<td>3.0</td>
<td>69.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Administrative services</td>
<td>14.0</td>
<td>—</td>
<td>14.0</td>
<td>13.0</td>
<td>—</td>
<td>13.0</td>
<td>−1.0</td>
</tr>
<tr>
<td></td>
<td>Total FTEs</td>
<td>Overtime FTEs</td>
<td>Overtime FTEs as a share of total (%)</td>
<td>Salaries, benefits, and contract labor as a share of total revenues (%)</td>
<td>FTEs paid per adjusted patient day</td>
<td>Net revenue per paid (total) FTE ($)</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>------------</td>
<td>---------------</td>
<td>---------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,023.1</td>
<td>26.7</td>
<td>2.6</td>
<td>47.05</td>
<td>4.17</td>
<td>91,193</td>
<td></td>
</tr>
<tr>
<td><strong>Overtime FTEs</strong></td>
<td>1,043.9</td>
<td>33.2</td>
<td>3.2</td>
<td>50.53</td>
<td>4.00</td>
<td>91,005</td>
<td></td>
</tr>
<tr>
<td><strong>FTEs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FTEs paid per adjusted patient day</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net revenue per paid (total) FTE ($)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
being proposed by the human resource division and reports the projected results on the income statement to the administration.

In a union shop, the organization can easily perform this step if it is in the middle of a multiyear contract that does not expire in the upcoming budget year. It must use only the amounts approved in the contract, which are essentially done. Budgeting for the remaining nonunion employees in the organization (often only management) becomes relatively easy because it involves fewer people and results in a much lower impact on the budgeted income statement.

Ultimately, the salary increase can be a function of the operating margin resulting from all the volume, revenue, and other expense assumptions used in the budget. This is the case if the initial budgeted bottom line does not meet the targeted level set by the board. The two factors that are often used to bring it into balance are reduction of the proposed salary increase and reduction in FTEs.

**Fringe Benefit Level Change** Fringe benefits have become a major expense category over the years with the rising significance of this tool for recruitment and retention of staff. As was recounted in Chapter One in reviewing the MRI pro forma, fringe benefits can now account for as much as an additional 30 percent of the actual salaries paid to the staff.

As Table 7.3 shows, the largest expense item in the fringe benefit category is health insurance expense. Like any other employer, RHMC is always evaluating it to minimize overall impact on the bottom line. Over the years, it has moved health insurance from an indemnity plan to a managed care plan. Several years ago, the medical center also started to require its employees to pay for a portion of the health insurance premiums; in the current year, this amounts to 30 percent of the total. In its benchmarking analysis, RHMC has determined that its competitors require their employees to pay 20 to 50 percent of the premiums.

For the upcoming budget year, the human resource department is suggesting that the budget include an expense increase of 4 percent for the health insurance premium, on the basis of competitive bidding of its account. No increase in the employee-paid portion of the insurance premium is recommended because of competitive human resource issues in the region.

The other fringe benefit line items are basically status quo for the upcoming year. No contentious issues are on the radar screen.
TABLE 7.3. Fringe Benefit Expenses, Ridgeland Heights Medical Center, Budget Year Ending December 31, 2009 (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>2009 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NON-FICA BENEFIT EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Insurance Premium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employer cost</td>
<td>3,200</td>
<td>3,200</td>
<td>3,300</td>
</tr>
<tr>
<td>Employee offset</td>
<td>(1,000)</td>
<td>(1,080)</td>
<td>(1,050)</td>
</tr>
<tr>
<td>Postemployment expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension</td>
<td>1,000</td>
<td>980</td>
<td>1,050</td>
</tr>
<tr>
<td>Tax-deferred annuity employer match</td>
<td>500</td>
<td>480</td>
<td>525</td>
</tr>
<tr>
<td>Life insurance</td>
<td>130</td>
<td>140</td>
<td>145</td>
</tr>
<tr>
<td>Long-term disability</td>
<td>100</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Short-term disability</td>
<td>200</td>
<td>200</td>
<td>205</td>
</tr>
<tr>
<td>Workers’ compensation</td>
<td>300</td>
<td>290</td>
<td>300</td>
</tr>
<tr>
<td>Unemployment insurance</td>
<td>60</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>Tuition reimbursement</td>
<td>60</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>Other expenses</td>
<td>50</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Total non-FICA benefit expenses</td>
<td>4,600</td>
<td>4,477</td>
<td>4,770</td>
</tr>
<tr>
<td><strong>FICA Expense</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,400</td>
<td>2,450</td>
<td>2,500</td>
</tr>
<tr>
<td>Total benefit expenses</td>
<td>7,000</td>
<td>6,927</td>
<td>7,270</td>
</tr>
</tbody>
</table>
Controllable Nonsalary Expense Change

Nonsalary expense constitutes considerably less than 50 percent of the total expenses for the organization because salaries and fringe benefits tend to make up more than half; noncontrollable nonsalary expenses can make up between 15 and 25 percent of the remainder. Noncontrollable nonsalary expenses are generally defined as interest and depreciation expenses. Controllable nonsalary expenses therefore make up 25 to 35 percent of total expenses.

Controllable nonsalary expenses are broken down into eight categories: supplies (medical and surgical), pharmaceuticals, dietary, utilities, insurance, purchased services, plant and equipment, and other. RHMC requires its supply chain managers to project the best price increases for the upcoming year, based on recent history and upcoming price negotiations. Also, RHMC is a member of a large group purchasing organization (GPO). The GPO publishes its upcoming supply rates, which can be used by the hospital organization in its inflation analysis for the new budget year.

July 15: Review of Gross Revenues and Contractual Adjustments and Validation of Payer Mix

This meeting involves the finance department and its administrators. The assumptions used by the financial analysts leading to the July 11 revenue and contractual adjustments summary, shown in Table 7.1, is reviewed with a fine-tooth comb. It is imperative that all the assumptions used be validated to the greatest extent possible. Although it is not possible to see the future, it is essential that the entire set of assumptions track from the past to the future using internal and external assessment tools.

During this meeting, the finance administrators grill the analysts to determine if there are any holes in the logic of the analysis. Because these finance bosses are going to present the outcomes to the rest of the administration in just a few days, they want to assure themselves that the information is solid and acceptable. In the case of RHMC, both the analysts and the administrators have been together for years, so all the questions are anticipated, and the answers are already available. Had this not been the case, there is a good possibility that some questions would need to be further researched and answered outside the meeting—though very swiftly, so that they are available by the meeting on July 18, three days hence.
July 18: Review of the 2008 Budgeted Income Statement, Determination of Price Increase Targets, and Revision of Salary and Nonsalary Assumptions

This is the big meeting of the year, when the executives and other administrators first see the projected and budgeted bottom line. This bottom line is based on the dozens of assumptions that have been discussed and debated over the past six weeks. These assumptions can be summarized as follows:

- Inpatient and outpatient volumes based on historical trends and future expectation of physician referral patterns
- Gross revenues based on these volumes with no price increase yet proposed
- Contractual adjustments based on best-guess Medicare, Medicaid, and managed care rates
- Salaries based on the number of employees and the proposed wage increase percentage
- Fringe benefit expenses based on the proposed employee health and welfare package, including the recommended medical plan and the amount of premium that the employees will be expected to pay
- Nonsalary expenses based on any changes over the current year and the projected rate of inflation for these expense items

The meeting immediately turns to the current-year projected and budget-year operating margin, as shown in Table 7.4. If the budget-year margin amounts to the targeted 4 percent of net patient revenue, then the meeting is over, well short of its two-hour time limit. This is unlikely nowadays. A declining reimbursement rate and volume pressures resulting from utilization controls required by managed care health plans have made bottom-line management much more difficult. In addition, outpatient volumes are being squeezed by newly competitive freestanding health care sites just blocks from many full-service hospitals.

Thus a gap between the initial budgeted bottom line and the target is likely at most health care institutions. This is true at RHMC. The initial 2009 budgeted operating margin presented by the finance administrator at this meeting is a $4.2 million loss. Meanwhile, the hospital needs an operating margin of $3.8 million to achieve the board-mandated 4 percent target. This establishes a gap of $8 million that has to be closed.
TABLE 7.4. Preliminary Budgeted Statement of Operations, Ridgeland Heights Medical Center, Budget Year to Date Ending December 31, 2009 (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient revenue</td>
<td>74,000</td>
<td>79,000</td>
<td>38,500</td>
<td>77,800</td>
<td>84,000</td>
<td>6.3</td>
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<tr>
<td>Outpatient revenue</td>
<td>69,000</td>
<td>77,000</td>
<td>37,600</td>
<td>76,100</td>
<td>86,000</td>
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<tr>
<td>Total patient revenue</td>
<td>143,000</td>
<td>156,000</td>
<td>76,100</td>
<td>153,900</td>
<td>170,000</td>
<td>9.0</td>
</tr>
<tr>
<td>Less: Contractual and other adjustments</td>
<td>(48,000)</td>
<td>(60,000)</td>
<td>(29,000)</td>
<td>(59,000)</td>
<td>(72,000)</td>
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<tr>
<td>Less: Charity care</td>
<td>(2,200)</td>
<td>(2,700)</td>
<td>(1,300)</td>
<td>(2,500)</td>
<td>(3,000)</td>
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</table>
### Net patient service revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Increase %</th>
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<th>Amount</th>
<th>Amount</th>
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<th>Amount</th>
<th>Amount</th>
<th>Increase %</th>
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### Add:

<table>
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<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Increase %</th>
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</table>

### Total revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Increase %</th>
<th>Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>100,800</td>
<td>101,600</td>
<td>51,000</td>
<td>101,600</td>
<td>102,200</td>
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<tr>
<td>2004</td>
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</table>

### EXPENSES

<table>
<thead>
<tr>
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<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>Increase %</th>
<th>Increase %</th>
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<tbody>
<tr>
<td>Salaries</td>
<td>34,000</td>
<td>35,500</td>
<td>18,000</td>
<td>36,500</td>
<td>39,000</td>
<td>9.9</td>
<td>6.8</td>
<td></td>
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<tr>
<td>Contract labor</td>
<td>1,500</td>
<td>1,400</td>
<td>400</td>
<td>800</td>
<td>1,200</td>
<td>-14.3</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>6,800</td>
<td>7,000</td>
<td>3,500</td>
<td>6,900</td>
<td>7,800</td>
<td>11.4</td>
<td>13.0</td>
<td></td>
</tr>
<tr>
<td><strong>Total salaries and benefits</strong></td>
<td>42,300</td>
<td>43,900</td>
<td>21,900</td>
<td>44,200</td>
<td>48,000</td>
<td>9.3</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Bad debts</td>
<td>4,400</td>
<td>4,400</td>
<td>2,400</td>
<td>4,400</td>
<td>5,000</td>
<td>13.6</td>
<td>13.6</td>
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(Table 7.4 continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient care supplies</td>
<td>15,000</td>
<td>15,200</td>
<td>8,200</td>
<td>16,000</td>
<td>17,100</td>
<td>12.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Professional and management fees</td>
<td>3,600</td>
<td>3,400</td>
<td>1,900</td>
<td>3,800</td>
<td>4,200</td>
<td>23.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Purchased services</td>
<td>5,600</td>
<td>5,600</td>
<td>2,900</td>
<td>5,600</td>
<td>5,600</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Operation of plant (including utilities)</td>
<td>2,500</td>
<td>2,700</td>
<td>1,300</td>
<td>2,600</td>
<td>2,800</td>
<td>3.7</td>
<td>7.7</td>
</tr>
<tr>
<td>Depreciation</td>
<td>10,500</td>
<td>11,000</td>
<td>5,600</td>
<td>10,500</td>
<td>11,500</td>
<td>4.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Interest and financing expenses</td>
<td>7,600</td>
<td>7,400</td>
<td>3,700</td>
<td>7,400</td>
<td>7,200</td>
<td>−2.7</td>
<td>−2.7</td>
</tr>
<tr>
<td>Other</td>
<td>4,600</td>
<td>3,800</td>
<td>2,000</td>
<td>4,000</td>
<td>5,000</td>
<td>31.6</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>96,100</td>
<td>97,400</td>
<td>49,900</td>
<td>98,500</td>
<td>106,400</td>
<td>9.2</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Operating margin</strong></td>
<td>4,700</td>
<td>4,200</td>
<td>1,100</td>
<td>3,100</td>
<td>(4,200)</td>
<td>−200.0</td>
<td>−235.5</td>
</tr>
</tbody>
</table>
## NonOperating Income

<table>
<thead>
<tr>
<th></th>
<th>600</th>
<th>1,200</th>
<th>800</th>
<th>1,400</th>
<th>1,000</th>
<th>−16.7</th>
<th>−28.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain (loss) on investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total nonoperating income</td>
<td>600</td>
<td>1,200</td>
<td>800</td>
<td>1,400</td>
<td>1,000</td>
<td>−16.7</td>
<td>−28.6</td>
</tr>
<tr>
<td>Net income</td>
<td>5,300</td>
<td>5,400</td>
<td>1,900</td>
<td>$4,500</td>
<td>(3,200)</td>
<td>−159.3</td>
<td>−171.1</td>
</tr>
</tbody>
</table>

4% targeted operating margin: 3,800

3% targeted operating margin: 2,850

2% targeted operating margin: 1,900
This gap is large but not necessarily surprising to many of the administrators in the room. Many have sat through dozens of budget meetings in their time and seen an initial bottom line almost as bad as this. They are not highly disturbed (although they should be). There are, however, a number of factors that are extremely troubling. Administration must deal with continuing managed care cost pressure, the escalating nursing shortage, the continued increase in drug costs, and ongoing negative margin from the employed physician practices that the hospital owns.

**Value of Price Increases** The remainder of the meeting is devoted to figuring out how to close the budget gap initially. Several techniques are used. The first decision is how many dollars the organization will net for every 1 percent increase in its listed prices. Because RHMC’s primary payer mix is Medicare and managed care, it would initially appear that price increases have no impact on the bottom line. In fact, the administrators at RHMC are aware that this is not case. There are at least two reasons for this. First, not all managed care contracts are per diem–based. There may still be a (declining) number of contracts based on discount from gross charges. If so, a piece of any price increase is passed along to the managed care plan, depending on the particular level of discount that has been negotiated. Second, there are still payers reimbursing RHMC on gross charges. Even if it is only a small percentage, say, 10 percent, this can still have a positive impact on the bottom line.

In the case of RHMC, analysis performed by the finance department indicates that every 1 percent increase is worth an incremental 25 cents on total dollars charged. This estimate is based on payer mix assumptions, level of managed care contracts paid on a percentage-of-charge basis, and percentage of payers still paying full charges. (This estimate will vary with each hospital, depending on its mix.) From this estimate, it is concluded that net revenue generated from a 1 percent price increase is $425,000 ($170 million total gross charges times 1 percent price increase times 25 percent net revenue realization).

Although the administrators now know the value of each percentage point increase, they still need some context to determine how much of an increase is acceptable to their community and the managed care payers. Although very few patients continue to pay for their health care out of pocket, there is continuing fascination with the health care organization’s price list. Leading the region in high charges can create a public relations problem for any organization. Being in Illinois (as is
true in other states as well), RHMC is required to report to a state agency a series of specific charges and a group of bundled procedure charges. These items are then published by the responsible state agency and available to anyone who wants a copy.

Like any other good finance department, RHMC’s people review the output of this report to determine the level of charges compared to competitors. Finance staff members report the organization’s position during this phase of the budget meeting. For the latest report year available, RHMC is directly in the middle of the pack for most of its charges, fifth among a total of nine competing organizations. With this knowledge, and some anecdotal information that some of the other organizations are raising their charges by the approximate level of health care inflation, the administration decides preliminarily to propose a price increase of 4 percent. Although this increases the gross revenues by $6.8 million ($170 million preincrease gross revenue times 4 percent average price increase), it will net only $1.7 million on the bottom line.

**Budgeted Expense Reductions** With this 4 percent price increase set, the administrators are then able to determine how much additional expense has to be cut or if there are any other revenue sources that could be considered. From the expense side, staffing level is once again the first item on the list to be discussed. Although this was discussed in depth less than a week ago at the July 14 meeting, now that the preliminary bottom line is in play, it is reviewed again to determine where cuts could possibly be made.

The best way to determine these cuts would be with appropriate productivity measures. RHMC is currently developing these productivity measures. There is a lot of work involved in developing, maintaining, and then tracking productivity. Once an organization makes the decision to do so, it is taking a step toward practicing better management. Productivity management is an art. It supplies the administrators and department managers with information they never had before. Managers believe they know the amount of time it takes their employees to perform individual tasks; however, research conducted for cost accounting studies indicates that manager perception is never a good measure of actual time spent.

Productivity management techniques allow department managers to understand the tasks being performed, whether or not the tasks are value-added, and how long these tasks take. When all the tasks and their time frames are added up, the total minutes should indicate the number of staff members needed. If the organization sets its parameters between
90 and 110 percent of standard, then it is possible to determine with some accuracy which departments are overstaffed or understaffed.

Table 7.5 lists possible cuts that were discussed by the RHMC administrators during this meeting. The initial outcomes are provisional and dependent on subsequent requests of the department managers. The finance staff therefore issue departmental budgets with an aggregate total bottom line of $1.4 million. All the administrators are aware that additional decisions must be made after the managers return their budgets in about a month.

July 25: Releasing 2008 Projected and 2009 Budgeted Worksheets to Department Managers

Based on all the decisions made in the previous budget meetings, the finance department is now ready to issue the following year’s budget to the department managers. This is first time that most of the managers will learn what is expected of them in the upcoming year. This revelation dictates how each manager must operate his or her department, now and in the coming year.

The first thing that the managers review is their staffing level. They are concerned whether the administration has already made any cuts. In addition, because RHMC is a top-down budget organization, the managers are also aware that they cannot add any staff unless they can prove that they are not already appropriately staffed and that an additional staff member will either improve net revenue production above the cost of the new FTE or decrease other departmental costs.

Of course, this is seldom the case. Instead, requests for most new FTEs are justified on the grounds of improved patient or physician satisfaction or a decrease in overwork.

The managers are also interested in the other revenue and expense assumptions made by the administration. Revenue-producing managers did have some input into the volumes, of course, but they want to know if their assumptions have been changed. In any event, the most important reason the administration issues this preliminary budget to the managers is so that they can review every line item and determine if the finance staff made any clerical or technical errors that require changing. After doing error checking, studying appropriate volumes, and reviewing all other nonsalary expense items, the managers are expected to return their budgets with any changes to their administrators by August 15.
**TABLE 7.5. “Closing the Gap” Analysis, Ridgeland Heights Medical Center, 2009 Budget (in thousands of dollars).**

<table>
<thead>
<tr>
<th>Operating margin per July 18 meeting</th>
<th>(4,200)</th>
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</thead>
<tbody>
<tr>
<td>4% net price increase</td>
<td>1,700</td>
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<tr>
<td>Improvement in investment income</td>
<td>1,000</td>
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</table>

<table>
<thead>
<tr>
<th>Salary expense reductions</th>
<th>Possible Options</th>
<th>Option Chosen</th>
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<tbody>
<tr>
<td>@ $40,000 average per employee</td>
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<td></td>
</tr>
<tr>
<td>10 FTEs</td>
<td>400</td>
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<tr>
<td>20 FTEs</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>30 FTEs</td>
<td>1,200</td>
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<tr>
<td>40 FTEs</td>
<td>1,600</td>
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<td>50 FTEs</td>
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**Fringe benefits**

Reduce additional benefits proposed in initial budget meeting of July 14

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Reduce bad-debt expense through better collection efforts

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Reduce patient care supply expenses

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Reduce professional and management fees

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CAPITAL BUDGETING: JULY

Concurrent with the operating budget, the capital budget process continues. The finance department staff are now working overtime. They are trying to keep up with the mass of analysis materials coming into the department as well as the reams of material going out to department managers and administrators during the month.

These are the steps that need to be completed in the July capital budget process:

- **July 11:** Department managers submit 2009 capital budgets to the finance staff using capital budgeting software
- **July 12–23:** Finance staff review all capital proposals for completeness
- **July 24–August 6:** Proposal reviewers (facilities management, materials management, and information systems) examine capital budgets

On July 11, the department managers are required to return all of their capital budget requests to the finance department with all required elements filled in. Over the two or three weeks that the managers have to complete their portion, they are expected to contact any individual who must obtain equipment within the department. Thus, for example, in a clinical department such as radiology, the manager should speak to the physician in charge of the clinical aspects of the department to determine whether this physician is aware of (1) any new equipment that has come on the market that could improve patient outcomes or offer a new revenue stream to the organization or (2) any current department equipment that has become obsolete, is no longer state-of-the-art for diagnosis or treatment, or is harmful to the patient’s care.

The physician may want the manager to submit a request for updated equipment during this capital budget process. This is in fact the appropriate time to do so. Here is a summary of the required elements of the electronic capital request form:

- Proposal name
- Proposal preparer’s name, title, department, phone number
- Purchase information (vendor name, manufacturer, model number)
- Description of item
Managers need to fill in all the blanks of the electronic capital request form for their request to be appropriately considered; they have already been told that their proposal will be returned if they leave out any of these required elements.

Actually, this is exactly what the finance staff will be doing during the next project step. Between July 12 and July 23, the staff will review all of the proposals to be sure that these elements are met. Acting in an advisory and consulting role, the finance representatives assigned to all these projects help the managers fill in any of the elements that have been left blank. They also advise the managers how they might be able to strengthen their proposals, where appropriate. Some managers do not write or justify proposals as well as others do. It is RHMC’s practice to attempt to level the playing field in this regard. The task of the finance staff member responsible for the capital budget is to ensure that all the proposals that will be reviewed by administrators are complete so that the review process is as fair as possible.

Between July 24 and August 6, the proposal reviewers get their crack at each proposal. These reviewers come from three technical areas: facilities management, information systems management, and materials management. Each area is required to review every proposal to determine if any additional costs arise should the requested item become operational in the organization. At RHMC, the information management department is required to review every capital item that is powered by a microchip. The intent is to determine if any nonstandard setups may be required or if the requested purchase requires information management expertise that is not currently available on-site.

The role of facilities management is similar. Almost every piece of requested capital equipment plugs into the wall. Most managers take the
plug and the wall outlet for granted. However, each one adds power requirements, and these add up, sometimes resulting in the need for facilities management to acquire new power distribution equipment (at substantial cost). It is the job of facilities management to be aware of all the energy needs throughout the organization. Therefore, it is absolutely necessary for these managers to perform their review before the evaluators see the proposals. The facilities management review may increase the cost of a proposed item. It is good to know this at the time the evaluators evaluate, not afterward.

Materials management ultimately has to issue the purchase order for all approved capital items. Therefore, its review ensures that all the data elements that they require have already been included in the proposal.

REGULATORY AND LEGAL ENVIRONMENT

Routine and capital budgets are not the only aspects of operation that are being managed during the month of July. Administrators of the various divisions (clinical, operations, and financial) have been spending time making sure that they and their staff are performing all of their duties in compliance with the many laws and regulations governing the operation of a health care facility.

Like every other industry in America, health care is heavily regulated. Not only is the industry governed by state, federal, and local laws, but it is also subject to additional regulations, formal rulings, and interpretations. In addition to being governed by several common sets of regulations, each industry segment has specific rules that it needs to follow.

As with all things, the highest level of authority is law, passed by legislative bodies. Health care laws are extensive and tend to cover a variety of areas within the industry. Federal laws, which must be followed, are passed by Congress and signed by the president. To follow the laws properly, providers seek guidance through regulations issued by the government agency that has responsibility for each program. In health care, the appropriate federal agency is the Center for Medicare and Medicaid Services (CMS), formerly known as the Health Care Financing Administration (HCFA), which is charged with administering the Medicare program through the authority of the U.S. Department of Health and Human Services (HHS).
Medicare and Medicaid Fraud and Abuse

As we explored the Medicare and Medicaid programs in Chapter Five, it was evident that these are very detailed programs. The complex technical specifications are occasionally taken advantage of by unscrupulous individuals. Although not dealing only with the inherently unscrupulous, the laws were designed to ensure that bad or crooked providers are punished.

The framers of the Medicare and Medicaid programs wanted to ensure that the government would pay only for needed services appropriately rendered under the law. They were aware that other government programs had been billed for goods or services not rendered or received. On occasion, bills had been inflated above the rate agreed to. The Social Security Act of 1965 therefore contained several provisions to combat this problem:

- Criminal penalties for persons convicted of filing false claims, misrepresenting an institution’s qualifications, or soliciting, receiving, or offering of kickbacks, bribes, or rebates
- Civil monetary penalties for persons determined by the secretary of HHS to have filed fraudulent claims or having charged beneficiaries for services in violation of any agreement entered into with the HHS secretary
- Exclusion from Medicare and Medicaid program participation for providers and practitioners convicted of crimes involving health programs established under the Social Security Act or of patient abuse or neglect

Many of these regulations contain detailed stipulations, reflecting the great concern that providers would attempt to profit from Medicare and Medicaid by submitting inappropriate or bogus claims. To combat this, the Social Security Act authorizing the programs contained express provisions criminalizing any individual who knowingly and willfully submits a false claim to the government (in this case, in connection with the Medicare or Medicaid program).

Kickbacks, Bribes, and Rebates The laws also detail efforts to prevent kickbacks, bribes, and rebates. The government was particularly concerned that individuals might conspire with others to obtain Medicare and Medicaid money illegally. These laws penalize individuals who
knowingly and willfully solicit or receive any remuneration (including any kickback, bribe, or rebate) directly or indirectly, overtly or covertly, in cash or in kind, in return for referring an individual to a person for furnishing or arranging to furnish any item or service for which payment may be made in whole or in part under Medicare or for purchasing, leasing, ordering, or arranging for, or recommending purchasing, leasing, or ordering any good, facility, service, or item for which payment may be made in whole or in part under Medicare. If convicted of these offenses, the individual is guilty of a felony and subject to fine or imprisonment for not more than five years (or both).

The law further penalizes individuals who knowingly and willfully offer or pay any remuneration (including any kickback, bribe, or rebate) directly or indirectly, overtly or covertly, in cash or in kind to any person to induce someone to refer an individual to a provider for furnishing or arranging to furnish any item or service for which payment may be made in whole or in part under Medicare or to purchase, lease, order, arrange for, or recommend purchasing, leasing, or ordering any good, facility, service, or item for which payment may be made in whole or in part under Medicare. If convicted of these offenses, the individual is guilty of a felony and subject to fine or imprisonment for not more than five years (or both).

These are just a few examples of the many laws and regulations that providers are required to observe if they want to continue to participate in the Medicare program and stay out of jail. A number of other laws are currently on the books and used by the government to enforce compliance. The Health Insurance Portability and Accountability Act (HIPAA), enacted in 1996, has a number of fraud and abuse provisions built into it. The False Claims Act, which was enacted in 1863 to combat fraudulent claims billed for services to the federal government during the Civil War, was reintroduced in the 1996 HIPAA law, and the Office of Inspector General (OIG) has used it often in its attempts to combat fraudulent health care claims resulting from services billed for Medicare beneficiaries.

**Office of Inspector General Work Plan** Indeed, the OIG has been extremely busy in its efforts to eliminate health care fraud in both billing and nonbilling issues. It is easy to determine which areas of potential fraud and abuse the office is targeting in any given year, since the OIG publishes its annual work plan on the Internet (www.oig.hhs.gov). Exhibit 7.2 displays selected items from the OIG’s 2007 plan.

- Critical Access Hospitals. Reviewing critical access hospital (CAH) cost reports to examine the administrative and other costs incurred by CAHs for inpatient and outpatient services before and after their conversion to CAH status.

- Rebates Paid to Hospitals. Determining whether hospitals are properly identifying purchase credit rebates as a separate line item in their Medicare cost reports. We will visit several large vendors and determine the amount of rebates paid to hospitals in a given year. We will then examine a sample of Medicare hospital cost.

- Outpatient Outlier and Other Charge-Related Issues. Determining whether outlier payments to hospital outpatient departments and community mental health centers were in accordance with Medicare laws and regulations.

- Medical Appropriateness and Coding of Diagnosis Related Group (DRG) Services. Analyzing inpatient hospital claims to identify providers who exhibit high or unusual patterns for selected DRGs. We will then determine the medical necessity, the appropriate level of coding, and reimbursement for a sample of services billed by these providers. In 2005, Medicare reimbursed hospitals approximately $110 billion for inpatient care. In earlier work, we have found the DRG system vulnerable to abuse by providers who wish to increase reimbursement inappropriately through upcoding.

- Oversight of Specialty Hospitals. Assessing CMS’s oversight of physician-owned specialty hospitals to ensure patient safety and quality of care at these hospitals. Concerns over the dynamic growth of specialty hospitals led Congress to impose an 18-month moratorium on new physician-owned specialty hospitals in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA). As part of this review, we will also examine policies related to staffing requirements at these hospitals.

As can be seen, the OIG is involved in many types of review and audit. The office is focused on more than just the billing and claims processing issues highlighted in Chapter Five. Its vision, as “guardian of the public trust,” is to ensure effective and efficient HHS programs and operations by minimizing fraud, waste, and abuse (U.S. Department of Health and Human Services, 2001). In addition to pure billing issues, the OIG gets involved in prospective payment system (PPS) rate formulation to ensure reasonableness. It also monitors utilization patterns to determine if providers are “gaming the system” illegally to increase their Medicare or Medicaid reimbursements.

OTHER REGULATORY AND BUSINESS COMPLIANCE ISSUES

In addition to the highly complex and punitive requirements of Medicare fraud and abuse rules and regulations, RHMC is also responsible for normal business compliance with Occupational Health and Safety Administration laws, all labor department rules and regulations, state health department rules, and tax or tax-exempt rules and regulations. Furthermore, as a health care provider, RHMC needs to comply with a whole series of supplementary rules and regulations designed specifically for the industry, including special state requirements pertaining to licensing as a health care facility; private insurance requirements, usually administered by the state insurance commissioner; special requirements by the federal government for participation in programs such as Medicare, Medicaid, and CHAMPUS, including eligibility, payment, utilization review, quality (which takes the form of accreditation), and fraud and abuse (as represented by the OIG’s work plan).

Meeting all of these areas of compliance requires management and employee vigilance. This book has already highlighted some of these areas and the types of techniques and methodology that enhance the organization’s financial performance, such as Medicare and Medicaid payment issues in Chapter Five and fraud and abuse issues in this chapter.

CORPORATE COMPLIANCE

Good managers expect to exceed many of the basic practices spelled out in the preceding discussion. Ultimately, the organization is responsible for ensuring that there are no deviations from rules necessary to maintain
licensure or accreditation. As we have seen, failure to do so can lead to fines for the organization or individuals. Furthermore, it can lead to jail time for the individual offenders. These facts alone should be deterrent enough to ensure that neither the organization nor its employees engage in any hanky-panky.

Yet given all of the various rules, regulations, and interpretations that health care providers are required to follow, monitoring compliance has become an ongoing process. Until the government became more diligent in its enforcement efforts in the early and mid-1990s, providers did not devote a great deal of time, money, or energy to compliance. This started to change when the OIG began extensive Medicare cost report audits of selected academic medical centers around the nation. This brought enforcement attention to the industry at large because of the visibility of the targeted institutions. These audits not only resulted in publicity for the government’s efforts but also wound up collecting millions of dollars in fines, which were turned back to the treasury.

That was just the beginning. Larger and better-funded government efforts followed. Most of these were billing audits, some of which were highlighted in Chapter Five. Still, the industry was now on notice; it needed to clean up its act. In 1996, the government issued what it termed the Model Laboratory Compliance Plan. This was followed in 1997 with the Model Hospital Compliance Plan. Although providers did not have to follow these model plans explicitly, the mere existence of a plan at a provider’s site could obviate more severe government-imposed penalties if some errors were uncovered. This was important because the government was now taking the position that seemingly unintentional errors, often of a clerical nature, were being considered as fraud and abuse and were being threatened with prosecution as such.

Ridgeland Heights Medical Center, like most of its competitors and peers, always believed that it followed all the required rules and regulations. Administrators believed they knew the rules and had systems in place to ensure compliance. Yet this new persistence by the government to make sure the rules were followed convinced RHMC administrators that they needed to observe them with even greater diligence and rigor.

To this end, RHMC has developed a major corporate compliance policy. Its purpose is (1) to ensure that all RHMC employees are aware of and follow all the laws, regulations, and policies affecting their duties and (2) to ensure that all employees recognize the organization’s values and reflect them in their actions.
The organization and its administration always believed in doing the right thing, but this new initiative codified policies and further reinforced and established new procedures aligned with compliance standards. The plan states that the organization is committed to conducting its business in a manner that facilitates quality, efficiency, honesty, integrity, respect, and full compliance with applicable laws and regulations. In addition, it expresses ongoing commitment to ensure that its affairs are conducted in accordance with both the letter and the spirit of laws and regulations and its own policies and practices. The plan requires employees to maintain standards of behavior that are lawful and ethical.

**Key Features of the Compliance Plan**

- Designation of specific RHMC officials responsible for directing the effort to enforce compliance
- Identification of a corporate compliance code of conduct, including an educational and training plan for dissemination of the code
- Incorporation of standards and policies that guide RHMC employees and other third parties affiliated with the organization in regard to their conduct
- Coordinated education and training for RHMC employees and other third parties affiliated with RHMC in regard to their conduct
- Publication of policies and procedures and uniform mechanisms for employees and other third parties affiliated with RHMC to raise questions and receive appropriate guidance concerning their conduct
- Provision of a framework for specific compliance areas, such as billing and collection activities
- Publication process for employees to report possible compliance issues and development of a procedure for investigating and resolving reports of possible compliance matters
- Formulation of corrective action plans to address any compliance problems that are identified
- Development of a plan to monitor the organization’s overall compliance efforts
ACCREDITATION ISSUES

Health care organizations have more to worry about than just criminal and civil penalties if they fail to comply with applicable laws, regulations, and policies. Many have also chosen to participate “voluntarily” in accreditation programs.

Major U.S. Health Care Accrediting Organizations

- Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
  - American Hospital Association (AHA)
  - American Medical Association (AMA)
  - American Osteopathic Association (AOA)
  - American Dental Association (ADA)
  - American College of Surgeons (ACS)
- Accreditation Association for Ambulatory Health Care (AAAHC)
- College of American Pathologists (CAP)
- National Committee for Quality Assurance (NCQA: for HMOs only)

There are significant practices that should be followed to be considered in compliance with the accrediting organization’s rules and reasons these health care providers have chosen to be involved in accreditation.

First, accreditation by the JCAHO automatically deems the provider eligible to participate in the Medicare and Medicaid programs and qualified to bill for and receive reimbursement from the government payers.

Second, there are marketing advantages available to organizations that have been accredited. Being able to advertise the accreditation allows a health care provider to imply or express a higher standard of care, if it so chooses.

Third, the ability to contract with managed care organizations (MCOs) is enhanced with acceptance by a reputable accrediting organization. Another way to say this is that organizations not accredited are probably not able to contract with any MCO to provide care to the health plan’s enrollees. Because of this, it is extremely difficult to serve as a health care provider without accreditation.
The largest accrediting body in America is the JCAHO. It evaluates and accredits more than eighteen thousand health care organizations and programs. As can be seen in the list, the Joint Commission is an amalgam of five major health care provider associations. Since 1951, it has developed professionally based standards and evaluated the compliance of health care organizations against these benchmarks. As is evident in the next list (obtained from www.jcaho.org/about_jc/jcinfo.htm), the Joint Commission’s evaluation and accreditation services are extensive and cover the entire spectrum of health care provider organizations.

**JCAHO Evaluation and Accreditation Services**

- General, psychiatric, children’s, and rehabilitation hospitals
- Health care networks, including health plans, integrated delivery networks, and preferred provider organizations
- Home care organizations, including those that provide home health services, personal care and support services, home infusion and other pharmacy services, durable medical equipment services, and hospice services
- Nursing home and other long-term care facilities, including subacute care programs, dementia programs, and long-term care pharmacies
- Behavioral health care organizations, including those that provide mental health, chemical dependency, mental retardation, and development disabilities services for patients of various ages in various organized service settings; and managed behavioral health care organizations
- Ambulatory care providers, including outpatient surgery facilities, rehabilitation centers, infusion center, group practices, and others
- Clinical laboratories

The Joint Commission has had its ups and downs over the years. Its biggest triumph was in being deemed the accrediting body of choice by the federal government for the Medicare and Medicaid programs in 1966. However, in the late 1990s, some providers challenged a variety of the Joint Commission’s practices and procedures. The JCAHO has attempted to evolve over the years, trying to lead its provider organizations into newer quality management techniques. In fact, beginning in 2001, the Joint Commission developed a new set of quality standards, known as Oryx, which required all hospitals to report several activity
measures in five diagnostic categories so that their care levels could be monitored and compared. The five core measure categories are these:

- Acute myocardial infarction (including coronary artery disease)
- Heart failure
- Community acquired pneumonia
- Pregnancy and related conditions (including newborn and maternal care)
- Surgical procedures and complications

These measures were later adopted, in 2003, by CMS and Medicare in their newly developed Pay for Performance program. These quality (activity) measures will continue to play a bigger and bigger role in hospital financial outcomes.

Although the controversy may not quiet down anytime soon, the ongoing debate seems destined to strengthen overall provider quality simply by keeping it constantly on the administration’s front burner.

The other three organizations listed earlier along with the JCAHO’s five constituents have the same goals. The last organization on the list, the National Committee for Quality Assurance (NCQA), does not accredit health care providers. Instead, it certifies health plans or MCOs that act as third-party payers to millions of insured enrollees. The NCQA is a private, nonprofit organization dedicated to assessing and reporting on the quality of managed care plans.

The NCQA began accrediting MCOs in 1991 in response to the need for standardized and objective information about the quality of these organizations. Since then, it has expanded the range of organizations that it certifies to include managed behavior health care organizations, credentials verification organizations, and physician organizations.

Like the JCAHO programs, the NCQA accreditation program is voluntary. Regardless of the motivation of the providers and health plans for participating, these accreditation programs enable the industry to claim a proper basis for quality care.

**PATIENT SATISFACTION ISSUES**

One more major issue not directly related to the finance function can have a significant impact on the health care organization’s bottom line. Because health care organizations really do care about offering very
good service to their customers, over the years, many have attempted to understand patient satisfaction, though they were not always able to measure it effectively. In the 1990s, in response to JCAHO standards, a few major national patient satisfaction firms sprang up to offer an assessment mechanism for health care providers.

These organizations permit the provider to monitor and evaluate patient satisfaction in various service categories (such as inpatient, emergency department, or ambulatory surgery). More important, because these patient satisfaction firms have many clients, it is possible to compare each provider in the appropriate peer group and determine its own ranking. This is critical because it allows the provider to set certain goals, not only for improvement against prior scores but also against the peer group. This is a classic and effective form of benchmarking. At RHMC, the organization has developed criteria so the level of patient satisfaction is part of the annual incentive compensation model. By incorporating it into the incentive compensation formula, the organization is putting its money where its mouth is, making the point to employees and the community that it takes patient satisfaction seriously. The RHMC administration believes that the community and physicians will notice a high level of patient satisfaction. It is believed that physicians are as a consequence more willing to refer, and patients are more willing to come, to an institution that has an objective record of excellent patient service. It appears that this has been borne out over the past few years because RHMC has had a smaller reduction in its admissions than some of its competitors have. Patient satisfaction ranks as one of the differentiators.

PRACTICAL TIPS

■ Use the top-down approach to developing the operating budget. It dramatically speeds up the budget and is more effective in developing bottom lines that are approvable by the board of directors.

■ When developing the FTE budget, be sure to incorporate any external staffing in the calculations. This will be important when the staffing dollar budget is developed.

■ Be sure to develop preliminary operating margin budget targets that are approvable by the finance committee and the board of directors. Any work on the budget needs to be predicated on this most basic assumption.
Otherwise, all other work will have little meaning when the final budget is presented.

- When determining the preliminary level of budgeted price increases, understand the level of your hospital’s charges in relation to your competitors’. This will give your organization a basic understanding of its competition, allowing the hospital to determine whether it wants to set its prices higher or lower based on market share, public relations, and bottom-line value.

- In developing preliminary FTE budget cuts, do not use an across-the-board method. This is a very poor management technique. It does not take into account the quality of the existing staffing levels. Instead develop budget cuts based on productivity standards and how well they are being maintained by each individual department manager.

- Be sure that the capital budget request form is in compliance with the elements needed to meet criteria-based capital budget policies and procedures.

- Be sure that all finance managers and staff are fully aware of the major elements of the Medicare fraud and abuse statutes. Provide professional training for the individuals most likely to be operating in areas where the statutes may apply.

**DISCUSSION QUESTIONS AND ACTIVITIES**

1. Discuss the pros and cons of the top-down and bottom-up methods for establishing the operating budget. Which is better? Why?

2. Debate the issues relating to across-the-board labor cuts versus cuts predicated on labor standards. What are the pros and cons of each method? Which is preferable?

3. Discuss the role and functions of the Joint Commission on Accreditation of Healthcare Organizations. How do the standards they set affect the finances and operation of the hospital?
CHAPTER 8

AUGUST

LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Use the main elements of the hospital strategic plan as the criteria for determining capital budget winners and losers

■ Understand why the strategic plan criteria should be weighted in the capital budgeting process

■ Recognize the value of using the 80–20 rule to stratify capital budget requests from highest to lowest dollars in order to concentrate on the 20 percent of requests that make up 80 percent of the requested dollars

■ Understand how hospitals decide how much money will be available for funding the capital budget each year

■ Appreciate why additional operating expenses (staff and supplies) are more likely to be approved for capital projects with favorable returns on investment

■ Determine the fundamental value of good and effective variance analysis and reporting

■ Appreciate the extreme level of accountability brought by electronic variance reporting (automated e-mail alerts) to hospital organizations
Recognize the absolute need for flexible budgeting in hospitals today

Realize why developing micro-based cost accounting is essential for superior hospital financial management

Margaret McGregor, RHMC’s vice president for patient care services and nursing, is having a pleasant morning, reviewing the improved patient outcome scores that have just been delivered. She is aware that some of the improvement is the result of an increased level of care management provided to patients and physicians. The changes were aimed at standardizing care through enhanced consumption and utilization controls. But she has a nagging feeling that something is missing. So she picks up the phone and calls the one person who might know the answer.

“Hi, Sam, it’s Maggie. How are you this morning?”

“Maggie, I’m fine. It sure is a pretty morning. I was just looking out the window and wondering how we could extend this weather year round. Of course, if we could, we’d be like San Diego, and everybody would want to live here,” Sam says. “Anyway, I digress. What’s up this morning?”

“Well, I was wondering about something. I was just looking over patient outcome results, and they’re very encouraging, but I also noticed that there’s no cost data on the reports. I can’t tell if these improvements cost us money or saved us anything.”

“You’re right. When we initiated the care management program before you started here, we didn’t have a cost accounting system. Because of that, we couldn’t produce a baseline analysis. Therefore, we can’t tell how much we’ve improved. We can, however, tell you how much each patient is costing us now. We can tell you the length of stay of each patient. We can even develop analyses allowing you to compare our physicians’ resource consumption and costs against each other or against regional or national benchmarks and create trend lines over time.”

“Sam, that sounds really good. I know that would help us a lot as we keep trying to improve our clinical outcomes and our cost base. With that kind of information, my nursing directors and their staff will be able to focus on areas that require the most improvement.”
“That’s great. I’m aware that the biggest bang for the buck would be to identify utilization patterns by individual physician, determine the a mean and median, recognize the outliers, and try to bring the physicians who are outside the norm back in line. We have great opportunities to save money for the organization while still increasing the patient satisfaction scores.”

“So how come you didn’t tell me about all this great stuff before?”

“Mags, that’s a real good question. You need to understand that I’ve been trying to get the nursing division to accept and use this information for the last few years. They have just shown no inclination to use it. That’s why I’m really pleased that you’re here now. I know that you’ve used data like these before and that you know their value. So I’m thrilled that you’re asking for these details now.”

“Yeah, yeah, yeah—but next time, I expect you to come to me with something like this first, OK?”

The dog days of summer. Hot days. Even hotter nights. As the temperatures soar into the triple digits, extraordinary numbers of city and suburban dwellers have gone fishin’. They take their companions, their kids, their dogs, and sometimes their turtles and leave town. They leave behind whatever work didn’t get done. It’s a theme at this time of year. The pace slows to a delightful crawl. Margaritas and moonlight meet. Daytime is extended as daylight is magnified.

As hot as it is outside, it is even hotter inside the four walls of Ridgeland Heights Medical Center. August is the month that final decisions are made on the operating and capital budgets. For the finance staff, no vacations are scheduled and none are allowed. They are busy crunching numbers and supporting both the department managers and the administration, helping them improve some of their budget presentations late in the game. They are in an all-out blitz to ensure that all the deadlines in a month of meetings are met.

**CAPITAL BUDGET: AUGUST**

Now that August has arrived, the role of RHMC’s administrators in the capital budget process takes center stage. Prior to this month, a lot of preliminary work has been performed. The department managers have prepared all of their capital requests, with input from the medical
Fundamentals of Health Care Financial Management

directors where appropriate. The finance staff have reviewed each proposal for completeness and consistency to allow them all an equal chance of success during the administrator’s evaluation phase. Finally, facilities management, materials management, and information systems management examined the proposals to ensure that they included any extra information that could potentially affect their areas. The proposals are complete, clean, and ready to be judged on their merits.

These are the steps that need to be completed in the August capital budget process:

August 11: Detailed discussion of all proposals over $100,000 and training of all proposal evaluators
August 12: Discussion of all pool proposals with the pool evaluators
August 12–15: Online evaluation of proposals
August 22–25: Consensus meetings with pool evaluators
August 25: Consensus meeting for all proposals over $100,000
August 26–28: Revision of ratings, if necessary, on the reviewer’s desktop

August 11: Detailed Discussion for All Proposals over $100,000 and Training of All Proposal Evaluators

The meeting of August 11 is highly anticipated by the administrators. This is the first time they see the entire list of capital items being requested for acquisition in the year 2009. Prior to this, each administrator has seen only the capital requests from his or her division. The primary purpose of this meeting is to allow each administrator to present a verbal detailed story about the capital items being requested from that division and see the competing items requested from all other divisions. In effect, each administrator is given an opportunity to champion items for that division. The secondary purpose of the meeting is to train (or retrain) each administrator in using software for analysis.

In this meeting, it has already been determined that the dollar cutoff point for major project evaluation is $100,000. This decision was made by the finance administrator within the past three weeks, but only after the entire list of requested capital items was assembled. The dollar cutoff number is not fixed but can vary from year to year. It depends on the total number and dollar value of capital items being requested. Essentially,
experience has shown that the evaluators can effectively review no more than forty to forty-five projects in detail. If they are asked to do more, they lose effectiveness, and the objectivity of the criteria-based capital budget process is diminished.

In the case of the 2009 RHMC capital budget, the requested items were stratified into dollar categories as shown in Table 8.1. Capital items at RHMC are defined as equipment or building items that cost at least $2,500 and have a useful life greater than one year.

Table 8.1 shows that a total of 194 capital items were requested. Looking at the items from lowest to highest dollar values, it is clear that to avoid exceeding the limit of forty to forty-five items, the 2009 capital budget cutoff should be at $100,000. This dollar limit can change each year; it is entirely dependent on the dollar value and number of requests.

There can also be finer stratification of the requests; the stratification

**TABLE 8.1. Summary of 2009 Capital Budget Requests.**

<table>
<thead>
<tr>
<th>Value of Requests ($)</th>
<th>Number of Requests</th>
<th>Backward Cumulation of Requests</th>
<th>Total Value of Requests ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,500–24,999</td>
<td>78</td>
<td>194</td>
<td>800,000</td>
</tr>
<tr>
<td>25,000–49,999</td>
<td>42</td>
<td>116</td>
<td>1,400,000</td>
</tr>
<tr>
<td>50,000–74,999</td>
<td>19</td>
<td>74</td>
<td>1,200,000</td>
</tr>
<tr>
<td>75,000–99,999</td>
<td>15</td>
<td>55</td>
<td>1,300,000</td>
</tr>
<tr>
<td>100,000–124,999</td>
<td>18</td>
<td>40</td>
<td>2,000,000</td>
</tr>
<tr>
<td>125,000–199,999</td>
<td>12</td>
<td>22</td>
<td>2,400,000</td>
</tr>
<tr>
<td>200,000–249,999</td>
<td>7</td>
<td>10</td>
<td>3,200,000</td>
</tr>
<tr>
<td>Over 250,000</td>
<td>3</td>
<td>3</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Total requests</td>
<td>194</td>
<td></td>
<td>16,300,000</td>
</tr>
</tbody>
</table>
jumps can be whatever makes sense to the organization. Although RHMC used $100,000, other organizations might use $50,000 or even $25,000. All items under the $100,000 cutoff level are evaluated in a somewhat different manner. They are grouped into six pools and evaluated separately by a small team of expert users and administrators.

During the first part of the meeting, the proposal evaluators (administrators) are trained on how to use the software. They are advised to set aside about two hours of uninterrupted time so that they can perform their review in one sitting. This is because they are being asked to score each proposal against all the others on ten criteria.

The methodology they are trained on works like this:

- The evaluators are reminded that their review is based on the ten strategic plan criteria, with which they are refamiliarized:

  **Strategic Plan Criteria**
  1. Community health promotion
  2. Facility quality
  3. Image and reputation
  4. Information and decision support
  5. Market share
  6. Operating efficiency (internal rate of return or net present value)
  7. Patient and family satisfaction
  8. Patient outcomes
  9. Physician outcomes
  10. Physician satisfaction

The evaluators are told to review all proposals in total, one time, before doing any scoring. This allows them to get an overall feel for the entire mix of proposals before them.

- Then they are told to go back to review and score each proposal on just the first strategic plan criterion, in this case, community health promotion.

- The key concept in the scoring, they are told, is to determine, after reading all proposals, which of the forty they consider best meet the criteria. This proposal is awarded 1,000 points on a scale of 0 to 1,000.
The other thirty-nine proposals are then judged against this “best” proposal. The evaluators are strongly encouraged to give out zeroes if a proposal does not have any features that meet the criteria or if no justification was given by the requester. If, for example, using this methodology, an evaluator decides that one of the other proposals is only 10 percent as effective in meeting the community health promotion criterion as the best one, the evaluator would award the second proposal 100 points for this criterion.

After completing the scoring for all the proposals on the first criterion, the evaluators are told to go back to the second strategic plan criterion and continue the process until all proposals have been rated on all ten criteria.

This system is extremely efficient and relatively fast. Using a desktop PC and the requisite software permits an amazingly compact process. In fact, one of RHMC’s administrators has been known to complete the forty-item list, with its ten criteria, in forty-five minutes. The average time among the group is about ninety minutes. This means that each RHMC administrator spends only an hour and a half or less a year allocating as much as $10 million. Not bad—and far superior to the previous smoke-filled back room!

The software enhances the process in several ways. First, each detailed proposal is just a mouse click away if the administrator needs to research any specific aspect. Particularly important in this regard are the justifications for any of the criteria that the department managers have claimed; the software summarizes them on one easy-to-read screen. Second, the software actually leads the administrator through the process, forcing him to complete the first strategic plan criteria before allowing him to move on to the second. This enforces discipline in the process. Last, the software encourages the manager to complete a screen for any additional information that she may deem important to making her case. This screen is always available to the evaluator with a single mouse click.

The administrators are given one additional piece of information during this meeting that is critical to fully understanding the criteria-based capital budget. Although these administrators serve as evaluators for each proposal and cumulatively their scores are totaled and ranked, high to low, there is still one additional concept that significantly affects the final total.

It turns out that the ten criteria are not evenly weighted at 10 percent each. Instead, this process mandates that the CEO gets to weight the
ten criteria, deciding which are more important to the organization’s well-being in the upcoming budget year and which are less important. At RHMC, this weighting was kept secret from the evaluators so that the administrators would not look for ways to game the system by overjustifying the more highly weighted criteria in their own division’s requests. The only two people who know the weighting are the CEO and the finance staff member assigned to entering it on the computer. Not even the finance administrator is privy to the weighting.

This is all explained to the administrators beforehand. Now that they know what they will be evaluating over the next few days in the privacy of their own offices, each evaluator can better formulate questions during the second part of the meeting they are all attending.

**August 12: Discussion of All Pool Proposals with the Pool Evaluators**

A lot has been written about the main capital budget process for all requests over $100,000. A significant amount of information is requested and then evaluated for equipment and projects above this threshold. Yet as shown in Table 8.1, there are many other requested projects under the threshold. The criteria-based capital budgeting process is streamlined and does not generally involve all the administrators, yet it still meets the objective of using strategic plan criteria in making yes-or-no decisions.

There is a reason for the streamlined process. It follows the classic 80–20 principle of finance, which holds that in almost every case, the top 20 percent of a process accounts for 80 percent of the value, and conversely, the bottom 80 percent of a process accounts for only 20 percent of the value. The principle is fairly accurate in this case. Twenty percent of the 194 requests means that 39 proposals should be reviewed. If we round this up to 40 cases that just happen to meet the $100,000 threshold, we can see again in Table 8.1 that these proposals have a dollar value of $11.6 million. This is 71.2 percent of the 194 cases, which is fairly close to proving the 80–20 principle ($11.6 million divided by $16.3 million equals 71.2 percent).

The process for all requests under $100,000 divides all the items into five categories: clinical equipment, facilities construction and renovation projects, information systems, market development, and office equipment. Small specialty groups are assembled to review the requested items in their categories. Each group develops a smaller set of criteria related to the strategic plan. They use these criteria to rate and score the requests.
The groups are made up of directors and managers with significant responsibility for the areas in question. Exhibit 8.1 shows the representative groups responsible for pool evaluation.

At the first meeting, the finance facilitator explains the role of each group, how it operates, and how much money is available for funding. The evaluators then review all of the requested proposals for the first time. The review consists of detailed discussion of each item and how it relates to the decision criteria set by the group. If there are any questions that cannot be answered at this meeting about any of the proposals, a small additional amount of time is set aside to get the answers. At the end of the meeting, the group is instructed as follows:

- Think about what they have just discussed.
- Get answers to any open questions.
- Return between August 22 and 25 to make final decisions on the requests.

**Funding Availability**

The amount of money available for both the over-$100,000 items and the under-$100,000 items is determined by taking the initial total funding determined by the finance administrator and allocating it among the categories. For example, if the organization has decided to fund its capital at

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**EXHIBIT 8.1. RHMC Pool Evaluators.**

<table>
<thead>
<tr>
<th>Pool</th>
<th>Evaluators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical equipment</td>
<td>Vice president, patient care services; directors of nursing; director of clinical services</td>
</tr>
<tr>
<td>Facilities and construction</td>
<td>Director of facilities, manager of environmental services</td>
</tr>
<tr>
<td>Information services</td>
<td>Chief information officer, manager of hardware services, manager of application services</td>
</tr>
<tr>
<td>Market development</td>
<td>Chief strategy officer, director of external communications</td>
</tr>
<tr>
<td>Office equipment</td>
<td>Finance administrator, materials manager</td>
</tr>
</tbody>
</table>

---
100 percent of depreciation expense, it then needs to determine the allocation between the over and under groups. At RHMC, the administrators look at the dollar level of requests between those over and under $100,000 and choose to use the percentage ratios between the two. Again, if we examine Table 8.1, we see that RHMC will fund 71.2 percent of its depreciation expense for the over-$100,000 requests and 28.8 percent for those under $100,000.

This funding limitation sets up constraints for the organization and justifies the need for this type of capital budgeting process. Table 8.2 summarizes the differences between the capital requests and capital available by category.

First, it is obvious that some department managers are not approved for all the capital they have requested. The organization’s funding level is $11.5 million. The capital requests are $16.3 million. That’s a gap of $4.8 million. The organization can approve only 70.5 percent of its requests.

### TABLE 8.2. 2009 Proposed Capital Budget Funding Summary (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
<th>Total Funded</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Criteria-Based</td>
<td>Automatic</td>
<td></td>
</tr>
<tr>
<td>TotalRequested</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main strategic</td>
<td>11,600</td>
<td>8,184</td>
<td>3,184</td>
<td>5,000</td>
</tr>
<tr>
<td>Clinical equipment</td>
<td>1,800</td>
<td>1,270</td>
<td>870</td>
<td>400</td>
</tr>
<tr>
<td>Facilities and</td>
<td>1,500</td>
<td>1,058</td>
<td>258</td>
<td>800</td>
</tr>
<tr>
<td>construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information services</td>
<td>900</td>
<td>635</td>
<td>635</td>
<td>800</td>
</tr>
<tr>
<td>Market development</td>
<td>300</td>
<td>212</td>
<td>212</td>
<td>0</td>
</tr>
<tr>
<td>Office equipment</td>
<td>200</td>
<td>141</td>
<td>141</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16,300</td>
<td>11,500</td>
<td>5,300</td>
<td>6,200</td>
</tr>
</tbody>
</table>
Automatically Approved Capital Funding Items

A counterintuitive concept inherent in this criteria-based capital budgeting system is the automatically approved items built into the process. At its heart, this concept expresses that not all capital acquisitions need to or are even able to meet strategic plan criteria and therefore need a safety valve for approval. In addition, there are capital items that might compete well in the main process, but because the administration as a whole agrees that these items need to be purchased no matter what, they are deemed eligible for automatic approval.

Examples of RHMC automatically approved capital items are HIPAA-mandated information system upgrades and fixes and information system infrastructure upgrades to support HIPAA fixes. In addition, the administration has determined that it is in the organization’s best interest to approve construction of a new emergency department and renovation of one of their medical and surgical nursing units. These items alone amount to $4.8 million in capital. This amount is therefore deducted from the total amount available to be funded, thereby reducing the amounts available for the criteria-based projects that need to compete against one another.

August 12–15: Online Evaluation of Proposals

Between August 12 and 15, the administrators (proposal evaluators) get their opportunity to score each of the proposals against all others using the ten strategic plan criteria. This is done on the evaluator’s PC, which is attached to a local area network (LAN) so that all the scoring is linked and aggregated by the software. This results in a streamlined and efficient outcome at the end of the process. The evaluators follow the rules set down at the meeting of August 11 and are given three days in which to find a two-hour time block to get it done. The finance division has two staff members available during these three days to come to any evaluator’s office in the event of a question or problem with the concepts or the software. At RHMC, over these three days, no problems are encountered.

August 22–25: Consensus Meetings with Pool Evaluators

Between August 22 and 25, the pool evaluators get together again to make final recommendations on their category requests. If there are no controversies, they are done. If however, no consensus is reached, each group has one more chance to settle on its recommended list over the following week. In essence, these meetings are held to give the pool evaluators one
more chance to lobby for their own proposal or champion any other. These meetings are usually short and conclusive.

**August 25: Consensus Meeting for All Proposals over $100,000**

This is the day that many of the administrators have been waiting for. It is when they learn if the capital requested by their division has made the cut in the criteria-based capital budgeting system. All of the process to this point has been important, but it was all a prelude to today’s meeting, when the power of the criteria-based capital budget becomes evident.

At this meeting, the list of 2009 recommended and nonrecommended capital items is presented. It is the culmination of the administrator’s ratings and the CEO’s weightings of the ten strategic plan criteria. The initial output from the licensed software is called the weighted value score (WVS). It is literally the administrators’ judged priority ratings multiplied by the CEO’s priority weighting. This output, when arrayed from the highest WVS to the lowest, is a clear indication of which requested capital items meet the administrators’ concept of strategic plan importance.

But this array is not the final list of recommended projects. The final step required to produce the best outcome is to divide each of the weighted value scores by its cost. This produces a benefit-to-cost ratio that can then be ranked. The higher the result, the more likely the capital request will be approved. This simple mathematical equation allows the administration to put the requested capital expenditures into context. For example, there could be a request for an item that has a high WVS but also high cost. The result can easily move it down the list, lower than an item with a lower WVS but much lower cost.

These rankings allow the administration to make rational decisions using objective criteria and techniques, something that was not possible before at RHMC. The rankings are machine-generated from the evaluators’ own consensus inputs. Still, they are not obliged to use them, in all or in part, if they so choose. As a group, they can decide not to fund a criteria-based recommended item in favor of one that did not initially make the cut. An administrator may try to lobby for a project that missed the cut. However, the odds are stacked against a change because every proposal went through the process, and if a substitution is made, one of the other recommended projects will have to be cut.

It is a zero-sum game. The funding is set and will not be increased. So when the projects are ranked, a cutoff point is drawn above the
funding limit. Replacement requires substitution. Because of this, arguments during the meeting are eliminated. All participants have had their say and are fully aware of the process. They understand that they have met clear-cut criteria and that the final decision is completely defensible.

RHMC in fact found that one intended consequence of the process had quite a positive effect on the organization. During the drafting of the 2008 capital budget, the organization’s chief operating officer (COO) requested a CT scanner costing $800,000. Based on the final WVS and benefit-to-cost ratio, this project did not make the cut. Still, the COO felt strongly that this was an important project and needed to be funded. This was because the request was initiated by the medical director for the radiology service, a powerful and politically connected individual.

In the past, the influence of the requester and the project champion meant that this argument would have prevailed over the strategic plan importance. However, because of the new process, the COO decided to go back to the radiologist and explain the situation, the objectivity of the process, and the desire of the group not to override the criteria outcome. Lo and behold, the radiologist backed off on his request and decided to come back the following year with a request for an even more sophisticated scanner. This was a major success for the 2008 process; 2009 will take care of itself.

As the meeting progresses, the finance administrator can make changes to any of the inputs online and in real time via the software. Because the results are being projected on a screen in the front of the room, the results of revised assumptions can be analyzed and reviewed immediately. The software reoptimizes the results instantaneously. This also enhances the value of the process, allowing the assembled “brain trust” to pursue its desired results.

At the end of this meeting, the capital budget has been set, based on established funding levels and strategic plan criteria, or else there is a clear need to bring back certain additional information on some of the projects, if desired. If this is so, the administrators have to perform one more set of evaluations to finalize their ratings. If it is not necessary, the 2008 capital budget is done.

**August 26–28: Revision of Ratings, If Necessary, on the Reviewer’s Desktop**

These next three days are necessary only if there was any kind of dispute at the August 25 meeting involving an administrator’s pet project or if additional information is requested during the meeting. It is really used as a fail-safe device, some extra time built into the capital budgeting
process. Although the capital budget software immediately allows the administrators to see the results of any changes to funding level, they might need some additional data to make an informed decision. If so, that information is transmitted electronically into the networked software for all the administrators to see and react to online, possibly by changing their evaluation scoring.

If this is done, the group meets again early next month to perform one final review of the capital budget requests.

**OPERATING BUDGET**

Although the finance staff members are hard at work on the capital budget, the beginning of August is a time when they are able to take a breather on the operating budget. The department managers and their bosses, the administrators, are doing almost all of the work this month. They are reviewing the operating budgets that have been in their hands since July 25. The main role of the finance staff during this time is to be available to answer any questions the managers have. They also continue to hold small formal classes on how the managers can best do their budgets. Still, for the most part, August finds the finance staff devoting most of their time to the capital budget.

**August 15: Return of Department Managers’ Operating Budget Worksheets to Their Vice Presidents**

By August 15, the managers have had the operating budget worksheets in their hands for three weeks. They were expected to review the full-time equivalent employees (FTEs) and salary levels, the volume assumptions, and the nonsalary line items to determine if there were any clerical or technical errors made by the finance staff in preparing the budget. If there were any errors of this sort, they are expected to make a note of it on the budget so that it can be corrected when it is returned to finance.

After the error check is complete, the managers have an opportunity to request additional resources for the department. This is problematic. Health care as an industry is under considerable financial pressure. Because of reimbursement limitations, additional resources are not easily granted. The best way to ensure that a request for additional staff is approved is to demonstrate that net revenue will exceed the cost of the position. Proof is the problem. It’s easy for a manager to say that additional volume and revenues will accumulate if another staff member is added. It is much harder to prove because no one can predict the future with sufficient certainty.
In Chapter One, the validity of volume assumptions was discussed at length in the MRI pro forma section. The administrators, who have dozens of years of cumulative experience, have heard all kinds of stories from managers about how this added FTE or that added FTE would allow them to earn significant additional revenue for the organization. But it doesn’t always happen, and then the organization loses money on the assumption. The addition of MRI service was an example of the organization’s taking a chance on proven medical technology because the odds of meeting the pro forma volume were very strong.

Similarly, revenue-producing department managers are currently deciding where they too may have an opportunity to expand their department services. For example, the radiology department manager may decide that there is an opportunity to expand CT scan service. She knows that there is an absolute capacity level to the department’s lone CT scanner. She also knows that the department is currently open for two full shifts, from 6:30 in the morning until 10:30 at night. Finally, there is currently a two-week waiting list for outpatient testing. Because of these facts, the department manager decides that it would be appropriate to request a second CT scanner as well as three additional FTEs to run the new machine. Once again, because of the size of this purchase, a pro forma analysis is prepared to determine if the net revenues will exceed the additional expenses, including staffing, additional fringe benefits, supplies, and depreciation on the new equipment.

Smaller projects involving revenue-producing departments need similar analysis. For example, the physical therapy department may have been built to accommodate a far greater volume of patients than is currently being served. However, if RHMC has just recruited a new orthopedic surgeon, it may be presumed that the need for additional therapies will commence soon. In this case, the request for a new physical therapist in the department is almost certain to be accepted.

But it may not be so easy if the physical therapy manager can show no particular event that increases revenues. Still, the manager believes that additional staff will bring additional people to the organization for service. This is the “if we build it, they will come” theory of management. It almost never works and will be rejected out of hand by the RHMC administrator. If, however, this manager does her homework and writes a marketing plan that includes specific actions to be taken to recruit physicians, health plans, and individual patients, there is a better chance for the extra FTEs to be accepted.
Nevertheless, if it is difficult for a revenue-department manager to add new staff, it is even harder to do so for a nonrevenue department manager. Non-revenue-producing departments find it very difficult to justify additional staff as a result of additional workload because it is always so hard to prove. Later in this chapter, we will look at cost analysis and decision making. Here we discuss how to measure workload. This is an important discussion that, if performed correctly, can truly help justify additional staff.

The most likely method for a non-revenue-producing manager to justify additional staff is to claim cost reduction in other areas of the department. Yet it is usually rejected because this is almost never verifiable. Like the volume argument used by the revenue-producing manager, the proof is elusive. Because this argument usually fails, the nonrevenue manager does not have many good justifications remaining for additional staff.

Nonsalary expenses are the other line items the managers review for accuracy. They determine whether the supplies, purchased services, and all other services reflect the current year’s reality and the upcoming budget year projection. They do this using some financial analysis techniques, but mostly it is determined by gut feel. Because they know what they are spending this year using the financial reports produced by finance, the managers can speculate on next year’s expenses. It is easy for many managers to recognize whether any of their large expense items have been lost through clerical error. If these nonsalary expenses appear correct, then they are ready to accept the budget and move it on to their administrator for further review.

August 18–28: Review of the Proposed Operating Budget by the Divisional Vice Presidents and Its Return to Finance

During this ten-day period, each administrator receives a budget package that has been reviewed and accepted by each of his or her department managers. Each administrator’s role is to aggregate all the department budgets and determine how the total volumes, revenues, and expenses equate to the current-year budget and the current-year projection and how they relate to the original following-year budget proposed at the July 18 meeting.

Their role is to understand the budget assumption of each one of their departments. They are required to present and defend any request
that deviates from the July 18 budget, particularly if it reduces the bottom line. Here are some actions of this sort:

**Department Manager Actions That Decrease the Budgeted Bottom Line**

- Volume reduction
- Gross revenue reduction owing to price decrease (to conform with market forces)
- Expense increase, characterized by FTE increase, salary increase greater than the organization’s established average, or supply cost increase because of additional consumption above the current average

Administrators also need to be prepared to speak up at the September 9 administrative budget meeting if the budgeted bottom line once again fails to meet the board’s established targets. They need to bring contingency plans and expense items they can “give up” if, as is almost certain, additional expenses have to be cut.

The administrators also understand that their role is tenuous. They need to walk a fine line between supporting the perceived needs of their managers (whose job is to focus on the daily operation of the department) and the board goals (which mandate specific bottom-line requirements). They use their experience and training in attempting to achieve these goals.

**BUDGET VARIANCE ANALYSIS**

While managers, directors, and vice presidents are performing all this work to present the best budgeted bottom line for the upcoming year, the current year is taking place. During the year, the administration constantly monitors not only its actual financial results but also how those results compare to the current-year budget. That is really the whole point of the budget! It is a plan developed by management and approved by the board, and it is meant to be followed. Although the budget is a target, out-of-range deviation from the budgeted results should be explained to clarify why variances occurred. Then action should commence to bring the actual performance back into conformance with the budget, particularly if performance is negative. In addition, all managers need to know the nature of the consequences, both positive and negative, if the budget is consistently missed. It is appropriate to
state that a positive consequence could be a more powerful position, more perks, or perhaps even more money. A negative consequence for budgeted financial targets consistently missed could be job termination.

Accounting and finance track and report budget variance diligently. In general, a variance is not inherently bad or good. It is just a deviation from the expected. Yet budget variance is a concept that many managers have a hard time accepting.

Budgets are not effective without appropriate feedback mechanisms. Feedback allows the managers to review the variance between actual operational results (including volume, revenues, and expenses) and expected (budgeted) results. All budget variances should be explainable. The concept of explainable variance should not be foreign to the clinical manager, who should have a scientific background and should understand the concept of deviation from the norm. An explainable variance is one that results from a specific event different from the expected event.

For example, let’s say that a water main on the second floor of RHMC broke in the month of August. The resulting flooding caused water damage to six rooms on the first floor. Ignoring any potential insurance claim, the cost to fix the damage was $10,000 and was charged to the facilities department. The manager of the department is disturbed because this $10,000 charge has put him over budget by $9,000 for the month. He is concerned that he will be singled out for criticism when the monthly financial statement is distributed because of the negative budget expense variance.

This should not be the case, and it is not so at RHMC. The administrators understand the concept of explainable variance. So long as a manager can appropriately explain significant negative or positive variance, she will not be maligned or disparaged. In the previous case, the administrator is reminded of the reason for the overage when she reviews the automated monthly variance analysis report required to be completed by all managers (see Exhibit 8.2). Still, if the facilities manager did not have a flood to explain the $9,000 overage and had no particularly good explanation for the overage, the manager would face appropriate criticism and consequences at RHMC.

This monthly variance report allows the manager to record reasons for positive or negative differences in net revenue, salary expense, and nonsalary expense. The purpose of the report is to require the managers to research and discuss variances with their administrators. It allows both individuals to know their businesses better. In addition,
EXHIBIT 8.2. **Departmental Monthly Variance Report.**

Use this form to provide information if your actual operating margin for the month was ±10 percent of budget.

Department __________________
Cost Center Number ________ Month ________
Operating margin variance: ________ percent $ ________

In the space below, identify the major factors contributing to the variance.

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount ($)</th>
<th>Amount (%)</th>
<th>Explanation of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonsalary Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This form is due to your vice president no later than the last business day of each month for the previous month’s profit-and-loss statement.
the finance administrator uses these reports to explain their variances to the finance committee. It is the best way to get and maintain a complete record of activities that deviate from the financial performance expected when the budget was developed in previous years.

This monthly variance report is just one of the integrated methods used by RHMC. A few years ago, a new financial decision support system was installed that allows administrators to monitor their manager’s outcomes, compare them to their financial goals through exception reporting, and alert management of variances in a timely manner. This user-friendly operating and capital budgeting product also automatically alerts department managers and their bosses to any deviation from the established exception parameters set by the administration (say, plus or minus 5 or 10 percent, or $500 or $1,000, or both; see Exhibit 8.3). The system automatically sends an e-mail notification of the variance to the appropriate manager and his or her vice president (as well as the hospital president, if desired). For example, Exhibit 8.3 shows that the operating room manager received an alert for overrunning his flexible (volume-adjusted) monthly budget for all medical supplies by over $400,000!

**EXHIBIT 8.3. Sample INSIGHTS Automated E-Mail Alert.**

- High Alert
- Operating Room—Monthly Medical Supplies
- Based on: Monthly Information
- Boundary Value from $5,000 to $999,999,999
- Boundary from 15.00% to 99,999.00%
- Actual: $1,899,214
- Budget Flex: $1,498,158
- Monthly Variance: $401,056
- Monthly Variance: 26.7699%
- Annual Impact: $4,812,672
This is considered a high alert as defined by the medical center and the automated system.

As this point, the manager is required to respond to the e-mails (which can be sent on a daily, weekly, biweekly, or monthly basis) with rationale and justification for the variance, as well as a corrective action plan, if required. This response is logged and automatically routed to higher-level administrators. This system instills a much greater level of accountability throughout the organization. (The INSIGHTS decision support budgeting, monitoring, and reporting software system is a product of Healthcare Insights; www.hcillc.com.)

**BUDGET VARIANCE PARAMETERS**

A key element of the variance report is the parameters set by the organization, triggering the need for an explanation. The organization’s culture has a great deal to do with the parameter levels. For example, as you can see in Exhibit 8.3, RHMC uses a 15 percent and $5,000 level for its high alerts; this means that it does not question revenue and expense variances that fall within the 85 to 115 percent range and greater than $5,000 around the budget. Other organizations may be tighter or looser with the parameter range. RHMC also has a low alert set at plus or minus 5 percent and $500 and a medium alert set at plus or minus 10 percent and $1,000.

Regardless of the range, it is important for the organization to enforce variance analysis. This allows administrators to maintain an understanding of the financial record of departments. Those with persistent positive variances from their budgeted margin should be monitored closely. The organization needs to consider replacing any manager whose department repeatedly undermines budgeted organizational results.

**FLEXIBLE BUDGETING**

Flexible budgeting adds a twist to budgeting and budget variance reporting. A flexible budget is adjusted for changes in volume. RHMC administration and the finance division believe that the use of flexible budgeting is essential to good financial management. The problem with fixed or static budgets is that they “are not adjusted or altered, regardless of changes in volume or other conditions during the budget period” (Horngren and Foster, 1987, p. 181). The organization’s budgeting and monitoring system automatically flexes the budget according to the selected volume statistic chosen for each department.
An organization that uses a flexible budget adjusts the budget column in the monthly departmental financial report to factor out any volume variance. The flexible budget is “based on a knowledge of how revenue and costs should behave over a range of activities” (Horngren and Foster, 1987, p. 181). Furthermore, “flexible budgeting tools pay for themselves if you use them correctly,” states Mary Wilkes, senior managing director of Phase 2 consulting (quoted in Barr, 2005, p. 25). The reason that flexible budgets and the appropriate enabling tools pay for themselves is in the actionable information that is now available to make better management decisions. Let’s look at the example in Exhibit 8.4.

In this nonsalary (supply) expense example, the fixed expense for radiology film in 2008 is $500,000. If we wanted to simply budget a 5 percent inflation increase for 2009, without taking any volume changes into effect, we would budget $525,000. But if we also knew that we budgeted a 10 percent volume increase, the only correct way to budget radiology film expense for 2009 would be to increase the $5.25 per unit cost by the added 10 percent volume to derive a $577,500 budget expense. This works in the same way for gross revenues.

Flexing the labor budget is more extensive, involving the use of labor productivity and average hourly rates, but the concept is the same: developing the budget using volumes as the key variable. Extensive polling across hundreds of continuing professional education health care classes indicates that more than half the hospitals in America are using flexible budgeting or monitoring. This is an area of great opportunity for the remaining hospitals. It takes a change in culture and
acquisition of an automated budgeting system to take the leap. But the financial outcomes and results for the hospitals that have done so have proved to be quite extensive.

COST ACCOUNTING AND ANALYSIS

Cost accounting in health care has had an interesting existence since 1966, when Medicare and Medicaid were created. Prior to these programs, the health care industry was smaller and less sophisticated. There was a perception at that time that because of the relatively charitable nature of the industry, accurate costing of organizational activity was unnecessary and unwarranted. Many nonprofit organizations did not care as much about their bottom line. Remarkable as it seems today, they often had donors who agreed to fund any bottom-line losses at the end of each year. These losses were usually moderate and reflected a time when patients received less dramatic care. A hospital’s mission then was more convalescent and much less intensive.

The advent of Medicare made health care into a big industry. All of a sudden, money flowed freely. With this came the need for better accounting of organizational revenues and costs. In fact, the Social Security Act that brought Medicare into existence mandated annual filing of a cost report for each organization treating Medicare patients. As described in some detail in Chapter Four, the Medicare Cost Report (MCR) mandated a cost accounting methodology for the industry called the ratio of costs to charges (RCC). The RCC was developed by allocating the organization’s indirect (or overhead) costs to revenue-producing cost centers according to a stepdown methodology. Because of the relative ease of use of this methodology, much of the industry accepted RCC as its cost accounting system. Unfortunately, the system is not totally accurate for developing or determining the actual cost of doing business at the unit-of-service level.

The RCC costing method does not meet the general requirements of a good cost accounting methodology. Cost accounting is a financial management technique that requires costs to be separated into meaningful categories to allow identification. There are four relevant cost components:

- **Direct costs**—costs directly attributable to the operating or revenue-producing department in question
- **Indirect costs**—also called *overhead*, costs not directly attributable to an operating department
- **Variable costs**—costs increase or decrease with a change in volume
Fundamentals of Health Care Financial Management

- **Fixed costs**—costs that do not vary with an increase or decrease in volume

  The RCC and stepdown methods of cost accounting do not do a reliable job of separating the components with relative accuracy. In fact, although these methods purport to at least separate direct from indirect components, they do not do so at the unit-of-service level and do not attempt to separate the variable from the fixed component.

  Consequently, if a health care organization wants to know the cost of producing a particular service, it must adopt different and better techniques to do so. The following list elaborates on why the organization would want to have a good idea of the component parts of its costs at the unit-of-service level. Each objective of a cost accounting system is important in its own right. The cumulative effect of the objectives makes it an organizational imperative to be able to perform reasonably accurate cost accounting. Cost accounting separates costs into meaningful categories, allowing managers to do all of the following:

  - Measure the effects of changes in intensity and case mix
  - Evaluate and measure performance against a plan
  - Acquire the information required to manage resources efficiently
  - Identify costs that can be converted from fixed to variable

**The Impossibility of Determining “True” Cost**

While reviewing established cost accounting techniques, it is important to recognize that there is no such thing as “true” cost in cost accounting. Many people—among them administrators, department managers, and physicians—believe that the cost accounting figures presented by the finance staff are an accurate and objective portrayal of cost components, but they are not. Developing costs at the unit-of-service level involves assumptions. In any finance or accounting concept, the first time an assumption is used, complete accuracy is lost. The best that can be said of cost accounting is that it is a reasonable representation of the cost picture.

  To understand why unit cost can never be completely true or accurate, let’s look at the example of a common test performed at a hospital, a CT scan of the abdomen. This is a digital diagnostic test ordered by physicians to rule out or determine whether a medical problem exists in
the patient’s abdomen. As you will see, assumptions are used to determine the direct and indirect (overhead) costs at the unit level. To ascertain costs at the unit level, the financial analyst has first to determine the direct costs. In the case of a CT of the abdomen, costs of staffing and nonsalaries have to be determined.

For staffing, there are at least three ways to determine unit costs:

- Time and motion studies
- Department manager time studies
- Department manager perception

In all three, several assumptions are used. The biggest assumption regards the amount of time it takes each employee to perform each of the various jobs in the department. Here is an example of the tests performed in the CT scanning department and the technician time required to perform each test:

- Scan of the head: 30 minutes
- Scan of the chest: 45 minutes
- Scan of the abdomen: 30 minutes
- Scan of the pelvis: 45 minutes
- Scan of the spine: 60 minutes

To develop what is called microcosting in each department, it is important to have a list of all the services performed. The direct departmental costs are then split between staffing and nonstaffing costs. All of these direct costs are then segregated into their various component parts. In the case of staffing at RHMC, this is done through the use of time logs kept by the staff and reviewed by the department manager over the course of a four-week period. In the case of supply costs, actual invoices are used wherever possible.

Table 8.3 is a summary of the direct cost inputs for the CT scan of the abdomen. The direct costs for the test are assembled and split between variable and fixed components. In this case, there were no direct fixed costs, just direct variable costs. A computer model is then used to allocate all of the direct departmental costs across all the tests.

Allocation of direct staffing costs entails several additional cost components not already included in the time log, such as fringe benefits and nonproductive time. In fact, nonproductive time doubles or triples
the actual direct cost of performing a test. Nonproductive time is often categorized as standby time, which is when the technician is standing around, waiting for the next patient to show up for treatment. Other nonproductive time includes paid breaks and holidays, sick time, and vacation time. All of these costs are encountered in the CT scanning department (which is a cost center), and they all need to be allocated back to individual tests.

### TABLE 8.3. Inputs for Calculating Procedure-Level Unit Costs for a CT Scan of the Abdomen.

**DIRECT VARIABLE COSTS**

<table>
<thead>
<tr>
<th>Labor costs</th>
<th>Pay Rate ($)</th>
<th>Test Time (minutes)</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Radiology Technician</td>
<td>17.90</td>
<td>30</td>
<td>8.95</td>
</tr>
</tbody>
</table>

**Nonlabor costs**

<table>
<thead>
<tr>
<th>Nonlabor costs</th>
<th>Unit Cost</th>
<th>Quantity</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film</td>
<td>1.59</td>
<td>11</td>
<td>17.49</td>
</tr>
<tr>
<td>Contrast media</td>
<td>40.44</td>
<td>1</td>
<td>40.44</td>
</tr>
</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th>Other</th>
<th>Total Departmental Cost ($)</th>
<th>Annual Scans Performed</th>
<th>Cost per Scan ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment depreciation</td>
<td>200,000</td>
<td>5,000</td>
<td>40.00</td>
</tr>
<tr>
<td>Equipment service contract (on the CT scanner)</td>
<td>50,000</td>
<td>5,000</td>
<td>10.00</td>
</tr>
</tbody>
</table>

**Total direct variable cost inputs ($)**

116.88
After the computer model completes its direct cost allocation at the unit level, it allocates indirect costs to revenue-producing departments through a statistical methodology based on usage. Exhibit 8.5 identifies common statistical allocation bases for developing indirect cost centers.

<table>
<thead>
<tr>
<th>Department</th>
<th>Statistical Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building depreciation</td>
<td>Departmental square feet</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>FTEs</td>
</tr>
<tr>
<td>Human resources</td>
<td>FTEs</td>
</tr>
<tr>
<td>Information services</td>
<td>Total expenses</td>
</tr>
<tr>
<td>Plant operations</td>
<td>Departmental square feet</td>
</tr>
<tr>
<td>Environmental services</td>
<td>Departmental square feet</td>
</tr>
<tr>
<td>(housekeeping)</td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>FTEs</td>
</tr>
<tr>
<td>Administration</td>
<td>Total expenses</td>
</tr>
<tr>
<td>Financial services management</td>
<td>Total expenses</td>
</tr>
<tr>
<td>Materials management</td>
<td>Supply expenses</td>
</tr>
<tr>
<td>Laundry and linen</td>
<td>Pounds of laundry</td>
</tr>
<tr>
<td>Patient accounting</td>
<td>Inpatient and outpatient units of service</td>
</tr>
<tr>
<td>Medical records</td>
<td>Inpatient and outpatient units of service</td>
</tr>
<tr>
<td>Planning and marketing</td>
<td>Total revenues</td>
</tr>
<tr>
<td>Medical staff</td>
<td>Total revenues</td>
</tr>
<tr>
<td>Central transportation</td>
<td>Adult admissions</td>
</tr>
<tr>
<td>Food services</td>
<td>Adult patient days</td>
</tr>
<tr>
<td>Community services</td>
<td>Total revenues</td>
</tr>
<tr>
<td>All other overhead</td>
<td>Total expenses</td>
</tr>
<tr>
<td>Bad debt</td>
<td>Total revenues</td>
</tr>
</tbody>
</table>
This allocation scheme deposits these indirect costs into a revenue-producing department, awaiting a mechanism to allocate the costs down to the unit-of-service or procedure level. Costs are assigned at the procedure level through an allocation based on either departmental revenue or volume.

One final assumption is used to determine unit costs. The 80–20 rule suggests the number of service or procedure codes to study. In this case, the rule theorizes that 80 percent of the departmental costs are attributable to only 20 percent of the departmental tests performed. As reported in Chapter Seven, this rule applies to many resource-based subjects. Therefore, the RHMC department manager needs only to analyze the top 20 percent of the tests in the department, not 100 percent, to feel confident in the costing outcomes. A computer matrix allocates the unstudied procedures on the basis of gross charges.

After all the allocations are done, the computerized cost accounting system produces a detailed analysis of the unit cost for each test. It allocates all the costs between fixed and variable, direct and indirect because each component acts differently in the course of departmental business. Table 8.4 shows the output of the cost allocation process for a CT scan of the abdomen. It is interesting to note that the variable salary output is $31.67, compared to input costs of $8.95. The difference represents those standby and nonproductive costs mentioned earlier. In this case, the fully allocated salary is 3.5 times the direct salary. That alone should raise some questions about the productivity level in the department.

It is also interesting to note that total costs at $249.55 are 87.8 percent greater than direct costs at $132.91. This means that the indirect cost markup for a CT scan of the abdomen is 87.8 percent. This is another area that managers and particularly administrators can review for cost-saving opportunities. It may mean that overhead costs are too high—and overhead costs are usually controllable by administrators, not managers.

In summary, it is now obvious that a considerable number of assumptions are used to develop cost accounting standards at the procedure or unit level. Consequently, cost accounting is useful for understanding an organization’s cost components in the various revenue-producing procedures performed, but the costs that are developed are not “true” or genuinely accurate. They are reasonable and can be consistently applied.

RHMC uses these cost accounting standards to produce a number of reports and analyses that aid in understanding departmental financial
# TABLE 8.4. Outputs for Calculating Procedure-Level Unit Costs for a CT Scan of the Abdomen (in dollars).

| Direct Costs          | Indirect Costs
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed costs</strong></td>
<td><strong>Fixed portion</strong></td>
</tr>
<tr>
<td>Salaries</td>
<td>0.16</td>
</tr>
<tr>
<td>Nonsalaries</td>
<td>2.17</td>
</tr>
<tr>
<td>Total fixed costs</td>
<td>2.33</td>
</tr>
<tr>
<td><strong>Variable costs</strong></td>
<td><strong>Variable portion</strong></td>
</tr>
<tr>
<td>Salaries</td>
<td>31.67</td>
</tr>
<tr>
<td>Nonsalaries</td>
<td>46.42</td>
</tr>
<tr>
<td>Equipment service contracts</td>
<td>12.49</td>
</tr>
<tr>
<td>Total variable costs</td>
<td>90.58</td>
</tr>
<tr>
<td><strong>Equipment depreciation</strong></td>
<td>40.00</td>
</tr>
<tr>
<td><strong>Building depreciation</strong></td>
<td>0</td>
</tr>
<tr>
<td>Total direct expenses</td>
<td>132.91</td>
</tr>
<tr>
<td>Total indirect expenses</td>
<td>116.64</td>
</tr>
<tr>
<td>Total unit costs</td>
<td>249.55</td>
</tr>
</tbody>
</table>
performance. They are used to determine which departments are making or losing money (winners and losers). Because the costs are developed at the procedure level, winners and losers can be aggregated in many ways, including these:

- Diagnosis Related Groups
- ICD-9-CM clinical diagnostic codes
- Nursing and ancillary departments
- Charge codes
- Physicians
- Payers
- Patients
- Service area
- ZIP code
- Age
- Sex

Cost accounting leads to decision making. If used properly, it becomes an important tool in the administration’s management arsenal. Winners can be rewarded and enhanced; losers can be disbanded. Loss leaders can be established and endured as they are developed by intent. Cost accounting is an art that acts like a science. In this case, the artist can paint with a broad brush.

**AUGUST FINANCE COMMITTEE SPECIAL AGENDA ITEMS**

In August, the finance committee has two special items to consider: the review of next year’s budget assumptions and the annual materials management review.

**Review of Next Year’s Budget Assumptions**

At the August finance committee meeting, the finance administrator presents an abbreviated list of budget assumptions for the administration
to present formally at the October meeting. It is still too early to propose a preliminary budgeted profit-and-loss statement, but this list allows the administration to introduce some of its preliminary thinking on the upcoming year. By doing so, the administration is able to gauge the mood and thinking of the finance committee. If there is some apparent disagreement in the direction being taken, it permits the administration to change its focus over the next few weeks prior to the October meeting.

Table 8.5 shows the budget assumptions submitted to the finance committee at the August meeting. The assumptions are strictly volume-related because no revenue or expense assumptions are ready. The assumptions include an abbreviated explanation for volume changes. This helps management begin its discussion with the board members about the direction in which they believe the organization is heading.

**Review of Annual Materials Management and Inventory Level**

Once a year, RHMC management presents a report to the finance committee on the status of the organization’s materials management goals and accomplishments. The report highlights the various efforts undertaken and achieved by the department in the areas of purchasing and receiving and central sterile supply, processing, and distribution. The report is presented in this format order:

- Trends in supply expenses per day
- Revenue enhancements
- Expense reductions
- Operational efficiencies

A summarized version of the report is presented to the finance committee. It has the gist of the important concepts to be communicated and understood by the finance committee to further its governance role. The finance committee usually needs to take no action on the information it receives so long as the report does not reveal problems with inventory level or the supply expense per adjusted patient day.
### TABLE 8.5. 2009 Budget Assumptions, RidgeLand Heights Medical Center.

<table>
<thead>
<tr>
<th></th>
<th>2007 Actual</th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>2009 Budget</th>
<th>Variance, 2009 Budget vs. 2007 Projected (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACUTE CARE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult admissions</td>
<td>8,100</td>
<td>8,760</td>
<td>9,023</td>
<td>9,787</td>
<td>8.47</td>
</tr>
<tr>
<td>Average length of stay (days)</td>
<td>3.89</td>
<td>4.05</td>
<td>4.05</td>
<td>4.20</td>
<td>3.72</td>
</tr>
<tr>
<td>Adult patient days</td>
<td>31,500</td>
<td>35,496</td>
<td>36,561</td>
<td>41,131</td>
<td>12.50</td>
</tr>
<tr>
<td><strong>SKILLED NURSING FACILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of admissions</td>
<td>800</td>
<td>840</td>
<td>850</td>
<td>900</td>
<td>5.88</td>
</tr>
<tr>
<td>Average length of stay (days)</td>
<td>11.00</td>
<td>10.00</td>
<td>9.50</td>
<td>8.30</td>
<td>−12.63</td>
</tr>
<tr>
<td>Patient days</td>
<td>8,800</td>
<td>8,400</td>
<td>8,075</td>
<td>7,470</td>
<td>−7.49</td>
</tr>
</tbody>
</table>
### NEWBORNS

<table>
<thead>
<tr>
<th></th>
<th>1,950</th>
<th>2,145</th>
<th>2,165</th>
<th>2,382</th>
<th>10.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average length of stay (days)</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Patient days</td>
<td>3,900</td>
<td>4,290</td>
<td>4,330</td>
<td>4,763</td>
<td>10.00</td>
</tr>
</tbody>
</table>

### TOTAL INPATIENTS

<table>
<thead>
<tr>
<th></th>
<th>10,850</th>
<th>11,745</th>
<th>12,038</th>
<th>13,069</th>
<th>8.56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average length of stay (days)</td>
<td>4.07</td>
<td>4.10</td>
<td>4.07</td>
<td>4.08</td>
<td>0.39</td>
</tr>
<tr>
<td>Patient days</td>
<td>44,200</td>
<td>48,186</td>
<td>48,966</td>
<td>53,364</td>
<td>8.98</td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>167,150</td>
<td>181,000</td>
<td>194,400</td>
<td>210,000</td>
<td>8.02</td>
</tr>
</tbody>
</table>

**Explanations of variances** Maternity admissions increase 10 percent due to newly expanded unit and recruitment of four obstetricians. Psychiatric admissions increase 20 percent due to addition of several new psychiatrists on staff. Medical and surgical admissions increase 4 percent due to additional affiliation of several primary care physicians. Outpatient visits increase 8 percent based on prior-year trends and continued emphasis on physician and consumer marketing.
PRACTICAL TIPS

■ Use the outcomes of the strategic plan and the strategic financial plan to develop the main criteria basis for the hospital's annual capital budget.

■ Require the hospital CEO to weight the various criteria so that the most important ideas of each year are given a greater chance of success in the criteria-based capital budgeting system.

■ Use the 80–20 rule to develop strong financial analysis around the 20 percent of the capital requests that make up 80 percent of the requested cost.

■ Use a software system that will automatically apply the CEO weighting and evaluator ratings to develop an optimized list of requests that can be used by the administrators to finalize capital budget decisions.

■ To make all of the budget work effective, be sure to drive accountability into the hospital culture. Strong positive and negative consequences need to be enforced from the administrative level down to the staff level.

■ Acquire software that automatically provides e-mail alerts to the department manager and staff whenever actual results fall outside the parameters set by the administration.

■ Adopt flexible budgeting if you don’t already use it.

■ Develop micro-based cost accounting outcome information that can be used in numerous ways to determine financial winners and losers.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Develop a list of twenty capital budget requested items of your choosing. Apply a purchase price against each of them. Sort the list by highest to lowest price. See if this arbitrary list with arbitrary prices supports the 80–20 rule.

2. Compare the bottom-line financial results of using a fixed budget and a flexible budget if volumes (a) increase by 10 percent or (b) decrease by 10 percent.

3. Discuss the value of using micro-based cost accounting in the hospital organization and the deficiencies caused if cost accounting is not used or used ineffectively.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Understand the types of changes that get made as the hospital budget season winds down
■ Discuss why an alert-based decision support management accountability budgeting, monitoring, and reporting system can help streamline the budgeting process and provide an automated tool for determining variance to the budget at a glance
■ Understand why it is important to produce a cash budget at the conclusion of the operating and capital budget process
■ Discuss some of the pressing financial issues confronting physicians in their practice management
■ Recognize the fundamental ways that a physician office practice can optimize its financial condition
■ Recite a hospital’s typical categories of medical staff
■ Recognize the differences between MSOs, PPMCs, and PCPs
■ Determine the most popular features of a physician practice management billing and collection system
■ Discuss the differences between a hospital-owned, equity-based practice and a physician-owned practice
“Damn it, Barnes, you’ve screwed me up again!” Frank Jacobs screams over a telephone line bristling with static and distortion.

Sam has but a moment to react. It is early in the morning, and he has not yet had his first cup of coffee. Recognizing the voice on the other end of the phone as one of his usual complainers, Sam responds, “Oh, come on, Frank, what did I do now?”

“Listen, Barnes, you can’t fool me. I know you were personally responsible for signing that managed care contract that cheated me out of a whole lot of revenue,” says Jacobs, one of the leading orthopedic surgeons on the Ridgeland Heights Medical Center staff.

“Now, Frank, really, you and I have talked about this before. You know that although I did sign that agreement, I did not do it unilaterally. The contract was discussed with the board of the IPA [independent practice association] as well as an advisory group of your colleagues on our PHO [physician hospital organization]. They all felt it was in the best interest of the hospital, and of all the physicians in the IPA, to sign this contract rather than lose all the business generated by it.”

“Horsepuckey, Barnes. I just know that the hospital will benefit from this contract a lot more than the doctors. You are fully conflicted in your role of lead negotiator for the hospital and the IPA.”

Sam Barnes is getting steamed, but he decides to keep his cool.

“Frank, I’m really sorry you feel like that, but it just isn’t true. I know you were around here when the PHO was formed ten years ago so that the hospital and physicians who chose to join the IPA—like yourself—could jointly present themselves in a united way to the managed care companies. In fact, over those ten years, we have jointly contracted with over fifty MCOs [managed care organizations]. Your representatives on the IPA monitor these negotiations. Frank, I’m not out to get you. It’s in the best interest of the hospital to get you the best deal that can be made.”

“Barnes, you’re full of it. The rates you’re negotiating are killing my office income. I can hardly afford to keep my whole staff together and still maintain my lifestyle anymore. I know you’re driving the rates down every time you accept a lower reimbursement.”
“No, Frank, I’m not! I know you believe that, but our acceptance of the lower rates is not causing the rates to plummet. This is an industrywide phenomenon. The payment structure has changed over the last several years, and we’re not immune. In fact, you should be thanking me rather than harassing me. We’ve actually held the line a lot longer than many of the PHOs around the area. I’m sorry your income is going down. But I also know that you need to look at the management of your office practice. It’s probably the best way you have right now to try to maintain your income. There are many ways you can economize without hurting your quality of care and patient satisfaction.”

“Barnes, thanks for the advice, but I’ll pass. Your advice on behalf of my business is already killing me. I’ll figure out what’s in my best interest by myself,” Jacobs blurts out as he slams down the receiver.

The first part of September is always an interesting time of year in the northern region of the United States. Almost ideal weather conditions predominate. Cool Canadian air wafts down out of the north, mixing with the warm breezes traveling up from the Gulf of Mexico. This is the best time of the year to live in this part of the country. Temperatures are in the high seventies during the day, the low sixties at night.

But with Labor Day fast approaching, the end of the summer season is near. The roadways around the densely populated region are already beginning to get more congested. The grocery stores and shopping malls are getting busier, and the swimming pools are preparing to close. It is a season of melancholy for many. The end of summer means winter is not too far away. It’s time for many people to put away their toys and return to the real working world.

Of course, at the RHMC finance offices, real work never went away. The summer was one of the two busy seasons, with budget preparation dominating the effort. Other tasks also needed to be done. For instance, this month, the CEO requested additional financial analysis of the physician practices owned by the organization. There was concern that the practices were not contributing to the overall bottom line of the organization and were operating negative to budget. The multifaceted analysis was designed to highlight the financial condition of the practices as well as the impact that the practices have on the hospital’s bottom line. The finance department was preparing to give the CEO a detailed analysis by the end of the month.
OPERATING BUDGET

September is the month in which the heavy technical work that the finance staff perform on the operating budget is completed. Subsequent work is of a more clerical nature. There is only this one additional short stretch for the finance staff to stimulate their enthusiasm. The efforts in September look like this:

- September 9: Validate or adjust budget assumptions and semifinal budget approval by the administrators
- September 17: Conduct final review of the operating budget, get it approved, and review the human resource committee package
- September 30–October 14: Prepare first draft through final copy of the 2008 budget for the finance committee

Right around the Labor Day weekend, the finance staff work being performed on the operating budget revs up again. After the vice presidents complete their operating budget review on August 28, it is returned to the finance division for processing. The finance staff have only eleven days to crunch the volumes, revenues, and expenses submitted by the department managers into an understandable set of reports. At the September 9 meeting, the administrators validate or adjust the assumptions submitted by the department managers. They need the best description and summary of the submitted financial data that they can get to make the best budgeting decisions for the organization.

For the finance staff to give their best summary of the data, once again they perform significant analyses at the level of detailed department line items. This is done to determine whether the changes requested by the managers make sense in the overall scheme and scope of the operating budget. The managers’ job during September is to review the FTEs and salary levels, review volume assumptions and nonsalary line items for any clerical or technical errors made by the finance staff in preparing the budget, and request any additional resources for the department, whether staffing or nonsalary. The finance staff’s job during September is to review the managers’ changes for objectivity and purpose. If a mistake was previously made, this is now the time to correct it. It is imperative that any mistakes be corrected before final decisions are made. They are much more difficult to correct, from a political standpoint, after final administrative approval is granted. Because this is the version that ultimately goes to
the finance committee, no CEO or CFO wants to make any changes and admit to a mistake at this late date.

An even worse time to find a mistake is after the budget is approved by the board of directors. The approved board budget is the formal direction of the health care organization and cannot be changed administratively. Going back to the board for subsequent approval is the only way to change the current year’s budget. No administrator wants to take a weak story back to the board. Therefore, common or small mistakes must be absorbed by the division responsible. It is to everyone’s advantage to catch any errors at this point in the process.

The outcome of this work by the finance staff will be a presentation to the executive and administrative staff on the upcoming year’s budgeted profit-and-loss statement. This is done at the September 9 meeting.

**September 9: Last Look at Budget Assumptions and Semifinal Budget Approval**

September 9 is another big meeting date for the finance and nonfinance administrators. Once again, there is trepidation as each administrator enters the room to learn the financial fate of the upcoming year: How much money will we still have to cut? How many employees have to be eliminated to balance the budget? Who will remain to take care of the patients, the facility, and electronic backbone of the computerized medicine now being practiced?

This particular budget meeting is often the hardest one of the year. This is where most of the final decisions are made. It becomes all the more difficult when department managers request big expense increases without any offsetting net revenue increases. During this particular budget process, ten additional FTEs were requested in the areas of facilities management, information services, planning, and marketing.

In addition, the clinical services division requested two additional FTEs for its rapidly growing MRI and CT scanning departments. Diagnostic services, particularly high-tech imaging services, are a fast-growing segment of the organization’s business. The physicians are fully aware of the value of these diagnostic devices. The diagnostic imaging manager is planning to add late afternoon and evening shifts for both services and needs a technician in each area. These two FTEs will be approved because the incremental revenue far exceeds the expense of the additional staff and supplies.
The other positions are more problematic and not so automatic. In fact, the only other positions that are approved at this meeting belong to the information services department, which is granted two additional network specialists, responsible for maintaining the local area network (LAN) and the devices connected to it. They serve as the installation and troubleshooting team for more than a thousand personal computers, three hundred local printers, and all the network hardware and system software. As RHMC places more software on the network, the problems multiply, and more attention is required by the information services staff. Because these problems are visible to administrators, it is easy for the information services administrator to get approval for these new jobs.

At this meeting, the finance administrator presents the modified preliminary budgeted statement of operations, which is based on (1) the changes suggested at the July 18 meeting and (2) changes requested by the department managers (see Table 9.1). In both cases, the changes include a 4 percent price increase and suggested improvements in investment income.

There are two issues surrounding the change in investment income. First, RHMC reports its investment income above the operating margin line in its GAAP-audited financial statement. Therefore, any improvements to investment income help improve the operating margin target. However, reporting the investment income above the line is somewhat controversial. In many organizations, an increase or decrease in investment income is not considered an appropriate change to the operating margin.

Second, in attempting to improve investment income, RHMC needs to change the investment strategy to favor somewhat riskier positions. Because past results do not guarantee future outcomes, this is one of the bigger gambles in the budget package. In fact, it is possible that the finance committee, the investment committee, or the board of directors will reject this recommendation as too radical.

Some other expense changes involve reductions in the following areas:

- Some additional fringe benefit increases initially proposed by the human resource administrator
- Bad-debt expenses through better collection efforts
- Patient care supply expenses through further standardization of products
- Consulting fees
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient revenue</td>
<td>74,000</td>
<td>79,000</td>
<td>77,800</td>
<td>84,000</td>
<td>87,360</td>
<td>87,360</td>
<td>10.6</td>
<td>12.3</td>
</tr>
<tr>
<td>Outpatient revenue</td>
<td>69,000</td>
<td>77,000</td>
<td>76,100</td>
<td>86,000</td>
<td>89,440</td>
<td>89,440</td>
<td>16.2</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>Total patient revenue</strong></td>
<td><strong>143,000</strong></td>
<td><strong>156,000</strong></td>
<td><strong>153,900</strong></td>
<td><strong>170,000</strong></td>
<td><strong>176,800</strong></td>
<td><strong>176,800</strong></td>
<td><strong>13.3</strong></td>
<td><strong>14.9</strong></td>
</tr>
<tr>
<td>Less: Contractual and other adjustments</td>
<td>(48,000)</td>
<td>(60,000)</td>
<td>(59,000)</td>
<td>(72,000)</td>
<td>(77,100)</td>
<td>(77,100)</td>
<td>28.5</td>
<td>30.7</td>
</tr>
</tbody>
</table>
(Table 9.1 continued)

<table>
<thead>
<tr>
<th>Add: Charity care</th>
<th>(2,200)</th>
<th>(2,700)</th>
<th>(2,500)</th>
<th>(3,000)</th>
<th>(3,000)</th>
<th>(3,000)</th>
<th>11.1</th>
<th>20.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net patient</strong></td>
<td>92,800</td>
<td>93,300</td>
<td>92,400</td>
<td>95,000</td>
<td>96,700</td>
<td>96,700</td>
<td>3.6</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>service revenue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add: Premium revenue

| Add: Premium revenue | 1,300 | 2,100 | 2,100 | 1,000 | 1,000 | 1,000 | -52.4 | -52.4 |

Add: Investment income

| Add: Investment income | 5,500 | 5,000 | 6,000 | 5,000 | 6,000 | 6,000 | 20.0 | 0.0 |

Add: Other operating income

| Add: Other operating income | 1,200 | 1,200 | 1,100 | 1,200 | 1,200 | 1,200 | 0.0 | 9.1 |

**Total revenue**

| Total revenue | 100,800 | 101,600 | 101,600 | 102,200 | 104,900 | 104,900 | 3.2 | 3.2 |

**EXPENSES**

| Salaries | 34,000 | 35,500 | 36,500 | 39,000 | 38,200 | 38,600 | 7.6 | 4.7 |

<p>| Contract labor | 1,500 | 1,400 | 800 | 1,200 | 1,200 | 1,200 | -14.3 | 50.0 |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013%</th>
<th>2014%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fringe benefits</td>
<td>6,800</td>
<td>7,000</td>
<td>6,900</td>
<td>7,800</td>
<td>7,500</td>
<td>7,600</td>
<td>7.1</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Total salaries and benefits</strong></td>
<td>42,300</td>
<td>43,900</td>
<td>44,200</td>
<td>48,000</td>
<td>46,900</td>
<td>47,400</td>
<td>6.8</td>
<td>6.1</td>
</tr>
<tr>
<td>Bad debts</td>
<td>4,400</td>
<td>4,400</td>
<td>4,400</td>
<td>5,000</td>
<td>4,500</td>
<td>4,500</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Patient care supplies</td>
<td>15,000</td>
<td>15,200</td>
<td>16,000</td>
<td>17,100</td>
<td>16,600</td>
<td>16,900</td>
<td>9.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Professional and management fees</td>
<td>3,600</td>
<td>3,400</td>
<td>3,800</td>
<td>4,200</td>
<td>3,900</td>
<td>4,000</td>
<td>14.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Purchased services</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Operation of plant (including utilities)</td>
<td>2,500</td>
<td>2,700</td>
<td>2,600</td>
<td>2,800</td>
<td>2,800</td>
<td>2,800</td>
<td>3.7</td>
<td>7.7</td>
</tr>
<tr>
<td>Depreciation</td>
<td>10,500</td>
<td>11,000</td>
<td>10,500</td>
<td>11,500</td>
<td>11,500</td>
<td>11,500</td>
<td>4.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Interest and financing expenses</td>
<td>7,600</td>
<td>7,400</td>
<td>7,400</td>
<td>7,200</td>
<td>7,200</td>
<td>7,200</td>
<td>−2.7</td>
<td>−2.7</td>
</tr>
</tbody>
</table>
(Table 9.1 continued)

<table>
<thead>
<tr>
<th></th>
<th>4,600</th>
<th>3,800</th>
<th>4,000</th>
<th>5,000</th>
<th>4,500</th>
<th>4,700</th>
<th>18.4</th>
<th>12.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expenses</td>
<td>96,100</td>
<td>97,400</td>
<td>98,500</td>
<td>106,400</td>
<td>103,500</td>
<td>104,600</td>
<td>6.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Operating margin</td>
<td>4,700</td>
<td>4,200</td>
<td>3,100</td>
<td>(4,200)</td>
<td>1,400</td>
<td>300</td>
<td>−66.7</td>
<td>−54.8</td>
</tr>
</tbody>
</table>

**NONOPERATING INCOME**

<table>
<thead>
<tr>
<th>Gain (loss) on investments</th>
<th>600</th>
<th>1,200</th>
<th>1,400</th>
<th>1,000</th>
<th>1,000</th>
<th>1,000</th>
<th>−16.7</th>
<th>−28.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total nonoperating income</td>
<td>600</td>
<td>1,200</td>
<td>1,400</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>−16.7</td>
<td>−28.6</td>
</tr>
<tr>
<td>Net Income</td>
<td>5,300</td>
<td>5,400</td>
<td>4,500</td>
<td>(3,200)</td>
<td>$2,400</td>
<td>$1,300</td>
<td>−55.6</td>
<td>−46.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 targeted operating margin</th>
<th>3,800</th>
<th>3,868</th>
<th>3,868</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 targeted operating margin</td>
<td>2,850</td>
<td>2,901</td>
<td>2,901</td>
</tr>
<tr>
<td>2 targeted operating margin</td>
<td>1,900</td>
<td>1,934</td>
<td>1,934</td>
</tr>
</tbody>
</table>
According to the budget compiled by the finance staff, the budgeted operating margin, after all requested changes are processed, would be $300,000, or 0.3 percent. This is still considerably below the original 4.0 percent mandated by the board. Therefore, the administrators must now do the job they are paid to do: make final determinations on how to achieve the budgeted target.

To aid in this effort, the finance staff once again present the closing-the-gap analysis from the July meeting (look back at Table 7.5). The administrators are reminded of the cost-reduction opportunities they already used and the level at which they used them. They must decide if they want to make further cuts in any of these line items or announce whether they have any additional ideas. The finance administrator also reminds them that the radiology manager brought the only revenue enhancements above and beyond the original budgeted volume targets. Because there is little additional net revenue being proposed, expense reduction is the only remaining area that can be used to reach the budget target.

After some discussion, the administrators agree to make a further series of cuts to the proposed 2009 budget (see Table 9.2). The biggest reductions come from staffing. Instead of the original cut of twenty FTEs proposed at the July 18 meeting, they agree on a total cut of thirty-eight. It is interesting to note that although the administrators have agreed to cut this many, the overall FTE count will decrease by only 17.2 because the department managers had already requested an additional 20.8 FTEs in July. So the impact of the thirty-eight cuts is not as severe as originally proposed. It is also agreed that these FTEs not be cut proportionally or across the board, as often happens. RHMC administrators have finally come to the realization that across-the-board cuts represent the worst kind of management. They have determined that staffing hours (and dollars) should be based on productivity analysis and that the “hands-on” revenue-producing departments should be given more budgeted hours than non-revenue-producing departments. So for this budget cycle, the revenue-producing departments will absorb a cut of only 25 percent, while the nonrevenue areas will disproportionately take 75 percent of the cut. It is the responsibility of the finance staff to develop the formula for this before the September 17 meeting.

One additional decision was made at this meeting. As all the administrators struggled to determine other places to cut expenses to meet the 4 percent operating margin target, the CEO decided that no additional
TABLE 9.2. Final “Closing the Gap” Analysis, Ridgeland Heights Medical Center, 2009 Budget (in thousands of dollars).

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating margin per July 18 meeting</td>
<td>(4,200)</td>
</tr>
<tr>
<td>4% net price increase</td>
<td>1,700</td>
</tr>
<tr>
<td>Improvement in investment income</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>SALARY EXPENSE REDUCTIONS</strong></td>
<td></td>
</tr>
<tr>
<td>38 FTEs @ $40,000 average per employee</td>
<td>1,520</td>
</tr>
<tr>
<td><strong>FRINGE BENEFITS</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce additional benefits proposed in initial budget meeting of July 14</td>
<td>500</td>
</tr>
<tr>
<td><strong>Reduce bad-debt expense through better collection efforts</strong></td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Reduce patient care supply expenses</strong></td>
<td>500</td>
</tr>
<tr>
<td><strong>Reduce professional and management fees</strong></td>
<td>400</td>
</tr>
<tr>
<td><strong>Reduce other expenses</strong></td>
<td>500</td>
</tr>
<tr>
<td><strong>Final set of changes since July 18 budgeted income statement</strong></td>
<td>7,120</td>
</tr>
<tr>
<td><strong>Revised operating margin</strong></td>
<td>2,920</td>
</tr>
</tbody>
</table>

cuts should be made beyond the 3 percent level for the second year in a row. He reasoned that the organization needed additional time to implement service enhancements to offset the negative net revenue changes wrought by the increasing and continuing intransigence on the part of managed care companies to negotiate reimbursement rates in good faith.
Therefore, the chief executive was willing to support a measure at the level of the finance committee and board to change the 4 percent operating margin target to 3 percent for the second time in two years. He fully reserved the right to move this target level back up to 4 percent for the 2010 budget year, depending on circumstances.

With these changes, the budget was essentially complete. The finance staff still needed to crunch the numbers one more time to make sure all the changes did indeed add up to the 3 percent operating margin. They would have eight days in which to do that and to recommend the number of staff members to be cut, by division.

**September 17: Final Review and Approval of the Operating Budget and Review of the Human Resource Committee Package**

At the September 17 meeting, the administrators are presented with the final version of the 2009 operating budget (see Table 9.3). Through a series of columns, the table shows the progression of changes made to bring it home. This version, without the intermediate columns (column numbers 3, 4, and 5), is to be presented to the finance committee for approval at its October meeting.

The administrators are also presented with the finance-produced list of FTE cuts by division. It is the responsibility of the division heads to determine how to implement the cuts required by the list. They will employ a number of techniques to make these determinations, including these possibilities:

- Eliminate all vacant positions (preferred answer for administrators)
- Cut the level of overtime (also high on the list, for good reason)
- Replace full-time employees with part-time employees
- Replace part-time employees with as-needed employees
- Eliminate currently filled positions (layoffs)

These are hard decisions to make, but they are always necessary. The vice presidents are also responsible for deciding which departments within their division need to make the cuts. Fairness is not always a consideration at this point. The cuts may be made proportionally or disproportionally. But they must be made, since there will be no budget dollars available to support these positions in the new year.
<table>
<thead>
<tr>
<th>REVENUES</th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>7/18/08</th>
<th>9/9/08</th>
<th>9/17/08</th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient revenue</td>
<td>79,000</td>
<td>77,800</td>
<td>84,000</td>
<td>87,360</td>
<td>87,360</td>
<td>87,360</td>
<td>87,360</td>
<td>10.58</td>
</tr>
<tr>
<td>Outpatient revenue</td>
<td>77,000</td>
<td>76,100</td>
<td>86,000</td>
<td>89,440</td>
<td>89,440</td>
<td>89,440</td>
<td>89,440</td>
<td>16.16</td>
</tr>
<tr>
<td><strong>Total patient revenue</strong></td>
<td>156,000</td>
<td>153,900</td>
<td>170,000</td>
<td>176,800</td>
<td>176,800</td>
<td>176,800</td>
<td>176,800</td>
<td>13.33</td>
</tr>
<tr>
<td>Less: Contractual and other adjustments</td>
<td>(60,000)</td>
<td>(59,000)</td>
<td>(72,000)</td>
<td>(77,100)</td>
<td>(77,100)</td>
<td>(77,100)</td>
<td>(77,100)</td>
<td>28.50</td>
</tr>
<tr>
<td>Less: Charity care</td>
<td>(2,700)</td>
<td>(2,500)</td>
<td>(3,000)</td>
<td>(3,000)</td>
<td>(3,000)</td>
<td>(3,000)</td>
<td>(3,000)</td>
<td>11.11</td>
</tr>
<tr>
<td><strong>Net patient service revenue</strong></td>
<td>93,300</td>
<td>92,400</td>
<td>95,000</td>
<td>96,700</td>
<td>96,700</td>
<td>96,700</td>
<td>96,700</td>
<td>3.64</td>
</tr>
<tr>
<td>Add: Premium revenue</td>
<td>2,100</td>
<td>2,100</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>-52.38</td>
</tr>
<tr>
<td>Add: Investment income</td>
<td>5,000</td>
<td>6,000</td>
<td>5,000</td>
<td>6,000</td>
<td>6,000</td>
<td>6,000</td>
<td>6,000</td>
<td>20.00</td>
</tr>
<tr>
<td>Add: Other operating income</td>
<td>1,200</td>
<td>1,100</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>0.00</td>
<td>9.09</td>
</tr>
<tr>
<td>----------------------------</td>
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</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>101,600</td>
<td>101,600</td>
<td>102,200</td>
<td>104,900</td>
<td>104,900</td>
<td>104,900</td>
<td>3.25</td>
<td>3.25</td>
</tr>
</tbody>
</table>

**EXPENSES**

<table>
<thead>
<tr>
<th>Salaries</th>
<th>35,500</th>
<th>36,500</th>
<th>39,000</th>
<th>38,200</th>
<th>38,600</th>
<th>37,480</th>
<th>5.58</th>
<th>2.68</th>
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</thead>
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<td>Contract labor</td>
<td>1,400</td>
<td>800</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>−14.29</td>
<td>50.00</td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>7,000</td>
<td>6,900</td>
<td>7,800</td>
<td>7,500</td>
<td>7,600</td>
<td>7,300</td>
<td>4.29</td>
<td>5.80</td>
</tr>
<tr>
<td><strong>Total salaries and benefits</strong></td>
<td>43,900</td>
<td>44,200</td>
<td>48,000</td>
<td>46,900</td>
<td>47,400</td>
<td>45,980</td>
<td>4.74</td>
<td>4.03</td>
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<tr>
<td>Bad debts</td>
<td>4,400</td>
<td>4,400</td>
<td>5,000</td>
<td>4,500</td>
<td>4,500</td>
<td>4,000</td>
<td>−9.09</td>
<td>−9.09</td>
</tr>
<tr>
<td>Patient care supplies</td>
<td>15,200</td>
<td>16,000</td>
<td>17,100</td>
<td>16,600</td>
<td>16,900</td>
<td>16,600</td>
<td>9.21</td>
<td>3.75</td>
</tr>
<tr>
<td>Professional and management fees</td>
<td>3,400</td>
<td>3,800</td>
<td>4,200</td>
<td>3,900</td>
<td>4,000</td>
<td>3,800</td>
<td>11.76</td>
<td>0.00</td>
</tr>
<tr>
<td>Purchased services</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Operation of plant (including utilities)</td>
<td>2,700</td>
<td>2,600</td>
<td>2,800</td>
<td>2,800</td>
<td>2,800</td>
<td>2,800</td>
<td>3.70</td>
<td>7.69</td>
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(Table 9.3 continued)

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Depreciation</strong></td>
<td>11,000</td>
<td>10,500</td>
<td>11,500</td>
<td>11,500</td>
<td>11,500</td>
<td>11,500</td>
<td>4.55</td>
<td>9.52</td>
</tr>
<tr>
<td><strong>Interest and financing expenses</strong></td>
<td>7,400</td>
<td>7,400</td>
<td>7,200</td>
<td>7,200</td>
<td>7,200</td>
<td>7,200</td>
<td>-2.70</td>
<td>-2.70</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>3,800</td>
<td>4,000</td>
<td>5,000</td>
<td>4,500</td>
<td>4,700</td>
<td>4,500</td>
<td>18.42</td>
<td>12.50</td>
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<tr>
<td><strong>Total expenses</strong></td>
<td>97,400</td>
<td>98,500</td>
<td>106,400</td>
<td>103,500</td>
<td>104,600</td>
<td>101,980</td>
<td>4.70</td>
<td>3.53</td>
</tr>
<tr>
<td><strong>Operating margin</strong></td>
<td>4,200</td>
<td>3,100</td>
<td>(4,200)</td>
<td>1,400</td>
<td>300</td>
<td>2,920</td>
<td>-30.48</td>
<td>-5.81</td>
</tr>
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</table>

**NONOPERATING INCOME**

<table>
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</thead>
<tbody>
<tr>
<td><strong>Gain (loss) on investments</strong></td>
<td>1,200</td>
<td>1,400</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>-16.67</td>
<td>-28.57</td>
</tr>
<tr>
<td><strong>Total nonoperating income</strong></td>
<td>1,200</td>
<td>1,400</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>-16.67</td>
<td>-28.57</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>5,400</td>
<td>4,500</td>
<td>(3,200)</td>
<td>2,400</td>
<td>1,300</td>
<td>3,920</td>
<td>-27.41</td>
<td>-12.89</td>
</tr>
<tr>
<td><strong>4% targeted operating margin</strong></td>
<td>3,800</td>
<td>3,868</td>
<td>3,868</td>
<td>3,868</td>
<td>3,868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3% targeted operating margin</strong></td>
<td>2,850</td>
<td>2,901</td>
<td>2,901</td>
<td>2,901</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2% targeted operating margin</strong></td>
<td>1,900</td>
<td>1,934</td>
<td>1,934</td>
<td>1,934</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
At this meeting, the human resource committee package, prepared by the finance staff with the assistance of the human resource staff, is presented as a last stop before it goes to the board. It includes a narrative of the human resource decisions that are being proposed by the administration, such as the actual, projected, and budgeted staffing levels by dollars and FTEs; details of the fringe benefit package; and discussion of the wage and salary levels. These include minimum and maximum pay scales across various job classifications and the current market-rate pay scales for the region. This allows the entire administrative staff to see what the board sees and gain any additional understanding of the subject at this time.

**September 18–October 14: Preparation of the 2009 Budget for the Finance Committee**

Over the next four weeks, the finance staff are heavily involved in preparing the budget reports for the human resource committee, the finance committee, and the board of directors meetings, and the finance administrators are heavily occupied in reviewing them. These reports are between sixteen and thirty pages in length and contain varying degrees of detailed information. Preparing and reconciling the schedules for volume, revenue, staffing level (FTEs), and staffing dollars is a tense and intensive chore. It takes an individual with a high level of commitment, organization, and perfectionism to lead this effort. RHMC is fortunate to have an accounting director with the drive and skill to meet that challenge.

The budget drafts are prepared on schedule so that effective review can be performed. As the date of each presentation draws closer and closer and the draft copies get cleaner and cleaner, the final implications of the budget packages are revealed.

**Operating Budget System for the Following Year**

In Chapter Eight, it was mentioned that RHMC had just installed a decision support system capable of automatically calculating variances between the budgeted target and the actual financial outcomes, whether it be gross revenues, net revenues, labor expenses, or nonlabor expenses. This same system has integrated operating and capital budgeting modules that will allow RHMC to automate its budget beginning next year. Because of this, the paper that now flows between department managers and finance staff during the budget process will be eliminated. Many of the manual steps that have been employed over recent years will be eliminated, and the process will be streamlined.
RHMC will be able to use this budgeting and monitoring software to enhance its financial process because it has already invested in construction of a computerized LAN. By going to the expense of installing the computer infrastructure (wiring, cabling wall outlets, and the various computer closets needed for coordination), all the PCs at the organization are hooked up to a common computer (server). The new budgeting system has the capabilities to be used in a client-server (CS) model (the hospital buys a computer server, and all the managers’ desktops are connected to it) or in a Web-based product. RHMC has chosen the client-server model over the Web-based model because it provides greater security access than the Web-based design and also because the CS model has much greater functionality for the user than the Web-based design, which lacks system capabilities.

Here are some of the electronic budgeting and monitoring functions available to the organization and its operating managers, finance managers, and staff:

- Operating budget
- Capital budget
- Capital monitoring
- Labor productivity drill-down analysis
- Accounts payable, journal entries, purchase orders, and inventory drill-down analysis
- Automated e-mail alert management system

The new budgeting capabilities will allow the finance staff and department managers to conduct their business online. In a nutshell, the finance staff will be able to send the budget out electronically over the LAN instead of on paper. The managers can then perform their analysis online, making it immediately available to the budget staff using the software. Because the changes are already in a digital format, the finance staff will no longer have to reenter the data. Instead they can devote their efforts to analyzing the department managers’ justifications and analyses of the requested changes. This is much better use of the analyst’s time and energy. The decision support system will enhance the organization’s knowledge base by automatically notifying the managers and their bosses of any variance from established parameters. RHMC was excited to purchase a low-priced system that performs all these functions and is
gearing up to use the system to start preparing its 2010 budget. Exhibit 9.1 shows that the finance director has already developed a preliminary budget calendar for 2010 that highlights the areas of streamlining. And even though the budget work still begins in the month of June, there is considerably more time for appropriate analysis because there are fewer steps to take for the managers and the finance division.

**CAPITAL BUDGET: SEPTEMBER**

The September 4 meeting to discuss the results of the main strategic capital budget evaluation and final administrative approval of the 2009 capital budget is necessary only if the administrators were unable to come to a final decision during the meeting on August 25. If there were still open issues present at the end of that meeting and additional evaluation scoring was performed over the preceding week, the administrators use this meeting to finalize the budget. This approval is required because the finance staff need to budget depreciation expense on the operating budget; and to do so, staff must know the capital assets that will be acquired in the coming year.

In this particular year, the RHMC administrators were able to complete their review and come to a consensus at the prior meeting. This was due in large part to the new process and software used by the organization to produce a much more efficient and effective outcome. Because of the early conclusion, the finance staff are able to determine the depreciation expense for the operating budget in record time.

**CASH BUDGET**

Once a year, at the conclusion of the capital and operating budget phases, the finance department staff prepares a cash budget. This is a necessary step that allows the organization to determine how to optimize the value of the cash being generated by its operations. Consider these facts:

- Excess cash can be kept in an interest-bearing checking account at a rate equal to 350 basis points below the prime lending rate; in this case, RHMC could perhaps receive 5 percent interest income on its excess cash (100 basis points is equal to 1 percent).
- It can be invested on a short-term basis (defined as twelve to eighteen months) for approximately 5.5 to 6 percent in low-risk intermediate-term bonds.
## EXHIBIT 9.1. 2010 Capital and Operating Budget
Planning Calendar, Ridgeland Heights Medical Center.

### Capital Budget

**Training (and distribution of package)**
- Capital budget training: August 8 (8:00–10:00)
- Extra help: August 8 (1:00–4:00)

**Input and Review**
- Departmental input of capital budget into INSIGHTS: August 8–August 28
  - >>>>Due into INSIGHTS software: August 28
  - **A/C Review #1:** September 4
  - >>>>Changes due into INSIGHTS software: September 13
  - **A/C Review #2:** September 18
  - >>>>Changes due into INSIGHTS software: September 27
- **Final capital budget:** October 8

### Operating Budget

**What ifs: Physician volumes**
- **FIN**—Physician volume data to A/C: June 17
- **A/C**—Meeting with medical staff to determine 2007 volumes: June 17–June 31
  - >>>>Due from A/C to Finance: June 30

**What ifs: Provider volumes**
- **P/M**—Provider volume data to managers: June 17
- **BHC**—Provider volume data to clinicals: June 17
- Meeting with providers to determine 2007 volumes: June 17–July 31
  - >>>>Due to Finance: June 30

**Review**
- **A/C** Assumption and volume review: June 9
  - >>>>Due from VPs (with adjustments) to Finance: June 14
- Finance committee discussion: June 21
Training (and distribution of payroll package)

- Operating budget training: August 8 (10:00–12:00)
- Extra help: August 8 (1:00–4:00)
- Work sessions: August 8, 14, 21, and 28
- September 5, 12, 19, 21, 26, and 28

Input and review

- Departmental input of operating budget into INSIGHTS: September 16–30
  >>> Due into INSIGHTS; reports to VPs: September 30
- A/C Budget and ratio review #1: October 1
  >>> Changes due into INSIGHTS, reports to VPs: October 6
- A/C Budget and ratio review #2: October 8
- Finalized budget from A/C to Finance: October 13
- Finance committee review budget model: November 11
- Finance committee and board approval: November 18–19

Notes: A/C = Administration council (leadership group)
FIN = Finance division representatives
P/M = Physician office practice managers
BHC = Clinic practice managers

- It can be invested on a moderate-risk, longer-term basis in a mix of fixed instruments (bonds) and equities (stocks); a moderate-risk portfolio would consist of a mix of 65 percent stocks and 35 percent bonds whose previous ten-year average return has been 11.3 percent annually (determined from analysis performed by the organization’s investment consultants).

  If the board has an appetite for a moderate-risk strategy that offers a greater than average return on investments, it becomes imperative to invest the maximum amount of excess cash in the highest-earning alternative. To do so, however, the organization has to have a clear understanding of its stream of receipts and disbursements, preferably on a weekly basis. This allows them to remove the optimum amount of cash from the checking account so that it can be invested in the longer-term, higher-earning assets.
At the conclusion of the annual budget process, the finance staff prepares a fifty-two-week cash budget that attempts to forecast the receipts and disbursements represented by the income statement revenues and expenses. Table 9.4 shows an eight-week stretch of the 2009 cash budget prepared by the finance staff. The most problematic line in this budget is patient cash receipts. It is the most difficult line to forecast because of the problem with the industry’s third-party payers (Medicare, Medicaid, managed care plans), many of whom—particularly the nongovernment managed care plans—have varying definitions of what a clean claim is. A claim is clean if it should be paid within a narrowly defined time period. However, many of the major health care provider segments have had their share of trouble collecting promptly on these clean claims. This makes it difficult to prepare a reasonable cash budget. Still, it is achievable, assuming that cash receipts are collected evenly throughout the year. The method that RHMC uses to budget receipts takes three steps:

1. The finance staff spreads the annual budgeted net revenue across the twelve monthly time periods according to days in the month (for example, January is allocated 31/365 of the net revenue, February is allocated 28/365, and so on).

2. The staff split the months into five-day weeks, and apply a proportional amount of the monthly receipts to each week.

3. The weeks are reviewed to detect any anomalies, such as whether a holiday falls within the week (those weeks are adjusted accordingly).

The caveat in budgeting cash receipts is that a change in the accounts receivable can wreak havoc on the forecast. The initial cash budget should prophesy collection of 100 percent of budgeted net revenue. If this does not happen, the cash budget could fail, leading to two problems: a shortfall to pay required disbursements, such as payroll and trade vendor payables, and a need to borrow funds at a rate higher than is being earned by the invested funds.

It is important to remember that a budget—whether operating, capital, or cash—is nothing more than a forecast based on a set of assumptions for future activities. Because the cash budget can have so much potential negative impact if the forecast is not reasonable, it is imperative to update these budgets weekly. This allows close monitoring of actual cash balances, which leads to better ability to move the cash into its most appropriate asset category. Still, it is extremely important to
note, again, that forecasts can never be accurate because it is not possible to foretell the future with certainty.

The RHMC board has requested that the administration maximize its investment income, wherever possible, without resorting to a risky investment strategy. One way this can be accomplished is by keeping checking account balances as close to zero as possible without going into an overdraft position ("going negative"). Table 9.4 shows a $4 million actual opening balance for the week ending March 8, 2009. Eight weeks later, the projected balance is still $3,997,200.

Given this information, it appears that if the organization wants to maintain a balance closer to zero, it could transfer, say, $3 million out of the checking account and into its stock portfolio. This would still leave it with a $1 million cash cushion in its checking account. Unfortunately, RHMC would overdraft its checking account if it transferred the $3 million according to this weekly forecast because the forecast for the week ending April 5 shows an ending balance of $2,734,500. If the $3 million had been transferred prior to that date, the ending balance would have therefore been a negative $265,500. Not good!

The moral of the story is that because cash balances fluctuate with normal organizational activity; the organization has to look at the lowest weekly cash balance when forecasting checking account balances if it does not want to overdraft. The organization should also negotiate a line of credit, at a favorable interest rate, with its bank to cover an occasional overdraft, in which case the finance administrator would be less concerned about a short-term shortfall. Clearly, cash budgeting can be of great value to an organization that has a desire to maximize cash assets, reasonably accurate forecasting, and overdraft protection or a line of credit.

PHYSICIAN PRACTICE MANAGEMENT ISSUES

Physician practice is a major segment of the health care industry. As you saw in Chapter One, physician practices accounted for $400 billion a year in 2004, encompassing almost 20 percent of the industry’s financial outlays. Although they also make up more than 20 percent of the industry, the impact of physicians and their office practice on the process of health care is enormous.

In every important way, physicians affect most of the health care costs generated in this country. While they personally control that $400 billion of their own pure office revenues; they also have a great deal of control over the expenses generated in the $571 billion hospital
**TABLE 9.4.** 2009 Cash Budget for Selected Weeks, Ridgeland Heights Medical Center (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th></th>
<th>Actual</th>
<th></th>
<th>Actual</th>
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<tr>
<td><strong>CASH RECEIPTS</strong></td>
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</tr>
<tr>
<td>Patient receipts</td>
<td>2,400,000</td>
<td>1,400,000</td>
<td>2,100,000</td>
<td>2,100,000</td>
<td>2,109,000</td>
<td>2,109,000</td>
<td>2,109,000</td>
<td>2,109,000</td>
<td>2,109,000</td>
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<tr>
<td>Other operating receipts</td>
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<td>35,000</td>
<td>35,000</td>
<td>35,000</td>
<td>35,000</td>
<td>35,000</td>
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<td></td>
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<td>Miscellaneous items</td>
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<td>8,000</td>
<td>3,000</td>
<td>—</td>
<td>—</td>
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<tr>
<td><strong>Total receipts</strong></td>
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<td>1,443,000</td>
<td>2,138,000</td>
<td>2,143,000</td>
<td>2,144,000</td>
<td>2,144,000</td>
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<td>2,144,000</td>
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<td><strong>CASH DISBURSEMENTS</strong></td>
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<tr>
<td>Trade vendors payable</td>
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<td>Self-insured health care payments</td>
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<td>—</td>
<td>—</td>
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<td></td>
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</tr>
<tr>
<td>Debt payments</td>
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<td>Miscellaneous items</td>
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<td></td>
</tr>
<tr>
<td><strong>Total accounts payable</strong></td>
<td>5,000</td>
<td>65,000</td>
<td>4,000</td>
<td>175,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>80,000</td>
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<td>and other</td>
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<tr>
<td>Transfers to payroll</td>
<td>850,000</td>
<td>250,000</td>
<td>800,000</td>
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<td>841,500</td>
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<td>444,000</td>
<td>43,400</td>
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<td>Other payroll transfers</td>
<td>100,000</td>
<td>2,000</td>
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<td>2,000</td>
<td>105,000</td>
<td>—</td>
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<tr>
<td><strong>Total payroll disbursements</strong></td>
<td>1,400,000</td>
<td>292,000</td>
<td>900,000</td>
<td>762,000</td>
<td>1,390,500</td>
<td>311,900</td>
<td>1,390,500</td>
<td>311,900</td>
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<tr>
<td><strong>Total cash disbursements</strong></td>
<td>2,505,000</td>
<td>1,507,000</td>
<td>2,704,000</td>
<td>2,437,000</td>
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<td>2,415,500</td>
<td>1,416,900</td>
<td></td>
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</tr>
<tr>
<td><strong>NET ACTIVITIES</strong></td>
<td>(70,000)</td>
<td>(64,000)</td>
<td>(566,000)</td>
<td>(294,000)</td>
<td>(271,500)</td>
<td>807,100</td>
<td>(271,500)</td>
<td>727,100</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cash balance: Beginning</td>
<td>4,000,000</td>
<td>3,930,000</td>
<td>3,866,000</td>
<td>3,300,000</td>
<td>3,006,000</td>
<td>2,734,500</td>
<td>3,541,600</td>
<td>3,270,100</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash balance: Ending</td>
<td>3,930,000</td>
<td>3,866,000</td>
<td>3,300,000</td>
<td>3,006,000</td>
<td>2,734,500</td>
<td>3,541,600</td>
<td>3,270,100</td>
<td>3,997,200</td>
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</tbody>
</table>
Fundamentals of Health Care Financial Management

segment of the industry. It is important to note that every clinical hospital expense is originated by a physician's orders. Thus the costs of every hospital inpatient case are the result of the type and quantity of diagnostic test, therapy, drug, and supplies ordered by the physician. Still, the manner in which physicians manage their own office practice is often an indicator of how frugal or profligate they are in managing the resources of other health care organizations with which they are affiliated.

**Physician Office Management**

There is an art to running a successful physician’s office practice, which involves juggling a large number of variables. One of the biggest factors is the size of the practice, which can range from a solo practitioner’s office to a building housing a five hundred–physician multispecialty clinic. Regardless of size, there are a number of basic financial characteristics that all physicians’ office practices must adhere to. Basically, you must either increase revenue or reduce expenses—or ideally, do both. Here is a list of the fundamental ways in which a physician office practice can optimize its financial condition:

**Revenue Enhancement**

- Improve documentation to bill for and support higher-reimbursement procedures
- Improve patient throughput
- Retain ancillary revenues in the office setting
- Use mid-level providers (physician extenders) to increase clinical presence and increase ability to accept more patients

**Expense Reduction**

- Use mid-level providers who come at a lower cost than a physician
- Trim the payroll through use of benchmarks and levels of support staff
- Hold down supply costs through lower usage and less costly items
- Maximize automation of clinical and financial records
- Reduce malpractice premiums
- Cut office space costs; consider time-sharing

Unfortunately, it has become obvious to many physicians and physician groups in recent years that they are no longer capable of
optimizing their own financial condition. The rapid rise of managed care plans dealt a crippling blow to many a physician’s old back office. Managed care plans mandated dozens of new requirements, some for billing (as we saw with the denials management issues discussed in Chapter Five) and some for referrals. Primary care physicians (PCPs) who signed up with a managed care plan are often required to get preapproval for many treatment modalities that take place outside the physician’s office. This has caused an avalanche of paperwork, with concomitant cost that was unknown in prior eras.

Specialists are not immune to this phenomenon. First, they are often the recipients of referrals requested by the PCP and processed by the health plan. Therefore, the specialist’s staff have to be sure that each managed care patient being treated has the required approval for payment. This is an onerous task; health plans do not always process their approvals expeditiously, yet the patients must be seen promptly, which creates a potential conflict between physician and patient. Second, they too often need to request further referrals from the PCP if they want to perform additional tests or treatments on the patient beyond the original referral.

There are other medical practice issues that physicians have to deal with in the current era of health care:

- Fraud and abuse, particularly related to Medicare rules and regulations under what are called the Stark II laws, as characterized by billing issues, documentation issues, and the corporate structure of the practice
- Cash flow, owing to the long time it takes some health plans to pay capitation premium and other insurance claims (again, denials management is a major concern)
- The need for capital to fund acquisition of efficiency-producing and revenue-enhancing information technology, such as electronic medical records and prescription ordering systems
- Consumers who are demanding new tests, treatments, and drugs under the influence of print ads, television ads, and the omnipresence of the Internet
- In small practices (fewer than five physicians), the need for capital to continue to compete for managed care contracts against the much larger groups that are being courted by the large consolidated managed health care plans
From PPMC to MSO

Into the breach, in the early and mid-1990s, rode the physician practice management company (PPMC). This form of business had many corporate structures. There are for-profit and nonprofit, hospital-based, equity-based, and academic medical center–based PPMCs. Their mandate was to operate the physician office practice in a professional, businesslike manner. It was the PPMCs’ conviction that many solo and multispecialty practice settings operated with little financial focus or lacked the ability to manage these issues. Therefore, the PPMCs sold physician practices, both solo and multispecialty, on their ability to optimize revenue enhancement and cost reduction strategies. They were promoted as a vehicle to improve the financial condition in the physician office setting.

Wall Street became enchanted with PPMCs in the early 1990s. They enjoyed exceptional growth in the equity-based market. The market capitalization for PPMCs increased from under $1 billion in 1993 to $12 billion three years later. At the same time, the number of publicly traded PPMCs increased from three in 1990 to over twenty-five in 1996—an explosion in a nascent industry.

In 1997, there appeared to be no limit to this new industry’s size. Doctors were selling themselves to PPMCs by the thousands. The PPMCs targeted medium- and large-sized groups for acquisition. They were on a roll. Although they had not yet proved that they could invigorate the financial condition of physician practices, they were able to acquire many vulnerable groups because of a hard-to-refuse appeal: “Join us, and we will make you very rich through the increase in our stock price.” Because equity- or stock-based companies always sell at a premium to their underlying value, equity-based PPMCs could offer physicians stock in the PPMC that was ten, fifteen, twenty, even thirty times the value of the practice. It made multimillionaires of some early-adopting physicians.

The come-ons were relentless. Every independent physician or physician group was talking about its future in relation to PPMCs. Some doctors were looking forward to be courted by a PPMC or were making overtures to PPMCs themselves. Others were talking about rejecting any offers received due to cultural differences or the simple desire to stay independent. Equity-based PPMCs grew exponentially, fueled more by their tremendous acquisition binge than by improved earnings from practice improvement.
Meanwhile, this phenomenon did not go unnoticed by the hospital and health systems side of the industry. These institutions were worried. There are historical linkages between hospitals and their affiliated doctors. In most not-for-profit hospital or health system settings, physicians maintain independent status while gaining the privilege of using the hospital for those specific services for which they were granted credentials. Hospitals have a financial interest in granting these credentials. After all, it is these privileged physicians who refer patients to the hospital for inpatient and outpatient services. Physicians can become privileged in any of several categories, each of which confers its own rights and responsibilities. (Exhibit 9.2 lists the categories of RHMC’s medical staff and some of the privileges afforded to them.) These categories create linkages between the health care organization and the individual medical staff members.

Anything that disrupts these linkages is viewed as an obstacle by the hospital. Thus hospitals attempted to counter the trends of “their” physicians’ selling or aligning themselves with equity-based PPMCs. One step that many hospitals and health systems took was to organize the equivalent of their own PPMC. Called a management services organization (MSO), they would offer to purchase the physician’s practice or manage it while the physician retained control.

It was extremely important to the hospitals that they maintain linkages, particularly in the era of expanding managed care. They knew that being able to strike a bargain on managed care contracts was enhanced if a single negotiator could speak for the hospital and physician providers. It gave a small amount of leverage against the health plans, in contrast to the hospitals and physicians coming to the contract table separately. In addition, single-signature contracting keeps hospitals and their physicians on the same side, allowing both entities to maintain a contract with the same MCO. It was therefore in the interest of RHMC to do its best to create a strong affiliation with the many primary care and multispecialty physicians on its staff.

RHMC did this in two ways. First, it encouraged its affiliated (credentialed) physicians to form an independent practice association (IPA). This gave the physicians a legal base from which to negotiate as a single unit with the managed care companies. Any physician who became a member of the IPA gave it the authority to negotiate rates for him or her and the practice. So long as the IPA board approved a deal, the individual physicians in the IPA had to accept it.
EXHIBIT 9.2. Categories of Medical Staff at Ridgeland Heights Medical Center.

**Provisional staff:** Physicians newly appointed to the staff; this is essentially a one-year probation period.

**Courtesy staff:** Physicians whose practice is exclusively office-based but who seek membership to use hospital services or specialists or participate in hospital-based managed care organizations (MCOs). They will be credentialed but not privileged to admit or treat patients in the inpatient or outpatient hospital setting. (Some hospitals may allow a limited number of patient admissions.)

**Associate staff:** Physicians who have completed their one-year provisional status; valid for three years. It is available to staff members who have demonstrated an increasing need for the hospital facilities through satisfaction of their respective utilization criteria, shown an active interest in the affairs of the hospital, and demonstrated through their professional work qualities of maturity and responsibility to indicate that they are likely to become eligible for promotion to active staff.

**Consulting staff:** Physicians whose work is not primarily at this hospital but who are exceptionally qualified and experienced in their specialty. Their appointment to the consulting staff shall be determined by their potential for contributing service to the hospital and the community. They do not have admitting privileges, are exempt from all utilization criteria policies, and do not have the right to vote or hold office.

**Active staff:** Physicians who have completed associate staff status and have satisfied organizational bylaw requirements that qualify them to conduct the business of the medical staff. They are entitled to admit patients to the hospital, vote on all members, and hold elected office.

Second, although RHMC had no control over the IPA (which was 100 percent physician-owned and -operated), it was now able to work with the IPA to develop a fifty-fifty physician hospital organization (PHO). This allowed the unified physician organization and the hospital to negotiate deals with health plans.
The Management Services Organization

RHMC took one additional giant step. Like other health care organizations in the country, it set up an MSO to offer back-office services to independent physicians who felt the need to outsource these efforts and to offer management services for PCPs employed by the health care organization. The rationale for MSO formation was to allow RHMC to have some control over the patient referral pattern in its primary and secondary service areas. Employed physicians refer 100 percent of their non-office-based clinical services back to RHMC. It also created for RHMC a growing physician practice, giving it some additional leverage with the managed care companies.

The MSO was another operating company within the overall RHMC corporate structure. Its creation was costly to RHMC, involving setup of a back-office operation consisting of billers and collectors, physician office managers, and administrative personnel. These individuals were responsible for operating the physician’s offices, from hiring all the office personnel and nurses to procuring the supplies and making the office facility meet high standards. The point of the MSO was to allow the physicians to concentrate on the clinical issues pertaining to their patients and not worry about office management and cash generation.

One of the biggest features of most MSOs was the responsibility to negotiate all the managed care contracts. In the case of the RHMC MSO, this was not applicable because every member of the MSO was also a member of the IPA. Thus the IPA through the PHO was the negotiating muscle for the MSO.

There were several areas in which the MSO was particularly effective, notably managing the office staff (which included hiring, firing, supervising, and reviewing nursing and clerical staff). A key responsibility of the clerical staff was to process the primary care physician’s referral for any other medical or surgical service. This could include referrals to specialist physicians, hospitals, or home health agencies.

Referral Issues Making referrals for other medical and surgical services encompassed some difficulty for physician practices. The most important piece of information that the physician’s clerical staff need is the patient’s insurance carrier and plan. This allows the clerk to determine the exact benefits applicable to the patient. It permits the PCP to know which specialist physician or hospital the patient can be referred to. This is possible because each and every insurance plan has a particular provider panel attached to it. Insurance companies allow only a
contracted PCP to refer to other physicians in the panel associated with the insurance plan being paid for by the individual employers.

**Billing and Collection Issues** Another service the MSO offers is billing and collecting. There are specific rules and regulations that physician billers and billing services must follow. Some of the rules and regulations are the result of laws written for the Medicare and Medicaid programs. Others are the result of contractual stipulations agreed to between the organization and all the managed care companies with which it has decided to do business. The rules involve all phases of the operation. Some of the main rules that need to be followed are the following:

- Determination of patient third-party status (capitation or fee-for-service)
- Amount of the copayment that needs to be collected from the patient
- Correct coding
- Second opinion
- Referral
- Preauthorization of services
- Coordination of benefits
- Fraud and abuse regulations (compliance issues)

It is extremely difficult to perform all the required steps properly and not run afoul of contract stipulations or the law. It is akin to juggling a set of rare china dishes without breaking any of them. Proper identification of the patient during the check-in period is critical to the success of the billing process. Determining the third-party payer’s requirements then becomes essential to speedy billing and collection of the account if it is a fee-for-service-type contract. If the patient is part of a capitated plan, no bill for collection is sent to payer or patient. The patient simply pays a copayment at the time of service delivery.

The rapid increase in managed care volume in many physician offices set off a rush by some physicians to acquire the tools to manage these additional new requirements. As mentioned earlier in this chapter, there was a great need to acquire state-of-the-art information technology to enhance the ability to bill and collect patient accounts from Medicare,
Medicaid, and managed care payers efficiently. Some of these information systems included “edits” within the programming to identify and flag gaps in information required to be submitted with bills based on the payer. This was useful to the billers; they could avoid having manually to review every bill against a payer’s contract.

But there was one enormous downside to acquisition of these new information technology billing and collecting tools: they are very expensive. The cost of a system varies with the size of the practice, the number of patients treated, the number of members capitated, and the number of physician sites being connected. There are several information system vendors catering to the physician office practice market, and their products come in a variety of shapes, sizes, and costs.

Here are some of the popular features and functions of a physician practice management (PPM) billing and collecting system (Worley and Ciotti, 1997):

- Electronic charting
- Voice recognition (still unproven)
- Optical imaging
- Office scheduling
- Managed care contract billing and contract compliance

Features subsequently added and still in use include these:

- Coding and billing edit functionality
- Electronic billing
- Electronic order entry
- Online prescription ordering and management

These features and functions aid the physician and office staff in optimizing billing and collections. They should also help in clinical practice. However, given the current health care reimbursement climate, the problem is deciding what mechanism to use to finance acquisition of a system. Many practices in the 1990s turned to PPMCs for help. A variety of physician practices have turned to application service providers (ASPs) to offer continuously updated software at a monthly rental in place of the PPMC alternative (Conn, 2001).
Patient Throughput

An important concept in PPM involves patient throughput. This is defined as the number of patients a physician can see in a defined time period, usually stated in hours or days. Put another way, patient throughput concerns the amount of time a physician spends treating patients. This is best explained using an example.

Let’s say that a physician currently treats, on average, twenty-one patients a day over a standard seven-hour day. This means that the physician is treating three patients per hour or, on average, one patient every twenty minutes. There are two important concepts inherent in this example.

First, it is critical to understand all of the work that the physician needs to perform during the twenty-minute treatment period. First and foremost, the physician needs to put hands on the patient. When a patient enters a doctor’s office, he wants the physician to listen to him and then physically poke and prod. This gives the patient comfort that the physician is doing his job. It is this spending of time that is the physician’s most valuable commodity. But because of the nature of twenty-first-century practice, the physician needs to perform many more functions than just sitting with the patient while making a diagnosis and devising a treatment plan, as this list suggests.

Steps Taken by a Physician During an Office Visit

1. Examine the patient.
2. Fully document all the relevant signs and symptoms of the patient to allow the physician coder and biller to produce an accurate bill that stands up to scrutiny by a federal government or managed care auditor.
3. Review the patient’s chart from prior periods to ascertain if any previous illness or injury is connected to the current medical problem; if so, review the previous treatment patterns for success or failure.
4. Create any referral notes and paperwork that may be needed so that the patient can move on to a higher level of care, if warranted.
5. Prepare any prescription that the patient may need.
6. Explain to the patient any particular instructions that need to be given for home care.
Now consider the patient. Does he think that twenty minutes is enough time for the care rendered? Does he want more? Does he think that the physician is able to do an effective job in that time period? The answer to most of these questions is no! Patients are demanding and often aware that the physician is on a short time schedule. It’s always been this way, hasn’t it? Well, of course, the physician has always had an appointment book. The biggest difference is that back then, in the Marcus Welby 1950s and 1960s, physicians often booked patients into thirty- or forty-five-minute time slots. Nowadays, because of the reduction in reimbursement, even a twenty-minute time slot is too long!

These days, most PCPs (the Marcus Welbys of this era) schedule four patients an hour—one patient every fifteen minutes. In fact, some primary care physicians book patients ten or twelve minutes apart (five or six patients per hour) to maximize their revenues.

Improving patient throughput in a physician’s office was a surefire way for the PPMC to increase the physician’s revenue, so long as there was pent-up demand for the physician’s services. It was one of the first things looked at by a PPMC that was performing due diligence in the event of a practice acquisition. The PPMC could immediately ascertain if the practice had throughput of 2.0, 2.5, 3.0, and so on patients per hour. It was easy math to determine immediate improvement.

The equation seems too easy—like pushing the speed-up button on the assembly line to produce more cars, thus generating more revenue. Unfortunately, in the late 1990s, theory could rarely be turned into practice. The main reason is that most physicians who have been in practice for a few years have developed a pattern with which they are comfortable. Altering this pattern is akin to changing a successful baseball player’s batting style or a golfer’s swing. Yes, it’s possible, but only after a lot of hard work and effort. And the person has to want to change.

The method used by most PPMCs was to develop an incentive compensation arrangement. This gave the physician a financial incentive for meeting productivity goals. Thus she might be able to earn 10 to 50 percent over base compensation for attaining patient throughput at various levels above a preagreed standard. For example, over the course of a year, the physician and the PPMC may have agreed on a base salary of $150,000 with a stipulation that the physician would see 6,174 patients (28 patients per day times 4.5 days per week times 49 weeks). However, if the physician sees two more patients per day on average, she can earn an additional 15 percent of her base salary; seeing four more patients per day, the incentive rises to 30 percent of base salary.
This is just one physician compensation method attempting to boost physician throughput. There are dozens more, some quite esoteric. Many books, articles, and seminars around the country concentrate on these methods and should be referred to for advanced discussion in this area.

Although PPMCs emerged because of the rise of managed care and the reduction in physician income, when push came to shove, many physicians chose not to alter their practice patterns even with the carrot of the incentive compensation being waved in front of them. Thus physicians did not always increase their incomes because there were few, if any, improvements in patient throughput and the PPMCs did not generate the kind of revenue that they expected.

The concept of improving patient throughput as a driver to physician financial success, and lack of success with it, became a beacon in the industry. Physicians began to rebel against throughput guidelines. Other physicians who had not yet signed on with PPMCs as employees, but might have been considering it, stopped. In effect, in 1997 and 1998, the PPMCs ran out of physician practices to acquire. From 1993 to 1996, the only thing fueling PPMCs' growth was acquisition, not bottom-line improvement. Thus when acquisition dried up, so did a good part of the equity-based industry. The big decline began in 1997, and a decade later, there are very few equity-based physician practice management companies left. Nevertheless, hospital-based physician employment and the hospital-owned PPMCs have continued to thrive.

**The Hospital-Owned PPMC**

Not all PPMCs are alike. Even with the turmoil in the equity-based PPMC industry, there are still segments of the industry that have not been so heavily tarnished: “Good PPMCs—defined mostly as single-specialty and hospital-based PPMCs—are suffering from a backlash caused by a few companies’ problems, but they will survive any industry shakeout because they still provide the money and management skills most physicians lack” (Cook, 1998, p. 2). And many hospital-owned PPMCs continue to operate with renewed purpose and greater financial returns.

Historically, like many of the equity-based PPMCs, those sponsored by hospitals did not produce good financial results during the 1990s. There tended to be a number of reasons for these conclusions. Hospitals generally paid higher salaries to employed physicians than
other firms that could offer equity (stock) as an added inducement. They did this because they believe there were opportunities to raise practice revenue or decrease costs to make the practice more profitable. Also, there were substantial opportunities for additional revenue as employed physicians may legally make appropriate referrals back to the hospital.

Still, the high practice losses did not deter many hospitals that had the opportunity to establish a PPMC. As stated earlier in the chapter, these hospital-owned PPMCs met the criteria of keeping control of some of the organization’s best doctors rather than losing them to an outside influence and in some cases establishing a new practice in an underserved part of the service area, thereby generating new referral revenue.

Still, hospital organizations did not go out of their way to create physician practice losses in the PPMC. Most of them had every intention of making the business segment profitable. Many of the losses experienced by hospital-based PPMCs could be construed as start-up losses over the first few years of their existence. In fact, steep investment costs and pressure to pay high physician salaries led many hospital-owned physician practices into the red.

Some hospitals reported decreasing losses during the late 1990s. This was the situation experienced at RHMC. When it entered the PPMC business in the mid-1990s, the center expected to lose money in the early years of the practice and budgeted accordingly. Although practice acquisition was a major thrust of the plan, in RHMC’s market, there were not many physician practices seeking to be acquired. RHMC turned instead to developing its own physician practices, hiring relatively young PCPs who agreed to be employed. RHMC then acquired office space for these physicians in the parts of the service area that RHMC wanted to seed.

The biggest problem with most new physician practice is that it takes a long time to mature. Depending on the area, it could take from three to five years (that is, to bring in enough revenue to offset the total practice costs, which include the physician’s salary). Developing a volume and revenue base involves becoming known in the community and applying for certification by the several managed care plans that allow medical insurance coverage in the area. This brings the physician into the managed care plan’s pamphlet of eligible providers, thus permitting a managed care member to access the physician. The cycle could take a year or longer.
The start-up costs during this cycle tend to be high. The two largest are the salary of the physician, who is sitting around waiting for the next patient to come through the door; and the office rent, a fixed cost that must be amortized by patient volume. Almost all the other costs are variable and thus relatively easily absorbed in a low-volume environment. Still, although the losses are real, they can be somewhat offset by the volume of patients who are referred to the hospital for required testing, when appropriate.

RHMC has developed a monthly board report that shows a summary financial review of the physician practices. It includes the profit or loss on the office practice itself as well as the incremental revenue generated by the hospital on the services provided through referral by the office practice. Table 9.5 is an example of this report. Although the finance committee of the board continues to be dissatisfied with the direct losses generated by the physician practices, the members are well aware of their value in extending the health care organization’s reach into the deepest corners of the service area. In addition, the committee’s dissatisfaction is somewhat ameliorated by the last line on the report, which shows an overall positive physician financial contribution to the organization.

In addition, the board is aware that the direct losses suffered by the physician practices are slowly decreasing. Over the years that the practices have been in existence, their managers quickly learned the reasons for the losses and took steps to improve the problems. Improvements included the following:

- Improved physician productivity (throughput)
- More appropriate level of physician compensation
- Increased collection rate
- Enhanced managed care contract negotiation outcomes
- Improved occupancy of the practice site

RHMC management and staff assigned to the physician practice have made significant improvements in many of these areas, as the direct losses experienced by the organization are moving toward break-even. This tends to be the case in other hospital-owned physician practices around the country. The RHMC finance committee and board of directors continue to support the efforts in regard to their hospital-owned PPMC, but they also demand improvement.
### TABLE 9.5. Physician Development Key Success Factors, Ridgeland Heights Medical Center, Month and Year to Date Ended September 30, 2008.

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<th>Month</th>
<th>Variance from Prior Year (%)</th>
<th>Variance from Budget (%)</th>
<th>Year to Date</th>
<th>Variance from Prior Year (%)</th>
<th>Variance from Budget (%)</th>
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<tr>
<td>Prior Year</td>
<td>Actual</td>
<td>Budget</td>
<td>Prior Year</td>
<td>Actual</td>
<td>Budget</td>
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<td><strong>Employed Physicians</strong></td>
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</tr>
<tr>
<td>Total number of capitated lives</td>
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<td>Office visits—new patients</td>
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<td>4,200</td>
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<td>Office visits—established patients</td>
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<td>Office visits—total</td>
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<tr>
<td>Patient satisfaction rating (scale = 1 to 5)</td>
<td>4.65</td>
<td>4.78</td>
<td>4.8</td>
<td>2.8</td>
<td>−0.4</td>
</tr>
<tr>
<td><strong>Accounts Receivable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/R balance ($ thousands)</td>
<td>350</td>
<td>450</td>
<td>0</td>
<td>28.6</td>
<td>n/a</td>
</tr>
<tr>
<td>Days net revenues in A/R</td>
<td>42.0</td>
<td>41.0</td>
<td>40.0</td>
<td>−2.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>
### Total Hospital Activity

<table>
<thead>
<tr>
<th></th>
<th>180</th>
<th>200</th>
<th>190</th>
<th>11.1</th>
<th>5.3</th>
<th>2,000</th>
<th>2,100</th>
<th>2,200</th>
<th>5.0</th>
<th>−4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient days</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inpatient admissions</strong></td>
<td>32</td>
<td>35</td>
<td>36</td>
<td>9.4</td>
<td>−2.8</td>
<td>380</td>
<td>400</td>
<td>420</td>
<td>5.3</td>
<td>−4.8</td>
</tr>
<tr>
<td><strong>Outpatient services</strong></td>
<td>310</td>
<td>330</td>
<td>350</td>
<td>6.5</td>
<td>−5.7</td>
<td>3,000</td>
<td>3,400</td>
<td>3,600</td>
<td>13.3</td>
<td>−5.6</td>
</tr>
<tr>
<td><strong>Physician practice</strong></td>
<td>−190</td>
<td>−150</td>
<td>−140</td>
<td>−21.1</td>
<td>7.1</td>
<td>(2,400)</td>
<td>(2,000)</td>
<td>(1,800)</td>
<td>−16.7</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total gross revenues</strong></td>
<td>450</td>
<td>520</td>
<td>490</td>
<td>15.6</td>
<td>6.1</td>
<td>5,000</td>
<td>6,000</td>
<td>5,800</td>
<td>20.0</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Total net revenues</strong></td>
<td>265</td>
<td>320</td>
<td>300</td>
<td>20.8</td>
<td>6.7</td>
<td>3,000</td>
<td>3,600</td>
<td>3,500</td>
<td>20.0</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Incremental contribution</strong></td>
<td>160</td>
<td>180</td>
<td>200</td>
<td>12.5</td>
<td>−10.0</td>
<td>1,800</td>
<td>2,100</td>
<td>2,300</td>
<td>16.7</td>
<td>−8.7</td>
</tr>
<tr>
<td><strong>Total physician contribution</strong></td>
<td>(30)</td>
<td>30</td>
<td>60</td>
<td>−200.0</td>
<td>−50.0</td>
<td>(600)</td>
<td>100</td>
<td>500</td>
<td>−116.7</td>
<td>−80.0</td>
</tr>
</tbody>
</table>
In summary, the rise of the PPMC in this country has produced some interesting and everlasting changes to the health care industry. Physicians are the dominant group of health care practitioners in the United States, by virtue of their education, experience, and licensure. Only they can prescribe medical testing, order inpatient hospital admissions, order drugs and medical supplies, and prescribe all other medical or surgical referrals. The past two decades have brought upheaval to established physician practices, particularly the dramatic oversight function by managed care companies. This story is far from over. It is likely that physicians, as a group, will continue to play the key role they have historically enjoyed as leaders of the health care community.

PRACTICAL TIPS

■ When making labor cuts, use a productivity-based management system to determine the departments that are out of compliance with the productivity standards and adjust those department back to the standard.

■ Acquire an alert-based decision support management accountability budgeting, monitoring, and reporting tool.

■ Prepare a cash budget at the conclusion of the operating and capital budgeting process. This provides useful information to the decision makers.

■ For cash management purposes, maintain a cash balance close to zero, and place all other cash in medium- and long-term investments to maximize returns.

■ For physician practice management purposes, optimize, for patient satisfaction and revenue purposes, the number of patients that can be seen in a typical day.

■ Develop a financial analysis of all hospital-owned physician practices and include both the direct revenues and expenses and the hospital-based revenues and expenses derived from these physician practices.
DISCUSSION QUESTIONS AND ACTIVITIES

1. Compare the difference between an operating budget, a capital budget, and a cash budget. What are the primary elements in each budget?

2. Discuss the ways physicians and their practice behavior affect the financial results of an operating budget and a capital budget.

3. Debate the differences between an alert-based decision support management accountability budgeting, monitoring, and reporting system and a standard reporting system that does not provide instant management information to the decision makers.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Recognize some of the most important information technology issues facing hospitals today
■ Determine the five strategic IT initiatives that should be given focus in most hospitals
■ Discuss the reason that the 1996 HIPAA law was created and the impact that it has had on the health care industry
■ Recite the general features and functions required in a hospital information system selection
■ Discuss how improvements to clinical systems will typically benefit hospitals
■ Determine the types of information to be reported in the board’s budget package that are most valuable to its finance committee in making a favorable approval recommendation

It is 7:30 in the morning. Josephine Morton, RHMC’s vice president of information services and chief information officer (CIO), has just arrived at her office. She has a big day ahead of her and is trying to brace herself for it. Heading for her first cup of coffee of the morning, she runs into Sam, coming out of his office down the hall.
“Hey, Jo, slow down!”

“Oh, sorry, Sam, I’ve got a lot on my mind today. We’re rolling out the final phase of the computerized patient record [CPR]. I’m on my way to a nursing floor right now to see how it’s working in action.”

“Final phase, today? That’s fantastic. I thought we’d never get there,” offers the always optimistic Sam.

“Yeah, I’ll tell you, this has been a heck of a year. Between implementation of the CPR and replacing several modules of our clinical information system during the past several months, I think the organization owes me about two months of sleep.”

“I know how you feel. I often feel that way during certain phases of the budget process. Still, I know the job you’ve been through is quite a bit bigger and longer than the annual budget.”

“Speaking of the budget, because of these clinical information module implementations and replacements, we’ve spent even more money than the very large budget that was approved by the board,” notes the suddenly worried CIO. “How are you going to handle that?”

“That’s a good question. I’ve thought a lot about how to present the final dollar amounts to the board. First of all, we’ve been keeping the board members informed all along. Whenever there was a break between the budget and the actual expenses, we’ve let them know and asked for subsequent approval. They haven’t always been happy, but they usually understand why there have been budget variances, particularly capital budget breaks. You know, most of our finance committee members are CEOs, and they’ve faced these issues firsthand at their own companies.”

“Well, I know I’ve prepared some analysis for you and the finance committee. So that’s good to hear.”

“I’ll tell you, Jo, the toughest part of the increased budget that we needed to explain was the tremendous cost of upgrading the computer infrastructure. It was hard to describe the need to spend several million dollars to replace all the wires behind the walls in addition to building dozens of computer closets to house the dramatically increased computer size and power needed to control the flood of digital data. The way we were able to convey these increases was to
remind them of the amounts of storage memory their kids are using right now on their home computers, just for retrieval and storage of music and videos.”

“That’s a good way to do it. I’m glad to hear that the finance committee has accepted the budget changes. I gotta go now. I need to get to that nursing floor to see the new system in action.”

“OK, but let me ask you to try not to have any more budget breaks. It gets harder and harder to deal with them.”

October dawns gorgeous, as usual. The leading edge of the trees that populate the remaining forests of northern Illinois is beginning the turn from bright green to flaming orange and red. The temperature, reaching the high sixties at noon and the mid-forties at night, is likewise perfect. The brisk autumn air invigorates the region. Productivity is high, and that’s useful because October is traditionally a month when hospital beds fill up with various illnesses and injuries.

At RHMC, October is always a transitional month because of the proposed budget presentation to the finance committee in the middle of the month and to the board of directors a few days later. At the beginning of October, the anxiety always begins to build as the dates approach.

The finance staff are working constantly to clean up the presentation package, giving particular care to explain any discrepancies that emerged. These discrepancies must be evaluated and clarified. At RHMC, because of the process of the previous five months that systematically weeded out anomalies, there are rarely any discrepancies to cause the finance staff to recommend a change in the budget before presentation to the finance committee.

At the same time, the finance staff are making heavy use of computers to perform the budget work. The computer technology enhances the staff’s performance in generating, calculating, and evaluating the operating and capital budgets. In fact, the finance staff would need to double or triple in size if the computers suddenly disappeared.

INFORMATION SYSTEMS IMPLICATIONS FOR HEALTH CARE FINANCIAL MANAGEMENT

Throughout this book, it has been shown that much of the process and practice performed by the finance staff is facilitated by use of information technology (IT). In fact, in essence, the staff members all have a
computer keyboard attached to the end of their arms. Just as a carpenter has a hammer, the finance and accounting staff have their spreadsheet programs. The accounting profession was invented in 1492, when an Italian named Pacioli invented double-entry bookkeeping using a quill pen. The current practice is somewhat more advanced (though still double-entry). In the early 2000s, quills are considered a bit too slow to keep up with the pace of change in the health care industry.

It may be obvious that all industries have adopted IT as a cost reduction and laborsaving tool, but uses for IT in health care have a distinctly patient-oriented focus. General ledger and payroll programs are the most basic pieces of software in any industry and thus are not at issue here. They work the same in health care as in any other industry. It is the other programs that produce value in health care and health care finance.

The essential function of information systems management is to get the right information to the right user at the right time to support effective decision making. The improvements contemplated for health care IT are generally predicated on improved patient care and involve moving previously unavailable information to the clinical practitioner at the patient point of service. The practitioner might be a physician, a nurse, a physical therapist, or a dietician. It could also be a massage therapist, an acupuncturist, a pharmacist, or a psychologist. In every case, the need to know what happened to the patient prior to the current visit is critical to effective and cost-efficient care.

Health care IT functions are extensive. There is critical need in areas such as clinical operations, financial operations and analysis, facility management and planning, and marketing development. Yet the health care industry has been behind the curve in IT spending. Figure 10.1 shows estimated IT spending in the health care and other industries.

This failure to invest in IT has previously hurt the industry by holding it back from making some of the major productivity strides achieved in other industries. For example, the auto industry is a leader in automated production processes. Banking, which specializes in the movement of money in both global and local marketplaces, could not exist without major advances in IT. After all, the proliferation of automated teller machines (ATMs) allowed banks to reduce their labor costs while improving service to customers who needed more than the basics.

So health care has been consistently late to the IT table. But it started to close the gap in IT spending in the late 1990s as many health care chief executives and their boards gained understanding of the organizational needs and capabilities of IT. They have accepted the need to
move beyond the 2.0 to 2.5 percent average spending on IT. Figure 10.2 gives an indication of the sort of costs involved. Each item has an expense history. For example, over the past few years, the cost of computer hardware has plummeted. Computer users now have hardware that is thousands of times faster, with the ability to store and hold much greater amounts of data, than just a few decades ago. Web-based applications, in some cases, allow the organization to bypass giant computers for smaller, more cost-efficient servers. On the other hand, the cost of IT personnel has increased much more quickly than the rate of inflation as a result of the demand for personnel who can write programs and fix glitches that arise in the course of operations.

Like most of its industry counterparts, RHMC has researched its future IT needs. It does this formally through an IT strategic plan, updated annually. The goals of the plan are as follows:

- Determine the organization’s needs
- Review its current capabilities
- Ascertain how to close the gap between needs and capabilities
The IT plan starts with a review of the strategic initiatives that the organization is attempting to achieve, in accordance with the main strategic plan. These are the strategic initiatives that the IT plan must focus on.

**Strategic Initiatives**

- Providing superior health care to all the clients of the system and improving the health status of the community
- Employing state-of-the-art clinical information systems and computerized patient record technologies to minimize patients’ risk of injury
Fully integrating all employed and attending physicians into the health delivery system and expanding the primary care physician network

Managing health care delivery across the continuum, from acute care through institutionalized skilled nursing care and into the home, through home care

Reducing cost per unit of health care service by increasing utilization and efficiency

INFORMATION TECHNOLOGY STRATEGIC PLAN INITIATIVES

Each of the five strategic organizational initiatives shown in the list has to be aligned with specific IT needs that are not currently being addressed. At RHMC, this led to determining that there should be a concentration in three key areas:

1. Build or buy systems to support enhanced clinical process management and data access

2. Integrate data and reporting to support enhanced decision making

3. Maximize the IT infrastructure and delivery capabilities

The Y2K issue absorbed a great deal of RHMC’s personnel and capital resources for the two years prior to 2000. Although many other IT needs were identified at that time, their accomplishments were significantly delayed.

Systems to Support Enhanced Clinical Process Management and Data Access

RHMC, as a medium-sized acute care hospital facility, has always taken the position that it would not be a beta site or even an early adopter for new software. Yet in late 2008, it identified several clinical applications that have already been proved to generate significant patient care improvements in other health care systems, including the following:

- Physician satisfaction through timely results reporting
- Patient satisfaction, thanks to the physician’s ability to give better diagnostic and therapeutic service and thereby treat the patient in a
timely manner, allowing the patient to be discharged sooner (which should also improve the bottom line)

- Employee satisfaction from the capacity of technology to help clinicians (nurses, technicians, therapists) record their observations (charting) into the clinical systems and have immediate access to their notes and those of others in a format that enhances good clinical decision making

- Clinical data access for all levels of management; in addition to access by the actual caregivers, new clinical technologies allow RHMC management and administration to access summarized clinical information (not at the level of the individual patient) for the purpose of improving the quality of care being performed as well as reducing costs, where appropriate

Given these projected improvements and the view that the rest of the industry was currently moving to adopt, RHMC was eager to implement clinical applications. Also, as will be seen later in this chapter, many projected financial implications for clinical application are favorable as well.

**Integrating Data and Reporting to Support Enhanced Decision Making**

The second IT strategic initiative—integrating data and reporting to support enhanced decision making—is extremely important to the organization. Without effective reporting and analysis systems, it is not easy for administrators to maintain proper control over their managers or for managers to gain a proper understanding of their department’s operations.

Turning data into useful information is critical to the financial and clinical health of RHMC. Several areas of decision support allow managers to optimize the resources of their departments at all times; anything less than this type of commitment leads to inefficiency, ineffectiveness, and inappropriateness.

**Effective Decision Support System Tools and Techniques Needed by the Health Care Organization**

- Daily administrative and management dashboards on the computer desktop

- Monthly balanced scorecard of financial, clinical, quality, and satisfaction indicators (metrics)
Maximizing the IT Infrastructure and Delivery Capabilities

RMHC had made a great commitment to improving its infrastructure and delivery capabilities during Y2K upgrades. In the ensuing years, additional capital was allocated to upgrading the IT capabilities so that the organization could remain competitive with its peers and meet its IT plans. Still, this is an area that is never finished. As technology gets increasingly faster, smaller, and more reliable, the organization’s technology infrastructure has to be continuously upgraded.

HIPAA IMPLEMENTATION ISSUES

While contemplating continued IT spending for all these items, RHMC is reminded of the costs it faced to implement a variety of new systems, both computerized and administrative, to comply with the Health Insurance Portability and Accountability Act (HIPAA) of 1996. Though signed into law in 1996, not all provisions have yet been finalized. Reality, however, is closing in on the parts of the legislation that directly affect health care providers, payers, and a variety of vendors with which they do business.

The federal law has five parts:

Title I: Health Insurance Access, Portability, and Renewal

Title II: Preventing Healthcare Fraud and Abuse, and Administrative Simplification

Title III: Tax-Related Provisions

Title IV: Group Health Plan Requirements

Title V: Revenue Offsets
In this book, we are concerned only with Title II, Section F, which refers to six major elements of administrative simplification:

1. Electronic transaction standards
2. Security
3. Unique health identifiers
4. Standard code sets
5. Privacy
6. Electronic signature standards

Each standard instigated significant changes to how business is done in the health care industry. The objectives of the administrative simplification provisions can be summarized as follows:

- Enhance the quality of patient care by improving clinical data access and information availability for caregiver decision making
- Improve health information security for Internet-based technology
- Protect the privacy and security of patient health care information
- Set standards for patients, providers, insurers, and employers
- Reduce health care administrative overhead costs (estimated at 26 cents of every health care dollar spent)
- Reduce health care fraud and abuse (estimated at 11 cents of every health care dollar spent)

The law requires many groups to comply with the provisions of HIPAA law. These provisions apply to any organization that transmits, maintains, or stores electronic “covered” (also called protected health information, or PHI) patient and payment information. Therefore these provisions apply to qualified health plans (ERISA, Medicare, Medicaid) and other covered entities, including all clearinghouses (if they are used to translate or convert data), pharmacies, providers (including physicians), and employers.

Covered patient information is defined as demographic, treatment, and payment information that is or will be stored electronically or on paper. Because all or almost all patient information is entered into a billing or registration system, all health care organizations (and many of their outsourced suppliers) need to apply HIPAA privacy standards to
all patient information at all points in the chain of service. In particular, this means that all of the collection agencies with which the hospital contracts must certify that they also comply with the HIPAA standards. This is to be done through a “chain of trust” agreement.

While all of the standards are important, the transaction and code set standards were the first to be implemented and set the stage for the HIPAA procedures to come. The transaction and code set standards were designed to offer the health care industry uniform standards for conducting business through electronic means and apply to the use of eight electronic sets mandated by HIPAA. There are civil monetary penalties for violating transaction standards of $100 per person per violation and up to $25,000 per person per violation of a single standard for a calendar year. The penalties for known misuse of individually identifiable health information can be up to $250,000 fine (civil) and ten years’ imprisonment (criminal). Thus it is in the best interest of the organization to get it right within the time frames listed.

Both of the transaction and code set standards require hospitals, health plans, physician groups, and others to make substantial changes in their paper medical records and their computer systems that contain demographic, insurance, or clinical information. In addition, the new privacy rule requires compliance in a number of areas, such as development of comprehensive and enforceable privacy policy and procedures, development of sanction guidelines for violation of privacy policy, offering mandatory training to employees regarding privacy policy, requiring all employees to sign a confidentiality agreement, and formalizing specific processes to manage access to the organization’s computer systems.

RHMC, like most of the hospitals in America, complied with the initial set of HIPAA standards in a timely fashion. Still, it was a costly undertaking that strained the capital budget of the hospital.

**SELECTION OF A NEW HEALTH CARE INFORMATION SYSTEM**

HIPAA was initially intended to establish registration and billing standards within the health care industry and to ensure privacy, confidentiality, and security for the information in these and other records that contain demographic, insurance, and clinical data. HIPAA did not focus on improving clinical information. Yet the opportunities to improve many of the clinical features and functions were enormous. This was particularly true as governmental, quasi-governmental, and business
and industry groups such as the Leapfrog Group, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) through its ORYX initiative, and other initiatives required hospitals to improve their clinical and quality outcomes along with their patient safety outcomes. It was determined that better and more state-of-the-art information technology tools were the answer.

So in 2006, RHMC administration decided to enlist the aid of a computer consultant who would help select the best possible health care information system (HIS) for its needs. The administrators interviewed consulting candidates to select the one best suited for their culture and needs. They were aware that consultants who help in IT selection processes could be expensive if allowed to perform extensive and unnecessary services. So they chose a consultant to assist them with a narrow scope of work (Berger and Ciotti, 1993):

1. Creating the initial list of vendors suitable for RHMC’s size
2. Helping prepare the request for price quotation (RPQ), a twenty-page document that asks the vendor for a standardized set of information that allows the consultant and organization to gain a clear understanding of the IT vendors being queried (Gibson, Berger, and Ciotti, 1992)
3. Summarizing the information contained in the RPQs returned by the vendors
4. Facilitating a focused yet streamlined selection process (staff of RHMC performed much of the analysis work related to software applications with which they would be involved, such as evaluating the features, functions, and ease of use and applying objective scoring criteria to determine the selection)

Features and Functions of the Selected IT System

After extensive negotiations, RHMC and the selected vendor got down to the troublesome implementation stage, in which time constraints were imposed to get the newly purchased system operational so that the organization could achieve some of its efficiency and effectiveness goals and upgrade the organization’s IT capabilities as expressed by the strategic plan and its initiatives. Because of the time it took to select a system, negotiate the contract, and perform significant upgrades to the IT infrastructure, the organization wanted to go live with the system within twelve months of the contract signing date. Each department
manager was therefore asked to review the features and functions of the vendors’ systems to be sure about those most critical to improving and expanding operations in the first implementation phase.

Because the organization’s baseline systems had been replaced in 1999 owing to Y2K concerns, the big issues now facing RHMC were primarily clinical. The additional features and functions that RHMC would be gaining with its new system acquisition included the following:

- **Patient integration:**
  - Integrated scheduling and registration
  - Enterprisewide master patient index

- **Physician support:**
  - Integrated clinical and administrative information access

- **Clinical data integration:**
  - Nurse charting
  - Clinical point-of-care applications
  - Clinical data repository
  - Computerized practitioner order entry
  - Clinical outcomes measurement system
  - Electronic medical record implementation
  - Disease management analysis and reporting
  - Pharmacy and bar code medication management
  - Encounter reporting

RHMC’s wish list was consistent with surveys conducted to determine the application areas considered most important to be available and installed by hospital or health systems over the next two years. A summary of one of the most widely cited surveys indicates that clinical systems are hot. Figure 10.3 shows that all of the top five applications are clinical.

Furthermore, all of these clinical upgrades require significant improvements to the IT infrastructure:

- **LAN upgrade** (wiring, data closets, integration hardware)
- **Additional staff support** (more FTEs in applications and hardware support, network engineering)
FIGURE 10.3. Application Areas Considered Most Important over the Next Two Years.

Significantly increased server capacity

Additional capability for multiple, complex project execution

Much of what RHMC planned was consistent with various surveys taken during 2006 and 2007. In general, for a majority of integrated delivery systems and hospitals, upgrading the IT infrastructure, patient-focused information, and clinical information systems were the priorities.

**Financial Implications for RHMC**

The work described here is extremely costly. In fact, it easily exceeds the 2.0 to 2.5 percent of average organizational spending on IT mentioned earlier in the chapter. Table 10.1 shows the extent of RHMC’s spending over the three-year period 2005–2007.

This appears to be a significant amount of money for an organization of its size. Yet it has been absolutely necessary, and RHMC was far from unique. Some of the cost is specifically related to improving the organization’s ability to operate effectively in the current health care climate. Earlier in the decade, many organizations spent millions to achieve compliance with HIPAA. Now health care organizations are facing the cost of keeping up with the competition as well as complying with patient safety concerns and the physicians’ desire for more state-of-the-art systems.

RHMC is currently in the process of determining its cost of these initiatives. It will do whatever is necessary to reengineer its processes so that it can thrive in this new era of health care. The organization is also confident that improvements in efficiency and reduction in accounts receivable thanks to electronic eligibility, billing, and payment features will offset some of the costs of compliance.

**How Improvements to Clinical Systems Benefit RHMC’s Financial Outcomes**

As stated earlier in this chapter, the biggest benefits that RHMC expects to obtain from its upgraded information system are in the clinical services area. New software modules for nursing and ancillary department staff are expected to generate service and patient satisfaction improvements. The modules are expected to automate some of the clinicians’ documentation, freeing up more time for clinical analysis. The following clinicians will be using the system in the ordinary course of the day:

- Physicians
- Nurses
### TABLE 10.1. Information Technology Capital Expenses for Computer Installation, Ridgeland Heights Medical Center, 2006–2008 (in dollars).

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<thead>
<tr>
<th>APPLICATION SOFTWARE (FINANCIAL/OPERATIONAL):</th>
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</tr>
</thead>
<tbody>
<tr>
<td>General ledger</td>
<td>60,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>60,000</td>
</tr>
<tr>
<td>Payroll/personnel</td>
<td>60,000</td>
</tr>
<tr>
<td>Medical records abstracting</td>
<td>60,000</td>
</tr>
<tr>
<td>Medical records coding</td>
<td>60,000</td>
</tr>
<tr>
<td>Enterprise medical records</td>
<td>150,000</td>
</tr>
<tr>
<td>Patient accounting/billing/collections</td>
<td>90,000</td>
</tr>
<tr>
<td>Patient registration</td>
<td>60,000</td>
</tr>
<tr>
<td>Automated scheduling</td>
<td>30,000</td>
</tr>
<tr>
<td>Data repository</td>
<td>90,000</td>
</tr>
<tr>
<td><strong>Total financial/operational software</strong></td>
<td><strong>720,000</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>APPLICATION SOFTWARE (CLINICAL)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Order entry and results reporting</td>
<td>90,000</td>
</tr>
<tr>
<td>Radiology</td>
<td>90,000</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>60,000</td>
</tr>
</tbody>
</table>
Automated nurse charting | 90,000
\[Total \text{ clinical software} \quad 330,000\]

**HARDWARE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer servers</td>
<td>800,000</td>
</tr>
<tr>
<td>Network</td>
<td>600,000</td>
</tr>
<tr>
<td>Peripherals: PCs (800), laser printers (200), miscellaneous</td>
<td>1,900,000</td>
</tr>
<tr>
<td><strong>Subtotal hardware</strong></td>
<td>3,300,000</td>
</tr>
</tbody>
</table>

**NETWORK INFRASTRUCTURE**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect and engineering fees</td>
<td>400,000</td>
</tr>
<tr>
<td>Network closets/cabling/electrical outlets</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Expansion of computer room</td>
<td>200,000</td>
</tr>
<tr>
<td>Renovations for additional classrooms</td>
<td>250,000</td>
</tr>
<tr>
<td><strong>Total network infrastructure</strong></td>
<td>4,850,000</td>
</tr>
</tbody>
</table>

**OTHER HARDWARE AND SOFTWARE COSTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface engine</td>
<td>250,000</td>
</tr>
<tr>
<td>Interface programming (12 systems)</td>
<td>200,000</td>
</tr>
<tr>
<td>Conversions (8 systems)</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Total other hardware and software costs</strong></td>
<td>550,000</td>
</tr>
</tbody>
</table>
(Table 10.1 continued)

**VENDOR IMPLEMENTATION FEES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation fees to vendors (13 systems)</td>
<td>600,000</td>
</tr>
<tr>
<td>Travel expenses for implementation and training</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Total vendor implementation fees</strong></td>
<td><strong>1,800,000</strong></td>
</tr>
</tbody>
</table>

**IMPLEMENTATION FEES FOR RHMC**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information technology staff</td>
<td>400,000</td>
</tr>
<tr>
<td>Consultants</td>
<td>400,000</td>
</tr>
<tr>
<td>Implementation team</td>
<td>400,000</td>
</tr>
<tr>
<td>User training</td>
<td>400,000</td>
</tr>
<tr>
<td><strong>Total RHMC implementation fees</strong></td>
<td><strong>1,600,000</strong></td>
</tr>
</tbody>
</table>

**Total Health Information System Implementation Costs**

13,150,000

- Physical therapists
- Speech therapists
- Occupational therapists
- Cardiac services personnel (catheterization, rehabilitation, other)
- Respiratory therapists
- Pharmacists
- Pastoral caregivers
- Dieticians
Basically, any clinician who currently is required to document the service or education component of a patient’s encounter can perform this documentation online. The benefits of online documentation (charting) are significant:

- **Easier locating of inpatient unit chart.** Clinicians who can document online from any computer no longer have to spend time locating the patient’s paper chart. This is a time saver.

- **Improved chart review capabilities.** Clinicians will now have access to wireless handheld computers that will allow for easier input capability and also clinician review of previous clinical notes as far back as has been input into the computer. It also permits clinicians to review and trend items such as laboratory results across various time periods, even years. This is not effectively possible with paper charts unless special requests are made, and the analysis can never be done quickly. This new capacity enhances the clinician’s ability to make quicker and more accurate diagnoses.

- **Improved chart review, diagnosis, and treatment capabilities off the inpatient unit.** Computer terminals and handheld devices will be located not only in patient areas but also in the physician lounges; for physicians associated with the hospital, connections can be made to terminals in their offices. This allows a physician to check the progress of a patient online and in real time for lab, radiology, or cardiology results or nurses’ notes. Because of the increased resources and speed of the analysis, the physician can prescribe treatment plans or drugs sooner. This should mean quicker recovery—a plus for the patient, the patient’s insurance company, and a health care organization that is reimbursed on a case rate or low per diem.

- **Increased legibility owing to online documentation.**

- **Improved patient satisfaction.** Patients will appreciate the benefits of the increased speed of treatment and recovery from their illness or trauma.

- **Accelerated speed of documentation in the chart.** Clinical documentation is always better the sooner it is recorded. Locating a terminal at the bedside, in the physician lounge, and in the physician’s office should shorten the time frame for recording the documentation. Swifter documentation leads to better documentation, which leads to better clinical analysis. This ultimately leads to better coding and reimbursement.
Increased quality of care. Nursing and other clinical personnel need to devote less time on administrative and clerical matters and can spend more time at the patient’s bedside, administering care.

In summary, the value of clinical systems is still virtually untapped. But at RHMC and many other health care organizations, using computers for documenting, analyzing, diagnosing, and researching the patient’s condition is at the starting line. It will revolutionize the practice of medical care.

BUDGET PRESENTATION TO THE BOARD FINANCE COMMITTEE

After all the work of the previous five months, RHMC’s administration presents its proposed 2009 budget to the finance committee of the board for approval. Upon approval by the finance committee, it is sent to the full board of directors for final approval. This is usually a formality, as the full board has generally ceded responsibility for detailed review and debate to the finance committee. Still, an occasional controversy may erupt, perhaps around the level of budgeted capital expenditure in relation to net income. For example, the administration may propose spending more money for capital acquisition and replacements than is available from cash inflow (see Table 10.2).

It is possible that the finance committee could decide to approve this scenario because it has been presented as a one-time problem. This could be the result of a major shift or reduction in third-party reimbursement, such as from the Medicare program or an incursion of managed care into the organization’s region. Yet the full board may be unsympathetic to the argument that administration should dip into its rainy-day funds. It could therefore decide not to approve the upcoming budget and instead return it to the administration with instructions to rethink the cash flow results so that there is no cash flow loss (that is, reduce planned capital spending).

In this case, RHMC’s board has already discussed the issue and decided that if there is a proposed cash flow loss because of 2007 and 2008 full implementation of the federal government’s 2003 Medicare Modernization Act issues or dramatic change in the reimbursement system, the board will allow it. So the presentation by administration proceeds. At RHMC, a twenty-three-page document is presented over a
TABLE 10.2. Cash Inflows and Outflows, Ridgeland Heights Medical Center (in thousands of dollars).

<table>
<thead>
<tr>
<th></th>
<th>2008 Projected</th>
<th>2009 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH INFLOWS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating margin</td>
<td>3,100</td>
<td>2,920</td>
</tr>
<tr>
<td>Add: Depreciation</td>
<td>10,500</td>
<td>11,500</td>
</tr>
<tr>
<td>Cash inflows</td>
<td>13,600</td>
<td>14,420</td>
</tr>
<tr>
<td><strong>CASH OUTFLOWS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>10,000</td>
<td>11,500</td>
</tr>
<tr>
<td>Principal payments on outstanding debt</td>
<td>3,500</td>
<td>3,600</td>
</tr>
<tr>
<td>Cash outflows</td>
<td>13,500</td>
<td>15,100</td>
</tr>
<tr>
<td>Net cash inflows (outflows)</td>
<td>100</td>
<td>(680)</td>
</tr>
</tbody>
</table>

two-hour time frame. It is important to note that this document was sent out to the finance committee members one week before the meeting so that the members could review it in detail before the actual meeting. Exhibit 10.1 shows the table of contents. The presentation includes chart, graphs, tables, and variance analyses to enhance the committee’s understanding of the budget.

There is an interesting feature to the structure of this budget. Several of the budget document pages are designed to look exactly like the pages presented to the finance committee in its monthly financial statements. This is a great time saver for the finance staff. In prior years,
### EXHIBIT 10.1. Table of Contents, 2009 Proposed Budget.

<table>
<thead>
<tr>
<th>Report</th>
<th>Page Number in Board Document</th>
<th>Reprint in This Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO’s memorandum to the board of directors</td>
<td>1–2</td>
<td>Exhibit 10.2</td>
</tr>
<tr>
<td>Executive summary</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Preliminary budgeted statement of operations</td>
<td>4</td>
<td>Table 10.3</td>
</tr>
<tr>
<td>Ratio analysis and key success factors</td>
<td>5</td>
<td>Table 10.4</td>
</tr>
<tr>
<td>Key volume assumptions and gross revenue percentage</td>
<td>6</td>
<td>Table 10.5</td>
</tr>
<tr>
<td>Analysis of revenue and contractual allowances</td>
<td>7</td>
<td>Table 10.6</td>
</tr>
<tr>
<td>Salary expense and FTE summary</td>
<td>8</td>
<td>Table 10.7</td>
</tr>
<tr>
<td>Salary reconciliation</td>
<td>9</td>
<td>Exhibit 10.3</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Financial effect of debt issues</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Capital budget</td>
<td>12–16</td>
<td></td>
</tr>
<tr>
<td>Cash budget</td>
<td>17</td>
<td>Table 10.2</td>
</tr>
<tr>
<td>Updated strategic financial plan information</td>
<td>18–19</td>
<td></td>
</tr>
<tr>
<td>Graphs of financial and statistical trends:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admissions</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Patient days and outpatient visits</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Total expenses and expense per adjusted admissions</td>
<td>22</td>
<td>Figure 10.4</td>
</tr>
<tr>
<td>Gross revenues, net revenues, and total expenses</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>
the finance staff had to scurry around throughout the year to extrapolate budgeted volumes or ratio analysis data that had not been specifically reported during the budget process. Several years ago, the RHMC finance administrator redesigned both the monthly financial statement and the annual budget report to align the outputs. All parties were pleased with the outcome of the alignment. It resulted in elimination of many obsolete analyses and inclusion of pages that matched the monthly financial report, such as the ratio analysis and key success factors (page 5 of the budget report) and key volume assumptions and gross revenue percentages (page 6).

The CEO’s memorandum to the board is designed to put the entire budget into perspective, coming from the individual with primary organizational responsibility for success or failure. In effect, this final budget product is the financial representation of the CEO’s goal and vision for the organization. Therefore, this memo is a personal message from the CEO to the board, which is responsible for approving the vision. For the year 2009 budget, the CEO’s vision and the board’s vision are somewhat at odds because the operating margin does not meet the board’s 4 percent target. In this case, the CEO’s memo becomes an essential tool for formally describing the reasons for divergence. Exhibit 10.2 shows how personal and direct this memo can be.

Following the CEO’s memorandum is the final proposed statement of revenues and expenses, shown in Table 10.3. We have already seen the development of these budgeted revenues and expenses. But the board gets to see only this final version. Ratio analysis (Table 10.4) and key volume assumptions (Table 10.5) are then provided to place the budgeted bottom line in context. Furthermore, there are explanations of variance as represented by the analysis of revenues and contractual allowances, salary expense and FTE summary, salary reconciliation, employee benefits, and interest expenses. There are also graphs that show selected financial and statistical trend results over the previous five or six years.

Table 10.4 places many of the expected financial results in context for the finance committee and the board. It begins with the ratios that directly relate to the organization’s strategic financial plan, permitting the board members to review trends in these areas. It continues with accounts receivable information, moves to staffing information, and ends with other pertinent patient information reflecting financial
EXHIBIT 10.2. CEO’s Memorandum to the Board of Directors.

To: Members of the Finance Committee  
From: Richard M. Samuelson, President and Chief Executive Officer  
Subject: 2009 Budget

The 2009 budget is noteworthy for the organization. The federal government’s 2003 Medicare Modernization Act is beginning its fourth full year, which has produced financial consequences for the industry at large and Ridgeland Heights Medical Center in particular. Payment reductions from managed care are also continuing, but the demand for service from patients and medical staff continues unabated. Our predicament is a national and local issue as well and was anticipated to occur several years ago during discussions of prior strategic financial plans. The fact that the sky did not fall previously is a reflection of the growth in outpatient revenues and our ability to delay the impact of the managed care market rates (thereby generating favorable variance in contractual allowances).

The question today is, how should management and the board evaluate our budget? Clearly, the most significant trend is the sharp rise in the percentage of contractual allowances, which causes net revenues to increase marginally. Management suggests that the board consider the following viewpoints:

- The most important consideration is that we provide quality patient care and that service shortfalls not be attributed to budget considerations. The human resource committee specifically concluded that quality should not be compromised to maintain short-term margin targets. However, on a long-term basis, both quality and financial targets must be achieved. Our ability to absorb short-term declines in operating margins is a recognized asset that the committee was willing to deploy.

- In spite of the decline in operating margins, our historical cash flow has generated a strong balance sheet, including $130 million of cash and investments through September 2008. In 2009, we will generate a negative cash flow due to projected capital expenditures exceeding our operating margin plus depreciation expenses. This onetime reduction needs to be absorbed as we restructure our services to further maximize our financial position.
Although the 2009 budgets are submitted for approval, ideas to improve actual hospital results are being developed, including the following:

1. Existing program enhancement or elimination and new program development. First, analysis is being done regarding home health and skilled nursing to determine if they will continue to have a positive contribution margin. If not, other opportunities may be considered. Second, development of cardiac surgery and other new programs has not been included. Third, these projects will have short-term negative impact as they ramp up.

2. Cost reduction efforts are ongoing. We are exploring merging some of our outpatient clinical programs, such as home health care, to improve overall financial results. Further staff reductions may arise from a new labor productivity management program. The strategic financial plan anticipated the need for staffing cuts. Efforts to further effective use of clinical pathways and to develop best practices are necessary. This requires focused physician leadership intended to improve product standardization and utilization management.

Putting into context the risk areas embedded in the budget is important. Inpatient or outpatient volumes may not be achievable. Managed care contracts, which historically have been favorable, may be at or below budget in 2009. Budgeted salary reductions will be difficult and have been elusive in the past. Pharmaceutical prices and use may be problematic. Realized gains may decline due to market conditions.

In conclusion, the lack of net revenue growth, in spite of volume and price increases, is the critical problem that exposes the risks identified. This requires that management remain focused on successful execution of the strategic plan to develop new or improved clinical programs, medical staff size and capability, and cost reduction efforts. The growth of our employed physician staff continues to be a centerpiece for improvement of our referral pattern. It is also essential in generating new business for the hospital. The era of declining margins makes it imperative that we maximize the returns from our core business and our investments.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient revenue</td>
<td>73,000</td>
<td>79,000</td>
<td>77,800</td>
<td>87,360</td>
<td>10.58</td>
<td>12.29</td>
<td></td>
</tr>
<tr>
<td>Outpatient revenue</td>
<td>72,000</td>
<td>77,000</td>
<td>76,100</td>
<td>89,440</td>
<td>16.16</td>
<td>17.53</td>
<td></td>
</tr>
<tr>
<td><strong>Total patient revenue</strong></td>
<td>145,000</td>
<td>156,000</td>
<td>153,900</td>
<td>176,800</td>
<td>13.33</td>
<td>14.88</td>
<td></td>
</tr>
<tr>
<td><em>Less: Contractual and other adjustments</em></td>
<td>(49,000)</td>
<td>(60,000)</td>
<td>(59,000)</td>
<td>(77,100)</td>
<td>28.50</td>
<td>30.68</td>
<td></td>
</tr>
<tr>
<td><em>Less: Charity care</em></td>
<td>(2,600)</td>
<td>(2,700)</td>
<td>(2,500)</td>
<td>(3,000)</td>
<td>11.11</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td><strong>Net patient service revenue</strong></td>
<td>93,400</td>
<td>93,300</td>
<td>92,400</td>
<td>96,700</td>
<td>3.64</td>
<td>4.65</td>
<td></td>
</tr>
</tbody>
</table>
### Add: Premium revenue

<table>
<thead>
<tr>
<th></th>
<th>2,100</th>
<th>2,100</th>
<th>2,100</th>
<th>1,000</th>
<th>-52.38</th>
<th>-52.38</th>
</tr>
</thead>
</table>

### Add: Investment income

<table>
<thead>
<tr>
<th></th>
<th>6,400</th>
<th>5,000</th>
<th>6,000</th>
<th>6,000</th>
<th>20.00</th>
<th>0.00</th>
</tr>
</thead>
</table>

### Add: Other operating income

<table>
<thead>
<tr>
<th></th>
<th>1,200</th>
<th>1,200</th>
<th>1,100</th>
<th>1,200</th>
<th>0.00</th>
<th>9.09</th>
</tr>
</thead>
</table>

### Total revenue

|       | 103,100 | 101,600 | 101,600 | 104,900 | 3.25   | 3.25   |

### EXPENSES

<table>
<thead>
<tr>
<th>Description</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2021 Adjusted</th>
<th>% Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>36,000</td>
<td>35,500</td>
<td>36,500</td>
<td>37,480</td>
<td>5.58</td>
<td>2.68</td>
</tr>
<tr>
<td>Contract labor</td>
<td>1,000</td>
<td>1,400</td>
<td>800</td>
<td>1,200</td>
<td>-14.29</td>
<td>50.00</td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>7,000</td>
<td>7,000</td>
<td>6,900</td>
<td>7,300</td>
<td>4.29</td>
<td>5.80</td>
</tr>
<tr>
<td><strong>Total salaries and benefits</strong></td>
<td>44,000</td>
<td>43,900</td>
<td>44,200</td>
<td>45,980</td>
<td>4.74</td>
<td>4.03</td>
</tr>
<tr>
<td>Bad debts</td>
<td>4,600</td>
<td>4,400</td>
<td>4,400</td>
<td>4,000</td>
<td>-9.09</td>
<td>-9.09</td>
</tr>
<tr>
<td>Patient care supplies</td>
<td>15,500</td>
<td>15,200</td>
<td>16,000</td>
<td>16,600</td>
<td>9.21</td>
<td>3.75</td>
</tr>
</tbody>
</table>
(Table 10.3 continued)

<table>
<thead>
<tr>
<th></th>
<th>3,600</th>
<th>3,400</th>
<th>3,800</th>
<th>3,800</th>
<th>11.76</th>
<th>0.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and management fees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased services</td>
<td>5,400</td>
<td>5,600</td>
<td>5,600</td>
<td>5,600</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Operation of plant (including utilities)</td>
<td>2,600</td>
<td>2,700</td>
<td>2,600</td>
<td>2,800</td>
<td>3.70</td>
<td>7.69</td>
</tr>
<tr>
<td>Depreciation</td>
<td>11,000</td>
<td>11,000</td>
<td>10,500</td>
<td>11,500</td>
<td>4.55</td>
<td>9.52</td>
</tr>
<tr>
<td>Interest and financing expenses</td>
<td>7,400</td>
<td>7,400</td>
<td>7,400</td>
<td>7,200</td>
<td>−2.70</td>
<td>−2.70</td>
</tr>
<tr>
<td>Other</td>
<td>3,800</td>
<td>3,800</td>
<td>4,000</td>
<td>4,500</td>
<td>18.42</td>
<td>12.50</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>97,900</td>
<td>97,400</td>
<td>98,500</td>
<td>101,980</td>
<td>4.70</td>
<td>3.53</td>
</tr>
<tr>
<td><strong>Operating margin</strong></td>
<td>5,200</td>
<td>4,200</td>
<td>3,100</td>
<td>2,920</td>
<td>−30.48</td>
<td>−5.81</td>
</tr>
</tbody>
</table>

**NONOPERATING INCOME**

<table>
<thead>
<tr>
<th></th>
<th>1,200</th>
<th>1,200</th>
<th>1,400</th>
<th>1,000</th>
<th>−16.67</th>
<th>−28.57</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain (loss) on investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total nonoperating income</strong></td>
<td>1,200</td>
<td>1,200</td>
<td>1,400</td>
<td>1,000</td>
<td>−16.67</td>
<td>−28.57</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>6,400</td>
<td>5,400</td>
<td>4,500</td>
<td>$3,920</td>
<td>−27.41</td>
<td>−12.89</td>
</tr>
</tbody>
</table>
### TABLE 10.4. Ratio Analysis and Key Success Factors, Ridgeland Heights Medical Center, 2009 Proposed Budget

<table>
<thead>
<tr>
<th>STRATEGIC FINANCIAL PLAN</th>
<th>2007 Actual</th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>2009 Budget</th>
<th>Change in Amount</th>
<th>Percentage Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating margin (%)</td>
<td>2.0</td>
<td>4.1</td>
<td>3.1</td>
<td>2.8</td>
<td>−0.3</td>
<td>−8.8</td>
</tr>
<tr>
<td>Total margin (%)</td>
<td>3.0</td>
<td>5.3</td>
<td>4.4</td>
<td>3.7</td>
<td>−0.7</td>
<td>−15.6</td>
</tr>
<tr>
<td>Current ratio</td>
<td>1.27</td>
<td>1.33</td>
<td>1.35</td>
<td>1.28</td>
<td>(0.07)</td>
<td>−5.2</td>
</tr>
<tr>
<td>Cushion ratio</td>
<td>12.19</td>
<td>12.20</td>
<td>12.20</td>
<td>12.13</td>
<td>(0.08)</td>
<td>−0.6</td>
</tr>
<tr>
<td>Days cash on hand</td>
<td>525.87</td>
<td>510.12</td>
<td>501.98</td>
<td>485.50</td>
<td>(16.48)</td>
<td>−3.3</td>
</tr>
<tr>
<td>Average age of plant (years)</td>
<td>6.55</td>
<td>7.24</td>
<td>7.35</td>
<td>7.85</td>
<td>0.50</td>
<td>6.8</td>
</tr>
<tr>
<td>Capital expenses as a share of expenses (%)</td>
<td>18.8</td>
<td>18.9</td>
<td>18.2</td>
<td>18.3</td>
<td>0.00</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Table 10.4 continued

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt service coverage</td>
<td>2.28</td>
<td>2.16</td>
<td>2.04</td>
<td>2.04</td>
<td>0.00</td>
</tr>
<tr>
<td>Debt to capitalization (%)</td>
<td>64.6</td>
<td>62.2</td>
<td>62.5</td>
<td>61.8</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Return on equity (%)</td>
<td>7.66</td>
<td>7.10</td>
<td>6.80</td>
<td>6.50</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Return on assets (%)</td>
<td>2.43</td>
<td>2.10</td>
<td>1.99</td>
<td>1.90</td>
<td>(0.00)</td>
</tr>
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</table>

**ACCOUNTS RECEIVABLE INFORMATION**

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<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient AR days</td>
<td>59.3</td>
<td>60.1</td>
<td>59.6</td>
<td>58</td>
<td>(1.60)</td>
</tr>
<tr>
<td>Outpatient AR days</td>
<td>65.1</td>
<td>66.5</td>
<td>65.4</td>
<td>64</td>
<td>(1.40)</td>
</tr>
<tr>
<td>Bad-debt expense ($)</td>
<td>4,600,000</td>
<td>4,400,000</td>
<td>4,400,000</td>
<td>4,000,000</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Net write-offs ($)</td>
<td>4,000,000</td>
<td>4,300,000</td>
<td>4,700,000</td>
<td>4,600,000</td>
<td>(100,000)</td>
</tr>
<tr>
<td>Allowance for doubtful accounts (ADA) (reserve for bad debts) ($)</td>
<td>5,800,000</td>
<td>5,900,000</td>
<td>5,600,000</td>
<td>5,000,000</td>
<td>(600,000)</td>
</tr>
<tr>
<td>ADA as a share of AR (%)</td>
<td>26.4</td>
<td>26.8</td>
<td>25.5</td>
<td>22.7</td>
<td>(0.03)</td>
</tr>
</tbody>
</table>
### STAFFING INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>980.0</th>
<th>1023.1</th>
<th>1026.0</th>
<th>1005.9</th>
<th>(20.10)</th>
<th>−2.0</th>
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</thead>
<tbody>
<tr>
<td>Total FTEs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTEs paid/adjusted patient days</td>
<td>4.10</td>
<td>4.17</td>
<td>4.13</td>
<td>4.00</td>
<td>(0.13)</td>
<td>−3.1</td>
</tr>
<tr>
<td>Salaries, benefits, and contract labor as a share of net revenues and premium revenues (%)</td>
<td>45.8</td>
<td>47.1</td>
<td>47.8</td>
<td>47.5</td>
<td>(0.003)</td>
<td>−0.6</td>
</tr>
</tbody>
</table>

### OTHER PATIENT INFORMATION

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare case mix index</td>
<td>1.32</td>
<td>1.33</td>
<td>1.34</td>
<td>1.34</td>
<td>—</td>
<td>0.0</td>
</tr>
<tr>
<td>All–payer case mix index</td>
<td>0.91</td>
<td>1.02</td>
<td>1.04</td>
<td>1.05</td>
<td>0.01</td>
<td>1.0</td>
</tr>
<tr>
<td>Cost per adjusted patient day ($)</td>
<td>1,122</td>
<td>1,024</td>
<td>1,017</td>
<td>944</td>
<td>(73)</td>
<td>−7.1</td>
</tr>
<tr>
<td>Cost per adjusted admission ($)</td>
<td>4,774</td>
<td>4,200</td>
<td>4,136</td>
<td>3,856</td>
<td>(281)</td>
<td>−6.8</td>
</tr>
<tr>
<td>I/p managed care contractual adjustment (%)</td>
<td>26.0</td>
<td>29.0</td>
<td>28.0</td>
<td>32.0</td>
<td>0.04</td>
<td>14.3</td>
</tr>
<tr>
<td>O/p managed care contractual adjustment (%)</td>
<td>20.0</td>
<td>24.0</td>
<td>22.0</td>
<td>26.0</td>
<td>0.04</td>
<td>18.2</td>
</tr>
</tbody>
</table>
outcomes. This page is set up to mimic the information presented in the financial statements every month.

In the key volume assumptions (see Table 10.5), analysis of inpatient volume begins with admissions. This is a big change from prior years, when revenues were based on per diem (per-day) reimbursement. It meant that the health care organization was paid for each day of stay as well as all the additional diagnostic and therapeutic services rendered during inpatient stays. This was particularly important through 1983, when most third-party insurers paid the full published charges and Medicare paid its own computed actual cost for each day of stay in the hospital. Skilled nursing facilities and physician practices were treated similarly. Since then, Medicare changed its inpatient reimbursement methodology and no longer relies on per diem costs. The prospective payment system (PPS) pays the organization on a case-by-case basis. Therefore, for Medicare revenue, admissions, not patient days, is now the statistic that determines net revenue.

Although many managed care companies have recently adopted per diem as the basis for reimbursement to hospitals, their per diem is based on the negotiations with the provider, not cost. Because managed care companies have extremely stringent utilization controls, which restrict the number of days that a patient can stay in the hospital, the number of days is limited. Hence the organization earns little, if any, margin from this per diem reimbursement. So even though patient days are still an important statistic for determining variable costs and operating capacity, patient days no longer occupy the primary slot at the top of the key volume assumptions page.

Analysis of revenues and contractual allowances (see Table 10.6) is useful in explaining change from year to year. In particular, it allows the reviewers to see how contractual adjustment changes can positively or negatively affect net revenue. In addition, it breaks down the gross and net revenues into units (per case, per day) that are more easily understandable from the standpoint of financial analysis. This analysis highlights the fact that a gross revenue increase does not translate into positive net revenue results, especially in an era of declining reimbursement.

The remaining analyses represent expense issues, both salary and nonsalary. There is usually little discussion on most of these items, except for staffing level and its resulting impact on salary expense. The analyses are usually able to pinpoint the issues driving staffing expense. For example, page 8 of the budget package (see Table 10.7) clearly summarizes the change in FTEs, which as we've seen in Table 7.2 in
TABLE 10.5. **Key Volume Assumptions and Gross Revenue Percentage, Ridgeland Heights Medical Center, 2009 Proposed Budget.**

<table>
<thead>
<tr>
<th></th>
<th>2007 Actual</th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>2009 Budget</th>
<th>Change in Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADMISSIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2009 Budget vs. 2008 Projected</td>
</tr>
<tr>
<td>Adult</td>
<td>8,100</td>
<td>8,760</td>
<td>9,023</td>
<td>9,787</td>
<td>764</td>
</tr>
<tr>
<td>Newborn</td>
<td>1,950</td>
<td>2,145</td>
<td>2,165</td>
<td>2,382</td>
<td>217</td>
</tr>
<tr>
<td>Skilled nursing</td>
<td>800</td>
<td>840</td>
<td>850</td>
<td>900</td>
<td>50</td>
</tr>
<tr>
<td>Total admissions</td>
<td>10,850</td>
<td>11,745</td>
<td>12,038</td>
<td>13,069</td>
<td>1,031</td>
</tr>
<tr>
<td><strong>AVERAGE LENGTH OF STAY (DAYS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>3.89</td>
<td>4.05</td>
<td>4.05</td>
<td>4.20</td>
<td>0.15</td>
</tr>
<tr>
<td>Newborn</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
<td>—</td>
</tr>
</tbody>
</table>
(Table 10.5 continued)

<table>
<thead>
<tr>
<th></th>
<th>11.00</th>
<th>10.00</th>
<th>9.50</th>
<th>8.30</th>
<th>(1.20)</th>
<th>−12.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total length of stay</td>
<td>4.07</td>
<td>4.10</td>
<td>4.07</td>
<td>4.08</td>
<td>0.01</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**PATIENT DAYS**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>31,500</td>
<td>35,496</td>
<td>36,561</td>
<td>41,131</td>
<td>4,570</td>
<td>12.5</td>
</tr>
<tr>
<td>Newborn</td>
<td>3,900</td>
<td>4,290</td>
<td>4,330</td>
<td>4,763</td>
<td>433</td>
<td>10.0</td>
</tr>
<tr>
<td>Skilled nursing</td>
<td>8,800</td>
<td>8,400</td>
<td>8,075</td>
<td>7,470</td>
<td>(605)</td>
<td>−7.5</td>
</tr>
<tr>
<td>Total patient days</td>
<td>44,200</td>
<td>48,186</td>
<td>48,966</td>
<td>53,364</td>
<td>4,398</td>
<td>9.0</td>
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</tbody>
</table>

**OUTPATIENT SERVICES AND VISITS**

<p>| | | | | | | |</p>
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<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency visits</td>
<td>19,000</td>
<td>20,000</td>
<td>20,200</td>
<td>21,816</td>
<td>1,616</td>
<td>8.0</td>
</tr>
<tr>
<td>Outpatient surgery</td>
<td>4,500</td>
<td>5,000</td>
<td>5,200</td>
<td>5,616</td>
<td>416</td>
<td>8.0</td>
</tr>
<tr>
<td>Service</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
<td>Change</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Same-day surgery</td>
<td>3,700</td>
<td>4,000</td>
<td>4,500</td>
<td>4,860</td>
<td>360</td>
<td>8.0</td>
</tr>
<tr>
<td>Observation patients</td>
<td>1,950</td>
<td>2,000</td>
<td>1,890</td>
<td>2,041</td>
<td>151</td>
<td>8.0</td>
</tr>
<tr>
<td>Home health services</td>
<td>26,000</td>
<td>30,000</td>
<td>27,000</td>
<td>25,000</td>
<td>(2,000)</td>
<td>-7.4</td>
</tr>
<tr>
<td>All other outpatients</td>
<td>112,000</td>
<td>120,000</td>
<td>124,000</td>
<td>133,920</td>
<td>9,920</td>
<td>8.0</td>
</tr>
<tr>
<td>Total outpatient services and visits</td>
<td>167,150</td>
<td>181,000</td>
<td>182,790</td>
<td>193,253</td>
<td>10,463</td>
<td>5.7</td>
</tr>
</tbody>
</table>

**GROSS PATIENT REVENUE PERCENTAGE BY PAYER**

<table>
<thead>
<tr>
<th>Payer</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>40.0</td>
<td>39.0</td>
<td>38.0</td>
<td>37.5</td>
<td>(0.005)</td>
<td>-1.3</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.0</td>
<td>5.0</td>
<td>6.0</td>
<td>6.0</td>
<td>—</td>
<td>0.0</td>
</tr>
<tr>
<td>Managed care (HMO/PPO)</td>
<td>26.0</td>
<td>28.0</td>
<td>30.0</td>
<td>31.5</td>
<td>0.015</td>
<td>5.0</td>
</tr>
<tr>
<td>All others</td>
<td>30.0</td>
<td>28.0</td>
<td>26.0</td>
<td>25.0</td>
<td>(0.010)</td>
<td>-3.8</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 10.6. Analysis of Revenue and Contractual Allowances, Ridgeland Heights Medical Center, 2009 Proposed Budget.

<table>
<thead>
<tr>
<th></th>
<th>2007 Actual</th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>2009 Budget</th>
<th>Change in Amount</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPATIENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross revenue per case</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>10,977</td>
<td>11,300</td>
<td>11,105</td>
<td>11,570</td>
<td>465</td>
<td>4.2</td>
</tr>
<tr>
<td>Non-Medicare</td>
<td>5,228</td>
<td>5,065</td>
<td>5,250</td>
<td>5,370</td>
<td>120</td>
<td>2.3</td>
</tr>
<tr>
<td>Total gross revenue per case</td>
<td>6,728</td>
<td>6,726</td>
<td>6,463</td>
<td>6,685</td>
<td>222</td>
<td>3.4</td>
</tr>
<tr>
<td>GROSS REVENUE PER DAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>1,505</td>
<td>1,502</td>
<td>1,478</td>
<td>1,506</td>
<td>28</td>
<td>1.9</td>
</tr>
<tr>
<td>Non-Medicare</td>
<td>1,740</td>
<td>1,725</td>
<td>1,700</td>
<td>1,730</td>
<td>30</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Total gross revenue per day</td>
<td>1,652</td>
<td>1,639</td>
<td>1,589</td>
<td>1,637</td>
<td>48</td>
<td>3.0</td>
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</table>

**NET REVENUE PER CASE ($)**

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,900</td>
<td>4,770</td>
<td>4,700</td>
<td>4,550</td>
<td>(150)</td>
<td>(150)</td>
</tr>
<tr>
<td></td>
<td>4,550</td>
<td>4,200</td>
<td>4,090</td>
<td>3,880</td>
<td>(210)</td>
<td>(210)</td>
</tr>
<tr>
<td>Total net revenue per case</td>
<td>4,648</td>
<td>4,290</td>
<td>4,145</td>
<td>3,996</td>
<td>(149)</td>
<td>(149)</td>
</tr>
</tbody>
</table>

**NET REVENUE PER DAY ($)**

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>880</td>
<td>850</td>
<td>820</td>
<td>790</td>
<td>(30)</td>
<td>(30)</td>
</tr>
<tr>
<td></td>
<td>1,400</td>
<td>1,330</td>
<td>1,300</td>
<td>1,365</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Total net revenue per day</td>
<td>1,141</td>
<td>1,046</td>
<td>1,019</td>
<td>979</td>
<td>(40)</td>
<td>(40)</td>
</tr>
</tbody>
</table>

**INPATIENT CONTRACTUAL ADJUSTMENT AS A SHARE OF INPATIENT GROSS REVENUE (%)**

<table>
<thead>
<tr>
<th></th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56.7</td>
<td>58.9</td>
<td>57.9</td>
<td>61.0</td>
<td>0.03</td>
<td>5.4</td>
</tr>
</tbody>
</table>
(Table 10.6 continued)

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Medicare</td>
<td>33.0</td>
<td>38.0</td>
<td>35.6</td>
<td>41.2</td>
<td>0.06</td>
<td>15.7</td>
</tr>
<tr>
<td>Total inpatient contractual share</td>
<td>41.1</td>
<td>45.3</td>
<td>44.2</td>
<td>48.9</td>
<td>0.05</td>
<td>10.6</td>
</tr>
</tbody>
</table>

**OUTPATIENT CONTRACTUAL ADJUSTMENT AS A SHARE OF OUTPATIENT GROSS REVENUE (%)**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>52.3</td>
<td>61.3</td>
<td>59.8</td>
<td>68.4</td>
<td>0.09</td>
<td>14.4</td>
</tr>
<tr>
<td>Non-Medicare</td>
<td>15.0</td>
<td>23.4</td>
<td>22.6</td>
<td>30.0</td>
<td>0.07</td>
<td>32.7</td>
</tr>
<tr>
<td>Total outpatient contractual share</td>
<td>26.4</td>
<td>33.5</td>
<td>31.6</td>
<td>38.0</td>
<td>0.06</td>
<td>20.3</td>
</tr>
</tbody>
</table>

**BAD DEBTS AND CHARITY CARE AS A TOTAL OF GROSS REVENUES (%)**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad debts</td>
<td>2.99</td>
<td>2.82</td>
<td>2.86</td>
<td>2.26</td>
<td>(0.01)</td>
<td>−20.9</td>
</tr>
<tr>
<td>Charity and other free care</td>
<td>1.69</td>
<td>1.73</td>
<td>1.63</td>
<td>1.70</td>
<td>0.00</td>
<td>3.8</td>
</tr>
</tbody>
</table>
### TABLE 10.7. **Staffing Expenses and FTE Analysis, Ridgeland Heights Medical Center, 2009 Proposed Budget.**

<table>
<thead>
<tr>
<th></th>
<th>2008 Budget</th>
<th>2008 Projected</th>
<th>2009 Budget</th>
<th>Change in Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary expenses ($)</td>
<td>35,500,000</td>
<td>36,500,000</td>
<td>39,000,000</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Total FTEs</td>
<td>1,023.1</td>
<td>1,026.0</td>
<td>1,005.9</td>
<td>(20.10)</td>
</tr>
<tr>
<td>FTEs per adjusted patient days</td>
<td>4.17</td>
<td>4.13</td>
<td>4.00</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Salaries, wages, and fringe benefits as a share of net patient service revenue (%)</td>
<td>47.05</td>
<td>47.84</td>
<td>47.55</td>
<td>−0.29</td>
</tr>
<tr>
<td>Nonsalary fringe benefit expenses ($)</td>
<td>7,000,000</td>
<td>6,927,000</td>
<td>7,270,000</td>
<td>343,000</td>
</tr>
</tbody>
</table>
Chapter Seven, has the most impact on staffing expense. In the case of RHMC, it is clear from Table 10.7 that staffing has fluctuated as the administration has attempted to rightszie it by way of productivity and volume changes throughout the years.

Meanwhile, page 9 of the budget package (see Exhibit 10.3) shows a reconciliation and explanation of how salaries increased or decreased between the current year’s projected and upcoming budget year’s salaries. The largest change is in the area of FTE increase or decrease, as it is again in this budget. Any policy or practice change proposed in the budget that has financial implications should be addressed in this reconciliation. Finally, merit rate increases have a carryover effect from the current year and an impact on the budget year. This last type of change

**EXHIBIT 10.3. Salary Reconciliation, Ridgeland Heights Medical Center, 2009 Proposed Budget.**

Total full-time equivalents were budgeted at 1,023.1 in 2008. The 2009 proposal of 1,005.9 is a net decrease of 20.1 below the currently projected FTEs of 1,026.0.

RHMC’s salary expense is projected to be $35,500,000 in 2008 and $37,480,000 in 2009, an increase of $1,980,000 or 2.7%. The net increase is a result of the following changes:

<table>
<thead>
<tr>
<th>2008 projected salaries ($)</th>
<th>36,500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary revisions</td>
<td></td>
</tr>
<tr>
<td>Net decreases of 20.1 FTEs in 2009</td>
<td>(824,100)</td>
</tr>
<tr>
<td>(1,026.0 projected minus 1005.9 budgeted equals 20.1 FTEs)</td>
<td></td>
</tr>
<tr>
<td>Increase due to staffing mix and rate changes</td>
<td>124,500</td>
</tr>
<tr>
<td>Wage adjustments</td>
<td></td>
</tr>
<tr>
<td>2008 carryover impact of merit increases (half of 4.0% increase)</td>
<td>730,000</td>
</tr>
<tr>
<td>2009 merit increase (half of 4.0%)</td>
<td>749,600</td>
</tr>
<tr>
<td>2009 wage contingency</td>
<td>200,000</td>
</tr>
<tr>
<td>2009 proposed budget</td>
<td>37,480,000</td>
</tr>
</tbody>
</table>
would be similar if the health care organization were unionized and knew its upcoming year’s negotiated wage changes.

Pages 10 (employee benefits) and 11 (financial effect of debt issues) of the finance committee budget package are summaries of specific expense items. Pages 12 to 16 present an overall summary of the capital budget as well as a listing of all recommended capital items costing $25,000 or more. This detail is presented to keep the finance committee informed of items (and because the members want to see them). The committee believes that being able to review the requested items at this dollar level is consistent with its governance and approval function. RHMC’s management is pleased to present the information because it shows the committee how these purchases support the organization’s strategic plans.

Page 17 (see Table 10.2) is a short worksheet presentation of the organization’s cash budget for the upcoming year. It is the presentation already discussed earlier in this chapter in regard to the finance committee’s willingness or unwillingness to approve net cash outflows. In this case, management’s recommendation is accepted, and for the short run (that is, the year 2009), the proposed negative annual cash flow is accepted after some discussion. However, the board members challenge the administrators to attempt to beat the approved operating and capital budget. They would still like to see no negative cash flow if this can be accomplished.

The administrators accept the challenge but offer no guarantees. As with any budget or any projection, the ability to predict or foretell the future, whether in assumptions already made or an assumption not yet known, is questionable and problematic. By far the budget assumption with the highest degree of uncertainty after volumes is managed care contractual adjustments. If none of the major managed care companies propose any substantial changes for the year 2009 (which is unlikely), the administration has a good chance of beating the budget.

The updated strategic financial plan information presented on pages 18 and 19 simply revise the information presented seven months earlier. This update maintains the discipline of periodically monitoring previous assumptions, summarizing actual results, explaining material variances, and reporting current projections. The explanation of variances allows the finance committee members to gain a better understanding of the reasons for positive or negative differences.

Finally, the last four pages of the package present five-year trends for certain financial and statistical information in graphic form. If one picture is worth a thousand words, these four graphs become particularly
<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Revenues (Millions)</th>
<th>Net Revenues (Millions)</th>
<th>Operating Expenses (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>$128,000,000</td>
<td>$98,200,000</td>
<td>$94,200,000</td>
</tr>
<tr>
<td>2006</td>
<td>$137,000,000</td>
<td>$100,800,000</td>
<td>$96,100,000</td>
</tr>
<tr>
<td>2007</td>
<td>$145,000,000</td>
<td>$103,100,000</td>
<td>$97,900,000</td>
</tr>
<tr>
<td>2008</td>
<td>$153,900,000</td>
<td>$101,600,000</td>
<td>$98,500,000</td>
</tr>
<tr>
<td>2009</td>
<td>$176,800,000</td>
<td>$104,900,000</td>
<td>$101,980,000</td>
</tr>
</tbody>
</table>

**FIGURE 10.4.** Financial Trends, Ridgeland Heights Medical Center, 2005–2009.
valuable tools in explaining the overall trends in the inputs that drive the budget dollars and the outputs from which they are derived. Page 20 graphs overall admissions for the organization, page 21 plots patient days and outpatient visits, while page 22 trends total expenses on the first y-axis and expenses per adjusted admission (which is similar to expense per adjusted discharge) on the second y-axis.

Page 23 (see Figure 10.4) shows the trend of gross revenues, total net revenues, and total expenses. This chart is a useful way to conclude the budget; in a single picture, it is easy to see the relationships between these three items and whether or not they are trending in a similar manner. If they are not, it appropriately requires the administration to explain why not. In this particular case, RHMC’s trend lines move in the same direction with approximately the same slope each year. It is an accurate representation of the organization’s actual financial results over the previous four years as well as the results projected for the upcoming year.

OCTOBER FINANCE COMMITTEE
SPECIAL AGENDA ITEMS

During the October finance committee meeting, one of the other special agenda items was the half-yearly report on the management letter comments made by the auditors in April. However, because the auditors did not report on any internal control deficiencies in April, there are no updates to be given by management. In summary, the October finance committee meeting is appropriately dominated by discussion and approval of the 2009 budget.

PRACTICAL TIPS

■ Provide the managers, directors, vice presidents, and executives with information technology systems that place actionable information at the fingertips of these decision makers. It is not enough to say that lots of money was spent for systems; what matters is the ability to use them.

■ Make sure that the health care organization has a strategic IT plan that contains a flexible framework for developing the best action plans for success. That means that value analysis needs to be applied for major IT purchases. Value is defined as the benefits to be received minus the costs to be spent.
Acquire all ten of the necessary decision support tools and techniques mentioned in the chapter and then use them.

Stay in compliance with all HIPAA rules and regulations, and make sure the organization remains current with any new rules and regulations that continue to be adopted.

Make sure that the budget package delivered to the board finance committee is concise yet provides all the information necessary to make the best decisions for the upcoming year.

Design the budget package pages to look exactly like the monthly financial reports that are provided to the finance committee and the board. This simplifies both processes and improves understanding of both the budget package and the monthly reports.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss the benefits to a health care organization of acquiring and using the ten necessary decision support tools mentioned in the chapter.

2. List and quantify some of the benefits that could be derived from the acquisition of a clinical IT system. If possible, estimate the costs of these systems, and develop a return on investment (ROI), using the internal rate of return (IRR) method for the acquisition. (See Table 1.4 for an IRR template.)

3. Design an operating and capital budget package for the finance committee that would provide it with the most value-added information, allowing for its approval the first time.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

- Spread and report contractual adjustments to the operating departments on a monthly basis so that the managers can get a better picture of their financial results
- Discuss several successful cost containment efforts available to hospitals
- Understand why it is so important to use benchmarking outcomes to set goals for your organization
- Recognize the five ways to improve the cost structure of health care organizations
- Discuss the six major issues surrounding supply chain management in hospital organizations today
- Recognize the financial benefits of a 501(c)(3) community-based not-for-profit hospital organization
- Understand why it is necessary to maximize the reporting of community benefits information on the IRS 990 tax return form
Rick Samuelson is pensive. He shakes the feeling that a great upheaval is looming. But he is having trouble getting a clear picture in his mind of just what it might be. Just then, Sam pops his head into the CEO’s office.

“Hey, Rick, what’s going on?”

“Oh, hi, Sam. Come on in,” says Samuelson, slightly startled by the jovial greeting.

“Rick, I was just reviewing some of our investment results from last month and thought you’d want to hear about them.”

“I do. But first I’d like to share a couple of things I’ve just been thinking about and see what you think.”

“Sure, go right ahead.”

“Well, you know that I’ve been the CEO of Ridgeland Heights for a long time. And it seems to be getting tougher every day. This place has so much to offer to the community. It’s a place of healing. We really make people better. And we have such good people working for us. They are so committed to their jobs. But it’s just getting harder and harder to maintain the high level of quality and patient satisfaction that every patient has come to expect from us.”

Sam is more than happy to agree.

“I know what you mean. The payers have been taking a bite out of us for the last few years, and we’re really feeling it now. The budget we just completed and got approved last month had the lowest operating margin in the last ten years. In fact, thanks to your memo, the finance committee was willing to allow us to work on a lower margin target than ever before.”

“That’s true. And I’ve been thinking a lot about that. This past June, you and I had a talk about the deteriorating margin, and I remember what you said. You mentioned that there were three things we could do to improve the bottom line. It was the usual things—increase revenues through higher inpatient and outpatient volumes, reduce costs through specific cost analysis, and perform process improvements. But I was concerned about the reaction from our core constituents—the doctors, the staff, and the community. I was
afraid that they wouldn’t understand the fundamental changes taking place in the financing of health care and that they would see us as a villain in this drama.”

“I know that. But it sounds like maybe you’ve had a change of heart.”

“Yeah, I think that would be true. We continue to strive for increased volumes, but they’re certainly not assured. So I want us to make a concerted and rational effort to reduce our costs. I know that you’ve been telling me about techniques that seem to be working at some other providers around the country. I’d like us to put some of them into place right here.”

“Well, Rick, I think that’s great. I’ve been hoping we could work on it. We can get started right away. The sooner we begin, the sooner we’ll be able to see some positive results. And you’re right, we really need to do this because even though our budget calls for a low level of profitability, even that is not assured. As you know, since we put the budget to bed, we’ve been hit with enormous discount requests from some of the managed care companies we do the most business with. And regardless of the political party that holds office, additional Medicare cuts are probably just over the horizon. So I’m totally supportive of these initiatives.”

“Well, then, what are you waiting for? Stop your yapping and get started!”

The ghosts and goblins of Halloween have hardly dissipated when the month of November begins. Autumn has truly fallen upon the region, with the skies remaining increasingly gray throughout the day and the nights getting ever colder. Residents of the northern climes are preparing for the equivalent of the big winter hibernation as they make plans to hunker down against the harsh weather that’s sure to come.

Halloween is an interesting metaphor for the health care industry. Some observers imagine the federal government as a kind of Dracula, sucking the lifeblood out of providers through a series of small cutbacks, followed by the big bite of the Balanced Budget Act. Meanwhile, the Frankenstein’s monster of managed care has been embraced and is beginning to crush the once mighty providers, even as some of them attempt to transform themselves into the monster itself through mergers
and acquisitions of other providers. Still, it is much too early to tell whether it will be the kind of eternal night that fell over the financing of the health care industry in the late 1990s or just an aberration that will resume the 1980s path of perpetually higher reimbursements.

Yet between shaking off some of the real and imagined monsters of Halloween and preparing to give thanks for all the good things that have taken place at the end of the month, the RHMC finance staff and managers remain hard at work. They are not worrying about what may be in the larger context of the industry so much as about performing very real technical duties for their employer.

**PREPARATION OF THE BUDGET RESULTS AND DELIVERY TO THE DEPARTMENT MANAGERS**

If there is one month during the year that the RHMC finance staff can sit back for a moment and take a break, it’s November. Although the routine work continues as always, the budget project, which has consumed more than five months, is now relatively complete. The finance committee and the board of directors gave their approval and their blessing to the upcoming year’s assumptions in October. Now the final set of assumptions, down at the department level, must be communicated. This creates an effective feedback loop, allowing managers to be cognizant of the goals and expectations placed on them.

The finance staff have certain jobs to perform before they can transmit departmental budgets back to the managers. First, they must spread the total approved financial information across certain time periods: twenty-six periods of time that allow them to determine salary variances within each biweekly pay period (if an organization produces weekly paychecks, this budget spread is over fifty-two weeks), and twelve periods of time to determine the monthly variance for inpatient and outpatient volume statistics. This is used to determine statistical variances that often help explain financial variance for gross revenue and expenses. The budget spread is a function of historical trends. Data are reviewed for the previous three years, by month, to develop percentages. In some cases, the financial analyst uses experience and the prior-year trend to develop the volume spreads.

Also, depending on the culture of the organization, some of the thirty-six months of statistical data are put through a regression analysis program to help improve the projections. The regression analysis plots the future months’ volumes based on past statistical performance. As with any projection, the results are only as good as the underlying data
and the quality of the assumptions. The greater the amount of historical data that can be loaded into the system, the better the possibility that the projected outcomes have validity. Therefore, for a modest cost, the results achieved from these programs can add a small amount of scientific rigor to the process.

Producing a worksheet that lists all the appropriate line items for gross revenues, contractual adjustments, salary, fringe benefits, and all other nonsalary costs is a task that spreads over the twelve monthly periods. Table 11.1 is an example of the budgeted spreadsheet produced by the finance staff for the radiology department. As you can see, the departmental line items match those in the organizationwide budget shown in Table 10.3.

These lines are a summary of a number of more detailed revenue and expense categories. For example, the patient care supplies line is an aggregation of these items:

- Bandages and dressings
- Catheters and tubing
- Disposable garments
- Drugs
- Instruments
- IV sets and supplies
- IV solutions
- Needles and syringes
- Radiology film
- Contrast media
- Processing chemicals
- Other supplies

What these items all have in common is that they vary with volume. Because they are variable expenses, they behave similarly from a budgeting perspective. This makes it easy to determine the budget spread methodology that must be employed. Because the finance staff have already spread the inpatient and outpatient volumes on the basis of historical trends, it is now simply a matter of using those budgeted monthly volume percentages to spread these variable expenses. Thus all variable nonsalary expenses are spread using the already established volumes.
<table>
<thead>
<tr>
<th>TABLE 11.1.</th>
<th>2009 Monthly Budget Spread, Radiology Department, Ridgeland Heights Medical Center (in thousands of dollars).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
</tr>
<tr>
<td>Inpatient revenue</td>
<td>patient days</td>
</tr>
<tr>
<td>Outpatient revenue</td>
<td>procedures</td>
</tr>
<tr>
<td><strong>Total patient revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Less: Contractual and other adjustments</td>
<td>adjusted patient days</td>
</tr>
<tr>
<td>Less: Charity care</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net patient service revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Add: Premium revenue</td>
<td>carved-out member months</td>
</tr>
<tr>
<td>Add: Investment income</td>
<td>n/a</td>
</tr>
<tr>
<td>Add: Other operating income</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td></td>
</tr>
</tbody>
</table>

| **EXPENSES** |                                                                                                         |
| Salaries | number of days in month | 1,041.0 | 88.2 | 82.5 | 88.2 |
| Contract labor | adjusted patient days | 80.0 | 6.8 | 5.9 | 6.4 |
| Fringe benefits | number of days in month | 78.0 | 6.6 | 6.2 | 6.6 |
| **Total salaries and benefits** |                                                                                                         |
| Bad debts | n/a | — | — | — | — |
| Patient care supplies | adjusted patient days | 357.0 | 30.3 | 26.4 | 28.6 |
| Professional and management fees | number of days in month | 17.0 | 1.4 | 1.3 | 1.4 |
| Purchased services | number of days in month | 120.0 | 10.2 | 9.5 | 10.2 |
| Operation of plant (including utilities) | number of days in month | 11.0 | 0.9 | 0.9 | 0.9 |
| Depreciation | even (1/12 per month) | — | — | — | — |
| Interest and financing expenses | even (1/12 per month) | — | — | — | — |
| Other | number of days in month | 158.0 | 13.4 | 12.5 | 13.4 |
| **Total expenses** |                                                                                                         |

| **Operating margin** |                                                                                                         |
| 2,530.0 | 217.2 | 174.1 | 192.0 |
| Patient days | 1.00 | 0.0830 | 0.0740 | 0.0810 |
| Procedures | 1.00 | 0.0860 | 0.0730 | 0.0790 |
| Number of days in month | 1.00 | 0.0847 | 0.0792 | 0.0847 |
| Adjusted patient days | 1.00 | 0.0850 | 0.0740 | 0.0800 |
| Even (1/12 per month) | 1.00 | 0.0833 | 0.0833 | 0.0833 |
|------|------|------|------|------|------|------|------|------|
| 156.7 | 158.7 | 158.7 | 182.5 | 180.5 | 160.7 | 184.5 | 158.7 | 170.6 |
| 463.9 | 463.9 | 446.9 | 509.1 | 486.5 | 458.2 | 480.8 | 469.5 | 531.8 |
| 620.6 | 622.6 | 605.6 | 691.7 | 667.0 | 618.9 | 665.4 | 628.3 | 702.4 |
| (259.9) | (263.2) | (259.9) | (295.7) | (289.2) | (263.2) | (285.9) | (263.2) | (292.4) |
| — | — | — | — | — | — | — | — | — |
| 360.7 | 359.4 | 345.7 | 396.0 | 377.9 | 355.8 | 379.4 | 365.1 | 410.0 |
| 360.7 | 359.4 | 345.7 | 396.0 | 377.9 | 355.8 | 379.4 | 365.1 | 410.0 |

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>85.3</td>
<td>88.2</td>
<td>85.3</td>
<td>88.2</td>
<td>85.3</td>
</tr>
<tr>
<td>6.4</td>
<td>6.5</td>
<td>6.4</td>
<td>7.3</td>
<td>7.1</td>
</tr>
<tr>
<td>6.4</td>
<td>6.6</td>
<td>6.4</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>98.1</td>
<td>101.3</td>
<td>98.1</td>
<td>102.1</td>
<td>101.9</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>28.6</td>
<td>28.9</td>
<td>28.6</td>
<td>32.5</td>
<td>31.8</td>
</tr>
<tr>
<td>1.4</td>
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<tr>
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<td>10.2</td>
<td>9.8</td>
<td>10.2</td>
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<tr>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
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<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>13.0</td>
<td>13.4</td>
<td>13.0</td>
<td>13.4</td>
<td>13.4</td>
</tr>
<tr>
<td>151.8</td>
<td>156.1</td>
<td>151.8</td>
<td>160.5</td>
<td>159.6</td>
</tr>
<tr>
<td>208.9</td>
<td>203.3</td>
<td>193.9</td>
<td>235.5</td>
<td>218.3</td>
</tr>
<tr>
<td>0.0790</td>
<td>0.0800</td>
<td>0.0800</td>
<td>0.0920</td>
<td>0.0910</td>
</tr>
<tr>
<td>0.0820</td>
<td>0.0820</td>
<td>0.0790</td>
<td>0.0900</td>
<td>0.0860</td>
</tr>
<tr>
<td>0.0820</td>
<td>0.0847</td>
<td>0.0820</td>
<td>0.0847</td>
<td>0.0847</td>
</tr>
<tr>
<td>0.0800</td>
<td>0.0810</td>
<td>0.0800</td>
<td>0.0910</td>
<td>0.0890</td>
</tr>
<tr>
<td>0.0833</td>
<td>0.0833</td>
<td>0.0833</td>
<td>0.0833</td>
<td>0.0833</td>
</tr>
</tbody>
</table>
Similarly, nonvariable (fixed) expenses are generally spread evenly across the twelve months, one-twelfth of the total per month. Salary and fringe benefit expenses are usually spread according to the number of days in the month because salary expenses are considered fixed and payable by the calendar. Meanwhile, revenues are usually spread using the adjusted patient day methodology because revenue truly is a function of volume generation.

**BUDGETING AND SPREADING CONTRACTUAL ADJUSTMENTS BY DEPARTMENT**

The most difficult of the all the budget spreads is contractual adjustment by department. This is the income statement line item that gives health care organizations the most trouble. The problem stems from reimbursement methodologies that are employed by third-party payers (Medicare, Medicaid, and various managed care organizations). Inpatient reimbursement methodologies can be case-based (DRGs), per diem, or various discounts from charges.

Outpatient reimbursement methodologies can include percentage of charges, fee schedule, capitation carve-outs, and ambulatory payment group.

On the inpatient side, it is literally impossible to assign the actual contractual adjustment because the third-party payers did not create DRGs, per diem, and capitation with actual nursing and ancillary charges in mind. Instead, the net payments made by third parties to health care organizations, and hospitals in particular, are based on amounts that Medicare and Medicaid can impose and managed care companies can negotiate. Therefore, in assigning contractual adjustments to nursing and ancillary departments, the best method is to use reasonable statistical relationships.

As shown in Table 11.2, RHMC attempts to be as scientific as possible while working within this constraint. The real problem with the budgeted contractual adjustment is splitting the inpatient side among the various departments. In the absence of any actual information from the payers, RHMC used a percentage-of-charge methodology. This involves using the budgeted inpatient charges by department, converting them to a percentage of the total, and then calculating the contractual adjustment by department on the basis of the total budgeted contractual adjustment.

Thus in Table 11.2, the $87.36 million of budgeted inpatient gross charges in column 1 is converted into percentage of the total in column 2.
These percentages are then assigned to the $40,092,000 of budgeted contractual adjustments in column 3 to calculate the inpatient contractual adjustment by department. The outpatient contractual adjustment relies less on departmental allocation because most outpatient contractual adjustments are for actual services provided. There is, in fact, a direct relationship between charges and contractual adjustments. This is even true of Medicare, which now reimburses most outpatient services on the Ambulatory Payment Classification (APC) method or on a fee schedule. So using the organization’s contract payment analyzer, it was not difficult to establish the proper contractual adjustment by department.

In summary, transmission of the budget spreadsheets is important to the proper functioning of all the health care organization’s departments. The department managers need to know what is expected of them so that they understand the type of volume necessary if the organization is to meet its revenue and bottom-line objectives. Being able to communicate the results of the budget by late November allows the department managers enough time to prepare for the upcoming year. This could mean that the manager has to do all of the following:

- Recruit a new staff member because a new budgeted position has been approved to absorb significantly increased volume
- Plan to lay off one or more staff members because volume has been declining and fewer staff are needed to perform duties
- Prepare for acquisition of new equipment to enhance the department’s ability to handle sicker patients (higher acuity) or perform more tests and therapies

Having the budget back quickly is essential to the efficient and effective operation of the organization.

**ISSUES INVOLVING RHMC’S COST STRUCTURE**

Meanwhile, as the department managers prepare for the new year, the administration is debating a problem that has become more evident over the past year or so as the bottom line begins to shrink. There has been a lot of talk by the administration to the managers about diminishing returns. Although the best way to improve the organization’s financial situation is to increase volume and net revenue, many of the efforts that have been tried thus far did not succeed. In this light, managers have been asked, once again, to review the cost structure of their departments
### TABLE 11.2. Monthly Spread of Budgeted Contractual Adjustments, Ridgeland Heights Medical Center, Budget Year Ending December 31, 2009 (in thousands of dollars).

<table>
<thead>
<tr>
<th>Department</th>
<th>Gross Revenue ($)</th>
<th>Gross Revenue as a Share of Total (%)</th>
<th>Computed Contractual Adjustment ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40,092</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 East (Medical/Surgical Nursing Floor)</td>
<td>3,400</td>
<td>3.89</td>
<td>1,560</td>
</tr>
<tr>
<td>2 Southwest (Medical/Surgical Nursing Floor)</td>
<td>2,170</td>
<td>2.48</td>
<td>996</td>
</tr>
<tr>
<td>3 Northwest (Medical/Surgical Nursing Floor)</td>
<td>5,000</td>
<td>5.72</td>
<td>2,295</td>
</tr>
<tr>
<td>Labor, Delivery, and Postpartum</td>
<td>7,350</td>
<td>8.41</td>
<td>3,373</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>800</td>
<td>0.92</td>
<td>367</td>
</tr>
<tr>
<td>Critical Care Stepdown Unit</td>
<td>5,220</td>
<td>5.98</td>
<td>2,396</td>
</tr>
<tr>
<td>Critical Care Unit (CCU)</td>
<td>3,870</td>
<td>4.43</td>
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</tr>
<tr>
<td>Skilled Nursing Facility (SNF)</td>
<td>2,680</td>
<td>3.07</td>
<td>1,230</td>
</tr>
<tr>
<td>Psychiatric Unit</td>
<td>4,720</td>
<td>5.40</td>
<td>2,166</td>
</tr>
<tr>
<td>Surgical Suites (Operating Rooms)</td>
<td>7,880</td>
<td>9.02</td>
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</tr>
<tr>
<td>Postanesthesia Care Unit (PACU)</td>
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</tr>
<tr>
<td>Same-Day Surgery</td>
<td>0</td>
<td>0.00</td>
<td>—</td>
</tr>
<tr>
<td>Outpatient Procedures and Treatment Center</td>
<td>0</td>
<td>0.00</td>
<td>—</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>1,470</td>
<td>1.68</td>
<td>675</td>
</tr>
<tr>
<td>Emergency Department</td>
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<td>3.17</td>
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<tr>
<td>Renal Dialysis</td>
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<tr>
<td>Home Health Services</td>
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<td>—</td>
</tr>
<tr>
<td>Eye Center</td>
<td>0</td>
<td>0.00</td>
<td>—</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>3,000</td>
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<td>1,377</td>
</tr>
<tr>
<td>Fertility Center</td>
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<tr>
<td>Physical Therapy</td>
<td>1,550</td>
<td>1.77</td>
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<tr>
<td>Occupational Therapy</td>
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<tr>
<td>Cardiology</td>
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</tr>
<tr>
<td>Cardiac Rehabilitation</td>
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<tr>
<td>Cardiac Catheterization</td>
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<td>CT Scan</td>
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<tr>
<td>Ultrasound</td>
<td>260</td>
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<tr>
<td>Magnetic Imaging Resonance (MRI)</td>
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<td>Laboratory</td>
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<td>Pharmacy</td>
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<td>11.84</td>
<td>4,745</td>
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<tr>
<td>Nuclear Medicine</td>
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<tr>
<td>Central Supply</td>
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<td><strong>40,092</strong></td>
</tr>
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<td>Gross Revenue ($)</td>
<td>Gross Revenue as a Share of Total (%)</td>
<td>Computed Contractual Adjustment ($)</td>
<td>Gross Revenue ($)</td>
</tr>
<tr>
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<td>--------------------------------------</td>
<td>-----------------------------------</td>
<td>------------------</td>
</tr>
<tr>
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<td>248</td>
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<tr>
<td>0</td>
<td>0.00</td>
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<td>4,720</td>
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<tr>
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<td>6,200</td>
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<tr>
<td>1,200</td>
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<tr>
<td>1,700</td>
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<td>993</td>
<td>3,400</td>
</tr>
<tr>
<td>600</td>
<td>0.67</td>
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<td>6,340</td>
</tr>
<tr>
<td>89,440</td>
<td>100.00</td>
<td>37,008</td>
<td>176,800</td>
</tr>
</tbody>
</table>
and reduce spending wherever possible, even beyond the level of the approved 2009 budget. Over the past few years, several methods have been used to deal with costs. Two of the efforts were highly successful, while others were not.

One of the successful efforts was the creation of organizationwide teams charged with reviewing specific issues leading to reduction of definitive costs. For example, a group was organized to review the types of gloves being purchased throughout the organization. It was determined that the same type was being purchased from three manufacturers. The group’s analysis concluded that all the manufacturers’ quality is comparable and there will be no resistance from the nursing, clinical, or physician staff to making a change. A three-month trial period was established to use a single glove manufacturer’s product. Because the trial was successful, a change to a single manufacturer was made—at total organizational savings of $50,000 a year! This arose from additional volume discounts and the ability to negotiate aggressively. This was just one item of potential savings.

Another successful effort was the creation of a formalized “suggestion box,” whereby each employee was required to submit two cost reduction suggestions over a one-month period. This method assumes that employees working at the detailed level (nurses, technicians, therapists, clerical staff) have a much better idea of waste that is taking place and improvements that are possible if it is addressed. RHMC’s thousand employees offered two thousand suggestions. An organizationwide, manager-led committee was established to review the ideas and bring the most promising ones forward for swift implementation. Many detailed steps were taken to move from idea to implementation, and the result was a $4 million cost savings. These economies were particularly valuable because they positively affected not just the year of implementation but all future years.

Meanwhile, unsuccessful efforts have usually all had the same characteristics:

■ No well-defined goal
■ No department manager involvement in establishing the goal
■ No staff involvement in establishing the goal
■ No follow-up by administration
■ No accountability
RHMC’s administration was aware of the successes and the failures. In addition to these five reasons for failure, some other distinguishing characteristics were lack of appropriate staffing, lack of political will, distraction, differing priorities, and resistance to change. The administrators knew they needed to enhance cost reduction efforts and were determined to achieve a lower level of unit cost while going beyond previous successes.

The first step RHMC took to determine its current cost structure was to attempt to understand it in a macro sense. In other words, before looking at the detailed components of cost, such as which elements are fixed or variable, direct or indirect (the micro level), it looked at its global cost structure to determine if it was out of line with the rest of the industry. To do this, RHMC had to benchmark its costs against those of peers. Benchmarking is a standard of excellence, achievement, and the like against which similar things can be measured or judged. Therefore, it had to obtain benchmarking data on overall costs for health care organizations. Because RHMC was no longer only a hospital, it felt it needed to benchmark against organizations like itself, those having a hospital-based program such as psychiatric services, an SNF unit, or a full-scale home health agency. Furthermore, it was interested in organizations that were managing a physician practice as well.

To obtain benchmarking data on overall hospital cost, RHMC reviewed information on the available benchmarking services. Although every industry in America has some, RHMC was interested only in those representing the health care industry. The review turned up a number of companies performing just this sort of service; many of them were dedicated solely to the health care industry. The review identified some health care benchmarking companies that specialized in only the financial aspects of the industry, others that specialized in only clinical aspects, and still others that performed in both segments.

Other distinguishing characteristics separated the various benchmarking companies specializing in health care:

- The number of health care organizations that are participating in the review (this has a significant impact on the sample size)
- Whether the benchmarking company is obtaining its data from health care organizations (which gives access to a greater amount of data at the micro level)
Whether the information is being obtained from governmental sources at the federal or state level (which means that more assumptions are being made in attempting to standardize the cost information)

The quality and extent to which the benchmarking companies have supplied the organization’s financial analyst with explanations on how to aggregate the departmental data

On this last point, the degree to which explanations are available heavily weighs on the quality of the outcomes reported for all the peer organizations being benchmarked. It also helps or hinders the financial analyst’s ability to convince department managers that the quality of the data is good. Good data allow the manager to concentrate on the results of the benchmark study rather than on the quality of the data.

After selecting two types of benchmark companies to work with, RHMC discovered some interesting findings. The most intriguing to the administrators was that the organization had a high expense base, according to both sources. This was further validated by a third benchmarking outcome; expense in this case was measured as a function of a unit of measure. The two most frequently used units of measure for expenses are patient days or patient discharges, adjusted for outpatient volume. These are commonly called expense per adjusted discharge (EPAD) or expense per adjusted patient day (EPAPD). (Note, by the way, that the words cost and expense are used interchangeably. Further, use of discharges or admissions has almost no impact on the final calculation because in any given period—month, year—there should never be a material difference.)

Figure 11.1 is a graph of RHMC’s EPAD over the previous four years. Even more interesting than the slope of the line, which is not decreasing but should be, is the position of RHMC’s line compared to the median EPAD of the benchmark peer group. An organization can easily delude itself into thinking that it is cost-efficient and even getting better if all that is available as a guide is analysis of its own results. Only by looking at other organizations and finding out which are using best practices can a valid comparison be drawn.

Every health care organization can set the benchmark target as desired. Some may aspire to be the best, thereby setting the target at or above the 90th percentile. Other organizations may be satisfied to be at the 50th percentile, the median level for the benchmark group. This usually depends on the organization’s culture and leadership. It may also be
a function of the level of competition in the area and whether or not there is a pressing need to set a high target.

RHMC is feeling the need to improve cost structure given the negative reimbursement change it is experiencing. The cost graph in Figure 11.1 is convincing enough for the administration to begin a series of evaluation steps that it expects to conclude in a serious improvement in cost structure. This will come in conjunction with the new budget year and be led by all the division heads, each of whom is responsible for a department where additional cost reductions can be made.

HOW TO IMPROVE THE ORGANIZATION’S COST STRUCTURE

There are several ways to improve the cost structure of the health care organization:

- Enhance communication with physicians
- Standardize the organization’s supplies
- Reduce utilization of services and supplies
- Obtain the best pricing for supplies and products
- Attain optimum productivity and staffing levels

**Enhancing Communication with Physicians**

In all hospitals, physicians control most of the cost of supplies. They place orders for pharmaceutical and medical supplies to be used for patients. They often do not know the cost of supplies because it has never been revealed to them. They will usually make rational and reasonable choices in the use of supplies so long as they have an understanding of the issues. Thus it is important to create formal and informal communication channels with physicians.

There are several ways to establish a communication channel. One is for the health care organization to publish its charge master (price list), with the actual cost of each item prominent, in places such as the physician’s lounge. This allows the physician to review the cost of an item before writing an order, especially if there is a less expensive alternative available. A better way is to require the physician to order her own supply and ancillary service online. In this case, the organization can list the cost of each requested order on a monitor, along with the charge. When the physician places the order, an alert may pop up showing possible alternatives that are clinically appropriate. This point-of-service alert offers the greatest opportunity for changing the physician’s ordering pattern.

By 2008, more and more hospital organizations had acquired software tools known as computerized practitioner order entry (CPOE) systems. This is the case because a spotlight had been cast on the issue of patient safety since the 1999 publication of the Institute of Medicine’s landmark white paper *To Err Is Human: Building a Safer Health System*, which stated that hospital preventable medical errors were the cause of up to 98,000 deaths a year. Many commentators and professional associations (especially the Leapfrog Group) suggested that the direct ordering of tests and drugs by physicians through electronic ordering (such as CPOE) was a specific way to remedy the problems created by poor transcription of physician written orders.

**Standardizing the Organization’s Supplies**

The concept of standardizing supplies is also wrapped around physician ordering patterns. Physicians often practice medicine the way they were
taught in medical school and in their residency programs. They are often taught only one way of performing their duties. The interesting aspect of this educational feature is that the teaching of medicine varies with the school. In fact, there are many ways to practice good medicine. Some of them are less expensive than others, yet the clinical outcomes are usually similar.

Thus physicians from the same hospital often want to practice medicine the way they were taught, even if it means a variety of practice and ordering patterns abound at the health care organization where they are currently working. This is particularly true for surgeons who become attached to the instruments of specific manufacturers that were used in the residency program they attended. Because the look, feel, and function of each manufacturer’s surgical instrument differ, the surgeon often bonds with that manufacturer’s instruments for life. The problem for the health care organization is that this results in a group of nonstandard surgical supplies that may be quite expensive.

For example, consider that the major supply item for hip replacement surgery is the artificial hip. At RHMC, there were actually seven artificial hips ordered by the organization’s nine orthopedic surgeons who perform this procedure. Ordering from seven manufacturers does not allow the organization to partake of discounts for volume buying, and it necessitates an inflated level of inventory to keep a complete set of hips of each size from all seven manufacturers. This nonstandardization is obviously inefficient and costly to RHMC. Yet the surgeons are unwilling to give up the product on which they trained and with which they performed these surgeries throughout their career.

What to do? It is another case of an irresistible object meeting an immovable force. What gives? A couple of potential solutions may be considered. The first involves a mandate from the administration that standardization must take place in the interest of cost reduction. The timing of a mandate of this sort is always interesting. It could come when the organization is already hemorrhaging red ink, in which case the surgeons may recognize the financial need; this allows them to acquiesce without controversy, banding together to help the organization survive. Or the mandate could come while the organization is still financially sound and the standardization could help it stay that way.

Still, the financially sound organization faces a problem convincing surgeons to abandon their comfort zone. To do so successfully, the organization should facilitate a group meeting with the physicians, led by the clinical chair of the surgery service. The chair should explain the
financial problems caused by multiple vendors and the need to economize because of reduction in reimbursement. It is extremely important that the physicians be allowed to determine which one or two vendors should remain. Administratively imposed decisions in this regard would be suspect and challenged by the physicians.

If the first solution is politically untenable, a second solution involves a compromise whereby all the physicians agree to help the organization negotiate the best price on artificial hips without changing vendors. They do this by letting each of the seven salespeople know they are seriously considering changing their hip preference unless a significant discount is offered to the health care organization. This discount should produce the price that would be available if the organization used only one type of artificial hip. Each vendor must get the same message, and any vendor that does not comply should be dropped by the surgeon and the organization. This solution allows the organization to obtain significant pricing concessions, though lack of standardization means that the inventory is still too large. Even so, it is better than nothing and keeps the physicians relatively happy about not having to change hip vendors.

Standardization throughout the organization holds great potential for savings. In many cases, it involves little pain to most of the users of supplies. It allows the organization to reduce inventory of high-priced supplies and deal with fewer vendors, thereby creating efficiency for the supply chain (purchasing) department. To achieve effective standardization, however, a lot of work is required by the clinical users and the purchasing agents:

1. Evaluation of opportunities for standardization
2. Determination of which vendor’s product they want to select
3. Organization of a clinical trial or test of the product in the areas that will be using it
4. Evaluation of the results of the trial
5. Implementation of the standardization

**Reducing Utilization of Services and Supplies**

This is another way to achieve significant cost reductions in a hospital. The organization can perform analyses to help it understand the types of supplies and services that are being overused and who is placing orders
for them. Rational improvement cannot be made without the data. This is especially true because the primary group that orders supplies is the physicians, and they demand data when their efforts are being reviewed. The following steps should be taken to analyze, develop, and implement improvements in supply utilization (using the organization’s decision support system or an outside agency specializing in clinical decision support):

1. Segregate the inpatient discharges by DRGs.
2. Further segregate the inpatient discharges by ICD-9-CM diagnosis level.
3. Determine the supplies being used at the ICD-9-CM level.
4. Analyze use by the organization’s physicians against outside benchmarks.
5. Identify best-practice treatment protocols.
6. Use these protocols (either internal or external) as standards of practice.
7. Measure individual physician variance.
8. Determine the reasons for variance.
9. Develop an action plan to achieve change.
10. Implement change in practice.
11. Monitor the results of the change.
12. Provide feedback of the monitoring results to the appropriate parties.

These steps are critical to a successful conclusion. Some interesting findings may be uncovered using these techniques. Also, use of benchmarks is essential to a successful outcome.

Consider a case study from RHMC. A national clinical benchmarking firm was retained to review the utilization levels of a specific number of DRGs. They were reviewing the differences between RHMC’s actual utilization and the available benchmark group utilization. The DRGs were selected according to the high number of cases seen at the organization. One selected was DRG 89, a medical DRG consisting of simple pneumonia and pleurisy, age greater than seventeen, with at least
one comorbidity or complication (CC) present. (CC generally means that the patient is sicker and requires more care than a patient without CC.) The benchmarking firm first sorted all of RHMC’s DRG 89 pneumonia cases into their ICD-9-CM components, because usage at the level of diagnosis code represents a much more homogeneous mix than aggregated at the DRG level (see Table 11.3).

The variance analysis was then sorted by price, frequency, distribution, and other factors. Positive price variance means that RHMC’s unit cost of products is higher than the benchmark. The frequency variance measures how often each patient is receiving a particular type of service or supply; for example, in the case of a complete blood count lab test, this category would measure whether the test was ordered and performed more (or less) for RHMC’s patients than for the benchmark group. The distribution variance represents the number of patients within the diagnosis code who are getting the service. In other words, it indicates the percentage of the total patients in DRG 89 receiving antibiotics at RHMC compared to the percentage for the benchmark group.

When stratified, it is clear from the “unit total” variance and the number of cases that further analysis is warranted for the subset of “no substantial CCs or moderate CCs.” Next, using that subset as the new variable, the analysts determined variances between RHMC and peer and benchmarking groups for major ancillary services (laboratory, radiology, cardiology, pharmacy). They also reported variance in the average length of stay.

This review immediately highlighted one interesting variance in the radiology (or imaging) service. The CT scanning service appeared to be costing the organization much more money than what was reported by the peer and benchmarking groups. Upon further review, it was noted that although the figures for patients receiving services were 3 percent for the benchmark group and 6 percent for the peer group, RHMC’s utilization rate was over 18.7 percent, six times that of the benchmark group (see Figure 11.2).

Upon learning of this, RHMC performed further analysis. It was discovered that a long-standing practice at the organization was for the radiologists who read the routine chest X ray to “recommend” a CT scan for many patients, in the case of a negative finding, as a precaution for the patient. Because of this recommendation from the radiologist, the attending physician had to order the test, from a medicolegal standpoint. Now that the organization had the national data, it questioned the radiologists about this recommendation. Although surprised by the data,
### TABLE 11.3. Utilization Analysis of DRG 89, Pneumonia.

<table>
<thead>
<tr>
<th>DRG Subset</th>
<th>Price</th>
<th>Frequency</th>
<th>Distribution</th>
<th>Other</th>
<th>Unit Total</th>
<th>Number of Cases</th>
<th>Grand Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No substantial CCs or moderate CCs</td>
<td>1,900</td>
<td>200</td>
<td>1,400</td>
<td>1,500</td>
<td>5,000</td>
<td>150</td>
<td>750,000</td>
</tr>
<tr>
<td>Major CCs</td>
<td>1,800</td>
<td>1,300</td>
<td>4,000</td>
<td>2,000</td>
<td>9,100</td>
<td>20</td>
<td>182,000</td>
</tr>
<tr>
<td>All other</td>
<td>100</td>
<td>(1,000)</td>
<td>(20)</td>
<td>400</td>
<td>(520)</td>
<td>10</td>
<td>(5,200)</td>
</tr>
<tr>
<td><strong>Total DRG 89</strong></td>
<td>1,789</td>
<td>256</td>
<td>1,610</td>
<td>1,494</td>
<td>5,149</td>
<td>180</td>
<td>926,800</td>
</tr>
</tbody>
</table>
the radiologists did not hesitate to change their recommendation methodology on the spot.

Both cost savings and revenue enhancement accrued from just this one change. First, the variable cost of the CT scan was saved. Second, because there was a waiting list for the organization’s CT services, the radiology department was able to replace the unnecessary and generally unreimbursed tests with reimbursed outpatient services. The quality of the data and the depth of the analysis impressed the physicians. They became more than willing to listen to the results of subsequent review because of the outcomes for pneumonia.

Obtaining the Best Pricing for Supplies and Products

Obtaining the best pricing is the most mundane of the cost-saving ideas. It is time-tested and easy to achieve. There is little magic to doing so for the supplies and products being acquired by a health care organization. One of the primary methods to achieving the best product pricing is to understand and practice the fine art of negotiation. But there may be some problems with this approach if used in isolation.
First, the negotiator, often the purchasing agent, may not have enough experience or training to negotiate the best available price from the salesperson. Second, the negotiator may not have any leverage to command the best price (as was true in our artificial hip example). If physicians tell the salesperson that they have no intention of switching to another hip regardless of what they are told by the health care organization, the purchasing agent will never be able to obtain a good price from the salesperson. Third, and most important, the health care organization may not be big enough to command the best prices from the manufacturer or distributor of the product. The best prices are usually given to purchasers who order the largest quantity of goods. Most stand-alone health care organizations do not look or act like major purchasers.

Thus it is important to look like a much bigger purchaser than is really the case. To do this, various health care providers band together to form a purchasing alliance. Three of the biggest current alliances (also known as group purchasing organizations, or GPOs) are MedAssets, VHA/Novation, and Premier.

For the price of membership, health care providers are permitted to participate in supply and service contracts. The GPO has already negotiated prices for the goods. In most cases, the health care provider has to agree to purchase a minimum quantity to get pricing at a cost far less, in many cases, than would have been available had it negotiated as a freestanding entity. This is possible because the GPO comes to the negotiating table with tremendous purchasing clout: the ability to deliver millions of dollars of sales to the manufacturer or distributor of supplies.

In any case, the GPO member is often assured of obtaining the best price (or close to the best) for much of the clinical and nonclinical goods required in running an efficient organization. This is a primary tenet in managing supplies in a health care organization. Other supply chain management concepts are discussed later in this chapter.

**Attaining Optimum Productivity and Staffing Levels**

Productivity management is a technique established and used for many years in other industries. Health care was late to adopt many of the techniques because until recently, cost management was not a top priority. As stated earlier in the book, from 1966 to 1983, Medicare reimbursed the hospital segment of the industry according to cost; the system
rewarded higher costs. Labor costs represent the highest portion in the health care industry. Because there was actually a disincentive to reducing costs prior to 1983, most health care companies did not practice labor productivity management.

Subsequent to 1983, these incentives changed. For inpatient care, Medicare’s decision to pay a specific rate according to diagnosis, regardless of the patient’s length of stay or resources consumed, led administrators to take some notice of cost. Still, many organizations had a small number of Medicare patients and a reasonable percentage of charge-based payers. They were therefore insulated from most financial disasters throughout the 1980s. But the rapid rise of managed care plans in the 1990s made almost no health care organization immune from cost pressure. Organizations started to recognize a need for cost reduction and identified labor as the most likely area to attack.

A typical method for identifying optimum labor and productivity levels is as follows:

1. Develop a list of the tasks performed by each employee.
2. Determine the amount of time it took the staff to do each task.
3. Determine the appropriate unit of service to be used by which to multiply the task.
4. Do the multiplication to determine the amount of total staff time needed according to the projected volume.
5. Compare staff needed (from the calculation) to actual staff.
6. Reassign the staff that made up the excess if actual staffing exceeded the calculation; maintain the status quo if the calculation exceeded actual staffing.

Many organizations either performed these steps on their own or engaged consulting firms to do so. When RHMC did so, the results were mixed. Some departments were able to determine they had been performing tasks that were non-value-added. When this was discovered, the tasks were often eliminated, thereby freeing up staff time. In the best case, staff could then be used to treat patients who were waiting for revenue-producing care. In the worst case, staffing was downsized, through attrition, relocation, or position elimination. Over a short period of time (six months), in a small number of departments (twelve) and with a moderate number of staff members in those
departments (four hundred), RHMC was able to reduce its staff by twelve members, or 3 percent.

This is not an overwhelming reduction; however, it was achieved, and this taught the organization’s administrators and managers two valuable lessons. First, understanding the actual task and job assignments improves the relationship between manager and staff. It allows a dialogue based on objective data. It enables rational discussion. For example, if many of the staff feel overworked, the manager and staff can review the task list and determine whether there are any additional non-value-added tasks that can be eliminated without sacrificing core values.

Second, it is important to monitor ongoing productivity. Once the tasks are known and the unit-of-service volume standards are set, the organization needs to maintain a system whereby variances are monitored by pay period. This encourages vigilance on these important costs.

Today, understanding, measuring, and managing labor costs are critical to maintaining a health care organization’s cost structure. The level of labor and nonlabor costs plays a great role in whether the organization remains financially viable or struggles to survive. Cost management is crucial in an era when inpatient volume is stagnant or slightly declining and reimbursement rate is declining. RHMC has chosen to place great emphasis in these areas and has been successful using such techniques.

SUPPLY CHAIN MANAGEMENT IN HEALTH CARE

Integral to the concept of cost management is the field of supply chain management. Supply chain management in health care is generally defined as managing supplies and goods (clinical and nonclinical) used by staff to perform their duties. In theory, management of supplies and services is the responsibility of every employee and nonemployed physician in the health care facility. In practice, the supply chain management function is performed by three sets of staff members:

- Purchasing staff, who negotiate and contract with outside suppliers and distributors
- Receiving staff, who accept and log in all the supplies offloaded at the receiving dock
Central supply staff, who maintain the organization’s inventory and distribute it to all the users around the facility.

The staff working in these areas are aware of the importance of their job. At RHMC, for example, they are responsible for acquiring $16.6 million in patient care supplies as budgeted for 2008. That’s 16 percent of RHMC’s total expenditures, a level comparable to that at many health care organizations around the country.

There are a few basic tenets that good materials managers follow to maximize return for their employers:

- Obtain the best pricing
- Develop close relationships with distributors
- Apply just-in-time inventory management
- Establish in-service training
- Adopt a consignment policy
- Implement e-commerce

**Obtaining the Best Pricing**

The first thing to do is to obtain the best pricing for goods and supplies, as was discussed at length in the preceding section. The primary method is to contain the cost of goods, but it is not the only one.

**Developing Close Relations with Distributors**

The second tenet is to develop close relations with distributors. Distributors are the middlemen in the supply chain. One of their basic functions is to consolidate the medical and surgical supplies of many manufacturers and resell them to health care providers for a small markup. The distributor or consolidator simplifies the procurement process through this one-stop-shopping approach. Distributors that do a good job of performing their tasks are often taken for granted by the materials manager. But it is important for the materials manager to develop close relations with distributors, for a number of reasons.

Over the past several years, the number of major distributors has decreased as that segment of the industry experienced significant alliances
and combinations. The supply chain manager is responsible for ensuring that the goods needed by clinical and nonclinical users are available when required. The distributors control the availability, receiving schedule, and pricing for these goods. Although the supply chain manager has a choice of distributors, this choice is dwindling. Good management principles obligate the manager to maintain close and effective relations with the one or two distributors that supply a majority of the organization’s goods.

**Applying Just-in-Time Inventory Management**

Just-in-time (JIT) inventory management has become extremely important over the past ten years as health care providers adopted techniques pioneered in the automotive industry. Prior to adoption, the health care provider maintained an entire inventory within the four walls of the facility. The provider therefore bore the risk for the holding cost of all the goods being warehoused in the facility as well as an increased chance for obsolescence and shrinkage (theft).

JIT allows the health care organization to significantly downsize its storeroom or warehouse. This produces significant savings for the organization. It can use an on-site, vacated, or downsized storeroom for a more productive or revenue-producing activity, or it can vacate warehouse space that may be leased outside the four walls, thereby saving significant rent expense.

JIT shifts the risk of these holding costs and shrinkage back onto the supplier or the distributor. These companies now become responsible for warehousing the products and shipping them to the organization expeditiously. JIT increases the frequency of delivery to the organization, often from once a week to three to five times per week. It becomes imperative that the supplier’s truck appear at the provider’s receiving dock at the time that it is expected each day. Otherwise, patient tests or surgeries may have to be postponed. Consequently, there are caveats to using a JIT method. The supplier or distributor must be extremely reliable in its delivery schedule and must also have a reliable pipeline for obtaining or manufacturing the goods.

Because the holding costs and risk of shrinkage have been shifted back to the distributor or supplier, it is general business practice for the distributor or supplier to charge a slightly higher rate for this service and the risk it entails.
Establishing In-Service Training

Creating and maintaining an in-service program for the organization’s entire management group is fundamental to running the supply chain management program efficiently. It allows the supply chain manager to communicate with and educate managers and their staff on major internal and external supply chain issues such as these:

- Understanding the supply chain management and central supply process
- Instructing managers on the proper procedures for requesting a purchase order number, which, when assigned, is a legal contract obligating the organization to pay the supply ordered
- Whether the manager should attempt to do his own negotiating with vendors or refer the salespeople to the organization’s purchasing agent
- How to deal with salespeople who have been known to break the organization’s rules about the steps to be taken before contacting a specific department manager

This type of in-service helps the organization maintain a good materials management system.

Adopting a Consignment Policy

Adopt consignment as a business model. In most cases, a health care organization acquires goods by purchasing them from a distributor or supplier. The goods are ordered by the health care provider, sent by the supplier, received by the provider, billed by the supplier, paid by the provider, stored for a short time in the user’s department, and finally consumed. Under the consignment method, that methodology changes because the provider acquires the goods for use, but payment is made only after use. If an item is not used, it can be returned to the supplier. Consignment is most often used for relatively expensive, specialized equipment such as that consumed in the surgical suite (operating room).

Consignment is an economical model that benefits the organization positively, through access to a variety of high-cost equipment without the monetary outlay usually associated with acquisition. There is no significant downside to the provider, so it is likely to grow in popularity.
Implementing E-Commerce

Since the late 1990s and the advent of widespread use of the Internet, a number of distributors, suppliers, manufacturers, and purchasing organizations have developed tools and techniques to improve the efficiency and effectiveness of health care supply chain management. These companies have created Internet-based tools to assist health care organizations with the following tasks:

- Ordering goods (hospital department manager)
- Processing the order (purchasing department)
- Pricing the order according to prescribed details in the computer program
- Transmitting the order from the hospital to the distributor
- Sending the order from the distributor back to the hospital
- Tracking the order
- Receiving the order at the hospital dock
- Transporting the order to the appropriate department
- Invoicing the hospital (distributor)
- Paying the distributor (hospital)

These are just some of the big supply chain processes streamlined by e-commerce.

In summary, it is clear that sound supply chain management policies and practices within a health care organization can have a positive impact on facility cost management. It is an area that merits highlighting whenever the concept of cost reduction is proposed.

BENEFITS OF TAX STATUS FOR HEALTH CARE ORGANIZATIONS

The issue of not-for-profit versus for-profit health care was briefly touched on in Chapter Two. Throughout the book, the not-for-profit model has been continuously emphasized because RHMC (like more than 80 percent of hospitals or health systems) operates under this Internal Revenue Code designation. There are several positive financial implications associated with this designation—and one large drawback.
Here is a summary of the various financial benefits associated with the two designations:

**Not-for-Profit**
- Exempt from federal income tax on profits
- Exempt from state income tax on profits
- Exempt from property taxes (in most cases)
- Exempt from state and local sales taxes (not exempt from excise taxes)
- Able to issue bond debt (income from which is tax-exempt to the purchaser of the debt) to raise capital

**For-Profit**
- Able to issue stock to raise capital
- Able to offer stock options to recruit and retain staff at various levels
- Limited obligation to provide indigent or uncompensated care

If we were just counting the number of benefits in this listing, it would appear that the not-for-profit entity has an advantage. After all, it benefits from considerable operating cost savings throughout the year, which translates into a greatly improved bottom line. Using RHMC’s 2009 budget as an example, Table 11.4 shows that the organization benefits by saving $10,924,800 in taxes. That is an enormous benefit to the nonprofit organization.

The government has granted this benefit because, historically, not-for-profit health care organizations have taken care of the poor, needy, and indigent who needed health care. These health care organizations did not discriminate against anyone who presented in an emergent care situation; they would often provide care even in nonurgent or elective situations. Much of this has changed over the years as the government imposed greater and greater requirements on health care providers, both voluntarily (if the organization accepted 1948 Hill-Burton grants) and involuntarily (the COBRA and EMTALA regulations of 1988).

A requirement for providing services to the indigent was imposed after World War II with the passage of the Hill-Burton Act. This act
TABLE 11.4. **Tax Benefits Accruing to Ridgeland Heights Medical Center Owing to Its Status as a Not-for-Profit Health Care Organization.**

<table>
<thead>
<tr>
<th>Description</th>
<th>2008 projected net income ($)</th>
<th>Total Potential Tax Liability Savings ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal corporate tax rate (%)</td>
<td>34.00</td>
<td></td>
</tr>
<tr>
<td>Potential federal income taxes ($)</td>
<td>1,332,800</td>
<td>1,332,800</td>
</tr>
<tr>
<td>State corporate tax rate (%)</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Potential state income taxes ($)</td>
<td>392,000</td>
<td>392,000</td>
</tr>
<tr>
<td>Potentially taxable property at estimated appraised value ($)</td>
<td>200,000,000</td>
<td></td>
</tr>
<tr>
<td>Approximate property tax rate (%)</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>Potential property taxes ($)</td>
<td>5,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Value of goods to be purchased, including supplies and capital equipment</td>
<td>30,000,000</td>
<td></td>
</tr>
<tr>
<td>State and local sales tax (%)</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>Potential sales taxes ($)</td>
<td>2,400,000</td>
<td>2,400,000</td>
</tr>
<tr>
<td>Amount of tax-exempt bond debt issued ($)</td>
<td>150,000,000</td>
<td></td>
</tr>
<tr>
<td>Average difference between taxable and nontaxable interest rates (%)</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Actual annual interest expense savings ($)</td>
<td>1,800,000</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Total potential and actual annual operating expense tax savings due to not-for-profit status</td>
<td>10,924,800</td>
<td></td>
</tr>
</tbody>
</table>
allowed the government to grant or lend money to health care organizations for the express purpose of building or renovating their facilities. Aside from the fact that this legislation was the first time the federal government had opened the spigot for a great flow of funds to the health care industry, the act required the recipient organization to ensure that a minimum number of dollars was spent on care for the indigent. It generally amounted to 10 percent of the amount borrowed each year over a twenty-year period. This was the equivalent of a 200 percent return on the borrowed funds in aid to community residents who could not afford this health care.

Although the reporting requirements were onerous, the actual requirements to treat indigent patients were not a problem for most nonprofit institutions. This, after all, was part of their mission. Keep in mind that this program was begun almost twenty years before Medicare and Medicaid, to spur the growth of health care facility availability for the soldiers returning from World War II and their families. There were also almost no for-profit health care facilities in the country at that time. It allowed the nonprofit organizations to share in the largesse of the government.

The advent of Medicare and Medicaid in 1966 considerably changed the equation. There was now far greater coverage for the poor and the elderly. Although these programs did not cover all the needy, initially the pool shrank. Depending on the location of the health care provider, the number of indigent requiring care could be large or small. Residents whose annual income falls below the government’s poverty guidelines often populate inner cities and rural areas; higher-earning individuals are often located in suburbs. Thus there are varying opportunities for not-for-profit health care organizations to give free or low-priced service to residents of a community.

There is an interesting counterpoint to the concept of providing community services. The late 1960s saw the first great wave of for-profit health care spring up. Hospital Corporation of America (now known as HCA) incorporated at this time, with a mission to maximize shareholder wealth. This was in stark contrast to the not-for-profit mission to provide health care to all members in the community who needed it. For-profit health care organizations are not obligated to seek out indigents in the local community. Their mission therefore differs from that of not-for-profit health care organizations.

In many communities where for-profit organizations set up their operations, they sought out the best-paying patients. This is known as
“skimming.” To maximize profits, they specifically attempted to avoid providing services to less-than-full-paying patients except where it was required by law. This occasionally led to another practice, “dumping,” which is defined as discharging or redirecting patients who lack insurance to their home or to county facilities before any treatment has been rendered.

To some extent, the desire by certain health care providers not to treat patients who could be a financial drain led to a new law to combat dumping. The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1988 set up requirements that all health care facilities, for-profit or not-for-profit, must treat and stabilize any patient who presents for care in a health care organization’s emergency department. Thus in the case of skimming and dumping, thanks to COBRA, there is no longer any advantage or disadvantage to the health care provider on the basis of tax status.

PREPARATION AND IMPLICATIONS OF THE ANNUAL IRS 990 REPORT

Not-for-profit, tax-exempt status confers certain responsibilities. One is submission of an annual corporate tax return. IRS Form 990 is similar in many respects to a for-profit tax return. It requests information on the organization’s income and expenses just as for other corporations. But unlike these other organizations, there is no tax assessment on any revenue exceeding total expenses. This is true for the operating margin as well as any total margin (which includes income on investment). Although IRS Form 990 is initially due in March, RHMC generally took full advantage of allowable extensions until November of each year.

Part III of the form, “Statement of Program Service Accomplishments,” encourages the nonprofit organization to highlight its community service activities performed during the tax year. Hospitals have developed community service benefit reports that summarize their large and small contributions made to the community: annual health screenings and immunization clinics, community health programs such as first-aid classes, school health fairs, CPR classes, stress management and nutrition programs, prenatal care programs, support groups, sponsorship, and so on.

The community service benefits report was developed and promoted by the Catholic Health Association as a way to advocate the
social value of its mission of caring and healing. During the 1980s, many of the ideas and features of the report were adopted by other not-for-profit health care organizations as a defined method to report their contributions to the community. Table 11.5 is a summary of the community service report included in Ridgeland Heights’ IRS Form 990.

The report is separated into several categories:

- Value of traditional charity provided to the community, representing the cost of providing free or discounted care to patients in accordance with the organization’s policies
- Unpaid costs of public programs, representing the net loss (or cost) of providing care to patients insured by government programs such as Medicare or Medicaid
- Nonbilled community services, which is the organization’s cost of offering community health education and outreach services
- Medical education, the net cost to the organization of teaching and education for health professionals
- Subsidized health services, the organization’s cost of providing specialized or free health services to the community
- Research, usually limited to an academic medical center
- Cash and in-kind donations, reportable when the organization donates cash, goods, or services for community services

RHMC adopted this reporting practice several years ago because of its highly structured definitions. It affords a defensible reporting mechanism and a framework for year-to-year comparisons. The administration uses this report in an effort to understand and budget for community service benefits.

It is important for a tax-exempt organization to be clear, concise, and complete in describing tax-exempt achievements because the description is likely to be reviewed by community members and others interested in the sources and uses of the organization’s funds.

There are some specific rules regarding public access to IRS Form 990. The document is available through the IRS or through the tax-exempt organization to anyone requesting public inspection or a copy. If requested through the organization, all parts of the return and all required schedules and attachments—other than the schedule of
TABLE 11.5. Quantifiable Community Benefits Report, Ridgeland Heights Medical Center, Year Ended December 31, 2008.

<table>
<thead>
<tr>
<th>Persons Served</th>
<th>Total Expenses ($)</th>
<th>Offsetting Revenues ($)</th>
<th>Net Community Benefits ($)</th>
<th>Share of Hospital Expenses (%)</th>
<th>Share of Hospital Revenues (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional charity care</td>
<td>506</td>
<td>567,000</td>
<td>567,000</td>
<td>0.58</td>
<td>0.39</td>
</tr>
</tbody>
</table>

**UNPAID COSTS OF PUBLIC PROGRAMS**

| Medicare | 80,000 | 40,000,000 | 30,000,000 | 10,000,000 | 10.21 | 6.90 |
| Medicaid | 1,500 | 1,400,000 | 800,000 | 600,000 | 0.61 | 0.41 |

**Total unpaid cost of public programs**

| 81,500 | 41,400,000 | 30,800,000 | 10,600,000 | 10.83 | 7.31 |

**COMMUNITY SERVICES**

<table>
<thead>
<tr>
<th>Nonbilled Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community health education and outreach</td>
</tr>
</tbody>
</table>
### Patient education on disease prevention

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Average</th>
<th>Median</th>
<th>Total</th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,000</td>
<td>40,000</td>
<td>10,000</td>
<td>30,000</td>
<td>0.03</td>
<td>0.02</td>
</tr>
</tbody>
</table>

### Other nonbilled services

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Average</th>
<th>Median</th>
<th>Total</th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8,000</td>
<td>30,000</td>
<td>—</td>
<td>30,000</td>
<td>0.03</td>
<td>0.02</td>
</tr>
</tbody>
</table>

### Total community services

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Average</th>
<th>Median</th>
<th>Total</th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34,000</td>
<td>400,000</td>
<td>100,000</td>
<td>300,000</td>
<td>0.31</td>
<td>0.21</td>
</tr>
</tbody>
</table>

### MEDICAL EVALUATION

#### Physicians, nurses, technicians, other

|        | —      | —      | —      | —      | —          | —         |

#### Scholarships, funding for health professionals

|        | —      | —      | —      | —      | —          | —         |

#### Other medical education

|        | —      | —      | —      | —      | —          | —         |

### Total medical education

|        | —      | —      | —      | —      | —          | —         |
### Subsidized Health Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Quantity</th>
<th>Cost</th>
<th>Value</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency and trauma care</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Neonatal intensive care</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Freestanding community clinics</td>
<td>5,200</td>
<td>400,000</td>
<td>400,000</td>
<td>0.41</td>
</tr>
<tr>
<td>Collaborative efforts in preventive medicine</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other subsidized health services</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total subsidized health services</strong></td>
<td>5,200</td>
<td>400,000</td>
<td>400,000</td>
<td>0.41</td>
</tr>
<tr>
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<td>30,900,000</td>
<td>11,912,000</td>
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contributors to the organization—must be made available during regu-
lar business hours at the organization’s principal business office and at
each of its regional or district offices having three or more employees.
Failure of the organization to respond to requests appropriately will
result in a significant fine.

The not-for-profit 990 tax return has one particular piece of infor-
mation that is often scrutinized by certain segments of the public more
than any other. Schedule A of the 990 requires the organization to
report the names, occupations, and salaries of the five highest-paid
employees who are not officers of the corporation. On another page,
the salaries of any paid officers of the corporation are reported. There-
fore, salaries of the organization’s top officials are likely to appear on
one page or the other. In addition, compensation of the five highest-
paid independent contractors for professional services is required on
Schedule A. The organization’s auditors, lawyers, and consultants
often dominate these lines. Many local newspapers around the country
have regular features reporting these wages and contract services at
not-for-profit corporations.

It is interesting to note that over the past couple of years, the IRS
has proposed several new guidelines for the reporting and monitoring
of Form 990. Further changes in the scope and nature of the reports
that are currently being considered will affect the three million or
so not-for-profit organizations in America, including the three thousand
not-for-profit hospitals and health systems.

Thus the IRS 990 report has many uses, both for the organization
and for the public. As with any tax return, it is imperative to make the
required information timely and accurate, following the rules and regu-
lations set down by the government. In the case of the 990, it is also
important to understand the potential implications of the need to report
the salaries of the highest-paid employees and service providers. The
RHMC finance staff and managers responsible for preparing and submit-
ting these tax returns are aware of the rules for reporting and filling
requests for information. In fact, they use outside tax experts to review
their preparation each year before the filing date to ensure that they have
made no errors. This also attests that they have complied with any new
rules effective with the tax year in question.
PRACTICAL TIPS

- Report contractual adjustments to the operating departments. This is a controversial yet necessary effort to develop more reasonable departmental operating margins.

- Create cost containment project teams, on an ongoing basis, charged with improving the organization's cost structure.

- Develop a formalized organizationwide effort to receive, accept, and operationalize suggestions for the entire employed staff. Implementing many of the suggestions will allow the organization to improve its cost and revenue structures.

- Benchmark!

- Standardize supplies to maximize discounts, reduce inventories, and improve distribution, all of which will improve the overall cost structure.

- Set labor productivity and cost goals exceeding the benchmarks, and monitor the outcomes to improve the organization’s cost structure.

- Develop a financial analysis of the benefits received as a 501(c)(3) community-based not-for-profit hospital organization.

- Maximize the community benefit information reported on the IRS Form 990 annual tax return.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Discuss the pros and cons of reporting contractual adjustments directly on the monthly financial reports at the department level.

2. Determine at least ten key success factors (key financial indicators) to benchmark in any hospital.

3. Compare the benefits being received by a representative hospital in the community with the real amounts of the cost of uncompensated care being given by the organization.
LEARNING OBJECTIVES

After reading this chapter, you should be able to

■ Develop an open-heart surgery projected financial statement (pro forma)
■ Recognize why financial analysts must be objective at all times when preparing pro formas
■ Discuss the importance of hospital professional liability (malpractice) insurance and why several levels of coverage are required
■ Cite the general accomplishments of a hospital finance committee
■ Understand some of the possible futures for health care and health care finance
■ Discuss issues surrounding the depletion of the Medicare Part A trust fund and its implications
■ Talk about the future issues for the Medicare program, managed care health insurance coverage, and universal coverage
■ Debate the possible future opportunities for hospitals in America
Self-doubt dominated the dreams of Sam Barnes. He was worried. He was trying to move along a clearly marked road, his destination shining in the distance. But he was mired in mud, unable to make any progress. And he did not know why.

Come on, come on, let’s go, he thought to himself. I can do this. I can get there! What do I need to do to break out of this rut and get going?

Just then a booming voice echoed through his thoughts. “And just where is it that you think you are going?” asked the Voice.

“Whaddya mean, where am I going?” responded the incredulous Sam. “Obviously, I’m heading out there. It’s my destination, my goal.”

Now it was the Voice’s turn to act incredulous. “Oh, really, Sam, and just what does that destination represent to you?”

“Huh?” blinked Sam.

“Come on, Sam, don’t be so obtuse. You can see the beacon out there on the horizon, and you can even see what looks like a path. But if you look closer, you’ll notice that there are some gaps along that paved road. In fact, you are standing in one of those gaps right now, a patch of mud so deep that it’ll take you quite a bit of hard thought to get out of it,” the Voice said pretty adamantly.

“Well, I still don’t know what you’re talking about. Me, obtuse? I don’t think so. Never was, never will be,” Sam said, somewhat defensively.

“Oh, really,” smiled the Voice. “If you’re so smart, then you tell me where you’re heading and why.”

Sam hesitated just a moment. “Yeah, well, of course I know where I’m heading. Out there is stability for me and this crazy industry I’m in. We’re going through some pretty unstable times at the moment in the financing of health care. Not only are a lot of these reimbursement cutbacks destabilizing to the delivery of patient care, but there is also a big problem for many families who stand to lose their take-home pay if they are laid off because of these cutbacks. So yeah, I’m worried. Wouldn’t you be?”
“Now that you ask, yes, I guess I would be too,” said the Voice. “But Sam, now that you’ve been able to pinpoint the problem, what are you going to do to work out a solution so that you can begin to move forward again?”

Sam was mad. “Man, you are one big pain. Questions, questions. I answer one but is it good enough for you? No! Right away you hit me with another big one. I’ll tell you, there’s no rest for the weary.”

“Hey, hey, nice try, but I can see right through you. Stop avoiding the question. What are you going to do about the financial instability in the industry?”

“Me, why me? Why do I have to be the one to do anything about the financial instability in the industry? Who am I? I’m no politician. I can’t make the managed care companies pay providers any more money. I can’t make the feds increase their reimbursements to the industry to provide an appropriate return on investments. Not only do they think we already make too much money, but they would claim that they really don’t have the money to fully fund the industry even if they wanted to. Their funding source is eventually going broke. Also, those politicians always take the expedient way out. They don’t lead. They react. They are afraid to alienate any constituency that votes, so they refuse to make decisions that would put the right kind of incentives in place that would begin to minimize Medicare trust fund disbursements.”

“Oh, really? Tell me more,” said the Voice.

“Well, it doesn’t seem like anybody is dealing with the conflict between patients who are demanding more services and the payers who are demanding less payments. The patients want to get better but want someone else to pay. The payers want to limit benefits so they don’t have to pay. And they have been raising their premiums in order to produce a bottom-line margin for their own health plans or insurance companies, sometimes exorbitantly. Meanwhile, the employers feel like they have maxed out on medical insurance premiums,” came Sam’s stream-of-consciousness reply.

“And your point is . . .?” questioned the Voice.
“We need to rationalize the financing of care. We need someone to make the hard decisions. If there is too much capacity in the health care delivery system, contributing to too much fixed cost, someone needs the authority to close it down. If too many providers are in a certain geographical area, a facilitectomy needs to be performed. If there are not enough facilities in certain areas, like rural settings, then appropriate additions should be made.”

“Come on, Sam, grow up. You know those kinds of proposals are nonstarters,” said the Voice, quite sarcastically. “First, no politician is going to take you up on that proposal; it’s political suicide. Second, in some cases, it’s been tried. Some of what you suggest is in the hands of state-run certificate of need boards. Third, it sounds like another government boondoggle, letting an authority make a decision that’s better left to the free market.”

“Blah, blah, blah, Voice. You sound just like every one else who throws up obstacles because its easier to maintain a bad status quo than work out a better future system. What you just said is nonsense. Most certificate of need boards were disbanded by their states because they were ineffective and didn’t have the authority to close facilities. They could only decide whether or not to add health care facilities and services, and usually only of certain types, making for severe unfairness. For example, they might have to approve the addition of an MRI service for hospitals, but they might not be able to stop a physician’s office from adding one. Pretty dopey stuff. So it is certainly a bad model to use.

“As far as your comment about government boondoggles and letting the free market prevail, that’s very problematic. This country has over 45 million underinsured or uninsured citizens, which is about one person in every six. Who’s speaking for them? Certainly not the free-market thinkers. And what about the population that’s aging? Right now, Medicare covers only one hundred days in a skilled nursing home, in many cases leaving a string of poor, uninsured older people with very few options. Medicaid has already become the payer of last resort, and it’s already government-funded. If government is always to be the final payer for services, maybe we need to let it participate in the discussions of potential solutions.”
“Sam, Sam, Sam,” chided the Voice. “Sometimes you are such a bleeding heart. How can government be the solution when it is so often the problem? Don’t you remember when the president tried to do this nationally in 1993 and 1994? It failed miserably. Nobody wanted it. Health planning was set back for years because of it.”

Aha, thought Sam, I’ve got him now. “Oh, yeah?” he retorted smartly. “Well, that’s where you’re wrong buster. The 1993 initiative failed for three reasons. One, the process was handled very badly. The lesson learned was to be less arrogant and get more constituencies involved. Second, the opposition mounted a brilliant campaign. The people responsible for providing commercial health insurance had a heavy self-interest in seeing the proposals defeated. They convinced a number of legislators through scare advertising that government-run health care would be as inefficient as the post office. They also convinced many people that there were no problems in health care finance. Their motto was ‘If it ain’t broke, don’t fix it.’ But you and I know it’s broke, structurally and financially. Third, the proponents were ahead of their time. While it was obvious to many of us in the industry that there already was a health care financing problem in the early 1990s, it was not obvious to the legislators.”

“So what, Sam? That’s just a lot of rehashing.” The Voice was starting to tire. “You’re living in the past. I see very little of the mud loosening up. Oh, sure, in New York State last year, a government-appointed committee recommended the closing or merging of several New York hospitals, but it is still too early to know if the list, like that of a military base closing commission, will be effectively implemented. And while we are finally hearing calls for some sort of universal health care for all American citizens from many segments of society on a national scale, only Massachusetts has so far adopted a form of universal health care. This is very little progress in a vast ocean of need.”

“OK already,” Sam replied. “Maybe there are a few things I can do. I’m nothing but a small cog in a small wheel. At the moment, the most I can do is continue to do the best job possible for Ridgeland Heights. That means continuing to maximize the revenues while staying within all the applicable laws and helping the clinical and nonclinical department managers contain their costs through assistance with reporting and benchmarking, leading to management accountability.
“The other thing I can do is help get out the message about health care financial management and health care financing. They are the two sides of the same coin. It’s a fact that you can’t be the best health care financial manager without having a solid understanding of health care financing issues. And if you have a truly good understanding of the financing issues, it is hard to ignore them and try to improve it because of the significant impact they have on each facility’s bottom line.”

“So what are you going to do?” the inquisitive Voice asked.

“I suppose I could write a book that blends theory with practice, anecdote with history, and narrative with exposition. It should be something that would help people understand the day-to-day functioning of health care managers and their staffs—reveal the real efforts it takes to keep a health care organization running as smoothly as possible in this difficult day and age. My hope would be that with this understanding, my readers will take the next steps to improve the financing of the health care delivery system in the future. None of us is going to solve this alone. It will take a concerted effort by a strong group committed to an overall solution, not just Medicare and Medicaid. It takes everything and everyone.”

And with that, Sam was startled out of his dream. As he regained consciousness, he felt his sore feet loosen up as he jumped out of bed to get to his word processor.

December. Thanksgiving gone, Christmas and New Year’s to come again and quickly. The air is brisk as it skims across the Great Plains and the Canadian frontier, heading east to a rendezvous with the denizens of northern Illinois. The winter coats are out, and the first dusting of snow has already been felt in the region. The winter doldrums are beginning to set in.

**GETTING READY FOR YEAR-END REPORTING—AGAIN**

Come early December, the finance staff are engaged in the routine business of preparing the November financial statement and taking the first steps in getting ready for year-end reporting. During the November closing of the books, the staff take extra time to analyze and evaluate
the balance sheet and income statement accounts. They are searching for unexplainable variances.

Any variance has to be understood and appropriately adjusted before the close of the year, and it is always better to make these adjustments in November rather than December. December adjustments are more obvious to the primary readers of the financial statements—the CEO and the board—because they have become conditioned to inquire about significant December line item changes. It is best to have no adjustments made by the auditors, but it is also preferable to have no major internal adjustments in December, if they can be avoided. It’s much better to make the adjustment in November.

OPEN-HEART SURGERY PRO FORMA

Meanwhile, RHMC administration has continued to analyze the future of the organization. The administrators have determined that the time has come to fill a major hole in product offerings. As a medium-sized community hospital, RHMC does not perform cardiovascular (CV) surgery, commonly known as open-heart surgery. When this procedure was first developed in the 1960s, it was performed only by surgeons at major academic (teaching) medical centers that had been involved in the initial trials or by surgeons who had subsequently trained or assisted with the original ones.

Over the years, many surgeons have been trained in this procedure. In addition, the steps required to perform these procedures have become well known, and in the 1980s, some community hospitals began offering CV surgery. The mortality rate at many a hospital was now equivalent to that at the teaching hospitals, which encouraged some other community hospitals to offer the service. In the early 2000s, it was important, in a competitive service area, for some community hospitals to provide this service to its patients. It indicated to patients and their physicians that the organization practiced serious medicine, surpassing other community hospitals that did not offer the service and placing one’s organization on par with some academic programs.

RHMC’s administrators decided it was time to attempt to implement one of the main tactics in the medical center’s strategic plan. They knew that to continue to compete for patients in the core and secondary service areas, they must develop a cardiac surgery program. Heart disease is and has been the number one killer of Americans for many years. Heart disease, which leads to death, may also occasion the need for significant
inpatient and outpatient services. For RHMC to access more of these patients for treatment, an open-heart surgery program was required.

To determine the financial implications of such a program, the finance division was asked to develop a financial pro forma. Unlike the pro forma developed for the MRI that was presented in Chapter One, which was relatively easy because it involved only one department (radiology) and only one set of volume assumptions, the open-heart surgery program involves many more departments and personnel. This creates a number of additional variables, thus increasing the complexity of the analysis, which increases to some extent the risk that assumptions are unsound.

**Development of Volume and Revenue**

The first step in developing an open-heart surgery pro forma, as with almost every other pro forma, is to determine the volume of services that can be provided. In this case, there are two prevalent procedure types. A coronary artery bypass graft (CABG, often pronounced “cabbage”) is generally the procedure referred to when people talk about open-heart surgery. Percutaneous transluminal coronary angioplasty (PTCA) is a procedure that cleans out plaque that has formed on the vessels leading to the heart, also through invasive surgery.

Tables 12.1 and 12.2 show the detailed and summary volume projections, which are based on usage rate within the organization’s service area as well as the actual volume of cardiac catheterization procedures currently performed at RHMC. The best way to initially determine if the medical center can achieve a CABG volume of 510 per year (a number generally agreed to be a minimum for competence in the industry) is to review the current volume currently being generated. After that review, the medical center should look at volume in the surrounding community. Thus the medical center’s plan is to convert 100 percent of its current catheterization patients who have been transferred to other facilities into its own CABG patients. This, however, gives only 220 potential patients a year. So administration then reviewed the patient origin data of all CABG patients within its surrounding community, which is available from a state database, to determine which other hospitals’ volume it could divert. This is called a market-based solution.

After determining the volumes, the financial analyst estimates the gross revenues chargeable for the service based on the current market rate. In addition to gross revenue, RHMC needs to estimate the mix of payers that will represent the CABG and PTCA patients. It does this on the basis of surveys of area hospitals willing to share such data. It can
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<th>Medicare DRG 2007 Weights</th>
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<td>7 7 20 20 20</td>
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<td>Cardiac Valve Procedure without Cardiac Catheterization</td>
<td>8 8 20 20 20</td>
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<tr>
<td>106</td>
<td>Coronary Bypass with Cardiac Catheterization</td>
<td>30 55 80 80 80</td>
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<tr>
<td>108</td>
<td>Other Cardiothoracic Procedures</td>
<td>4 8 8 8 8</td>
</tr>
<tr>
<td>110</td>
<td>Major Cardiovascular Procedures with Cardiac Catheterization</td>
<td>10 14 14 14 14</td>
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<tr>
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<td>Major Cardiovascular Procedures without Cardiac Catheterization</td>
<td>4 8 8 8 8</td>
</tr>
<tr>
<td>Code</td>
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<td>Coronary Bypass with Cardiac Catheterization with Major Cardiovascular Diagnosis</td>
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<td>Coronary Bypass without Cardiac Catheterization without Major Cardiovascular Diagnosis</td>
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<td>Permanent Cardiac Pacemaker Implant with Major Cardiovascular Diagnosis or Automatic Implantable Cardio-Defibrillator Lead or Generator</td>
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<td>552</td>
<td>Other Permanent Cardiac Pacemaker Implant with Major Cardiovascular Diagnosis</td>
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<td><strong>Total Cardiac Procedures</strong></td>
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### Projected Reimbursements ($)

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<th>Year 3</th>
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<td>111</td>
<td>Major Cardiovascular Procedures without Cardiac Catheterization</td>
<td>536,000</td>
<td>1,072,000</td>
<td>1,072,000</td>
<td>1,072,000</td>
<td>1,072,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>547</td>
<td>Coronary Bypass with Cardiac Catheterization with Major Cardiovascular Diagnosis</td>
<td>5,200,000</td>
<td>7,150,000</td>
<td>10,400,000</td>
<td>10,400,000</td>
<td>10,400,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>2004</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
<td>2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
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<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>548</td>
<td>Coronary Bypass with Cardiac Catheterization without Major Cardiovascular Diagnosis</td>
<td>4,440,000</td>
<td>6,600,000</td>
<td>9,600,000</td>
<td>9,600,000</td>
<td>9,600,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>549</td>
<td>Coronary Bypass without Cardiac Catheterization with Major Cardiovascular Diagnosis</td>
<td>3,450,000</td>
<td>6,325,000</td>
<td>9,200,000</td>
<td>9,200,000</td>
<td>9,200,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>550</td>
<td>Coronary Bypass without Cardiac Catheterization without Major Cardiovascular Diagnosis</td>
<td>3,300,000</td>
<td>6,050,000</td>
<td>8,800,000</td>
<td>8,800,000</td>
<td>8,800,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>551</td>
<td>Permanent Cardiac Pacemaker Implant with Major Cardiovascular Diagnosis or Automatic Implantable Cardio-Defibrillator Lead or Generator</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>552</td>
<td>Other Permanent Cardiac Pacemaker Implant with Major Cardiovascular Diagnosis</td>
<td>1,600,000</td>
<td>1,600,000</td>
<td>1,600,000</td>
<td>1,600,000</td>
<td>1,600,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total cardiac procedures</td>
<td>29,130,000</td>
<td>44,157,000</td>
<td>63,588,000</td>
<td>63,588,000</td>
<td>63,588,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TABLE 12.2.** Cardiac Surgery Program, Ridgeland Heights Medical Center: Summary of Assumptions.

<table>
<thead>
<tr>
<th>CAPITAL COSTS ($)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>1,200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renovations</td>
<td>800,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total capital costs</td>
<td>2,000,000</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOLUMES</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total volumes</td>
<td>240</td>
<td>360</td>
<td>510</td>
<td>510</td>
<td>510</td>
<td>2130</td>
</tr>
<tr>
<td>Total volumes per day @ 260 days</td>
<td>0.92</td>
<td>1.38</td>
<td>1.96</td>
<td>1.96</td>
<td>1.96</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROSS REVENUES ($)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>29,130,000</td>
<td>44,157,000</td>
<td>63,588,000</td>
<td>63,588,000</td>
<td>63,588,000</td>
<td>264,051,000</td>
</tr>
</tbody>
</table>
**PAYER MIX (%)**

<table>
<thead>
<tr>
<th></th>
<th>55</th>
<th>55</th>
<th>55</th>
<th>55</th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managed care</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>All other</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total payer mix</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**AVERAGE CONTRACTUAL ALLOWANCES (%)**

<table>
<thead>
<tr>
<th></th>
<th>80</th>
<th>80</th>
<th>80</th>
<th>80</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Managed care</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>All other</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

**Notes**

- Volumes and service mix are based on research from current RHMC catheterization lab volumes and external sources.
- Payer mix is based on Smith Memorial Hospital actual data across the product line.
- Gross revenue is based on full-year operations for DRG 106 and 107. All other DRGs are estimates based on 106 and 107.
- Contractual allowances are based on Medicare and managed care approximate rates from other regional hospitals.
- Gross charges are projected to increase at 0% per year.
- Variable expenses are projected to increase by an inflationary rate of 5% per year.
- Equipment is depreciated over eight years.
- Spinoff revenues and expenses are provided at a 5% increase over the 2007 actual cardiovascular service line.
also validate these data by reviewing the payer mix of its catheterization patients. RHMC needs to perform this estimate to project its net revenue, which depends on the contractual rates that can be negotiated with third-party managed care payers as well as acceptance of the rates paid by Medicare and Medicaid for these services. Finally, to complete net revenue projections, the medical center must estimate contractual rates. This also uses information from other area hospitals and in some cases a best guess from the medical center’s managed care negotiator.

The Importance of Financial Analyst Objectivity To reiterate a comment from the pro forma development in Chapter One, the absolute toughest assumption in any pro forma is volume projection. However, the second toughest is often the net revenue rate assumptions because of the significant possibility of being too optimistic.

It is important to be relatively conservative when estimating volumes, contractual adjustments, and net revenues. In this industry, as well as most others, optimistic pro forma projection has often given way to greenlighting a project that subsequently fails because of problems in these three areas. Nobody, particularly the financial analyst, wants a finger pointed because of overly optimistic projections. The finance pro forma developer must exercise judgment in critically evaluating the numbers presented from the operations representative. Keep in mind that the latter individual has a bias toward getting a project approved, since this affords growth in that area of responsibility.

The finance representative should never have such a bias. She must remain independent and objective at all times. If the pro forma shows a very good internal rate of return, then it is obvious to all reviewers that the project will be approved on its merits. Do not help the result by improving these critical pro forma elements just because it seems like a good project to do or because the operations representative is pushing to do so. Also, the pro forma finance developer should not become a champion of the project. That is the role of the operations or business development representative. Always stay objective.

Development of Expenses After completing the volume assumptions, projection of expenses can begin. Like revenues, expenses are both fixed and dependent on the volume projection. Because most project expenses are variable (that is, they vary with volume), it is important to have the volume assumption completed before an estimate of staffing and supplies can begin. Table 12.3 is the CV surgery projected income
TABLE 12.3. RHMC Cardiac Surgery Program Income Statement Pro Forma.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross revenues</td>
<td>29,130,000</td>
<td>44,157,000</td>
<td>63,588,000</td>
<td>63,588,000</td>
<td>63,588,000</td>
<td>264,051,000</td>
</tr>
<tr>
<td>Less: Contractual Allowances</td>
<td>22,502,925</td>
<td>34,111,283</td>
<td>49,121,730</td>
<td>49,121,730</td>
<td>49,121,730</td>
<td>203,979,398</td>
</tr>
<tr>
<td>Net revenue before spinoff</td>
<td>6,627,075</td>
<td>10,045,718</td>
<td>14,466,270</td>
<td>14,466,270</td>
<td>14,466,270</td>
<td>60,071,603</td>
</tr>
<tr>
<td>Marginal spinoff revenue</td>
<td>500,000</td>
<td>700,000</td>
<td>900,000</td>
<td>1,100,000</td>
<td>1,300,000</td>
<td>4,500,000</td>
</tr>
<tr>
<td>Total net revenues</td>
<td>7,127,075</td>
<td>10,745,718</td>
<td>15,366,270</td>
<td>15,566,270</td>
<td>15,766,270</td>
<td>64,571,603</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staffing</td>
<td>3,000,000</td>
<td>5,000,000</td>
<td>5,500,000</td>
<td>6,000,000</td>
<td>6,500,000</td>
<td>26,000,000</td>
</tr>
<tr>
<td>Fringe benefits @ 30%</td>
<td>900,000</td>
<td>1,500,000</td>
<td>1,650,000</td>
<td>1,800,000</td>
<td>1,950,000</td>
<td>7,800,000</td>
</tr>
<tr>
<td>Total staffing and benefits</td>
<td>3,900,000</td>
<td>6,500,000</td>
<td>7,150,000</td>
<td>7,800,000</td>
<td>8,450,000</td>
<td>33,800,000</td>
</tr>
<tr>
<td>Variable startup staffing costs</td>
<td>300,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Variable Expenses

<table>
<thead>
<tr>
<th></th>
<th>200,000</th>
<th>300,000</th>
<th>426,000</th>
<th>426,000</th>
<th>426,000</th>
<th>1,778,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiology</td>
<td>80,000</td>
<td>120,000</td>
<td>170,400</td>
<td>170,400</td>
<td>170,400</td>
<td>711,200</td>
</tr>
<tr>
<td>Pharmacy and IVs</td>
<td>80,000</td>
<td>120,000</td>
<td>170,400</td>
<td>170,400</td>
<td>170,400</td>
<td>711,200</td>
</tr>
<tr>
<td>Other ancillaries</td>
<td>40,000</td>
<td>60,000</td>
<td>85,200</td>
<td>85,200</td>
<td>85,200</td>
<td>355,600</td>
</tr>
<tr>
<td>Supplies: RHMC direct variable</td>
<td>1,000,000</td>
<td>1,500,000</td>
<td>2,130,000</td>
<td>2,130,000</td>
<td>2,130,000</td>
<td>8,890,000</td>
</tr>
<tr>
<td>Marginal spinoff cost</td>
<td>150,000</td>
<td>225,000</td>
<td>319,500</td>
<td>319,500</td>
<td>319,500</td>
<td>1,333,500</td>
</tr>
<tr>
<td><strong>Total variable expenses</strong></td>
<td>1,550,000</td>
<td>2,325,000</td>
<td>3,301,500</td>
<td>3,301,500</td>
<td>3,301,500</td>
<td>13,779,500</td>
</tr>
</tbody>
</table>

### Fixed Expenses

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Franchise fee—teaching hospital</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Contract labor—perfusionists</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 3</td>
<td>Year 4</td>
<td>Year 5</td>
<td>Year 6</td>
</tr>
<tr>
<td>------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>MD house coverage</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Medical director fee</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>750,000</td>
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<td>Education</td>
<td>200,000</td>
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<td>150,000</td>
<td>150,000</td>
<td>150,000</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Maintenance costs</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Total nonstaffing expenses</td>
<td>2,300,000</td>
<td>2,050,000</td>
<td>1,950,000</td>
<td>1,950,000</td>
<td>1,950,000</td>
<td>10,200,000</td>
</tr>
<tr>
<td>Total expenses</td>
<td>2,300,000</td>
<td>2,050,000</td>
<td>1,950,000</td>
<td>1,950,000</td>
<td>1,950,000</td>
<td>10,200,000</td>
</tr>
<tr>
<td>Contribution to overhead</td>
<td>8,050,000</td>
<td>10,875,000</td>
<td>12,401,500</td>
<td>13,051,500</td>
<td>13,701,500</td>
<td>57,779,500</td>
</tr>
</tbody>
</table>
statement (pro forma). In addition to its summary of gross and net revenues, it shows expenses by specific category.

**Staffing Expenses** A key expense assumption is estimating the number and type of staff required to perform the services. In the case of the open-heart surgery program, several types of employees are required: specialized operating room nurses and technicians, intensive care unit nurses, additional cardiac catheterization nurses and technicians, and cardiology, respiratory therapy, and cardiac rehabilitation technicians. In this case, RHMC estimates it needs a total of 40.1 additional FTEs in the first year of the program, rising to 56.4 FTEs in the fifth year.

**Fringe Benefits** RHMC is consistent in its use of a 30 percent fringe benefit rate on all pro formas (the derivation of this rate was explained in detail in Chapter One), and on this pro forma the center continues to do so.

**Variable Startup Staffing Expense** As with most new programs, there are expenses incurred to start up before any revenue is generated. These startup costs are usually related to training the new program staff, whether new employees from the outside or existing staff from other departments. This training is obviously important because the staff must be ready to perform competently on the day that the service opens to the public.

In the case of the open-heart surgery program, training is extensive for all levels of staff involved. Most new staff receive eight weeks of intensive training, both in the classroom and on the job, at other hospitals that are already performing the service. In addition, currently employed staff receive the necessary training to treat and service new patients. The cost of their training, as well as the cost of replacement staff paid while others are training outside the unit, is included in startup cost.

**Variable Expenses** To determine variable expenses for the new service, which involves several hospital departments, it is essential to be able to estimate two items with the greatest possible precision. They are the volume (units of service) of the new services to be rendered (which we know is already available because of the work performed to determine revenue) and the cost per unit of service.

Determining the cost per unit of service does not have to be an onerous task. If the organization has developed a cost accounting system, then it should not be difficult to use the cost already established for each individual service code (procedure code). These procedure code costs should then be applied against the projected volume to determine the variable expenses of the new service. If the organization has not
developed a cost accounting system, it can still use the simple, though less sophisticated, method of the ratio of costs to charges (RCC), available to all health care organizations that file a Medicare cost report. The RCC was reviewed in detail in Chapter Four.

**Fixed Expenses** The fixed expenses are generally specific to the program, and of course, by definition, they do not vary with volume. In this case, there are three key fixed expenses: a franchise fee, a cost for twenty-four-hour physician coverage of the cardiology patients in the hospital, and marketing costs.

Regarding the first fixed expense, because RHMC is a community hospital and does not have prior experience or expertise in open-heart surgery, it has decided to affiliate with a respected academic medical center just on the fringe of the RHMC service area, to make the requisite experience and expertise available. The academic medical center decided to charge RHMC a franchise fee for its services, including on-site and off-site training of RHMC staff, any and all required technical assistance, and use of its CV surgeons.

Second, again because RHMC is itself not a teaching hospital, it does not have interns and residents to cover inpatients through the day and night. The RHMC administration decided that to promote and market its new service to primary care and specialist physicians (especially cardiologists) in its service area and beyond, it must offer this twenty-four-hour on-site coverage by hiring its own set of physicians to cover the inpatients. This coverage allows referring cardiologists to increase their comfort level that their patients have adequate care available, especially at night.

As for marketing costs, we see in the projected income statement that this program should earn net revenues of almost $65 million over the first five-year period. The administration has determined that it is worth $1.8 million over that same time period to bring this new program to the attention of its prospective customers, primarily the referring physicians (primary care physicians and area cardiologists). There will be a small amount of marketing directed to the consumer, but this is considered only a secondary consideration because consumers (patients) are not able to admit themselves into the hospital.

**Financial Conclusion: Open-Heart Surgery Program**
The contribution margin, or contribution to overhead, over the five-year period is a positive $6,492,103, excluding depreciation charges. On its face, this appears to be a good return. But this does not tell the whole
story. As was explained in Chapter One, many health care organizations use either the net present value calculation (a dollar answer) or the internal rate of return (a percentage answer). RHMC prefers the percentage methodology inherent in the internal rate of return because it is better able to represent a return in relation to other available investment vehicles. The 29.99 percent internal rate of return on initial investment for the open-heart surgery program justifies the administration’s taking this program and its $2,000,000 initial investment to the December finance committee and the board of directors.

It is important to note that the finance division did more than just present the models in Tables 12.1, 12.2, and 12.3. Staff also built sensitivity models that assign more optimistic and more pessimistic volumes to assess the impact of other possible scenarios. The finance committee requires this sensitivity because its members are aware that a pro forma is only as good as the volume assumptions made.

**DECEMBER FINANCE COMMITTEE**

**SPECIAL AGENDA ITEMS**

In addition to the CV surgery program that the administration presents in December to the finance committee and the regularly scheduled monthly financial statements and accounts receivable report, there are two more routine reports to be presented: a review of the organization’s insurance coverage and a request for approval of the external auditors and their fees for the following year.

**Review of Malpractice Insurance Coverage**

An important feature and function of RHMC’s cost structure and risk management program, professional liability insurance (or malpractice insurance, as it is commonly known) is reviewed with the finance committee once a year. The committee is concerned about the level of coverage as well as the premium costs. Exhibit 12.1 shows the report presented to the committee. As with most insurance, the cost of coverage decreases on each layer above the primary or first layer because there is less chance for a claim being made against these additional layers. RHMC was fortunate to have experienced a reduction of premiums in 2006 and 2007 as a result of a small number of claims being filed. In addition, there were even fewer payments, or losses, against claims made. Still, it is incumbent on the organization to guard itself against potential claims of poor treatment or poor outcomes. It is within
EXHIBIT 12.1. Professional Liability Self-Insurance
Status: Premium Update.
(in thousand of dollars)

RHMC’s self-insurance administrator has estimated the premiums required to maintain our coverage for professional liability over the period through December 2009. The coverage will be identical in amount and structure to that in effect in 2008. An optional third layer of excess coverage was added effective January 1, 2008.

<table>
<thead>
<tr>
<th>Per-Occurrence Limit</th>
<th>Aggregate Limit</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>First layer</td>
<td>1,000</td>
<td>None</td>
</tr>
<tr>
<td>Second layer</td>
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<td>20,000</td>
</tr>
<tr>
<td>Third layer</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

The following schedule indicates the premiums that have been paid in recent years:

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
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<td>650</td>
<td>680</td>
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<tr>
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<td>300</td>
<td>310</td>
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<tr>
<td>Third layer</td>
<td>—</td>
<td>100</td>
<td>95</td>
<td>90</td>
<td>90</td>
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<tr>
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<td>975</td>
<td>1,040</td>
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<td>900</td>
<td>800</td>
<td>900</td>
<td>1,000</td>
<td>1,100</td>
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the fiduciary responsibility of the finance committee members to be apprised of and understand the significance of the level of malpractice coverage. They are comfortable with the current level and understand the need to pay self-insurance premiums.

Review and Approval of Auditors and Their Fees for the Current Year

The final action that is taken by the finance committee this year is approval of the auditors, along with their proposed fees. The audit partner and the manager of the CPA firm that RHMC has been using for a number of years have been invited to present a proposal indicating
the scope of the audit, a high-level discussion of how they plan to conduct the audit, and the various responsibilities of the client. They present the arrangement letter, spelling out in detail the responsibilities of both the audit firm and RHMC. It also spells out any additional services that the organization has commissioned the auditors to perform and the fees for those services. The arrangement letters are standard and have evolved over time as the auditors defended themselves and their firms in court, particularly in cases where the auditor’s client went bankrupt, leaving a line of creditors looking for some recourse.

The audit partner spends some time pointing out current items of interest in the industry (hot topics) and commenting on any topics the finance committee members might want to know more about. The finance committee at RHMC is charged with selecting an audit firm each year. It is important for the members to feel comfortable with their choice because the auditors are passing judgment on the quality of the work of the finance managers. They want a professional and unbiased opinion of the financial statements and of the financial managers and staff. It is an important decision that is made easier if an ongoing relationship has been established over the years.

The committee reviews the audit fees for consistency. The members are interested in any rate of increase over the prior year. In addition, the committee periodically requests that management perform a comparison of pricing with other audit firms in the region to determine if they are being charged more than their peers for the same range of services. Although the committee values a long-standing relationship, members do not want to overpay for it. Thus it is in the best interest of the current audit firm to stay competitive because it knows it will be checked.

**Finance Committee Annual Achievements**

The December finance committee meeting concludes its members’ work for the year. They have had a productive year, reviewing management’s performance in most aspects of health care financial management. In doing so, they touched on certain topics:

- Monthly financial statement reporting and analysis, particularly the variances between actual results and approved budget
- Special review regarding the ongoing payment changes wrought by Medicare and Medicaid through the BBA, subsequent give-back
provisions of the BBRA and BIPA, and reductions continuing to be evident with managed care plans

- Accounts receivable issues and analysis
- Bond debt status
- Health and malpractice insurance analysis
- Approval of the auditors, their fees, and the annual audit and auditors’ management letter
- Pension status and actuary’s report
- Materials management analysis
- Information systems plans, particularly concerning computerized patient record implementation and the new systems needed by the organization
- Approval of the five-year strategic financial plan linked to the organization’s strategic plan early in the year
- Approval of the annual budget for the coming year

Throughout the year, as part of their monthly review of the financial statements, they were also apprised of the income earned on investments. The negative market conditions of the previous two years have not been pleasant for the committee members. However, their review was cursory because a separate investment committee was primarily involved with investment opportunities and results. Although investment policies and practices are beyond the scope of this book, they have in recent years been extremely important in producing overall positive results for health care organizations, especially in light of significant reductions in reimbursements by all the major payers. Still, RHMC managed to avoid the negative investment results of 2006 and 2007 that had proved so onerous to other organizations, thanks to some judicious market timing and “going to cash,” which means they sold off some of their equity and bond holdings and kept the proceeds in cash without bothering to reinvest for the time being.

Although the committee is somewhat disappointed in the overall operating margin results, management’s ongoing education of the members regarding payment reduction and ongoing concerns about cost management have given the members a better appreciation of the
challenges confronting health care organizations. They are in a better position to assess the year just passed and the years to follow. They are concerned about the financial integrity of the organization and worried about how to maintain and even improve the high level of patient care that currently exists. There have been discussions regarding the future of RHMC’s financial position as well as that of the industry in general. It takes on a crystal ball feel, but it is a necessary step and a required management technique for future planning.

LOOKING INTO THE FUTURE OF HEALTH CARE FINANCE

The future of health care financial management and health care financing is anyone’s guess. It could take any of a hundred paths, twisting and winding, approaching forks in the road not currently evident to planners. Decisions could be made by government employees or politicians, seeking to save the Medicare trust fund for future beneficiaries, who may or may not achieve intended consequences. Decisions could also be made by the executives at managed care plans seeking to increase their profits at the expense of patients or providers by limiting their exposures on medical loss ratios. Decisions could also be made by employers around the country, some of whom have grown tired of subsidizing medical insurance for their employees.

Several of these paths could be taken simultaneously, as seems to be the case at the moment. Or they could diverge. Clues abound everywhere about the possible futures of health care finance. There are comprehensive industry models as well as segment models. RHMC and its administration are concerned about the financial implications of future trends. They would be delighted to recognize any particular emerging trend and be among the first to implement services that would improve revenue. They would also be amenable to applying any new ideas that produce efficiency without compromising patient care or patient satisfaction.

For this discussion, it is best to look at the trends for the industry as a whole, for the payers, and for the providers. Over the course of this book, we have seen many concepts used in financial and general operations. We have seen many theories turned into practice and used to maximize the clinical, operational, and financial outcomes for RHMC. It is time to do some crystal ball gazing and see how some of the current trends might reach into the future.
**General Macro Health Care Trends**

Two trends appear to be emerging faster and with more power than in the past.

First, cutting-edge research and development in gene therapy has already produced some startlingly positive results in a few diseases, with the promise of landmark breakthrough in other diseases in the very near future.

Second, the growing value of drug therapy in curing or containing illness is already helping produce some dramatic improvements in the quality of the lives of patients with certain diseases.

Here are some fascinating details regarding these two trends.

**Genomic Medicine and Gene Therapy** Most likely, gene therapy will be the primary medical treatment of the twenty-first century and have a profound effect on delivery of medical care. The human genome is the set of genetic instructions carried within a single cell of an organism. Gene therapies will be the outgrowth of the Human Genome Project, funded by the federal government to find all human genes, and Celera Genomics, a private company that gave the government quite a bit of competition. In February 2001, scientists from the government and Celera, in a joint statement, announced they had located 95 percent of the sequencing of human genetic information with accuracy greater than 99 percent. Interestingly, the announcement also revealed that humans are 99.9 percent genetically identical (Olivier and others, 2001).

Furthermore, according to a 1999 article in the *Chicago Tribune*, the most sweeping near-term benefit of knowing our genes will be a major improvement in health that could supersede the tremendous advances made by vaccines and antibiotics. The article quotes a physician as saying, “Even though we like to think we’re fairly sophisticated in medicine, we don’t cure disease. We make it more bearable, or we prolong people’s lives. Genomic medicine is different. It is the fact that you’re getting at the root cause of the disease and you have rational new ways of treating it.” In fact, another physician who is working on gene repair and gene therapy is quoted as saying, “We can envision a hospital some day that is strictly a gene-therapy hospital” (Kotulak, 1999, p. 1).

In fact, even before the Human Genome Project was finished, *Time* magazine devoted forty-five pages of its special January 11, 1999, edition to genetics. Titled “The Future of Medicine: How Genetic Engineering Will Change Us in the Next Century,” it offers in-depth coverage of the history of modern genetic research, the current climate, and
some of the medical advances that should be available in the near future. Among the possible developments on the horizon:

- Replacing defective cells to generate healthy tissue in combating Alzheimer’s disease, heart disease, and diabetes

- Developing fruits and vegetables to deliver drugs that stave off infectious diseases or treat various chronic conditions rather than relying on injections to do so

- Developing better vaccines to coax the body to churn out killer T-cells, which strike at offending microbes with great specificity

- Lengthening the tip of certain chromosomes that might control the aging process (if this is determined to be correct, it is theoretically possible to rejuvenate a part of any organ with a simple injection)

Since the completion of that phase of the Human Genome Project, a great deal of new information has sprung forth. In one major development, it is clear that genomic medicine in the present and in the future includes genetic testing. According to a major cover story in the December 11, 2006, of Newsweek, new knowledge about how our genes affect our health is transforming the way diseases are understood, diagnosed, treated, and even predicted. “Today, gene tests are available for more than 1,300 diseases, including cystic fibrosis and hemophilia” (Kalb, 2006, p. 54). In the future, such tests will get cheaper and faster, allowing for genetic testing on more complex disorders such as adult-onset diabetes, Alzheimer’s, heart disease and depression.

There are great social and ethical issues at work here, and much bioethical debate is currently under way. The private sector is heavily involved in its own human genome research, and some companies have already developed practical solutions to dealing with some diseases.

In a related development, President Bush is now urging Congress to pass legislation that would outlaw discrimination on the grounds of genetic testing. In his weekly radio address on June 23, 2001, the president said, “By better understanding the genetic codes in each human being, scientists may one day be able to cure and prevent many diseases. As with any other power, this knowledge of the codes of life has the potential to be abused.”

Because new genetic research should make it possible to identify an individual’s lifetime risk of cancer, heart attack, and other diseases, the average American is already worried that this information could be used
to discriminate in hiring, promotion, or insurance. Employers and insurers could potentially save millions of dollars if they used predictive genetics to identify in advance, *and then reject*, applicants who are predisposed to develop chronic diseases. Fear of discrimination could discourage people from seeking useful information about their genetic makeup. As of this writing, this legislation has still not been approved.

In any event, the genie is out of the bottle. Rampant and rapid development of these therapies is likely to be the number one health care story in the twenty-first century.

**Drug Therapy** Genomic medicine allows for the development of the genetic testing, but testing is just one aspect of the future genomic medicine. If a person tests positive for potential diseases, effective therapies will need to be available to guide safe, effective, and appropriate treatment. Drug therapy is an extension of much of the gene therapy that was done throughout the 1990s. Wonder drugs that significantly improve the health of patients with specific conditions have been coming to market in recent years—with enormous price tags attached. Many of these new drugs will reduce a patient’s pain or cure long-standing illness. The wonder drugs continue to come to market, often with assistance from the same genetic research that is powering genomic medicine. The new science of pharmacogenetics marries the discoveries of the Human Genome Project to technologies like DNA chips and traditional medicine (Begley, 2001). This allows patients to use drugs that have been designed specifically for a rare disease that they may be carrying. This is a great advance for them, allowing them to live longer and more productive lives.

Still, there is a great upfront cost for these advances. In the case of personalized medicine, the big drugmakers are unlikely to produce a big profit-generating drug if each one is individually tailored to specific patient needs. But as stated in the *Newsweek* article, “A major goal is to create new sophisticated therapies that home in on a disease’s biological glitch, then fix the problem. Already genes are helping to predict a patient’s response to existing medicine” (Kalb, 2006, p. 60). This field is called pharmacogenetics.

Meanwhile, the hospital and physician side of the industry and the insurance companies will be tested in their resolve to use and reimburse these new therapies. Pharmaceutical expenses will account for a high percentage of dollar increases in coming years. It is not expected to get better as efficacious miracle drugs make their way through the Food and Drug Administration’s testing process and become available for
prescription use. So providers and insurers are already gearing up for seemingly inevitable cost increases related to these new drug therapies. It remains to be seen if these high-cost drugs eventually lower the overall cost of health care throughout the nation.

**National Health Care Expenditure Projection** Chapter One noted that the United States spent more than $1.9 trillion on health care in 2004, the last year for which data were available. This accounted for 15.9 percent of the country’s GDP. Yet in information published on the government’s Web site, it is estimated that health care spending will increase to $4.14 trillion, or 19.6 percent of the GDP, by the year 2016, an increase of more than 100 percent over a twelve-year period. This is a huge dollar increase, backed up by an enormous movement of additional funds being spent on the nation’s sick care and well care.

According to the summary of the study shown in Table 12.4, the areas with the greatest expenditure increase between 2004 and 2016 are drugs (a whopping 162.3 percent) and home health care (160.2 percent). As was just recounted, the reasons for drug increases should be no surprise. A major part of the increase in home health care expenditures is the aging of the baby boomers and their expanding need for medical care in the home.

Meanwhile, hospitals (127.2 percent) and nursing homes (83.4 percent) expect much smaller increases, in large part because the federal and state governments are continuing to ratchet down these institutional payments and because of ongoing, tough, and tedious managed care negotiations.

No matter how this pie is sliced, $4.1 trillion is a gigantic pile of money that is going to be paid to health care industry providers. In no way is this industry in decline. Not only does the gross number increase, but the GDP percentage does also. In the future, this industry will continue to play an ever-larger part in the financial wealth of the nation, as it has always played the key role in its health.

**Industry Payer Trends**
Along with the general health care trends, it is important to concentrate on the trends playing out in the payer community.

**Medicare** The major player in the payer community is Medicare. In its current form, it pays out more money for health care services than any other third party. And as a government agency, it is subject to politics in

<table>
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<tr>
<th>PAYERS</th>
<th>2004 (Actual)</th>
<th>2008 (Projected)</th>
<th>2012 (Projected)</th>
<th>2016 (Projected)</th>
<th>Change, 2016 Projected vs. 2004 Actual (%)</th>
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<td>Out-of-pocket payments</td>
<td>235.8</td>
<td>281.3</td>
<td>353.3</td>
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<td>175.4</td>
<td>235.2</td>
<td>311.4</td>
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<td>Medicare</td>
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<td>478.6</td>
<td>641.2</td>
<td>862.7</td>
<td>175.8</td>
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<td>Medicaid</td>
<td>292.0</td>
<td>362.0</td>
<td>492.4</td>
<td>677.0</td>
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<td>Other government</td>
<td>233.2</td>
<td>292.9</td>
<td>373.2</td>
<td>474.0</td>
<td>103.3</td>
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<td>2,420.1</td>
<td>3,173.6</td>
<td>4,137.0</td>
<td>122.6</td>
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<th>PROVIDERS</th>
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<td>Hospital care</td>
<td>566.9</td>
<td>747.2</td>
<td>988.2</td>
<td>1,287.8</td>
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<td>Physician services</td>
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<td>506.2</td>
<td>650.4</td>
<td>819.9</td>
<td>108.3</td>
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### Table 12.4 continued

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<th>2009</th>
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<td>Dental services</td>
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<td>104.9</td>
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<td>Other professional and personal services</td>
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<td>Nursing home care</td>
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<td>169.8</td>
<td>210.9</td>
<td>83.4</td>
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<td>Home health care</td>
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<td>62.7</td>
<td>83.7</td>
<td>111.1</td>
<td>160.2</td>
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<tr>
<td>Prescription drugs</td>
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<td>497.5</td>
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<td>Durable medical equipment</td>
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<td>Other nondurable medical products</td>
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<td>Program administration (public and private)</td>
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<td>233.5</td>
<td>295.7</td>
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<td>Government public health activities</td>
<td>52.5</td>
<td>70.9</td>
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<td>Investment in research and construction</td>
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<td>152.8</td>
<td>202.2</td>
<td>267.0</td>
<td>122.7</td>
</tr>
<tr>
<td>Total</td>
<td>1,858.9</td>
<td>2,420.1</td>
<td>3,173.6</td>
<td>4,137.0</td>
<td>122.6</td>
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<tr>
<td><strong>Share of GDP</strong></td>
<td>15.9</td>
<td>16.5</td>
<td>17.9</td>
<td>19.6</td>
<td>23.3</td>
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a significant way. Since its inception, Medicare has always been a program under heavy political pressure due to the size of its budget and the voter power of its constituency, all American citizens aged sixty-five years and older. The original Part B payment methodology, which did not include an automatic premium inflator, is but one example. The most recent example is the 2003 Medicare Modernization Act (MMA), which was not budget-neutral and was passed, signed, and enacted despite the subsequent admission that the Centers for Medicare and Medicaid Services administrator (a political appointee) had the Medicare actuary lie to the Congress about the amount of money the program would cost over a ten-year period ($534 billion rather than the reported $395 billion) in order to get it passed.

The problem is that all of this extra cost has contributed to a significant diminution of the solvency of the Medicare Part A trust fund. Right after the Balanced Budget Act was enacted in 1997, the program moved its date of actuary-based insolvency from 2000 to 2030. Yet with the passage of the MMA in 2003, trust fund insolvency has moved backward to 2018. So just where does that leave the Medicare program in the near future? The government cannot politically afford to let the Part A trust fund fail (not with all the baby boomers about to enter the program starting in 2011). And yet the new prescription drug costs will not be able to be removed at this point.

It is very possible that in the very near future, there will be a second Balanced Budget Act, which may again reduce the reimbursements to the major provider of services, including hospitals, physicians, skilled nursing facilities, and home health agencies. It could also include the pharmaceutical companies, some of which are currently experiencing record profits. Furthermore, because the program is so political, the near future of Medicare is dependent on which political parties occupy the office of the president as well as the majority in the House of Representatives and the Senate.

Therefore, there are many possible paths and futures for Medicare health care financing, which could take some interesting turns. The various proposals under consideration continue to make the future of health care financial management worthy of close attention.

**Managed Care** As shown in Figure 4.8, almost seventy million Americans, or 23.4 percent of the population, are enrolled in managed care programs. Most of these members are enrolled through their employers. Still, according to the latest government statistics, 13.1 percent of
Medicare patients in 2003, or 5.3 million (13.1 percent times 40.2 million); and 54 percent of Medicaid patients in 1998, or 30.66 million (59 percent times 51.97 million) are enrolled in managed care programs that contract directly with the HMO to pay the appropriate annual premium (National Center for Health Statistics, 2006, tabs. 144 and 145).

Managed care emerged quickly in the 1990s to supersede the old indemnity health insurance policies that paid providers the charges that were billed to insurance companies. When the ultimate payers—the employers—tired of premiums rising at an ever-increasing level, they moved most of their plans to managed care. Throughout the 1990s, managed care plans controlled employers’ premium increases through utilization controls and heavy emphasis on payment limitations to providers.

By the end of the century, managed care plans’ control on both areas was under severe attack. The government attempted repeatedly to pass patient protection legislation, but it was never achieved. The legislation would remove some of the utilization controls that the health plans have been using primarily to limit specialist referrals, often for highly expensive tests. In addition, employers have been hearing a loud-and-clear call from their employees that they want more choice in provider selection than has been available through the basic managed care health plan. This has led to new point-of-service (POS) offerings in many plans that allow the member to receive service from providers outside the plan’s panel with very little financial disincentive. This freedom of choice, however, comes at a price.

Inevitably, the industry saw the return of health care inflation that outstrips the inflation inherent in the rest of the economy. Since 1999, employers felt the pinch as managed care plans required premium increases of 10 to 18 percent through 2006. At the same time, the percentage of U.S. workers enrolled in restrictive managed health care plans fell for the first time in 1998 and has continued to plunge since that time, suggesting that the managed care strategy has run its course. In addition, in the same time period, enrollment in the less restrictive PPO plans increased. This is an indication that the restrictive managed care plan premise of “less access, less cost” was no longer acceptable.

These upward trends in cost are a function of several phenomena:

- Plans with less restriction and more choice
- The upward surge of pharmaceutical costs, which were borne in large part by the health plan until the advent in the early 2000s of additional cost shifting to the enrolled beneficiary (the employee)
The increase in the health plan’s medical loss ratio, which has been driven by smaller than required premium increases over the past several years

The future of managed care in America is in some doubt. Although more Americans are enrolling in managed care plans through Medicare and Medicaid, employer-based managed care plans have been losing significant members since the late 1990s. The biggest change in managed care is the move to consumer-driven health plans, which, as stated in Chapter Four, are actually high-deductible insurance plans. This may work to keep managed care a viable force—or it may not. What is more likely, however, is that managed care may play a role in the future of universal health care.

**Universal Health Care** At the time of writing, universal health care (UHC) seems to be the most likely health care payment future. Universal health care has been discussed as an option since the early 2000s, and it has been gaining more and more acceptance year by year. In form, it differs from “socialized medicine” (also known as national health insurance), which has always been conceptualized as a single-payer system (usually run by the federal government.) Instead, UHC, as generally proposed, would have almost all citizens covered by some form of health care insurance, but it would be designed around many of the currently available plans (Medicare, Medicaid, commercial managed care, indemnity, worker’s compensation, and so on), supplemented by government-run joint insurance programs for individuals not already covered. Another commonly proposed feature would require employers with twenty-five or more employees to cover their workers with a base level of health insurance or be subject to additional taxes, generally in the amount the insurance would cost. Individuals who cannot afford the insurance and are not eligible for any other coverage would get government subsidies.

UHC has been embraced, since 2001, by an extremely strange assortment of organizations and individuals. Those that have come on board include several Blue Cross plans across the country (these were very early advocates), the Commonwealth Fund, a coalition of physician groups, the Institute of Medicine, Senator Edward Kennedy, Newt Gingrich and Senator Hillary Clinton (together), and the American Hospital Association. Some of these supporters were opposed to the UHC concept in earlier years. They changed their position when they realized not only that the current financing system was broken but just how broken it is.
The national logjam began to break up when the state of Massachusetts in 2005 passed and signed UHC legislation for all state residents. As the first state to get this done (with a Republican governor and a Democratic legislature), it became a leader in the UHC movement, and its features were highly scrutinized by at least eighteen other states, which have embarked on similar legislation. These state initiatives are a direct response to the lack of action by the federal government. So whether or not the feds act (and they are likely to do so in 2008 with the change in the majority makeup in Congress), the states are already taking matters into their own hands.

**Hospital Segment Trends**
The macro and payer trends have a direct impact on the largest segment of the health care industry, the hospitals. In 1975, there were approximately 1.5 million hospital beds in America. By 2005, this number had shrunk to just under a million, a reduction of about 33 percent in just twenty-five years (National Center for Health Statistics, 2006). In addition, the total number of hospitals had decreased from 7,156 to 5,764 in the same time period. If the bed count reduction is extrapolated out, there should be no need for any more hospital beds by the year 2038. But the demise of the American hospital is not likely to come that soon, and possibly never.

Here’s a riddle concerning the future of hospitals and hospital care. If the health care community is going to practice *Star Trek* medicine in the future, with medical tricorders and magic pills developed through the use of gene therapy that do away with the need for surgery, why does the *Starship Enterprise* have a sick bay? It may have to do not only with the technical competence and proficiency of the nurses, doctors, and technicians that treat the patient but may also involve the compassionate care these individuals give. Patients have come to prize the high-tech and high-touch environment of hospital care.

There is good reason to believe that hospitals will have to reinvent themselves in the current century to offer improvements in many areas and remain a viable delivery system. There is also ample evidence to believe that they can do so. Improvements might include the following:

- **Patient-friendlier processes**, from the registration function to the clinical climate, followed by discharge planning and billing requirements. Several hospitals across the country have adopted systems to deal with these issues. Many facilities have come to rely heavily on preregistration and point-of-service registration processes. Most new
hospitals are built with private rooms only; semiprivate rooms and wards are a thing of the past in many communities. Similarly, most renovation projects on the patient floor incorporate the private-room concept. Many hospitals have also implemented highly structured discharge planning techniques that emphasize patient and family education and a variety of posthospital options. This is often called continuum of care, and it improves the awareness of patients and their caregivers.

■ Implementation of pricing transparency practices. Recent years have brought on a loud call from patient advocates (sometimes in the form of lawsuits) to allow patients to understand the price of their care before admission to the hospital. Hospitals have always had trouble complying with this request because the services rendered could vary widely, depending on some underlying medical conditions, and this is not always known at the time of registration. Still, when the price to the patient is mentioned, it does not necessarily mean the charges generated by the hospital. Instead it has come to mean the amount of deductibles and copayments that will be required from the patients themselves. Part of this call to action is the result of the increase in consumer-driven health plans (CDHPs), which require considerably more out-of-pocket payments by the beneficiary. Another part is the general discontent over the lack of financial information supplied to the patient by the hospital before the care is rendered.

Still, cutting edge computer systems have been developed to allow hospitals to compute approximate out-of-pocket amounts based on the physician’s initial reason for the visit, a complete understanding of the patient’s third-party insurance coverage (because hospitals, since HIPAA implementation, have better access to patient coverage information in some third-party systems), and computer systems that compute the appropriate amounts.

■ Development of additional revenue sources. For hospitals to prosper and thrive in the future, they have to tap into new health care services that may not exist today. One obvious developing area is the gene therapy clinic. That remains in the future; however, there are a number of areas where hospitals can increase inpatient and outpatient revenues today. Some outpatient care areas are alternative medicine centers, midlife women’s centers, and digestive disorder centers, along with stroke centers, frail elderly units, and cardiac crisis centers. To survive in the future, hospitals must develop these new revenue sources or steal market share from competitor organizations (which are of course also trying to do the same).
**Fundamentals of Health Care Financial Management**

- **Cost reduction from improved clinical decision support systems.** There is an enormous opportunity in most hospitals to improve the cost structure through utilization and consumption controls, along with standardization of protocols and supplies. This was covered in some detail in Chapter Eleven. Hospitals that want a secure future have to stop talking and start doing. The best chance these providers have to accomplish this task is through clinical decision support systems that include the hospital’s unit costs and volumes segregated by physician and clinical coding (such as ICD-9-CM and CPT-4 codes). This could and should be incorporated into clinical (critical) pathway development and monitoring. These systems exist now. Successful providers will take a leadership position and enlist their physicians in changing their ordering patterns to reduce costs while maintaining or improving quality. Using clinical decision support tools is one of the best opportunities for health care systems of the future to position themselves as low-cost, efficient, patient-friendly providers.

- **Improved outcomes for the use of computerized patient records systems.** As noted in Chapter Ten, CPR holds tremendous promise for improved patient outcomes, more efficient services, better documentation by clinicians, and better reporting to a variety of users of clinical information. Some current and future CPR capabilities include matching patients with their medications through the use of barcoding, accessing personal health records online (similar to current online banking practices), reducing prescription errors and duplicate testing, and being able to send a patient’s complete medical history to various doctors.

- **Pursuit of the concept of a virtual hospital or a hospital without walls.** This entity may include only a small physical structure for major surgery and critical care beds. All other activities would take place at a cluster of widely separated (or neighboring) facilities (for example, imaging center, same-day surgery center, and ambulatory center) for activities that cannot be accomplished over the phone or through telemedicine. There would also be a communications center to facilitate electronic monitoring of chronic patients and telemedicine capabilities.

**Health Care IT Trends**

Information system advances hold out a great opportunity for improving quality and efficiency at health care organizations. Because the clinician knows more about the patient and his or her medical, social, and
economic history than anyone else on staff, capture of this knowledge in a computerized patient record that can store, retrieve, and display this information in a user-friendly and timely manner is extremely useful and available now. Information of this type permits the clinician to develop a treatment plan sooner because it makes reaching a correct diagnosis quicker. In fact, in the future, computers will be assisting clinicians in patient diagnosis. Medical databases can already assess the probability of a diagnosis according to the input of symptoms and complaints presented by the patient. The databases will be updated constantly in real time with the latest clinical findings as published in clinical journals from around the world. Once the diagnosis is made, these databases will also recommend the most efficacious treatment pattern. Clearly, a targeted approach to treating a properly diagnosed illness has a better chance of clinical success with a lower cost for achieving it.

These databases are among the many improvements that IT promises. Each year in February, the magazine Healthcare Informatics looks at the nine hottest trends. In the February 2007 issue, the hot trends were identified as disease management systems, enterprise master patient index, electronic medical records (CPR), pay for performance, personal digital assistants, personal health records, telehealth, storage (for digital imaging), and vendor consolidation. Now compare that with the list from February 2001: application service providers, data security, integration, supply chain management, workflow automation, wireless, customer relation management, convergence, and disease management. Typically, the trends are chosen on the basis of at least one of three critical components to health care delivery: lowering overall costs, offering a competitive advantage, or improving patient care. Clearly this is an evolving field but one that holds the promise of a better future in health care delivery.

So we can look at these important areas of concentration at this moment in time. Yet as the past is prelude, hot items always pass, to be replaced with the next big thing. Still, IT in the future of health care will play a key role in helping organizations achieve goals, mundane or lofty. When it comes to technology, there are few limits on the improvements that can be made to the care of the patient at a reasonable cost.

Future Conclusions

All this prognosticating about the future holds big promises and big pitfalls. As the health care industry continues to prepare for its unknown future, it faces a daunting financing challenge. The industry needs to
decide if it truly believes that projected expenditure levels can be sustained. Also, will the country continue to allow a disproportionate amount of its wealth to be used for health care in the manner it has in the past? The industry is going to have to face public schizophrenia and political posturing as it winds its way down the path toward an unknown tomorrow. The one constant we are assured of is that there will always be change.

In late 2006, the financial consulting firm Deloitte forecast a very interesting future in a report titled *The Catalyst for Health Care Reform*. This report proposes a framework in which the American health care financing market would operate like a free-market economy, with universal health insurance available to all citizens. These consultants believe that this “insurance-for-all” concept would dramatically increase the number of individuals covered by health insurance, create new markets for all market participants, increase competition, remove barriers and spur innovation, align the tax code with desired outcomes, create a governance model more responsive to market demands, and launch initiatives that will fill gaps in current knowledge and innovation.

Deloitte believes that four market-based reforms are required to improve the effectiveness and efficiency of the health care financing market:

- Align the tax code with public policy to improve affordability
- Rationalize the regulatory model to encourage innovation
- Give consumers better information, and let the market respond
- Reward high-performing providers and compliant patients through performance-based incentives

Finally, Deloitte believes that its insurance-for-all model will provide a number of substantial benefits, including stimulating the economy, reducing taxes, increasing productivity for the uninsured population, providing a market boost to health plans and providers, encouraging lower employer premiums, providing tax credit to uninsured Americans, and engaging all industry stakeholders.

That would be a much sweeter future than is envisioned by other seers. Regardless of outcomes (none of which are assured, of course), in the end, health care finance professionals have to understand *all* the factors that affect the finances of the industry. Whether they are managers, accountants, financial analysts, payroll or accounts payable specialists,
materials management buyers, receivers or distributors, registrars, billers, collectors, or ombudsmen, they all have a common goal: to support patient caregivers in every way possible. This usually means using their expertise to maximize revenues or minimize costs so as to produce the highest possible operating and net margins so that the health care organization they represent can continue to buy the latest medical equipment and hire the best-qualified personnel to provide the best in patient care. This may be why CFO magazine in 1999 published an article that is just as relevant today. Titled “Critical Condition: Why Healthcare CFOs Have the Toughest Finance Jobs in America,” the article quotes a number of health care CFOs. As one says, “The whole industry is in turmoil, and I don’t think any of us know where this is going. We have a lot of options, and I’m not sure any one is the right one, but decisions have to get made. It’s not just a business; there are enormous social considerations. Every day we have to consider that the consequences of not doing a good job are just terrible. We take it very, very seriously” (McCafferty, 1999, p. 71).

They take it seriously at Ridgeland Heights Medical Center, with an occasional sip of goofball humor thrown in on the side. Finally, the finance management and staff are happy to conclude another successful year of doing their jobs to the best of their ability. Then the clock strikes midnight on December 31, 2008. As the second hand rolls over into a new year, many of them are hopeful that a new era may dawn for the health care industry and a very affirmative opportunity for healthy financing.

“Dad, are you finally done?” asks an overly tired Susie.

“Well, honey, I guess I’m done with this book,” says a greatly relieved Sam. “But I don’t think I’m done getting out the message of how important the things that we do in health care finance are. I suppose I’ll keep doing something of this sort for a while. You know I enjoy doing it, so I’ll just stay with it.”

“Yeah, Dad, that’s great. But remember, I just heard you tell this whole story over the last year. I’d really rather go out and kick the soccer ball around with you.”

“You’re right,” her proud dad beams at the active little girl. “Let’s go.”
PRACTICAL TIPS

■ When developing projected financial statements (pro formas) of any kind, remember always to spend the greatest amount of time developing the volume assumptions. These are the most important assumptions because they drive gross revenues, net revenues, and variable expenses.

■ Review the organization’s professional liability (malpractice) insurance to be sure that there is a high enough limit of excess coverage for most contingencies.

■ Be sure that your auditor’s fees are competitive (that the quality and service you are receiving is appropriate to the fee) by doing periodic market analysis.

■ Always understand where your organization may be headed by knowing how it got where it is today. Study the history of the organization and all the facets of the business and industry so that logical and effective conclusions and decisions can be drawn.

DISCUSSION QUESTIONS AND ACTIVITIES

1. Pick one hospital area that is generally profitable (imaging, surgical services, cardiology), and develop a pro forma for a service expansion of your choice. Remember the importance of volumes in the development of the pro forma.

2. Debate the need and usefulness of hospital and physician professional liability (malpractice) insurance in America. Does the need for the insurance add to or detract from the care that is given? What is its effect on the cost of care?

3. Discuss the future of health care finance. What do you think it will look like ten years from now? What do you want it to look like? How can you reconcile the differences, if any? Most important, what can you do to change the future?
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