

ESSENTIALS OF PHYSICIAN PRACTICE MANAGEMENT

BLAIR A. KEAGY · MARCI S. THOMAS

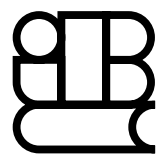


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CONTENTS

List of Figures and Tables xi

Acknowledgments xvii

Preface xix

PART ONE: FINANCIAL MANAGEMENT 1

1 Budgeting for Physician Practices 3

Marci S. Thomas

2 Revenue Cycle 33

Lou Porn, Polly Minugh

3 Understanding the Cost of Providing Services 56

Suriya H. Grima, John A. Grima

4 Taxation and Physician Practices 85

Anne M. McGeorge

- 5 Capital Investment Decisions 100
Marci S. Thomas, Elisabeth Fowlie Mock
- 6 Monitoring Financial Performance 124
Teresa L. Edwards

**PART TWO: REGULATORY ENVIRONMENT AND
RISK MANAGEMENT 143**

- 7 Negotiating Managed Care Contracts and
Contract Management 145
Beacham Wray
- 8 Federal and State Regulations 174
Bruce A. Johnson
- 9 Corporate Compliance in a Medical Practice Setting 195
Bruce A. Johnson
- 10 Risk Management 211
Kathryn Johnson

PART THREE: HUMAN RESOURCE MANAGEMENT 239

- 11 Governance and Leadership in a Medical Practice 241
Blair A. Keagy
- 12 Human Resource Management 268
Bruce J. Fried, Marci S. Thomas, Lisa L. Goodrich
- 13 Physician Compensation 291
Lou Porn
- 14 The Role of Nonphysician Clinicians in Medical Practice 311
Blair A. Keagy

- 15 Impact of Nursing Workforce Issues on the Physician
and Practice Manager 330

Elizabeth A. Arsenault

**PART FOUR: STRATEGIC CONSIDERATIONS: PLANNING,
MARKETING, AND MANAGEMENT 347**

- 16 Developing a Business Plan 349

Lou Porn

- 17 Adding a New Service or Program to a Medical Practice 369

Blair A. Keagy

- 18 Marketing a Practice 394

Karen McCall, Dan Dunlop

- 19 Integrating a Clinical Research Program into
a Medical Practice 410

William A. Marston

- 20 Relationships Between Medical Practices and
Community Hospitals 433

Blair A. Keagy

- 21 Academic Medical Centers 455

Mary Jane Kagarise, Anthony A. Meyer

PART FIVE: INFORMATION MANAGEMENT 477

- 22 Information Systems 479

David D. Potenziani

- 23 Performance Improvement, Teamwork, and
Monitoring Outcomes 501

Bette G. Brotherton, Larry Mandelkehr

24 The Twenty-First-Century Medical Environment 524

George F. Sheldon

The Editors 536

The Contributors 538

Index 545

LIST OF FIGURES AND TABLES

FIGURES

- 1.1 The Budget in Relation to the Planning and Control Cycle
- 1.2 Relationship Between Level of Effort and Precision
- 1.3 Budgeting Process
- 2.1 Patient Service Revenue Cycle
- 2.2 Patient Access Functions
- 2.3 Billing and Collections
- 2.4 Calculating Payment with the RBRVS Methodology
- 3.1 Direct and Indirect Costs for Pittsburgh Family Practice
- 3.2 Calculating Percentages to Allocate Support Costs
- 3.3 Fully Allocated Cost for Newborn Visit
- 3.4 Proposed HMO Fixed Rate to Cover Direct Costs for Newborn Visit
- 3.5 Simplified Breakeven Formula
- 3.6 Mammography Screening Data
- 3.7 Breakeven Calculations
- 3.8 Breakeven Graph for Mammography Screenings
- 3.9 Breakeven Calculation Including Profitability and Overhead
- 3.10 Expected Average Rate of Reimbursement
- 3.11 Group Practice Acceptance of Capitated Contracts in 2000

- 3.12 Capitation Breakeven Formula
- 3.13 Dr. Foster's Capitation Breakeven Calculation
- 3.14 Capitation Breakeven Calculation for New Patients
- 3.15 Average Variable Cost per Visit
- 4.1 Advantages and Disadvantages of Taxable and Tax-Exempt Status
- 5.1 Types of Capital Investments
- 5.2 Components of the Project Business Case
- 5.3 Capital Investment Analysis
- 6.1 Steps in the Benchmarking Process
- 7.1 Steps in Contracting with MCOs
- 7.2 Categories of Payers
- 7.3 Evaluating the Marketplace
- 7.4 Perform Financial Analysis and Model the Effects of the Contract
- 8.1 Analytical Framework for Laws That Apply to Medical Practices
- 10.1 Median Awards for Medical Negligence, 2002
- 11.1 Increase in Patient Choice Options During the Late 1990s
- 11.2 Increase in Practice Size and in the Number of Physicians in Large Groups
- 11.3 Increase in Administrator Compensation, 1996–2000
- 11.4 Percentage Change in per Capita Health Care Spending, 1995–2002
- 11.5 Increase in Operating Expenses and Medical Revenue, 1998–2000
- 12.1 Advantages and Disadvantages of Internal Versus External Candidates
- 12.2 Strategies to Improve Job Satisfaction Factors
- 12.3 Behavioral Rating Scale Item for a Practice Receptionist
- 13.1 Steps in the Compensation Process
- 13.2 Role of the Compensation Committee
- 13.3 Example of Compensation Formula Design
- 13.4 Steps in the Conceptual Design Process
- 13.5 Overall Compensation Formula Design
- 13.6 Quality as an Allocation Factor for Overall Practice Profit
- 15.1 National Supply and Demand Projections for FTE Registered Nurses, 2000–2020
- 15.2 Ages of Registered Nurses, 1980–1996
- 16.1 Planning Process Leadership
- 16.2 Characteristics of Mission and Vision Statements
- 16.3 Examples of Strategy Initiatives
- 16.4 Sample Report on Ratings for an Initiative of Improving Affiliate Operations
- 16.5 Sample Timeline for Plan Implementation
- 17.1 Median Revenue per FTE MD After Operating Costs
- 17.2 Ancillary Services Producing the Most Profit per FTE MD
- 20.1 Decreasing Discharge Rates and Lengths of Hospital Stay

- 20.2 Hospital Admissions per 1,000 Population in Selected Industrialized Nations, 2000
- 20.3 Acute Care Beds per 1,000 Population and Average Length of Stay in Selected Industrialized Nations, 2000
- 20.4 Comparison of Administrative Costs in Health Care in the United States and Canada, 1999
- 20.5 The Top Three Hospital Revenue Generators per FTE Physician
- 21.1 Breakdown of Medical School Affiliations with AAMC COTH (Council of Teaching Hospitals) and Health System Hospitals
- 21.2 Relationship of Medical Schools to Their Parent Universities
- 21.3 Structure of the Faculty Practice Plan
- 21.4 Medical Schools by Geographic Region
- 22.1 Common Practice Applications and Functions
- 22.2 Common Applications with a Patient Focus
- 22.3 Traditional Approach to Strategic Planning
- 22.4 Emerging Approach to Strategic Planning
- 23.1 Sample Control Chart: Percentage of Children Not Receiving Immunizations During a Seven-Month Period
- 23.2 Sample Completed Action Plan
- 23.3 Sample of Data Collected, Analyzed, and Graphed in Preparation for a One-Hour AIDE Team Meeting
- 23.4 Sample Cause-and-Effect (Fishbone OR Ishikawa) Diagram
- 23.5 Sample Cause-and-Effect Diagram Identifying Root Causes of Problems
- 24.1 Health Care Spending as a Percentage of Gross Domestic Product
- 24.2 Actual and Projected Numbers of Active MDs and DOs per 100,000 Population in the United States
- 24.3 Numbers of Physicians per 1,000 Population in Selected Developed Countries

TABLES

- 1.1 RBRVS Illustration
- 1.2 CPT Codes Categorized by Level of Effort
- 1.3 Actual and Projected Visits for 2003 and 2004
- 1.4 Projected Population in Highgrove Service Area for 2004
- 1.5 Projected Income Levels in Highgrove Service Area for 2004
- 1.6 Projected Patient Visits by Month for 2004
- 1.7 Indicators for Additional Analysis
- 1.8 Percentage of Patients in Each Work Level by Specialty for January

- 1.9 Total Visits and RVUs by Specialty for January
- 1.10 CPT Codes Converted to Work Level RVUs and Charges per Payer Type
- 1.11 Projected Gross and Net Revenue per Payer per Specialty for January
- 1.12 Revenue Budget for All Specialties for January
- 1.13 Budgeted Physician Compensation for 2004
- 1.14 Budgeted Nonphysician Compensation for 2004
- 1.15 Maximum RVUs per Month for Clinical Employees
- 1.16 RVUs for January
- 1.17 Variable Labor Requirements for January
- 1.18 Budgeted General Operating Costs for 2003 and 2004
- 1.19 Operating Budget for 2004
- 1.20 Cash Budget for 2004
- 3.1 Assumptions Behind Allocation Bases
- 3.2 Allocated Costs and Total Costs
- 3.3 Allocation of Costs to Visits and to RVUs
- 3.4 Payer Types
- 3.5 Payer Mix and Average Reimbursement Rates for Mammography
- 3.6 Use Rate Sensitivity
- 3.7 Payer Mix for Discussion Question 6
- 4.1 Comparison of Tax Structures
- 4.2 Establishing Comparability of Physicians' Compensation
- 5.1 Weighted Average Cost of Capital
- 5.2 Payback Period Analysis for Two Alternative Investments
- 5.3 Computation of Net Present Value for Densitometer
- 5.4 Computation of Net Present Value for Mammography Unit
- 5.5 Excerpts from Present Value of \$1 Table
- 5.6 Calculation of Present Value of Ordinary Annuity for Five Years at 10 Percent
- 5.7 Excerpts from the Present Value of an Ordinary Annuity Table
- 5.8 Strengths and Weaknesses of Return on Investment Analytical Tools
- 5.9 Cornerstone ENT Expansion Evaluation
- 5.10 Lease or Buy Data
- 5.11 Cash Flow Evaluation for Purchase
- 5.12 Cash Flow Evaluation for Operating Lease
- 5.13 Types of Debt Financing
- 6.1 Report Card for the Richardson Obstetric Group
- 6.2 Payer Evaluation Sheet
- 6.3 Stonehill Family Practice Payer Mix Evaluation
- 6.4 Payer Mix for Discussion Question 2
- 8.1 Sources of Law by Practice Issue
- 9.1 Risk Areas Identified by the OIG for Physician Practices

- 10.1 Malpractice Climate in Various States, 2003
- 13.1 Performance Areas and Metrics for Compensation Formulas
- 13.2 Cost Allocation Considerations
- 13.3 Allocation of Revenue and Costs by Specialty
- 13.4 Allocation of Revenue and Costs by Individual
- 16.1 Issues a Strategic Plan May Address, by Type of Practice
- 16.2 Three Markets with Different Characteristics
- 16.3 Sample Preliminary Task List and Timeline for One Initiative
- 19.1 Typical Compensation from a Phase III Trial of an Investigational Compound for Healing Diabetic Foot Ulcers (DFUs) Versus Clinical Revenue Generated from DFU Treatment (Medicare Allowable)
- 19.2 Personnel and Time Requirements for a Typical Trial
- 19.3 Media Options for Recruitment and Relative Costs
- 19.4 Reasons for Patient Dropout
- 21.1 Affiliated Health Schools
- 22.1 Electronic Products for the Physician Practice
- 22.2 Information Technology Implementation Steps
- 23.1 Goals to Monitor for Success of Practice Changes
- 23.2 Steps in the AIDE Process
- 24.1 The Greatest Decline in Mortality in the History of the World Occurred Between 1900 and 2000

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PREFACE

The purpose of this book is to provide a comprehensive and practical guide to the issues inherent in physician practice management, as well as tools and techniques to deal with those issues. Although primarily designed as a textbook for students interested in the field, this book will also provide physicians and their practice managers with a fundamental understanding of the financial and regulatory issues that influence today's medical practice and with insight into the cultural, human resource, and governance issues that make physician practices unique among health care organizations. (Businesspeople who work in medical practices are known by a variety of titles, such as administrator, practice manager, or office manager. For consistency we have chosen to use the title *practice manager* throughout this book.)

Physicians and medical groups face increasing challenges to compete as the cost to provide health care services continues to rise. Because reimbursement from governmental and other third-party payers is flat or decreasing, improvements in technology, increases in costs of pharmaceuticals and for medical malpractice coverage, and the costs of complying with the Health Insurance Portability and Accountability Act (HIPAA) and other legislation have put a strain on practice financial margins. As a result many physicians and their practice managers now realize that they need additional knowledge and administrative skills to understand and deal with the changing regulatory and fiscal environment.

Physicians seldom learn about medical practice management issues and techniques during their years of medical education, and many practice managers have

no formal training as health care administrators. Lack of awareness of critically important practice issues such as the organization's cost structure, the negotiation of managed care contracts, and the importance of federal and state regulations can cause the practice to lose income or, even worse, face civil or criminal action.

In this environment physicians and their practice managers must have a general understanding of the many elements of practice management and a depth of understanding in a few. To ignore these concepts could lead to loss of income as well as sanctions for violations of regulatory requirements. The practical tools and references in this book will help those who lead and manage physician practices to understand the principles behind effective practice management and increase their own proficiency.

As the external environment has changed over the last few years so has the internal environment in which the physician has to practice. Physicians coming from their residency programs face issues resulting from changes in the way practices do business. The loss of control in medical decision making is very much on the minds of many physicians in today's managed care environment. Newer physicians entering an existing practice also need to understand the culture of that practice and be aware of governance and equity issues. Physicians and their practice managers must work collaboratively to maximize the success of the practice.

The Framework of This Book

In July 2002, the American College of Medical Practice Executives (ACMPE) published *The ACMPE Guide to the Body of Knowledge for Medical Practice Management*. It summarizes the body of knowledge and skills that the ACMPE considers a practice manager must possess to be effective in today's health care environment. The "general competencies" that the ACMPE believes necessary are

- Professionalism
- Leadership
- Communication skills
- Organizational and analytical skills
- Technical knowledge and skills

Technical knowledge and skills should be developed in eight domains:

- Financial management
- Human resource management
- Planning and marketing

- Information management
- Risk management
- Governance and organizational dynamics
- Business and clinical operations
- Professional responsibility

This book provides the reader with practical, easy-to-implement information related to the majority of these topics. Each chapter contains illustrations of important concepts or management techniques as well as tools and templates that can be used in practice. The book is organized in logical divisions based on the eight domains of the ACMPE body of knowledge, as follows:

Part One, “Financial Management,” provides the reader with the information necessary to understand how to turn strategic plans into financial reality. Beginning with a description of developing budgeting templates to model financial performance in Chapter One, the chapters in this section also discuss increasing net reimbursement through management of the revenue cycle (Chapter Two); understanding the cost of providing medical services and management accounting (Chapter Three); the taxation of physicians and of the profits from their practice (Chapter Four); capital budgeting for the most efficient allocation of practice resources (Chapter Five); and monitoring financial performance through variance analysis, benchmarks, and ratios in order to maintain the practice’s competitive edge (Chapter Six).

Part Two, “Regulatory Environment and Risk Management,” provides the reader with the information necessary to understand the risks that physician practices face in today’s regulatory and litigious environment. The reader will learn how to combine the knowledge obtained in the section on understanding practice costs with knowledge of legal and contract terminology in order to negotiate contracts with third-party payers and minimize risk to the practice (Chapter Seven). Chapters Eight and Nine address federal and state regulations and corporate compliance and will help the reader interpret those complex laws and regulations and know when to seek the advice of legal counsel. Finally, Chapter Ten, on risk management, will help the reader understand the risk of medical malpractice suits and how to reduce that risk.

Part Three, “Human Resource Management,” provides the reader with the information necessary to understand and implement the various governance models appropriate to physician practices. The reader will also learn to interpret and integrate the various laws and regulations that affect the practice’s human resource policies and procedures and to design recruitment and retention strategies (Chapter Twelve); to understand, choose, and apply the best physician compensation model for the practice (Chapter Thirteen); to understand the role of midlevel providers in a practice (Chapter Fourteen); and to understand the impact on the practice of nursing workforce issues and how to address those issues (Chapter Fifteen).

Part Four, “Strategic Considerations: Planning, Marketing, and Management,” provides the reader with the information necessary to create and implement a business plan for the practice, including creating or refining the mission and vision; performing, analyzing, and interpreting market research; building consensus for the plan among key stakeholders; and communicating the plan and obtaining buy-in for the plan from all parties (Chapter Sixteen). Chapters Seventeen, Eighteen, and Nineteen offer information on how to add a new service or program to the practice, develop an effective marketing plan, and integrate a program in clinical research into the practice. Chapters Twenty and Twenty-One present information that will help the reader develop skills in dealing with relationships between medical practices and community hospitals and in working with physicians in academic settings.

Part Five, “Information Management,” provides the reader with the information necessary to assess the short- and long-term needs of the practice and incorporate that information into the strategic plan. The reader will also learn to write requests for proposals (RFPs), understand the various laws and regulations affecting security and transmission of information, and gain awareness of technologies that can add to practice efficiency and quality (Chapter Twenty-Two). Chapter Twenty-Three includes information on performance improvement, teamwork, and monitoring outcomes that is critical to practice management because medical practices are obligated to provide data on clinical results and practice quality to regulatory agencies. The reader will come to understand the necessity of developing databases to gather information that will aid in quality control without providing detrimental information in the event of litigation. Finally, Chapter Twenty-Four discusses the realities that medical practices are facing in the twenty-first century.

Many examples are included as illustrations. All the practices and physicians used in these examples are hypothetical examples developed out of the authors’ experience or based on contemporary medical news stories.

Essentials of Physician Practice Management Practice Aids

To assist our readers in gaining the most value they can from this book, we are also providing supplemental materials on the World Wide Web. Included are

- Answers to the discussion questions at the end of each chapter
- Selected mini–case studies
- Two comprehensive case studies, one on human resources and one on general practice management issues

- Templates where appropriate, in the form of checklists and spreadsheets, that illustrate best practices that can be used by physicians or their practice managers to effect change in the practice
- Teaching notes to the comprehensive case studies (for instructors only)
- Sample tests with answer keys (for instructors only)
- PowerPoint slides to accompany each chapter (for instructors only)



Essentials of Physician Practice Management is a collaborative effort between a physician and a businessperson. We have tried to address the needs of physicians and their practice managers in practices of varying sizes (small to large) and types (for-profit and nonprofit group practices and faculty practice plans). Our goal is to give the readers of this book practical knowledge about and insight into the operation of medical practices. It is our belief that the challenges faced by practices today cannot be solved by either the physician or the practice manager alone. A team effort is needed to acquire and apply the deep knowledge and skills necessary to thrive in today's challenging environment.

June 2004
Chapel Hill, North Carolina

Blair A. Keagy and Marci S. Thomas

**ESSENTIALS OF PHYSICIAN
PRACTICE MANAGEMENT**



PART ONE

FINANCIAL MANAGEMENT



CHAPTER ONE

BUDGETING FOR PHYSICIAN PRACTICES

Marci S. Thomas

Objectives

This chapter will help the reader to

- Understand the purposes and advantages of budgeting.
- Describe the process of budgeting.
- Prepare a budget for a physician practice.

Each year physician practices go through the all-important exercise of planning for the coming year's activity. As more fully discussed in Chapter Sixteen, this should be a joint activity between practice management and the physician-owners. The budget is the tool that group practice managers use to translate the practice's goals and objectives for the year into dollars. The budget also serves as a vehicle to communicate financial targets to physician-owners and other stakeholders in the practice.

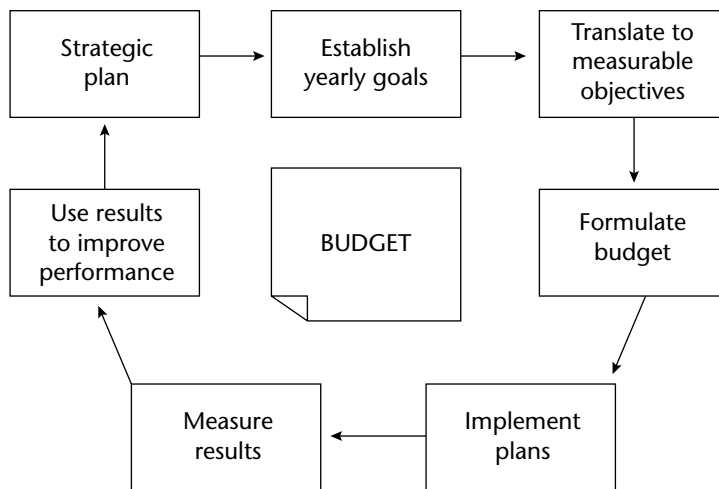
To the wise practice manager the budget is not just a financial plan. It is also a mechanism for monitoring and managing the activity of the practice on a periodic basis. Some practices compare actual results to the budget on a monthly basis. Others do it more or less frequently. The comparison of actual results to budgeted amounts enables practice management to

- Focus on where the practice is going and what it will take to get there.
- Determine where resources should be allocated.
- Assess the productivity of the practice.
- Foster accountability in department managers.
- Analyze the areas in which variances in volume have occurred.

- Identify rates paid by third-party payers that are either more or less than originally predicted.
- Identify costs of various inputs to the practice, such as labor and supplies, that are either more or less than originally predicted.
- Make the necessary changes on a timely basis to keep the practice healthy.
- Note opportunities for future expansion.

Practice managers can use this information to make timely changes to practice operations. Corrective action is particularly important in times like the present when reimbursement is low in comparison to the resources it takes to adequately deliver services and manage a practice. Thus the budget as a control mechanism takes on additional importance. Figure 1.1 illustrates the relationship between the budget and the planning and control cycle.

FIGURE 1.1. THE BUDGET IN RELATION TO THE PLANNING AND CONTROL CYCLE.



The budget is the focal point of the planning and control cycle.

Variety in Budgeting Methods

There is a great deal of variety in how physician practices budget. Some take budgeting very seriously and use it as a planning tool, whereas others don't prepare budgets at all. The wise group practice manager will develop a budget in sufficient detail to provide himself, the physician-owners, and other practice stakeholders with information that will be useful in guiding the practice and monitoring results. At the same time, the budget should not be so detailed that it takes an inordinate amount of time to accumulate and analyze the information. The size and complexity of the practice as well as the level of its administrative resources will play a role in determining the appropriate level at which to budget. However, it is better to budget with less detail than not to budget at all. Practice budgets vary in

- Level of stakeholder participation
- Level of detail
- Budgeting method used—incremental or zero-based

Level of Participation

Participation in the budgeting process varies from practice to practice. In some practices budgeting is left to the practice administrator, with little input from the physicians other than how much they intend to work in the coming year. This is unwise. Input from physicians, department heads, and other clinical staff can provide the practice manager with fresh ideas. In addition to making the budget more reliable, such input increases buy-in to the financial plan as well as awareness of what it costs to run a practice. At the same time, where participation is advisable and will most likely produce the best result, the practice manager must also consider the following:

- The budgeting process will take longer and consume resources that the practice might otherwise devote to patient care.
- Estimates of patient volume and of costs of the inputs to deliver patient care may be unrealistic.
- People who take time to provide their input to the budgeting process may be disappointed if their input is overridden by the practice manager.

Level of Detail

As more fully discussed later in this chapter, revenue budgets are constructed using estimates of patient volume at varying levels of reimbursement. Expense budgets are constructed using estimates of labor, supplies, and overhead. How far the practice manager disaggregates those estimates depends on the precision desired. For example, a more precise budget can be created by budgeting patient visits by intensity as well as by payer and contract type.

Physicians provide services in several settings. Office visits, surgical procedures, and other types of diagnostic and therapeutic services can be provided in physicians' offices, hospitals, skilled nursing facilities, hospices, outpatient dialysis facilities, clinical laboratories, and ambulatory surgical centers. Physician practices frequently use relative value units (RVUs) to express intensity of service. The resource-based relative value scale (RBRVS) was enacted into law as part of the Omnibus Budget Reconciliation Act of 1989. The fee schedule, phased in over a four-year period (1992 to 1996), reimburses physicians for their services based on three distinct components:

- Work (physician effort and skill)
- Practice expenses (rent, supplies, staff effort)
- Malpractice expenses

The objective of the RBRVS is to compensate physicians based on both the work involved and the resources used in patient care. There are codes for 7,000 distinct services, ranging from basic services such as injections to complex bundles of procedures associated with particular surgeries. These more complex bundles include the surgery and preoperative and postoperative visits. Each HCPCS (Healthcare Common Procedure Coding System) procedure code has a relative value (the basic value is 1). These values are adjusted for geographic factors to produce the reimbursement level. Although this payment system was created for services to Medicare patients, the methodology can be used to predict the level of effort involved in serving other patients as well.

In 2001, the American Medical Association performed a survey to determine whether non-Medicare payers used the RBRVS relative rankings in their payment systems. Respondents to the survey included Blue Cross Blue Shield organizations, health maintenance organizations, point-of-service plans, preferred provider organizations,

Medicaid agencies, and workers' compensation plans. Of the 226 entities surveyed, 74 percent used the RBRVS in at least one of their product lines.¹ The American Academy of Pediatrics has adapted the RBRVS relative rankings for services to pediatric populations.²

If a practice manager is budgeting using a high level of detail, she might compile a list of the Current Procedural Terminology (CPT) codes most frequently used by the practice and estimate the number of times each would occur during the year. Table 1.1 presents an example of such a list, in which estimated RVUs for each of the three reimbursement components are multiplied by the geographic adjustment to estimate the total RVUs. However, if that level of detail is not desired, the practice manager can determine the procedures most commonly performed and categorize them according to the average time it takes to perform each one, as illustrated in Table 1.2, using the following scale:

<i>Work Level RVUs</i>		<i>Time</i>
0–2	=	15 minutes
2.01–3.5	=	30 minutes
>3.5	=	45 minutes

Level of detail also comes into play when estimating the reimbursement to be received for a particular service. Depending on size and geographic location, a practice may have dozens of reimbursement levels for the same service. If a high level of precision is desired, the group practice manager will estimate by payer and by contract. Depending on the number of payers and of contracts per payer, this level of detail may be overwhelming. Practice managers may wish to use only a few payment levels, aggregating contracts with similar payment features and amounts.

The most basic level of detail that a practice can use is number of patient visits. If patient visits are generally homogeneous (that is, they require the same level of effort) and reimbursement levels do not vary significantly by payer, this level of detail may be all that is required. Figure 1.2 illustrates various levels of effort in relation to the precision achieved.

Physician practices may experience daily, weekly, or monthly variations in volume. This level of detail will be important to consider, especially when it comes to budgeting for revenue, labor usage, and cash flow.

TABLE 1.1. RBRVS ILLUSTRATION.

CPT Code Modifier	Work RVUs	Times Geo. Adj. ^a	Practice RVUs	Times Geo. Adj. ^a	Malpractice RVUs	Times Geo. Adj. ^a	Total RVUs	Estimated Procedures for Year	Estimated RVUs for Year
	Adult Codes ^b								
99201	0.45	0.97	0.47	0.931	0.02	0.595	0.886	1,325	1,174
99211	0.17	0.97	0.38	0.931	0.06	0.595	0.5544	752	417
99241	0.64	0.97	0.62	0.931	0.62	0.595	1.5669	754	1,181
99213	3.43	0.97	0.67	0.931	0.24	0.595	4.0937	1,305	5,342
99395	1.36	0.97	0.54	0.931	0.04	0.595	1.8457	856	1,580
99396	1.53	0.97	0.61	0.931	0.05	0.595	2.0818	742	1,545
99397	1.71	0.97	0.68	0.931	0.05	0.595	2.3215	903	2,096
Pediatric Codes ^c									
99392	1.19	0.97	1.1	0.931	0.04	0.595	2.2022	3,325	7,322
99393	1.36	0.97	1.07	0.931	0.04	0.595	2.3392	1,224	2,863
99394	1.36	0.97	1.15	0.931	0.04	0.595	2.4137	785	1,895

^a Geographic adjustment for North Carolina.

^b American Medical Association.

^c American Academy of Pediatrics.

TABLE 1.2. CPT CODES CATEGORIZED BY LEVEL OF EFFORT.

CPT Code	Work Level RVU (1,2,3)	Minutes
99201	1	15
99211	1	15
99241	1	15
99213	3	45
99395	1	15
99396	2	30
99397	2	30
99392	2	30
99393	2	30
99394	2	30

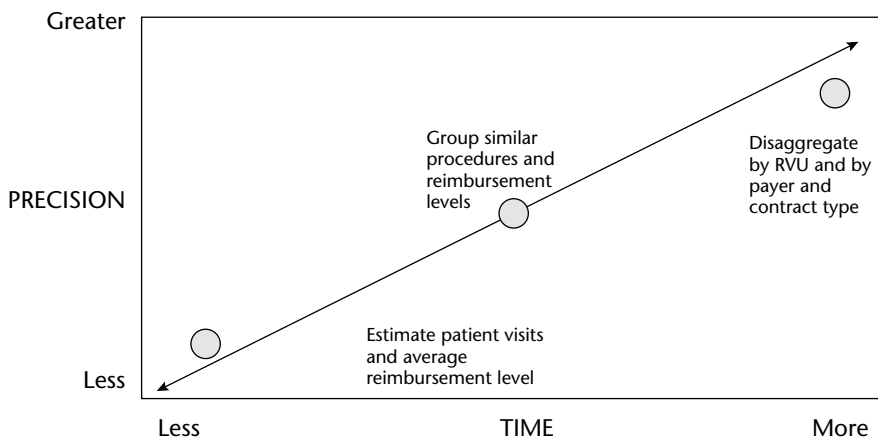
Incremental Versus Zero-Based Budgeting

Incremental budgeting begins with the results of the prior year's activity and adjusts for expectations of

- Increased or decreased patient volume for current payer contracts
- Additional patient volume from anticipated contracts
- Additional patient volume due to increased marketing activities
- Additional patient volume due to referrals from networking with other providers
- Changes in reimbursement for current contracts
- Changes in personnel, including increases or decreases in pay rates
- Changes in overhead costs due to increased space, additional machinery and equipment, changes in supply costs, or overall inflation

This form of budgeting takes the least amount of time to perform. However, the necessary research must still be performed to ensure that variables such as reimbursement levels and changes in market share and patient mix are accurate. Otherwise the practice might find that revenue is not sufficient to pay operating expenses. Because physician practices operate mainly with costs that are fixed, accurate volume and reimbursement projections are critical. In addition the importance of obtaining accurate predictions for expenses that are proportionately high and nondiscretionary, such as for malpractice insurance, cannot be overemphasized.

FIGURE 1.2. RELATIONSHIP BETWEEN LEVEL OF EFFORT AND PRECISION.



The greater the level of detail, the more precise the budget. However, more precision results in a more time consuming process.

An alternative method of budgeting for established practices is *zero-based budgeting*. Zero-based budgeting is a concept that has reemerged a number of times since the term was first used by Peter Phyrri in 1970. The technique, as its name implies, involves starting from ground zero and building a budget by identifying and prioritizing discrete business activities and then developing alternative methods for completing these activities. The alternatives include both different ways the activity can be completed and different levels of effort that can be used, so that the budgeting process attempts to align resource allocation with strategic business priorities.³

This method of budgeting requires the practice manager to

- Understand the possible volume, costs, and reimbursement of the activity.
- Determine the profitability of the activity.
- Review and evaluate the profitability of third-party reimbursement contracts.
- Look at how well the activity fits into the practice as a whole.
- Evaluate alternative ways to conduct the activity that may be more cost effective.

Zero-based budgeting can be used as a continuous quality improvement (CQI) tool because it challenges leaders to routinely question and justify their activities and resource allocation. However, its implementation presents challenges such as these:

The process requires a significant investment of time and effort. One KPMG study suggested that inefficient budgeting can consume up to 20 to 30 percent of senior leadership's time.⁴

The budgeting time horizon is often in conflict with business demands. Budgeting takes more time in dynamic, rapidly moving business sectors that need to respond quickly and less time in more stable settings where immediate decision making may not be required.⁵

Early proponents of the technique touted zero-based budgeting as a way to increase decision making by providing more timely feedback to managers. However, implementation of the process tends to be most successful in settings with centralized decision-making authority⁶ or in practices that are more procedure or project oriented,⁷ good news for small to moderate size physician practices. In a group practice setting, zero-based budgeting may be a useful technique if stakeholders are given a clear explanation of why the change to this method is taking place and if there is commitment to the time and effort necessary to implement the process.⁸

Notwithstanding its useful characteristics, zero-based budgeting has not caught on with many medical groups. In fact, newer techniques such as activity based costing (ABC) (discussed in Chapter Three) may be preferable in light of increased software options designed to facilitate their implementation.⁹

Cash Versus Accrual Accounting Method

A physician practice may maintain its accounting records on either a cash basis or an accrual basis. In the cash basis method of accounting, revenues are recorded when cash is received, and expenses are recorded when cash is spent. Generally, larger expenditures, such as those for building and equipment, will not follow the rule for operating expenses because they must be depreciated for tax purposes.

The accrual method of accounting is the method prescribed by generally accepted accounting principles (GAAP). In the accrual method, revenues are recorded when they are earned, and expenses are recorded when they are incurred. The accrual method provides for a better matching of revenues with the inputs or expenses it takes to produce them.

Although the cash method of accounting takes a little less effort, it does not provide the practice manager with information that helps him understand and monitor the profitability of the practice because revenues are not recorded as the service is delivered although the majority of expenses are recorded at that time. Given the prevalence of third-party payers in medicine, collection of receivables generally takes from thirty to ninety days, whereas expenses are generally paid by the end of the month.

Overview of the Budget Process

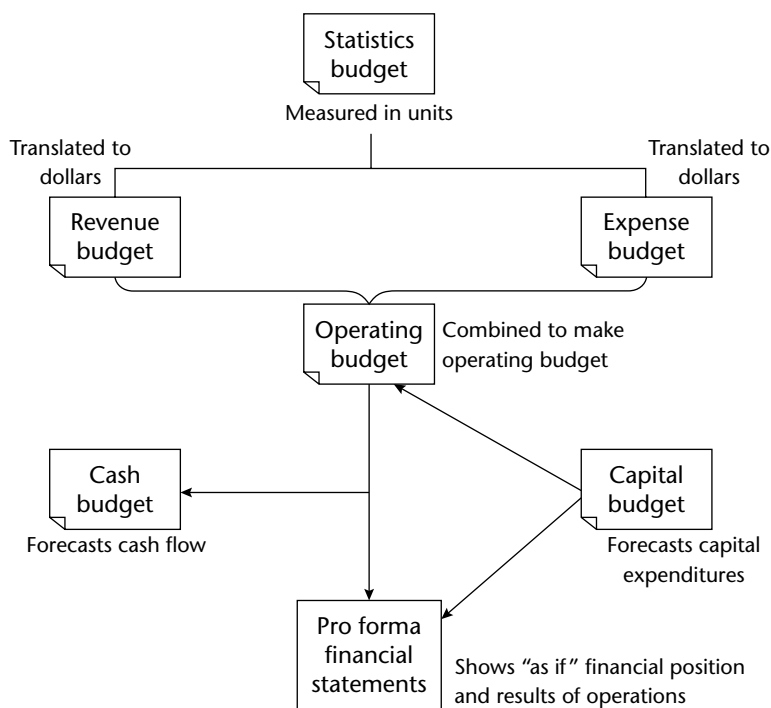
In order to get the desired level of precision for the budget, the practice manager should prepare several types of budgets. As illustrated in Figure 1.3, each of the individual budget types plays an important role in the overall budget process. The individual budgets are then integrated to create pro forma financial statements. The pro forma financial statements provide the practice manager with a view of the financial position and results of operations as they will be if budget forecasts are achieved as planned.

The *statistics budget* is the first budget that should be prepared. It forecasts the volume of activity anticipated for the practice and will be the basis from which the revenue budget and portions of the expense budget are prepared. Statistics generally take the form of units of service that are used to forecast revenue. For purposes of forecasting revenue, units of service may be patient visits, procedures, lab tests, X-rays, or any unit that can be converted to revenue. Statistics budgets may also be prepared for labor hours or units of supplies required. These labor and supply budgets can then be converted to dollars for the expense budget.

The *operating budget* translates the statistics budget into dollars and has two components, revenues and expenses. The *revenue budget* is prepared using the volume forecast in the statistics budget for varying levels of reimbursement. The *expense budget* forecasts labor and nonlabor expenses.

The *capital budget* is a forecast of the practice's long-term investment needs related to facilities and equipment. Capital budgeting, which is more fully discussed in Chapter Five, considers purchases of capital assets such as buildings and equipment and activities such as acquisitions of businesses by the practice and replacement and disposal of assets. The resulting interest on borrowings to finance the expenditures, depreciation on buildings and equipment, and rental costs for leased assets can represent significant expenses in the practice's operating budget.

When a practice operates on the accrual basis of accounting, one other budget must be considered. The *cash budget* is very important because it forecasts the cash

FIGURE 1.3. BUDGETING PROCESS.

Information from each of the various budgets is important to planning and controlling practice activities.

flowing into and out of the practice. The cash budget gives the practice manager a clear picture of whether cash inflows from operations will be sufficient to meet cash outflows, whether they are for operating expenses or capital expenditures.

We can examine the process of preparing a budget by following the steps taken by the practice manager at Highgrove Family Practice, a physician practice with three specialties, located in rural North Carolina. Highgrove's practice manager is beginning the budgeting process for 2004.

Creating the Statistics Budget

Step 1. The first step in creating a statistics budget is to forecast the demand for services for the year. The practice manager can perform this activity by

- Using the prior year's activity as a base and adjusting for changes in the numbers of physicians who will be working and any workload changes they have requested as well as for anticipated growth in the number of patients.
- Assessing the demand for the practice's services, given the present demographics of the area and projections of growth as well as the market share the practice would like to achieve. Physicians can then be hired to meet any excess demand.

Highgrove's practice manager decides to use last year's activity as a base for this year's budget, as illustrated in Table 1.3.

She performs a demographic survey of the area to estimate the percentage growth in patients for 2004, as illustrated in Tables 1.4 and 1.5. She expects that the practice will retain its overall market share of approximately 11 percent for patient visits. The practice manager projects that there will be an average of two visits per internal medicine patient, one visit per gynecology patient, and three visits per pediatric patient per year.

The practice manager also assumes that visits will not be spaced out evenly over the year, as seasonal fluctuations generally affect health care providers. Therefore she reviews the last three years' data to determine the percentage of patient visits in each month and uses those percentages to forecast monthly visits for 2004. Table 1.6 illustrates patient visits broken out by month. If a practice manager wanted to perform additional demographic analysis he or she could research the additional indicators listed in Table 1.7.

TABLE 1.3. ACTUAL AND PROJECTED VISITS FOR 2003 AND 2004.

Specialty/Department	Actual Patient Visits 2003	Projected Patient Visits 2004	Projected Increase
Internal medicine	7,352	7,573	3%
Gynecology	2,241	2,375	6
Pediatrics	<u>9,421</u>	<u>9,798</u>	4
TOTAL VISITS	19,015	19,746	

Note: Due to rounding, the numbers in this table may be slightly different from those computed by calculator.

**TABLE 1.4. PROJECTED POPULATION IN
HIGHGROVE SERVICE AREA FOR 2004.**

Male	
<1 year	789
1–8 years	930
9–17 years	8,882
18–44 years	20,645
45–64 years	6,864
65 years and older	3,921
Female	
<1 year	965
1–8 years	1,137
9–17 years	9,106
18–44 years	21,143
45–64 years	6,974
65 years and older	3,677
TOTAL POPULATION	85,033

$$85,033 \times 2.09 \text{ visits per year} \times 11.11\% = 19,746$$

Note: Population figures projected for 2004 from 2000 Census. Due to rounding, the numbers in this table may be slightly different from those computed by calculator.

**TABLE 1.5. PROJECTED INCOME LEVELS IN
HIGHGROVE SERVICE AREA FOR 2004.**

Income Level (per family)	No. of Families
<\$10,000	2,527
\$10,000–\$24,999	5,276
\$25,000–\$34,999	3,720
\$35,000–\$49,999	5,450
\$50,000–\$74,999	7,393
\$75,000–\$99,999	3,942
\$100,000–\$149,999	3,617
\$150,000–\$199,999	1,118
\$200,000 and over	972
TOTAL FAMILIES IN SERVICE AREA	34,015

Note: Income figures projected for 2004 from 2000 Census.

TABLE 1.6. PROJECTED PATIENT VISITS BY MONTH FOR 2004.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Internal medicine	695	688	568	568	568	695	568	568	639	625	695	695	7,573
Gynecology	179	225	174	179	179	225	179	225	225	225	181	179	2,375
Pediatrics	900	895	895	736	735	750	750	750	750	842	895	900	9,798
TOTAL VISITS	1,774	1,808	1,637	1,483	1,482	1,670	1,497	1,543	1,614	1,692	1,771	1,774	19,746

Note: Due to rounding, the numbers in this table may be slightly different from those computed by calculator.

TABLE 1.7. INDICATORS FOR ADDITIONAL ANALYSIS.

Indicator	What This Tells You
Increase in sales and employment of top employers in the area	Whether the population is likely to be growing or declining in the near future
New home construction and sales of new homes	Whether additional families are moving to the area
New office construction and office rentals	Whether new businesses are moving to the area
Managed care plans in the market and their enrollment	Whether the practice's percentage of market share from various major plans has increased or decreased
Changes in population's average age, income, and education level	Whether the services offered by the practice are consistent with market needs
Services offered by competitors	Whether there are things your practice is overlooking that might be natural offshoots of current service offerings

Step 2. Not all patient visits require the same level of effort. To reflect the different levels of effort involved, the practice manager converts the patient visits to relative value units (RVUs). The RVUs can then be used to forecast revenue and to forecast the labor and supplies needed to support patient visits. As discussed earlier, many practices use the RBRVS scale for both their Medicare and non-Medicare patients. Although a practice manager could develop more precise estimates of the level of effort with time and motion studies and of supplies consumption by keeping detailed records, use of the RBRVS scale will generally yield information sufficiently precise for practice purposes. In addition some practices may prefer to simplify the calculation and use only one level of visit, assigning it an average time. For simplicity, Highgrove's practice manager groups the CPT codes into three work levels and uses historical data to determine the percentage of patient visits that typically fall into each level, as illustrated in Table 1.8. Again, each RVU equals fifteen minutes. Table 1.9 illustrates how total visits and RVUs break down by specialty for the month of January.

TABLE 1.8. PERCENTAGE OF PATIENTS IN EACH WORK LEVEL BY SPECIALTY FOR JANUARY.

Work Level RVUs	Internal Medicine	Gynecology	Pediatrics
1	15%	20%	10%
2	55	55	75
3	30	25	15
	100%	100%	100%

TABLE 1.9. TOTAL VISITS AND RVUs BY SPECIALTY FOR JANUARY.

	%	Visits	RVUs
Internal medicine			
Level 1	15%	104	104
Level 2	55	382	764
Level 3	30	209	627
TOTAL		695	1,495
Gynecology			
Level 1	20	36	36
Level 2	55	98	196
Level 3	25	45	135
TOTAL		179	367
Pediatrics			
Level 1	10	90	90
Level 2	75	675	1,350
Level 3	15	135	405
TOTAL		900	1,845
TOTAL ALL SPECIALTIES		1,774	3,707

Creating the Revenue Budget

Step 3. The practice manager reviews the practice's contractual arrangements to see if reimbursement amounts for services have changed from the previous contract period. It is important to understand both gross and net revenue. Although a payer will rarely pay a practice's full charges, it is important to have an estimate of those charges so that the practice is aware of the discounts it is giving to various payers and the amount of uncompensated or charity care it is providing.

Highgrove's charges are set at approximately two times the RBRVS conversion factor (\$36.79 for 2003). The practice manager calculates an average charge per RVU for the practice of \$74. Multiplying the average charge per RVU times the anticipated number of work level RVUs gives the practice manager an estimate of gross charges. To compute net charges the practice manager uses contract terms to determine how much of those charges will be paid. She groups the practice's various reimbursement arrangements into four different buckets, placing similar contracts together.

PERSPECTIVE 1.1. CHARITY CARE.

A portion of the uncompensated or charity care in this country is provided by physicians. Along with hospitals, community centers, health departments, and free clinics, they are part of America's safety net. However, physicians' ability to provide such care is decreasing. A Center for Studying Health System Change issue brief gives some of the reasons for that decrease:^a

- More physicians are employees today, rather than owners of practices, and they have less control over their time.
- Practices are facing financial pressures from lower payment schedules and losses on managed care risk-sharing contracts.
- Time pressures are increasing due to heavier administrative burdens caused by third-party payer requirements.

According to this report, the percentage of physicians providing charity care decreased from 76 percent to 72 percent between 1996–97 and 1998–99. The average number of hours per month given to charity care decreased from 11.1 to 10.6 during that time period.

^a Center for Studying Health System Change, "Physicians Pulling Back from Charity Care," *Issue Brief 42*, Aug. 2001.

PERSPECTIVE 1.2. STRATEGIES FOR SETTING BUDGETS.

Setting charges is often a subjective process. Group practices may apply various strategies. One strategy is to set charges on the high side to ensure that no money is "left on the table" when dealing with third-party payers who reimburse a percentage of total charges. Another strategy is to set charges on the low side to minimize the economic burden placed on self-pay patients as well as those patients who must satisfy an annual deductible each calendar year. Practice managers should balance these considerations as well as carefully analyze activity level costs when making pricing decisions.

Highgrove sees patients who are covered by a variety of payment arrangements. The majority are discounted charges patients but Highgrove also has patients covered by flat fee and capitated contracts. Very few of Highgrove's patients pay full charges. Approximately 2.5 percent of patients receive charity care. A health plan pays Highgrove \$17 per member per month (pmpm) for each of the 1,200 patients that are covered by capitated contracts. Table 1.10 illustrates a portion of Highgrove's fee schedule converted to RVUs.

TABLE 1.10. CPT CODES CONVERTED TO WORK LEVEL RVUs AND CHARGES PER PAYER TYPE.

CPT Code Modifier	Work Level RVUs	Gross Charge per Visit	Discounted Fee Schedule	Flat Fee Payer
Adult codes ^a				
99201	1	\$ 74	\$ 63	\$50
99211	1	74	63	50
99241	1	74	63	50
99213	3	222	189	50
99395	1	74	63	50
99396	2	148	126	50
99397	2	148	126	50
Pediatric codes ^b				
99392	2	148	126	50
99393	2	148	126	50
99394	2	148	126	50

^a American Medical Association.

^b American Academy of Pediatrics.

PERSPECTIVE 1.3. SHORTCUT FOR CONSTRUCTING REVENUE BUDGETS.

Some practice administrators may wish to shortcut the revenue budgeting process by simply estimating total visits and multiplying that number by the average amount of revenue per visit from the prior year. The resulting revenue figure can be adjusted for anticipated changes in payer mix and known changes in reimbursement level.

The difference between gross and net charges or contractual allowances can then be evaluated as a percentage of charges to determine the amount that will not be collected on each contract, as illustrated in Table 1.11. Table 1.12 summarizes the practice's revenue budget for January.

TABLE 1.11. PROJECTED GROSS AND NET REVENUE PER PAYER PER SPECIALTY FOR JANUARY.

	<i>Internal Medicine</i>				Total
	5% of Visits Full Charges	45% of Visits Discounted Charges	30% of Visits Flat Fee	20% of Visits Capitated	
RVUs	75	671	448	299	1,495
Charge per RVU	\$74	\$74	\$74	\$74	
	\$5,550	\$49,654	\$33,152	\$22,126	\$110,482
Contractual allowance (incl. charity care)	(2,775)	(7,448)	(22,722)	(1,726)	(34,671)
Reimbursement					
50% charity care	\$2,775				2,775
85% of charges		\$42,206			42,206
\$50 per visit			\$10,430		10,430
\$17 pmpm ^a				\$20,400	20,400
TOTAL NET REVENUE					\$75,811
PERCENTAGE DISCOUNT	50%	15%	68.5%	7.7%	31.3%
	<i>Gynecology</i>				
		85% of Visits Discounted Charges	15% of Visits Flat Fee		Total
RVUs		312	55		367
Charge per RVU		\$74	\$74		
		\$23,088	\$4,070		\$27,158
Contractual allowance		(3,462)	(2,793)		(6,255)
Reimbursement					
85% of charges		\$19,626			19,626
\$50 per visit			\$1,277		1,277
TOTAL NET REVENUE					\$20,903
PERCENTAGE DISCOUNT		15%	69%		

continues

TABLE 1.11. (Continued)

	<i>Pediatrics</i>			Total
	5% of Visits Full Charges	75% of Visits Discounted Charges	20% of Visits Flat Fee	
RVUs	92	1,384	369	1,845
Charge per RVU	\$74	\$74	\$74	
	\$6,808	\$102,416	\$27,306	\$136,530
Contractual allowance (incl. charity care)	(3,404)	(15,362)	(17,046)	(35,812)
Reimbursement				
50% charity care	\$3,404			3,404
85% of charges		\$87,054		87,054
\$50 per visit			\$10,260	10,260
TOTAL NET REVENUE				\$100,718
PERCENTAGE DISCOUNT	50%	15%	62.4%	

Note: Due to rounding, the numbers in this table may be slightly different from those computed by calculator.

^a Highgrove receives capitated payment of \$17 pmpm for 1,200 patients.

TABLE 1.12. REVENUE BUDGET FOR ALL SPECIALTIES FOR JANUARY.

	Internal Medicine	Gynecology	Pediatrics	Total
Gross revenue	\$110,482	\$27,158	\$136,530	\$274,170
Contractual allowance	(31,896)	(6,255)	(32,408)	(70,559)
Charity care	(2,775)	—	(3,404)	(6,179)
NET REVENUE	\$ 75,811	\$20,903	\$100,718	\$197,432

Creating the Expense Budget

Labor is the largest expense of the physician practice. The total nonphysician labor budget may represent 60 percent of operating costs. According to the Medical Group Management Association (MGMA) cost survey for 2002, for internal medicine groups total personnel costs (both physician and nonphysician) were approximately 79 percent of total costs.¹⁰ Most of the labor expense takes the form of salaries and benefits for medical and administrative personnel. Physician compensation, which is discussed more fully in Chapter Thirteen, may consist of a base salary and benefits as well as an incentive or bonus component. Other medical personnel as well as administrative personnel will typically be compensated with base salary plus benefits.

Step 4. The Highgrove practice manager prepares a projection of the full-time equivalent (FTE) employees that she expects to have for the coming year. Each non-physician employee's benefits are approximately 15 percent of the employee's salary. The practice manager also factors in a 4 percent raise for the employees, effective January 1. Physicians' compensation is a combination of salary, benefits, and incentive compensation. Tables 1.13 and 1.14 illustrate Highgrove's budgeted compensation for physician and nonphysician personnel for 2004.

Step 5. The practice manager builds the budget based on the FTE count from the previous year. In order to see whether more or fewer FTEs are needed for the volume of RVUs projected for 2004, she performs an analysis based on that anticipated

TABLE 1.13. BUDGETED PHYSICIAN COMPENSATION FOR 2004.

	Salary	Benefits	2004 Increase	Bonus	2004 Projected Total
Physician 1	\$140,000	\$21,000	\$6,440	\$17,500	\$184,940
Physician 2	127,000	19,050	5,842	15,875	167,767
Physician 3	132,000	19,800	6,072	16,500	174,372
Physician 4 (½ time)	65,000	9,750	2,990	2,000	79,740
Physician 5 (¾ time)	90,000	13,500	4,140	5,000	112,640
TOTAL PHYSICIAN COMP.	\$554,000	\$83,100	\$25,484	\$56,875	\$719,459

TABLE 1.14. BUDGETED NONPHYSICIAN COMPENSATION FOR 2004.

	Salary	Benefits	2004 Increase	2004 Projected Total
LPN 1	\$ 52,500	\$ 7,875	\$ 2,415	\$ 62,790
LPN 2	49,500	7,425	2,277	59,202
LPN 3	43,000	6,450	1,978	51,428
LPN 4	42,000	6,300	1,932	50,232
LPN 5	40,000	6,000	1,840	47,840
TOTAL CLINICAL COMP.	\$227,000	\$34,050	\$10,442	\$271,492
Practice administrator	57,000	8,550	2,622	68,172
Office staff 1	25,000	3,750	1,150	29,900
Office staff 2	25,000	3,750	1,150	29,900
TOTAL ADMIN. COMP.	\$107,000	\$16,050	\$ 4,922	\$127,972
TOTAL NONPHYSICIAN COMP.	\$334,000	\$50,100	\$15,364	\$399,464

volume. Given the intensity level required by Highgrove's patients, the average visit consumes approximately two RVUs. Also, Highgrove requires that physicians see from eighteen to twenty-four patients per day, representing thirty-six to forty-eight RVUs. This RVU amount includes both direct patient care and the time it takes to document the visit in the chart, call in prescriptions, and perform other administrative tasks. Tables 1.15 and 1.16 illustrate that, based on this requirement, the current number of physicians could meet the demand.

Given the prior year's experience, Highgrove estimates that its nurses can see from fourteen to sixteen patients per day, representing twenty-eight to thirty-two RVUs. This RVU amount includes both direct patient care and administrative time.

From the analysis in Tables 1.15 and 1.16 it is evident that Highgrove will need approximately 3,700 RVUs of nursing time for January. Because the amount of RVUs staff must cover is not likely to be the same each month, a shortfall for a given month is best handled by using variable labor. The practice manager decides to ask the current nurses whether they want to work overtime or whether they prefer to have temporary nurses come in to make up shortfalls. As the staff meeting is more than a month away, the practice manager decides to budget \$30 an hour for the required hours. Table 1.17 illustrates the amount of variable labor needed for the month of January.

TABLE 1.15. MAXIMUM RVUs PER MONTH FOR CLINICAL EMPLOYEES.

	Internal Medicine	Gynecology	Pediatrics	All Specialties
Physician FTEs	1.75	0.5	2	
Max. RVU requirement per day	48	48	48	
Days per month	20	20	20	
Max. RVUs for month	1,680	480	1,920	4,080
LPN FTEs				5
Max. RVU requirement per day				32
Days per month				20
Max. RVUs for month				3,200

TABLE 1.16. RVUs FOR JANUARY.

Internal medicine	1,495
Gynecology	367
Pediatrics	<u>1,845</u>
TOTAL RVUs	3,707

TABLE 1.17. VARIABLE LABOR REQUIREMENTS FOR JANUARY.

Maximum RVUs covered by FTEs	3,200
Total RVUs for January 2004	3,707
Surplus (shortfall) RVUs	(507)
Hours (@ 4 RVUs an hour)	127
Rate for variable labor per hour	\$30
Variable labor in dollars	\$3,810

General operating costs typically consist of information technology costs, medical and surgical supply costs, building and occupancy costs, professional liability costs, depreciation on furniture and equipment, interest on debt outstanding, administrative supply costs, and promotion and marketing costs.

Step 6. The practice manager creates a budget for general operating costs by examining each line item of the prior year's budget and adjusting it for changes expected in 2004. Table 1.18 illustrates the comparison of budgeted to actual costs for 2003 and the budget for 2004.

Step 7. The practice manager compiles the information (the revenue and expense budgets) for the operating budget and sends the document to the physician-owners and other stakeholders to review. Table 1.19 illustrates Highgrove's operating budget for 2004.

PERSPECTIVE 1.4. EXPENSE BUDGETS RIGHT ON TARGET.

Expenses can quickly get out of hand in a large physician practice. One way to keep that from happening is to budget using national benchmarks for all expense categories and then to monitor frequently, comparing budgeted amounts to actual amounts. Our practice uses the MGMA cost survey benchmarks for cardiovascular/thoracic surgery and cardiology practices. For example, the 2002 report states that mean general and administrative salaries for 2001 were \$15,368 per FTE physician. Mean medical surgery and supply costs for 2001 were \$4,606. Understanding reasonable costs per budget line item and holding the line on those costs has helped our practice achieve its budget with less than 2 percent variation for the last several years.

Source: Contributed by Teresa L. Edwards, executive administrator, Cardiac & Thoracic Surgical Associates, Richmond, Virginia.

PERSPECTIVE 1.5. BALANCING MISSION AND MARGIN IN AN ACADEMIC MEDICAL PRACTICE: A MULTIDIMENSIONAL BUDGETING TOOL.

Patient care, teaching, research, and service are all integral parts of the mission of the Department of Family Medicine at the University of North Carolina (UNC) at Chapel Hill. The department, through its Family Practice Center (FPC), provides over 45,000 primary care visits each year, helps to educate about 640 UNC medical students, 24 residents, and 16 annual part-time faculty development fellows across the country, and maintains almost \$2 million in external funding each year, including research done directly in the department and through multidisciplinary research centers on the UNC campus.

Balancing these divergent missions has been a challenge at both the departmental level and the individual faculty level. To help bring order to the chaos, the departmental leadership created a spreadsheet-based faculty time management system, nicknamed the “grid.” The grid assists in allocating individual faculty time across mission activities while ensuring that aggregate faculty time is sufficient to cover needs within each mission area. This multidimensional tool serves several needs that help to balance mission and margin:

- *Planning and budgeting tool.* Clinical work is broken into clinic sessions in the grid. The grid also includes inpatient attending weeks per year, nights on call per year, and other miscellaneous clinical activities. It provides an aid for clinical scheduling as well as a sophisticated budget modeling tool. The grid automatically recalculates patient visits, clinic revenue, and clinic variable costs based on changes in total faculty clinic sessions. The grid serves as a master inventory of faculty, their total FTEs for the fiscal year, and their salary and benefit costs.
- *Resource management tool.* The grid’s ability to track individual faculty time across diverse mission activities allows for more informed decision making by the departmental leaders and by individual faculty members. The department uses the grid as a central tool for negotiating current faculty activities as well as for creating job descriptions for incoming staff. Each faculty member has access to a public version of the grid, enabling faculty to view FTE allocation impacts for a number of possible career scenarios. The grid lends itself to enhancing faculty accountability by tracking clinical sessions but also helps to protect faculty from being committed to activities over and above 100 percent FTE.

- *Mission litmus test.* The grid supports a systems-planning approach to balancing the multiple mission activities and goals of the department as well as the preferences of individual faculty in the context of limited resources. It aids in trend analysis over time to identify total faculty FTEs and associated costs applied to each mission area, providing a powerful tool for identifying disparities between actual resource allocation and departmental vision, mission, and value statements.

In addition to serving these primary needs, the grid has improved faculty solidarity by allowing peers to better understand the work of others in the department, which can be seen by all faculty on the grid public version. Finally, the grid helps to frame debate regarding the value of diverse mission areas and provides a context for meeting the challenges of an ever-changing external environment.

Source: Adapted from A. J. Daugird, J. E. Arndt, and P. R. Olson, "A Computerized Faculty Time-Management System in an Academic Family Medicine Department," *Academic Medicine*, 2003, 78(2), 1–8.

Step 8. After the operating and capital budgets are approved, the practice administrator finalizes the cash budget. A review of the practice's collection information for the past two years reveals that the practice has an average of forty-two days in accounts receivable. The practice's history shows collection rates as follows:

Collections in month of service	50 percent
Collection in month of service + 1	30 percent
Collection in month of service + 2	15 percent
Collection in month of service + 3	5 percent

The practice's revenue under capitated contracts has been \$20,400 per month (\$17 pmpm × 1,200 members). Revenue under discounted charge arrangements and flat fee contracts for the last three months of 2003 was

October	\$168,435
November	\$170,525
December	\$171,500

TABLE 1.18. BUDGETED GENERAL OPERATING COSTS FOR 2003 AND 2004.

	2003 Budget	2003 Actual	Variance Over (Under)	2004 Budget	Comments for 2004 Budget
Information tech.	\$69,530	\$70,251	\$721	\$70,921	2% inflation increase
Med. & surg. supplies	35,174	35,539	365	35,877	2% inflation increase
Building & occupancy	117,500	117,500	—	123,375	5% rent increase
Depreciation expense	40,900	41,324	424	46,283	Purchase of additional equipment
Interest expense	27,000	27,000	—	36,000	Additional debt—computer
Admin. supplies	40,900	41,324	424	41,718	2% inflation increase
Prof. liability	163,600	163,600	—	176,688	8% premium increase
Other insurance premiums	11,452	11,571	119	11,681	2% inflation increase
Prof. fees	71,984	72,731	747	73,424	2% inflation increase
Marketing & promotion	29,448	27,350	(2,098)	30,037	2% inflation increase
Bad debt expense	96,520	92,514	(4,006)	98,450	2% inflation increase
TOTAL	\$704,008	\$700,704	\$(3,304)	\$744,454	

TABLE 1.19. OPERATING BUDGET FOR 2004.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Revenue													
Gross revenue	\$274,170	\$275,724	\$263,440	\$233,174	\$232,952	\$253,006	\$235,246	\$242,276	\$249,676	\$263,588	\$269,804	\$268,768	\$3,061,824
Charity care	(6,179)	(9,926)	(9,484)	(8,394)	(8,386)	(9,108)	(8,469)	(8,722)	(9,988)	(9,489)	(9,713)	(9,676)	(106,534)
Contractual allowance	(70,559)	(68,931)	(65,860)	(58,294)	(58,238)	(63,252)	(58,812)	(60,569)	(62,419)	(65,897)	(67,451)	(67,192)	(765,456)
NET REVENUE	197,432	196,867	188,096	166,486	166,328	180,646	167,966	172,985	178,269	188,202	192,640	191,900	2,186,142
Salaries & benefits													
Physician comp. & benefits	59,955	59,955	59,955	59,955	59,955	59,955	59,955	59,955	59,955	59,955	59,955	59,955	719,459
Other clinical salaries & benefits	22,624	22,624	22,624	22,624	22,624	22,624	22,624	22,624	22,624	22,624	22,624	22,624	271,492
Part-time or contract clinical labor	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	3,810	45,720
Admin. salaries & benefits	33,289	33,289	33,289	33,289	33,289	33,289	33,289	33,289	33,289	33,289	33,289	33,289	399,464
TOTAL SALARIES & BENEFITS	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	1,436,135
Operating costs													
Information tech.	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	70,921
Med. & surg. supplies	2,990	2,990	2,990	2,990	2,990	2,990	2,990	2,990	2,990	2,990	2,990	2,990	35,877
Building & occupancy	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	10,281	123,375
Depreciation expense	3,857	3,857	3,857	3,857	3,857	3,857	3,857	3,857	3,857	3,857	3,857	3,857	46,283
Interest expense	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	36,000
Admin. supplies	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	41,718
Prof. liability	14,724	14,724	14,724	14,724	14,724	14,724	14,724	14,724	14,724	14,724	14,724	14,724	176,688
Other insurance premiums	973	973	973	973	973	973	973	973	973	973	973	973	11,681
Prof. fees	6,119	6,119	6,119	6,119	6,119	6,119	6,119	6,119	6,119	6,119	6,119	6,119	73,424
Marketing & promotion	2,503	2,503	2,503	2,503	2,503	2,503	2,503	2,503	2,503	2,503	2,503	2,503	30,037
Bad debt expense	8,204	8,204	8,204	8,204	8,204	8,204	8,204	8,204	8,204	8,204	8,204	8,204	98,450
TOTAL OPERATING COSTS	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	744,454
TOTAL EXPENSES	181,716	181,716	181,716	181,716	181,716	181,716	181,716	181,716	181,716	181,716	181,716	181,716	2,180,592
Income before taxes	15,716	15,151	6,380	(15,230)	(15,388)	(1,069)	(13,750)	(8,731)	(3,447)	6,486	10,924	10,184	7,227
Income taxes	(315)	(303)	(128)	304	307	21	275	174	69	(130)	(219)	(204)	145
NET INCOME	\$15,401	\$14,848	\$6,252	\$(14,926)	\$(15,051)	\$(1,048)	\$(13,475)	\$(8,557)	\$3,378	\$6,356	\$10,705	\$9,980	\$7,082

Note: Due to rounding, the numbers in this table may be slightly different from those computed by calculator.

Because expenses are generally incurred ratably over the year, the assumption is that an equal amount of cash flows out of the practice each month. Tax expense is negligible and therefore not included in the cash budget. The practice has a policy that requires the cash available to be 40 percent of the next month's cash outflow. Accordingly the cash budget shown in Table 1.20 is prepared. Cash in excess of requirements, if significant, should be moved to an interest-bearing vehicle.



To review, budgeting is the beginning of the planning and control cycle. It can be performed with as much or as little detail as is practical for the physician practice. Although it can be a daunting task in the face of all that the practice manager has to do, time spent in the budgeting process can pay dividends to the practice by enhancing profitability.

The budgeting process can be broken into the following eight steps:

1. Create a statistics budget to forecast the demand for services for the year in units of service.
2. Convert units of service to relative value units.
3. Review payer contracts to identify any changes to reimbursement that will affect revenue for the budget year. Translate the relative value units into revenue.
4. Prepare the labor budget for physicians, nonphysician clinical employees, and administrative employees.
5. Forecast the need for part-time or contract labor. Translate these requirements into dollars.
6. Create a budget for general operating costs.
7. Aggregate the revenue and expense components of the budget and distribute to stakeholders for review and comment.
8. Integrate the capital budget and prepare the cash budget.

In the midst of all that the practice manager has to do, budgeting can be an intimidating assignment. However, budget preparation, if viewed as a plan for action and broken into manageable tasks, can be an informative process. Ideally, the budget is a tool for translating the goals and objectives of the practice for the year into dollars. The annual budgeting process offers a key opportunity for analyzing the strategic plan of the organization and ensuring that the allocation of practice resources is in alignment with this plan. Monitoring the practice's actual results of operations against the budget, as further outlined in Chapter Six, can help the practice stay on course.

TABLE 1.20. CASH BUDGET FOR 2004.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Collections in month of svc. (50%)	\$88,516	\$88,234	\$83,848	\$73,043	\$72,964	\$80,123	\$73,783	\$76,293	\$78,935	\$83,901	\$86,120	\$85,750
Collections from prior month (30%)	51,450	53,110	52,940	50,309	43,826	43,778	48,074	44,270	45,776	47,361	50,341	51,672
Collections from 2 mos. prior (15%)	25,579	25,725	26,555	26,470	25,154	21,913	21,889	24,037	22,135	22,888	23,680	25,170
Collections from 3 mos. prior (5%)	8,422	8,526	8,575	8,852	8,823	8,385	7,304	7,296	8,012	7,378	7,629	7,893
Capitalated revenue	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400
TOTAL CASH INFLOW	194,367	195,994	192,318	179,073	171,168	174,599	171,450	172,296	175,257	181,928	188,170	190,886
Total salaries & benefits	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678	119,678
Operating expenses	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038	62,038
Remove noncash expenses												
Depreciation expense	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)	(3,857)
Bad debt expense	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)	(8,204)
TOTAL CASH OUTFLOW FROM OPERATIONS	169,655	169,655	169,655	169,655	169,655	169,655	169,655	169,655	169,655	169,655	169,655	169,655
Cash generated for month from ops.	24,712	26,340	22,663	9,419	1,513	4,944	1,796	2,641	5,602	12,273	18,515	21,231
Capital expenditures						35,000						
Beginning cash balance	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862
Cash available	92,574	94,210	90,534	77,290	69,384	37,815	69,666	70,512	73,473	80,144	86,386	88,625
Cash requirements for next month	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	67,862	75,000
Cash excess (needed)	24,712	26,340	22,663	9,419	1,513	(30,056)	1,796	2,641	5,602	12,273	18,515	13,625
Cash transferred to money market acct.	\$24,712	\$26,340	\$22,663	\$9,419	\$1,513		\$1,796	\$2,641	\$5,602	\$12,273	\$18,515	\$13,610
Cash borrowed						\$30,056						

Discussion Questions

1. Discuss the trade-offs to be considered when choosing between adequate projections and accurate projections in the budgeting process.
2. Compare and contrast the advantages and disadvantages of incremental and zero-based budgeting.
3. Discuss how the ability to match revenues with expenses through the accrual accounting method benefits practice managers.
4. Propose five potential sources of information for performing a demographic survey.
5. Discuss the purpose of the revenue budget.
6. Identify three methods for projecting changes in practice expenses.
7. List several key stakeholders in the budgeting process.

Web Resources

PowerPoint presentation
 Answers to discussion questions
 Case study

Notes

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Suggested Reading

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CHAPTER TWO

REVENUE CYCLE

Lou Porn
Polly Minugh

Objectives

This chapter will help the reader to

- Understand the scope, key processes, and objectives of the revenue cycle.
- Identify and differentiate common reimbursement methodologies.
- Recognize common revenue cycle issues and potential solutions.
- Understand revenue cycle macro- and process-level performance indicators.

Physician practices continue to face severe financial challenges. Operating margins are shrinking as a result of declining third-party reimbursement, rising nursing salaries, and malpractice expenses. When an organization's leaders believe they cannot achieve further cost reductions without sacrificing quality of care and patient safety, they turn their attention to revenue cycle initiatives as a key strategy for returning their organizations to financial viability. These revenue cycle initiatives center around two objectives: increasing net collectible revenue and improving cash flow and cash position.

Revenue cycle initiatives that focus on net revenue improvement include

- Pricing strategies
- Fee schedule management
- Charge capture improvement
- Denial rate reduction
- Underpayment management
- Specialized reimbursement strategies, such as Medicare provider-based designation

Revenue cycle process improvement initiatives such as electronic processing, automated work flow management, and accounts receivable outsourcing strategies aim toward accelerating the collection of cash.

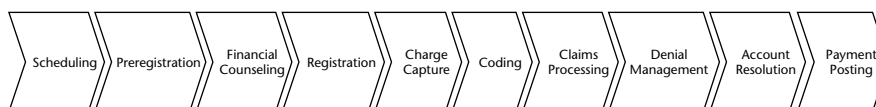
To understand the importance of the revenue cycle to an organization's financial health and to optimize revenue cycle performance, the practice manager must understand the full scope of the revenue cycle and its interdependent processes and should adopt key performance targets to promote revenue cycle accountability and coordination across the organization and monitor performance against those targets.

Revenue Cycle Processes and Objectives

The term *revenue cycle* has traditionally meant the process of collecting money for services rendered by a provider. The prevailing, yet narrow, focus of organizations seeking to improve revenue cycle operations has been on the business office, or billing and collection processes. However, as the complexity of the health care regulatory and reimbursement environment has increased, and physician practice net revenues and operating margins have declined, physician practices are now taking a broader view of the revenue cycle. They are recognizing that it is a series of complex interdependent processes that require coordination, across administrative, clinical, financial, and external organizational boundaries.

The revenue cycle begins when a patient or physician determines the need for a service and the patient schedules an appointment or presents for the service. The cycle is not complete until the charges associated with that service have been resolved through the application of insurance payments, contractual allowances, write-offs, or patient payments to his or her account. Figure 2.1 illustrates the processes and functions now routinely accepted as the broader definition of the revenue cycle.

FIGURE 2.1. PATIENT SERVICE REVENUE CYCLE.



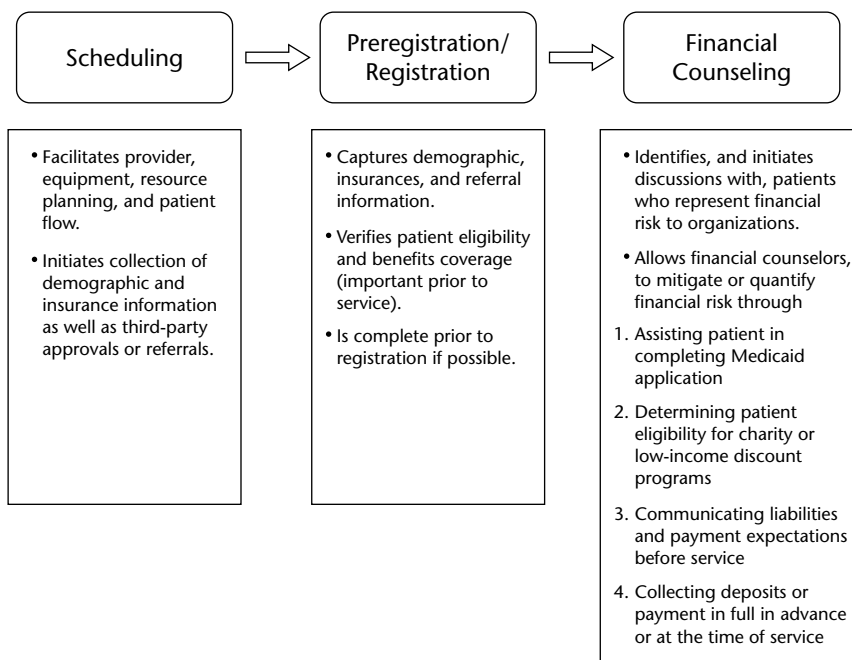
Patient Access

The scheduling, preregistration and registration, and financial counseling processes are frequently referred to as the *patient access* functions (Figure 2.2). Each of these processes has an important role in ensuring the successful execution of the service capture and billing and collection processes that follow.

Scheduling occurs once a patient (through self-referral) or physician has deemed the need for a service. Scheduling is a critical process in facilitating provider, equipment, and resource planning and patient flow and also satisfies an important revenue cycle requirement: the notification to the practice of a future service and the opportunity to initiate collection of required demographic and insurance information as well as the necessary third-party approvals or referrals before service delivery.

Preregistration is the preservice capture of all information required to ensure third-party payment, including patient demographic, insurance, and referral information. If it is determined that preauthorization is required for the scheduled service, then the

FIGURE 2.2. PATIENT ACCESS FUNCTIONS.



preregistration process also includes securing required approvals from the patient's insurer. For certain high-dollar services or targeted insurance plans, verification of patient eligibility and benefits coverage should be obtained from the insurer before service. If preregistration has occurred before service, then the registration process at patient arrival is greatly simplified and requires only verifying the information gathered during the preregistration process, obtaining signatures on required forms, obtaining copies of insurance cards if not already on file, and collecting copayments or other known patient liabilities.

The preregistration process is dependent on the scheduling process, because the scheduling of a service serves as the notification that a preregistration is required. In some large physician practices, patient call centers handle scheduling and preregistration simultaneously during the initial scheduling call. In practices where scheduling is performed at the site of care, a centralized preregistration unit may complete the preregistration process after scheduling is complete. This happens in a number of ways, such as patient call transfers to the preregistration unit after the service is scheduled, telephone callbacks completed by preregistrars after the scheduling is complete, or patient-initiated preregistration by telephone, mail, or Web self-service. In other offices the scheduling and preregistration processes may be decentralized and completed entirely by the office staff at the site of care. Regardless of the approach it is very important that the necessary information is accurately captured to facilitate verification of required billing information and approvals before service delivery for scheduled services.

In situations when preregistration cannot be completed in advance of service (walk-in or emergent services or services scheduled within twenty-four hours of the appointment), the registration process will be lengthier and the opportunity to verify insurance and benefits coverage in advance will be limited. For these unscheduled patient encounters, the registrar will create the entire registration data set on the date of service. In many large physician practices a centralized registration department performs same-day registrations either through patient check-in at a central registration point or through "registration phones" located at the site of service. The benefits of centralizing the preregistration and registration function include the ability to tightly monitor and manage the quality of registration data and registrar performance and the opportunity to train highly skilled registration "superusers" who are well versed in the practice's highly complex set of insurance plans, insurance requirements, and billing requirements. When a practice takes a decentralized approach to preregistration and registration functions, having them performed by a large number of staff in the practice office locations, then the standardized policies, registrar education, and registration performance measurement processes discussed later in this chapter become particularly critical.

Financial counseling refers to the process of identifying and initiating discussion with patients who represent financial risk to the organization due to lack of insurance, limited or no coverage for services to be performed, or high patient cost-sharing requirements. Financial counseling derives from corporate policy. In today's economy financial resources are being reduced from all sources. As a result organizations are strengthening policies that address expecting payment from those who can pay. All patients should be screened for ability to pay. Some organizations may have a strong community mission or need for patient volume to support an academic program. However, those patients who are able to pay should still be expected to pay.

Patients are typically referred to the financial counseling process through patient request or through identification of financial risk when scheduling elective procedures routinely not covered by insurance, during the preregistration or registration process, or following determination of previous bad debt or large, outstanding past-due balances. The role of the financial counselor is to mitigate or quantify the financial risk or commitment through

- Securing third-party sponsorship—for example, through assisting the patient in completing the Medicaid application process
- Determining patient eligibility for charity or low-income discount programs
- Communicating estimated patient liabilities and payment expectations to the patient in advance of the service
- Collecting deposits or payment in full in advance or at the time of service

In large physician practices dedicated financial counselors may be located at certain office sites or in a central financial counseling department. In smaller groups financial counseling responsibilities may reside in the business office or with the practice manager.

Service Capture

The charge capture, coding, and charge entry processes together result in the determination and capture of required procedure and diagnosis codes for billing, as well as the recognition of revenue for the services provided. In the physician office setting, services are documented in the medical record (electronic or paper) and may be recorded on a paper encounter form, through a handheld charge capture device that is downloaded into the practice management system, or created and captured as a result of the documentation process if an electronic medical record is used. Procedure coding is usually completed by the physician through selection of the appropriate Current Procedural Terminology (CPT) codes, whereas diagnosis

coding may be performed by the physician or coded by the physician's office staff based on the physician's written diagnosis. If charges are captured through paper encounter forms, a daily reconciliation of patients receiving services to encounter forms is an important step in ensuring that charges are not lost. Handheld devices or electronic medical record systems are typically capable of performing reconciliations and identifying missing charges as well. The charge capture, coding, and charge entry processes for office services should be completed by the end of the day to minimize the potential for lost charges and to avoid delays in revenue recognition and billing.

Services performed by physicians in the hospital setting present a greater challenge to charge capture and coding than office-based services, for the following reasons:

- The site of care is remote from the location of the practice management system where charges are entered for billing purposes.
- Reconciliation of services rendered to charges recorded relies on the availability of information on hospital activity, such as daily census reports by the physician, consults ordered, and surgical schedules, rather than the readily available physician schedule in the office setting.
- Coding for hospital procedures is more complex than that for office-based services and must be supported by what is documented in the hospital medical record.
- The complexity of physician services and the service dollar value are both greater in the hospital setting.

For these reasons, charge capture, coding, and charge entry for hospital services must be managed closely to avoid charge entry delays and potential for lost revenue. For hospital services, charges may be recorded on paper encounter forms or through handheld charge capture devices and then transported to a location where they can be entered into the practice management system for billing. Coding may be performed in the same way as for office services or by coders employed by the practice and deployed to the hospital setting to code services based on physician documentation in the hospital medical record. In addition to using hospital-based coding staff to ensure accurate coding for hospital services, many larger groups locate charge entry and charge ticket drop-off stations in strategic locations in the hospital. These stations may be close to the operating suites or physician lounges. Office staff retrieve these charges to facilitate timely entry into the practice management system.

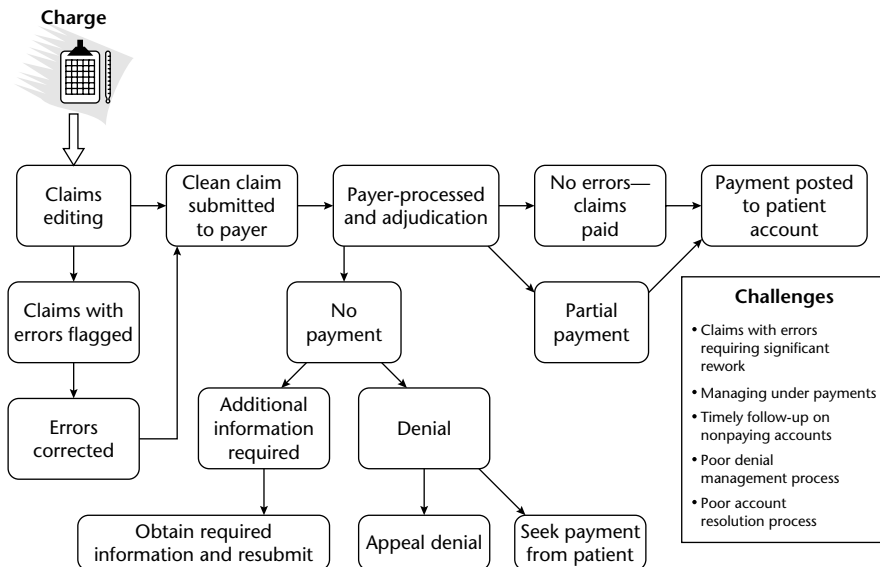
For both office- and hospital-based services, successful revenue cycle execution relies on timely, complete, and accurate charge capture, charge entry, and coding of services to avoid delays in billing and revenue loss.

Billing and Collections

Once procedure and diagnosis codes are entered, the claim is created and the back-end billing and collection processes are initiated. Back-end revenue cycle processes include claim submission or billing, denial management, account resolution, and payment posting (Figure 2.3).

When the claim is produced, it must be submitted to the payer, either through electronic data interchange (EDI) or on a paper claim form mailed to the payer. Most practice management systems have a claims management module that allows electronic copies of claims to be retained and printed on demand. The claims management system or the EDI vendor maintains a series of claim edits that mirror the editing process of the payers' claim processing systems. Claims are processed through these edits before submission to a payer to ensure the claims are "clean." Claims with errors are flagged by this editing process and are not transmitted until the errors have been corrected. Clean claims (with no edit flags) can be printed for mailing or sent through EDI to the payer. Claims with errors require manual

FIGURE 2.3. BILLING AND COLLECTIONS.



intervention by billing or registration staff, which temporarily delays submission. A high percentage of clean claims therefore expedites the billing process.

When the payer receives the claim, it is processed and adjudicated, resulting in payment, partial payment, or denial. If the claim is paid, both the provider and the insured receive payment notification, through either a remittance advice (provider notification) or an explanation of benefits (patient notification). The remittance advice indicates any payments made as well as the contractual allowances to be applied to the charges and any amounts collectible from the patient. If no payment or only partial payment is received, the remittance advice provides the reason for the denial or reduced payment or notes additional information that is required to be submitted in order to complete payment processing. Many payers transmit remittance notifications and payments through electronic remittance advice (ERA) and electronic funds transfer (EFT). This can accelerate processing by several days.

As previously noted, the payer's claims adjudication process will result in payment or denial notification. When a claim denial is received, the business office or billing staff attempt to resolve the denial, by providing the additional information required by the payer to complete payment processing, by appealing the denial with the payer, or by seeking payment from the patient. Like claim errors, claim denials delay and extend the revenue cycle. Therefore low claim denial rates and proactive denial prevention are important to managing accounts receivable levels.

Finally, to resolve an outstanding accounts receivable balance and complete the revenue cycle, payments and contractual allowances are posted to the patient account until the account balance is zero. Payment posting is typically managed through a centralized cash department. Payments received are deposited to the organization's bank account, and payment and contractual allowances are credited against the outstanding charges on the patient account. Deposits and accounts receivable cash posting totals are balanced daily for purposes of cash control and to ensure the accounts receivable balance is accurately stated.

Reimbursement Methodologies

Physicians are rarely paid based on their full, or *gross*, charges. As discussed more fully in Chapter One, the difference between what the practice charges and the amount it is entitled to from a particular payer is the *contractual adjustment* or *allowance*. The most common reimbursement methodologies for physician services are resource-based

relative value scale (RBRVS) systems, prospective fee schedules, discounted charges, and capitation.

RBRVS

The current Medicare reimbursement methodology under Medicare Part B, mandated by the Omnibus Budget Reconciliation Act of 1989, is known as the Medicare RBRVS system. The RBRVS methodology calculates a payment amount for each CPT code, using three factors (Figure 2.4):

1. A nationally uniform set of *relative value units* (RVUs) for physician services, determined by these three components:
 - Physician work—the time and skill the service requires and the service intensity
 - Practice expenses
 - Malpractice expenses
2. A *geographic adjustment factor* to reflect differences in cost by geographic area (Geographic Practice Cost Index, or GPCI)
3. A nationally uniform *conversion factor* (CF) to convert geographically adjusted relative values to dollars

In addition to determining physician reimbursement for Medicare beneficiaries, the RBRVS methodology has become the basis for reimbursement from other government payers and many managed care plans. Over 50 percent of state Medicaid programs, for example, have adopted an RBRVS methodology, often with conversion factors and GPICIs adjusted to achieve state budgetary goals and usually resulting in payments levels below Medicare rates.

FIGURE 2.4. CALCULATING PAYMENT WITH THE RBRVS METHODOLOGY.

$$\text{Payment} = \text{CF} \times [(\text{RVUw} \times \text{GPCIw}) + (\text{RVUp} \times \text{GPCIp}) + (\text{RVUm} \times \text{GPCIm})]$$

CF = conversion factor

RVU = relative value units, w = work, p = practice cost, m = malpractice

GPCI = geographic practice cost index, w = work, p = practice cost, m = malpractice

Prospective Fee Schedules

Prospective fee schedules are physician fee schedules that are negotiated with a payer. They do not have a direct relationship to the physician's published fee schedule. The Medicare RBRVS fee schedule discussed earlier is a prospective payment methodology. Many managed care plans have adopted methodologies similar to RBRVS to determine payment amounts at the CPT code level, expressed as a percentage of the Medicare fee schedule (for example, some insurers pay 120 percent of Medicare rates). In some cases, services may also be paid at a flat amount that reflects certain market dynamics or characteristics of the service itself.

Physician Capitation

Capitation is another prospective payment methodology. When providers are capitated, the payment for the patients covered is determined on a per capita basis, not on the number, amount, or intensity of services provided. The provider must deliver a defined set of services for these patients and receives a set amount per member per month (pmpm). The services covered under the capitation arrangement may include primary care physician services, ancillary services such as lab and radiology, emergency services, specialty physician services, outpatient hospital procedures, inpatient hospitalization, or any combination of these services. In addition, capitation payments can and usually do include services provided outside the physician group and even outside the local market. Under capitation methodologies the provider is at financial risk for the medical costs associated with caring for his or her panel of capitated patients. If the primary care physician's or other physician's patient panel requires a high level of costly services or if the physician has high-utilization practice patterns, the cost of the covered services delivered may exceed the pmpm payments received. In some capitation arrangements financial risk for the cost of hospital and specialty physician services may be shared among the primary care physician, specialists, and the hospital.

Capitation as a reimbursement methodology is becoming more and more unpopular. Physicians are no longer as willing to accept capitation contracts. The public and political backlash associated with the underlying premise of capitation has reached an all-time high. Many feel that linking a physician's decision making regarding appropriate levels of care with the physician's personal financial risk may produce an incentive for the physician to withhold appropriate care in order to achieve financial gain. The risk of malpractice litigation, high malpractice insurance rates, and a number of high-profile lawsuits against HMOs have made capitation methodologies less attractive to both insurers and providers.

Discounted Fee for Service

Although the fee-for-service method is less common than the others discussed here, reimbursement can also be determined by a negotiated percentage discount on the provider's gross charges. Under discounted fee-for-service reimbursement methodologies, the payer determines payment levels during the claims adjudication process by applying the negotiated discount rate to gross charges for allowed services. Therefore the actual payment amount is determined retrospectively, after service delivery, rather than prospectively as is the case with RBRVS and capitation methodologies. Discounted fee-for-service methods are normally not acceptable to payers because an individual physician or a group practice may charge disproportionately for various services to increase reimbursement.

Common Revenue Cycle Challenges

Practice managers deal with a number of specific revenue cycle challenges as they work to increase net collectible revenue and improve the practice's cash flow and cash position.

Patient Access

The most common revenue cycle challenge is obtaining patient billing and insurance authorization information before delivering scheduled service. Frequently, scheduling and registration functions are decentralized at the site of service. Lack of understanding of the importance of preregistration and competing priorities at the site of care may result in preregistration not being completed before the service. Preregistrations should be completed twenty-four to forty-eight hours before the scheduled appointment.

Registration data quality is another common revenue cycle issue. If the data collected during the registration process are not accurate, a number of issues may result, including claim errors, denials, and payment delays. Capturing accurate data becomes more difficult as the number of insurance contracts, with different complex plans, goes up and when the practice has a large number of registration staff who are not centrally trained or managed. Practices should consider limiting registration access to a smaller number of registrars who are well trained in registration and billing requirements. They should also consider conducting periodic audits on registration data to ensure quality. Completing the preregistration and insurance verification processes will also improve the

quality of registration data because initial registration errors can frequently be identified at this point.

Service Capture

The most common challenges in the service capture process are

- Failure to capture charges for all services rendered
- Errors in posting charge and diagnosis codes
- Delays in posting charges

The first step in avoiding issues with service capture is to ensure all services provided are reconciled to charges entered on a daily basis. Comparison of patients receiving services to charges recorded will help prevent lost charges. Charges should be entered daily to avoid lags in billing for services provided. If charges are posted with invalid procedure or diagnosis codes or posted to the wrong patient account or episode of care, then claims for payment may be delayed or denied. Routine fee schedule maintenance, proper coding training, and availability of current coding references should improve coding accuracy. In addition, denials and claim errors resulting from charge posting errors should be routinely communicated to the staff responsible for charge entry in order to address training needs and continuously improve charge capture performance.

Billing and Collections

Once a claim is produced, the billing process must ensure the claim is clean and submitted to the payer in a timely manner. A claim is clean when it passes successfully through system edits designed to “scrub” the claim of potential errors. When a high percentage of claims cannot pass successfully through system edits and must be manually corrected by billing staff, delays can result. These billing delays can have a significant impact on the level of accounts receivable and the practice’s cash flow.

The most common failure of the account resolution process is the lack of effective denial management. Medical group collections staff are continually challenged by the low-dollar, high-volume nature of the physician revenue stream. Telephone follow-up on outstanding accounts is typically cost effective only for high-dollar accounts, which represent a small percentage of the overall claim volume. Recording, inventorying, tracking, and responding to denials received from the payer is the most cost-effective way to address and pursue unpaid claims. The denial notification from the payer indicates the next action required (supplying additional information, billing

the patient, and so forth) to resolve the claim and therefore eliminates the need for time-consuming telephone follow-up for small-dollar claims. Monitoring of and feedback on the source and type of the denials being received is important to achieving the ultimate goal of preventing future denials.

Despite the importance of managing denials, this part of the revenue cycle process is the most commonly overlooked or underresourced. A lag in follow-up means that it will be even longer before the receivable is collected. Frequently, denials are processed manually, despite the availability of electronic remittances and practice management system functions for automating the denial management work flow. Using electronic remittance processing when available and leveraging automated denial management systems can improve denial processing and assist in capturing the denial data required to understand the root causes underlying the denials.

Other collection process challenges include managing underpayments and evaluating bad debts on a timely basis. Most practice management and contract management systems that have been installed recently have the ability to compare the actual payment received on a claim to the expected payment level (as dictated by contract terms or government reimbursement rates) and will flag potential underpayments for follow-up and resolution. In order for the system to accurately flag underpayments, the terms of each payer contract must be loaded and maintained in the practice management or contract management system payer table. However, managed care contract negotiations and system table maintenance functions are frequently performed by different departments. This can result in failures or delays in communication about contract changes, and that may cause inefficiencies in managing the level of underpayments.

Inconsistent or delayed bad debt processing (the writing off of uncollectible accounts receivable balances) can result in a “ballooning” of very old accounts in the practice’s accounts receivable. Bad debt policies and procedures typically call for write-off of an outstanding balance once it has reached a certain age and a series of collection efforts has been exhausted with no payment received. Bad debt processing is usually supported automatically in the practice management system, according to criteria established by practice leadership. This is an area where the practice information system may not be used to its fullest advantage. If the practice has established a variety of different bad debt policies and criteria by clinical department or individual physician, the business office may not be able to use the automated processing. Bad debt processing is also frequently delayed by numerous clinical and administrative write-off approval requirements for even very small balances. The best defense against these bad debt processing challenges is achieving organizational consensus on bad debt policies and procedures; this agreement will allow technology to support this critical process effectively. Consistency in patient collection processes, including bad debt referral, is important to maintaining equity in treatment of patients who are seeing different providers in the practice.

MEASURING SUCCESS

An often neglected but critically important aspect of superior revenue cycle performance is the establishment and monitoring of appropriate revenue cycle performance indicators. Measurement can be effective only when appropriate performance standards or targets have been identified and adopted for each indicator. For example, see various Academic Practice Compensation and Production Surveys published by the Medical Group Management Association (MGMA).

The macro-indicators listed here are useful in assessing the general health of the revenue cycle.

<i>Indicator</i>	<i>Benchmark</i>
• Gross days revenue outstanding	40 days to mid-50 days
• Net cash collection rate	> 95%
• Bad debt write-off	< 3% of gross revenue
• Bad debt recovery	10–12%
• Cost-to-collect	3–4%
• Registration denial rate	2% of billed claims
• Total denial rate	3% or less of billed claims

These macro-indicators are typically measured monthly and are appropriate for executive-level monitoring. Unfavorable performance on any single metric may indicate a disease state within the organization's revenue cycle. Evaluating the macro-indicators together will provide additional insight into the magnitude of the issue and its sources. Further investigation of the process performance indicators, discussed later, will assist the practice manager in making a more definitive diagnosis and determining the appropriate interventions to improve revenue cycle performance.

Gross days revenue outstanding (GDRO) measures an organization's cash flow and level of accounts receivable (AR), expressed in number of days. First, calculate average daily gross revenue (ADGR):

$$\frac{\text{Gross Revenue Production in Period}}{\text{Number of Calendar Days in Period}} = \text{Average Daily Gross Revenue}$$

Then use the ADGR figure to calculate GDRO:

$$\frac{\text{Gross AR Balance}}{\text{ADGR}} = \text{Gross Days Revenue Outstanding}$$

Target performance levels for GDRO will vary, primarily according to an organization's service mix, payer mix, and payer turnaround times. GDRO alone is not sufficient to gauge revenue cycle performance. If an organization achieves a very low GDRO by aggressively writing off outstanding balances once a certain period of time has elapsed since the service date, it will also reduce the collectible cash realized, resulting in "leaving money on the table" and a lower than expected net cash collection rate.

Net cash collection rate is the difference between net revenue expected and actual cash collections. Used to evaluate collection-rate effectiveness and potential revenue leakage, it is calculated as

$$\frac{\text{Cash Collected}}{\text{Net Revenue for the Same Period}} = \text{Net Cash Collection Rate}$$

Note that the cash in the numerator is not necessarily associated with the net revenue in the denominator. Take, for example, an office visit charge generated on June 1 and paid on July 15 of the same year. The net revenue for this office visit is recorded in June and is therefore counted in the net revenue denominator in June. The cash, however, is recorded in July and therefore will appear in the numerator of the July calculation. These timing differences can influence net collection rate performance from month to month; however, averages over time and the general trend line are useful in assessing collection-rate effectiveness. Specific factors that may cause material fluctuations in the month-to-month collection rate include

Adding new providers and services. Additional net revenue will outpace associated cash in initial months.

Accounts receivable "clean-up" projects. Additional cash generation from old accounts will cause a temporary cash increase and may cause the collection rate to exceed 100 percent.

Changes in contract reimbursement rates. These changes can temporarily increase or decrease the net collection rate as cash experience lags new net revenue levels.

As a result of these timing differences, some organizations have developed systems that measure and monitor actual net collection rate experience at the charge level. The net revenue value of an office visit according to the payer contract is determined and then compared to the actual cash received from the payer and the patient or guarantor.

Bad debt refers to a balance that is owed and is uncollectible from the patient or guarantor. When an accounts receivable balance is deemed uncollectible, the balance

will be “written off to bad debt,” internal collection efforts will cease, and the organization may choose to refer the balance due to an external collection agency for further collection attempts. If the balance is recovered, the agency will assess a percentage of the recovery as its fee, and the remaining cash collected will be recorded as a bad debt recovery. Bad debt experience is used in several indicators to assess collection rate efficiency and effectiveness.

Bad debt as a percentage of gross revenue is calculated as follows:

$$\frac{\text{Bad Debt Write-Offs in Period}}{\text{Gross Revenue in Period}} = \text{Bad Debt as a \% of Gross Revenue}$$

The bad debt recovery rate is calculated as follows:

$$\frac{\text{Bad Debt Recovered}}{\text{Bad Debt Referred for Collection}} = \text{Bad Debt Recovery Rate}$$

High recovery rates may seem attractive—cash is cash after all. However, remember that every dollar collected by an outside agency is less than a dollar in the organization’s bank account, as the agency fees reduce collections. Recovery rates in excess of 15 percent may indicate that the organization is referring accounts to collection agencies too early or that the organization’s internal collection efforts are not effective.

Cost-to-collect is an expression of the value realized on expenses associated with billing and collecting accounts receivable balances. Cost-to-collect considers only expenses associated with back-end business office functions and does not typically include expenses associated with front-end revenue cycle activities such as scheduling, registration, charge capture, and coding. Cost-to-collect is calculated as

$$\frac{\text{Total Business Office Expense for a Period}}{\text{Cash Collections for Same Period}} = \text{Cost-to-Collect}$$

Cost-to-collect percentages that are less than 3 percent, coupled with negative performance on other macro-indicators, may suggest inadequate staffing to support business office functions, as labor is usually the largest component of business office expense.

Denial rates represent a refusal of third-party payers to pay claims and are typically classified as *administrative* or *clinical* denials.

Typical Reasons for Administrative Denials

- Timely limit for filing has expired. The claim was not submitted within the time frame from date of service required by payer contract.
- Eligibility issues. The patient was not covered on date of service, patient cannot be identified as an insured or the policy number is invalid, or another payer is primary.
- Claim form errors. Invalid billing or revenue codes were submitted or required data are missing.
- Duplicate claim or service. The claim was previously processed.
- Unbundling. The charge was paid as part of payment for another service.

Typical Reasons for Clinical Denials

- The service does not meet medical necessity criteria.
- The service was not preauthorized or lacked a referral.
- The CPT or diagnosis code is invalid.
- The procedure code requires a modifier.
- Clinical documentation is required.

Once a denial is received on a claim, the practice has three options:

1. Appeal the denial, a process typically associated with clinical denials.
2. Respond to the payer's request by supplying additional information or correcting invalid entries.
3. Bill the next responsible party, the secondary insurer or the patient or guarantor.

Practices are increasingly scrutinizing denial rates and experience because these issues affect cash flow, net revenue, and cost-to-collect. The denial rate is measured as

$$\frac{\text{Total Claims Denied in Period}}{\text{Total Claims Billed for Period}} = \text{Denial Rate}$$

Overall denial rates exceeding 5 percent merit further investigation into denial rates by payer, denial type, and source.

PROCESS PERFORMANCE INDICATORS

Process performance indicators are measures of the success of a revenue cycle process in achieving its desired outcomes. Process performance indicators may be measured and monitored daily, weekly, or monthly. Frequency of monitoring should be a function

of the stability of the process, historical performance levels, risk of process failure, and ease of monitoring. Process performance indicators are generally monitored at the director and manager levels of the organization. Examples of common revenue cycle process performance indicators are listed here, classified by major process.

<i>Indicator</i>	<i>Benchmark</i>
• Percentage of patients preregistered	95%
• Percentage of patient liability collected at point of service	90%
• Registration-related denial rate	2% of total claims billed
• Charge entry lag days	2 days for office; 5 days for hospital
• Percentage of claims failing coding editor	< 5% of total claims
• Percentage of claims filed electronically	90%
• Days unbilled revenue	2 days
• Accounts receivable greater than 90 days	No more than 20%; no more than 3–5% should be > 180 days
• Days from bill drop to follow-up	No more than 45 days
• Days revenue in unapplied cash	1 day

Scheduling and Registration

The objective of the scheduling and registration processes is the complete and accurate capture of demographic and insurance information to support billing. Whenever possible, data should be captured in advance of patient arrival, to allow sufficient time for eligibility confirmation and securing of required authorizations and referrals. On the date of service, registration data should be confirmed with the patient, referrals and insurance card copies should be obtained, and copayments should be collected. Process performance indicators and targets should include

- The percentage of scheduled patients preregistered before their date of service:

$$\frac{\text{Number of Preregistrations}}{\text{Number of Scheduled Visits}} = \% \text{ of Scheduled Patients Preregistered}$$

- The percentage of estimated patient liability collected at point of service (POS):

$$\frac{\text{Actual POS Collections}}{\text{Estimated Patient Liabilities for Same Services}} = \% \text{ of Patient Liability Collected}$$

- The registration-related denial rate:

$$\frac{\text{Total Claims Denied}}{\text{Total Claims Billed}} = \text{Registration Denial Rate}$$

In addition to these indicators, a *registration quality audit* program should be established to monitor common registration errors at the individual registrar level.

Charge Capture, Coding, and Charge Entry

The objective of the charge capture, coding, and charge entry processes is complete, accurate, and timely recording of charges and diagnosis information for services provided. Common performance indicators are

- Charge entry lag days—average elapsed days from date of service to date of charge posting. Charge entry lag days are typically measured separately for office visits and for hospital services. Charge entry for office services should occur before the end of each business day. Hospital services should be recorded on the date of service and posted to the billing system on the date of service for procedures or when an inpatient is discharged for hospital visits (or on the fifth day for lengthy hospitalizations).
- Missing charges. Missing charges are determined through a reconciliation of patients seen to accounts with charges entered. Modern practice management systems provide missing charge reports by identifying appointments for previous dates of service with no corresponding charges entered. Missing charges should be resolved whenever possible by the end of the business day following the appointment date.
- Coding accuracy. Accuracy is assessed by measuring the number of claims failing the coding editor divided by total claims processed through the claim editor.

In addition to these indicators a comprehensive coding compliance program should be in place to provide physicians and coding staff with appropriate coding and documentation education and monitoring.

Billing and Collections

Billing process performance indicators focus on timely billing to reduce the level of receivables in an unbilled status and avoid the write-offs associated with exceeding timely filing limitations stipulated by Medicare, Medicaid, and most payer contracts. As discussed earlier, many practice management systems provide some level of claim editing within their claims management module, designed to identify and halt claims with missing, incorrect, or conflicting data before submission to the payer. In addition EDI vendors can provide additional claim edits to ensure claim accuracy before submission. Common billing process performance indicators include

- The percentage of claims filed electronically (an important indicator because electronic filing greatly reduces both provider and payer processing times):

$$\frac{\text{Claims Filed Electronically}}{\text{Total Claims Filed (paper and electronic)}} = \% \text{ of Claims Filed Electronically}$$

- The clean claim percentage—percentage of electronic claims that pass through the billing process without edit failures (errors):

$$\frac{\text{Number of Claims Failing Edits}}{\text{Number of Claims Processed Through Editing System}} = \text{Clean Claim } \%$$

- Days revenue in unbilled status—the dollar value of claims held in practice management system suspense files, claims held in the editing system, and paper bill inventories not yet filed:

$$\frac{\text{Dollar Value of Unbilled Claims}}{\text{Average Daily Revenue}} = \text{Days in Unbilled Status}$$

Follow-up and collections processes are typically initiated when a denial is received, a third-party payment is made leaving a patient liability, or approximately thirty days from filing if no response has been received from the payer. Associated process performance indicators may include

- The percentage of accounts receivable aged greater than ninety days from date of service:

$$\frac{\text{Dollars in AR Aged > 90 Days}}{\text{Total AR Balance}} = \% \text{ of AR >90 Days}$$

- The number of days from bill drop to follow-up. This measure assesses the timeliness of follow-up on outstanding accounts. It is generally applied to high-dollar accounts and measured through sampling to determine average elapsed days from billing date to initial follow-up activity as documented in account notes. Target days are determined based on average turnaround time for clean claims by payer.

Cash Application

The cash department in the business office, or the staff responsible for applying payments and contractual allowances to the accounts receivable, is evaluated based on the timeliness and accuracy of the transactions it posts. Two traditional performance indicators for cash application processes are

- Days revenue in unapplied cash—the amount of cash received and deposited in the organization’s bank account but not yet applied to patient accounts:

$$\frac{\text{Total Dollars of Cash Unapplied}}{\text{Average Daily Revenue}} = \text{Days Revenue in Unapplied Cash}$$

- Days gross revenue in credit balances—the dollar amount of receivables in a credit balance status. The amount and aging of credit balances are of concern for several reasons. The presence of credit balance accounts in the receivable result in understating the receivable on the trial balance. In addition credit balances can become a “red flag” for payers, as they may indicate errors in billing, prompting requests for payer audits.

$$\frac{\text{Dollars in Credit Balance Status}}{\text{Average Daily Gross Revenue}} = \text{Days Gross Revenue in Credit Balances}$$

An additional measure is the credit balance age of oldest credit balance. This is measured by identifying the oldest credit balance on the system (measured from the date the credit balance was created) and should not exceed thirty days.

Billing Inquiry or Customer Service

The billing inquiry or business office customer service department functions as a call center for incoming billing inquiries. Process performance indicators for this function are consistent with call center performance metrics across many industries and include

- Call abandonment rate—number of times callers hang up before the call center answers the call:

$$\frac{\text{Number of Abandoned Calls}}{\text{Total Incoming Calls During the Same Period}} = \text{Call Abandonment Rate}$$

- Average wait time—average number of minutes a caller waits on hold before a representative answers the call.



Given the ongoing cuts to third-party reimbursement and rising costs, group practice managers must be diligent in setting up and monitoring the revenue cycle. Incremental gains in overall revenue capture can have an enormous impact on practice margins.

Discussion Questions

1. What macro-indicators are useful in gauging the overall health of the revenue cycle?
2. What is the difference between gross charges, net revenue, and net collections?
3. What are the major patient access revenue cycle processes and associated key performance indicators?
4. What are the common challenges to patient access process effectiveness, and what are the potential solutions?
5. What revenue cycle processes must occur following service delivery in order to recognize revenue for services provided? Describe the major differences between revenue recognition for office services and for hospital services.
6. What are the major billing and collection processes and the associated key performance indicators?
7. What are the common challenges during the billing and collection processes, and what strategies can be applied to avoid these common issues?
8. Describe the major differences between the RBRVS, capitation, and discounted fee-for-service reimbursement methodologies?

Web Resources

Case studies
 PowerPoint presentation
 Answers to discussion questions

Suggested Reading

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CHAPTER THREE

UNDERSTANDING THE COST OF PROVIDING SERVICES

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Objectives

This chapter will help the reader to

- Understand the types of costs incurred in group practice and how these costs are defined and allocated.
- Identify and understand a variety of different costing methods.
- Complete a breakeven analysis for capitation.
- Use benchmarks to evaluate costs and perform variance analysis.

Physician practices operate in an environment characterized by constant change and economic pressure. Decreases in Medicare, Medicaid, and third-party reimbursement present physicians and practice managers with the formidable task of improving efficiency while maintaining the quality of care provided to patients. Perhaps one of the most common weaknesses in physician practice management is a lack of understanding of the cost of the resources it takes to provide a service to the patient.

Definition of Cost

Most people think they understand the concept of *cost*, at least the basics. In layperson's terms, cost is what is paid out to acquire or produce things. Said more formally, cost is the "monetary value of goods and services expended to obtain current

or future benefit.”¹ However, the description of costs within and across enterprises and across time can get very complicated. Practice managers may want to know the answers to these questions:

- How much does it cost to produce a mammogram or a physician office visit?
- Are we more or less productive than our peers in other practices?
- Are we achieving sufficient profitability in a new service to justify its continuation?
- Would we be better off adding or subtracting a service?
- Are we achieving our budget goals?
- Why are we not achieving our budget goals?

In all of these situations, intuitive notions of cost are generally inadequate, and it is easy to oversimplify and make errors of judgment. This chapter will explore the ways in which the practice manager should think about cost in different situations so as to make the best management decisions.

The goal of any business is to make money, and costs are often seen primarily as an enemy in this endeavor. After all, they represent revenue not retained. Clearly, it is the responsibility of management to control cost, and a thorough understanding of cost helps with this. However, costs are also necessary to produce revenue. There is no revenue without expending resources, and that means cost. From this point of view the management of costs is the management of the inputs that underlie the enterprise’s ability to meet its mission. The task is not simply to minimize but to choose wisely. The dimensions of cost described in this chapter are crucial for doing that well.

Costs of Practice

Everything that is bought or used in creating revenue or producing services in a practice is a cost. The practice’s *chart of accounts* will define most of these costs: physician and staff salaries, benefits, insurance (including malpractice), consulting services, memberships, continuing medical education (CME), travel, office supplies, software licensing fees, service contracts, medical and surgical supplies, utilities, rent, interest, depreciation, and amortization. Most of these costs are cash expenses in that they require regular monetary outlays during the period in which they are recognized as expenses. Depreciation and amortization are not cash expenses; they are an accounting device for allocating capital expenditures made at a prior time to the time period in which their benefit is realized. A practice may also have noncash expenses associated with in-kind items in the form of donated labor or consumables. Similarly, most

expenditures are accounted as expenses, but not all. Purchases of capital equipment, other transactions that convert one asset type into another (for example, cash into stocks or certificates of deposit), and principal payments on debt are not counted as expenses. Noncash expenses and nonexpense expenditures introduce complexity into the notion of cost. They require special treatment in cost analysis for financial decision making.

Direct and Indirect Costs

Many large physician practices account for their activities by incorporating a set of departments into their chart of accounts. Total cost in such practices is described in two dimensions in the chart of accounts: the types of inputs consumed and the departments, the domains in which the inputs are used. The whole practice is then a roll-up of the departments. A practice may have many departments, depending on the scope and complexity of its business. In the practice used as an example later in this chapter, there are seven departments: utilities and rent, administration, billing, obstetrics and gynecology (Ob/Gyn), pediatrics, internal medicine, and MRI.

One of the most basic distinctions in cost analysis concerns direct and indirect costs. The distinction is intended to capture a fundamental perception about the way that labor and supplies (work) relate to products and services: some of the work goes directly into services or is consumed directly by the customer, whereas other work acts to support the creation of those services. The total cost of creating the service includes both kinds of work, but they occur in different parts of the organization, and they relate to the final product very differently. In physician practices, *direct costs* are costs incurred in departments that have patient contact and generate charges for services: clinics, laboratory, X-ray, and pharmacy. *Indirect costs* are costs incurred in support areas and areas that execute the business functions of the practice: administration, quality assurance, medical records, information systems, billing and finance, housekeeping, and building and grounds.

How the distinction between direct and indirect costs is captured so as to be usable depends on the departmental and functional organization of the practice. A practice in which each physician manages his or her own billing, scheduling, and reception and in which accounting and departmental structure is designed to separate individual physician expenses will probably include both direct and indirect costs in those same individual physician departments. Each physician would be assigned a department and cost directly attributable to him, as well as allocated costs. But to do this, the practice needs to understand how to allocate. In order to understand direct and indirect costs, the practice must make an effort to group its operations according to these distinctions and capture them in accounting data.

Cost Allocation: The Step-Down Method

In any practice the cost of producing goods and services is a function of both direct and indirect costs. However, in describing the costs of a particular product or direct patient service department, a method of including, or *allocating*, its indirect costs must be determined. Cost allocation plays a key role in helping practices understand the impact of indirect costs on the practice and the average total cost of producing services. It serves as a basis for evaluating the overall profitability of each patient service area, and it is a valuable reminder that revenues must cover all direct and indirect costs in order for the practice to be profitable.

In *cost allocation*, indirect costs (such as utilities, rent, housekeeping, billing, and administration) are distributed to the direct cost departments that they benefit. There are several ways in which indirect costs can be allocated. For instance, billing services costs might be allocated to departments according to each department's percentage of total revenue or percentage of total visits. Deciding which allocation metric to use can be difficult. The guiding principle is, "The better the cause and effect relationship between why the cost occurred and the allocation basis, the more accurate the cost allocation."²

Some standard allocation metrics used in step-down costing are

- Square footage
- Number of physicians
- Number of relative value units (RVUs) performed
- Number of full-time equivalent employees (FTEs)
- Percentage of total revenue
- Percentage of total visits

Indirect costs that are often allocated include

- Billing and patient accounts
- Housekeeping and general maintenance
- Rent
- Laboratory
- Quality assurance
- Medical records
- Continuing medical education
- Clerical supplies

In order to understand how a practice might use the step-down method, consider the Pittsburgh Family Practice, which incurs the costs shown in Figure 3.1. Practice support costs are not directly paid for by patient service revenue, but they are

FIGURE 3.1. DIRECT AND INDIRECT COSTS FOR PITTSBURGH FAMILY PRACTICE.

Practice support			
Utilities & rent	\$100,000	→	These indirect costs must be allocated down to direct costs.
Administration	150,000		
Billing	50,000		
Patient services			
Ob/Gyn	350,000		↓
Pediatrics	300,000		
Internal medicine	300,000		
MRI	<u>250,000</u>		
TOTAL COSTS	\$1,500,000		

essential for running the practice. Thus, in order to gain a better understanding of the true cost of providing patient services, step-down allocation assigns each service a portion of the support costs.

The first step in the step-down method is the selection of the basis, or bases, for cost allocation. In this example, Pittsburgh Family Practice has decided to allocate utilities and rent by square footage, administration by direct costs, and billing by service line volume. Table 3.1 displays the assumptions used to justify the allocation base chosen for each of the indirect costs.

TABLE 3.1. ASSUMPTIONS BEHIND ALLOCATION BASES.

Practice Support Costs	Allocation Base	Assumption and Justification
Utilities & rent	Square footage	Utilities consumed by each service are proportional to the square footage occupied by each service as a percentage of the total square footage.
Administration	Total direct costs	Administration costs for each service are proportional to the direct costs each service incurs as a percentage of the total direct costs.
Billing	Service volume	Billing costs for each service are proportional to the service volume each service incurs as a percentage of the total service volume.

After defining the appropriate allocation bases for practice support costs, the next step in step-down cost allocation is to determine the order of allocation for each department and calculate the percentages that will drive the allocation in each round of allocation, as illustrated in Figure 3.2.

The allocation is performed in three steps. The first step is to allocate utilities costs to all other departments, including the indirect cost departments of administration and billing, along with the patient service departments of obstetrics and gynecology, pediatrics, internal medicine, and MRI. This allocation is performed on the basis of square footage, as illustrated in Table 3.2. All the departments that receive utilities and rent costs are included in the percentage calculations for the distribution, and the distribution follows those percentages. For instance, because obstetrics and gynecology occupies 19 percent of the total square footage, it is assigned 19 percent of the cost of utilities.

The second step is to allocate administrative costs (which now include the utilities and rent allocation to the administration department) to all the departments served by administration. This is done on the basis of total departmental cost after allocation of rent and utilities, with percentages calculated for all of the cost-receiving departments. The total amount of administrative costs to be allocated equals \$157,692.31 (administrative costs + the portion of allocated costs assigned to administration from utilities).

FIGURE 3.2. CALCULATING PERCENTAGES TO ALLOCATE SUPPORT COSTS.

These percentages will be used to allocate practice support costs.

	Square Feet	% of Total Square Footage	Direct Costs	% of Total Direct Costs	Service Volume	% of Total Service Volume
Utilities & rent	—	—	—	—	—	—
Administration	100	8%	—	4%	—	—
Billing	100	8	50,000	28	—	—
Ob/Gyn	250	19	350,000	24	6,500	61%
Pediatrics	300	23	300,000	24	1,100	10
Internal medicine	350	27	300,000	24	1,500	14
MRI	200	15	250,000	20	1,500	14
TOTAL	1,300	100%	1,250,000	100%	10,600	100%

Note: Percentages have been rounded.

TABLE 3.2. ALLOCATED COSTS AND TOTAL COSTS.

	Direct Costs	% of Total Square Footage	Allocation of Utilities	% of Total Direct Costs	Allocation of Administration	% of Total Service Volume	Allocation of Billing Services	Total Costs
Utilities & rent	\$100,000		\$(100,000.00)					
Administration	150,000	8%	7,692.31		\$(157,692.31)			
Billing	50,000	8	7,692.31	3%	4,095.90		\$(61,788.21)	\$448,089.81
Ob/Gyn	350,000	19	19,230.77	26	40,959.04	61%	37,900.00	370,436.95
Pediatrics	300,000	23	23,076.92	26	40,959.04	10	6,400.99	386,865.49
Internal medicine	300,000	27	26,923.08	32	51,198.80	14	8,743.61	294,607.75
MRI	250,000	15	15,384.61	13	20,479.53	14	8,743.61	
TOTAL	\$1,500,000	100%	—	100%	—	99%	—	\$1,500,000.00

Note that utilities will not receive any portion of administrative costs because the step-down method moves downward as costs are allocated from one cost center to another (that is, costs are never allocated upward).

Billing is the last indirect cost to be allocated. The total cost of billing that is allocated equals \$61,788.21 (billing costs + allocated rent and utilities + allocated administration), with percentages calculated in relation to the volume of patient services areas that receive this final allocation.

Note that the totals allocated include the support departments' direct costs as well.

When practice support costs are fully allocated, the total cost of running the clinic is still \$1,500,000. However, because the step-down method allocates practice support costs to patient services, the total costs for the direct service departments change after each has been assigned a portion of the practice support costs. For instance, before cost allocation, the direct cost of delivering pediatric care is only \$300,000; after allocation, the full cost of delivering this service becomes \$370,436.95.

Relative Value Units as a Basis for Allocation

The allocation of costs allows a *full-cost* perspective on the clinical departments of a practice. It shows approximate total costs for providing patient services in each patient service department.

It is often desirable to proceed to a more detailed level of analysis with cost allocation so that the practice can understand, for example, the cost per MRI performed or the cost of a pediatric patient visit. Visits (or exams) and RVUs are the two most common bases used for this next level of allocation. Visits are a more convenient statistic to use for allocation because most practices keep track of them by department. Numbers of visits are also a fairly good predictor of labor cost and intensity, especially for cognitive services. However, they are not a good predictor of nonlabor costs, especially in procedural areas, and under modern reimbursement methodologies they don't correlate well with payment. Correlation with payment is the strength of using RVUs as a basis for allocation, and RVUs are the primary basis for reimbursement for Medicare and most private insurance companies today.

RVUs were designed to provide a single system of measurement of the value of medical services. They are primarily a payment methodology, not a cost-accounting system. They are intended to allow direct value comparison of cognitive and procedural services. As discussed more fully in Chapter Two, each RVU value is the product of three components: physician work, practice expense, and professional liability. The physician work value includes both intensity and time requirement, with intensity relating to the number of years of training required to achieve proficiency. These factors may bear little or no relationship to the way that costs actually accrue in the

day-to-day workings of a physician practice. Nevertheless, cost allocation to RVUs is very useful because of its links to reimbursement. Every dollar of practice cost must be covered by reimbursement if the practice is to be viable, and the best way to evaluate the adequacy of a proposed reimbursement rate when that rate is stated in terms of RVUs is by examining its relationship to cost per RVU within the practice. Table 3.3 demonstrates the allocation of practice costs at Pittsburgh Family Practice to visits and to RVUs.

The possible applications of this type of analysis with respect to profitability analyses and third-party negotiations are straightforward. For this practice, payment of less than \$50 per RVU will not cover full costs; in order to average \$50 per RVU, the practice will have to negotiate that amount as a global rate, or it will have to achieve individual specialty rates that approximate those in the last column of Table 3.3 (total cost per RVU). Unlike Medicare, many managed care companies continue to use different dollar multipliers for different specialties. Therefore, knowing total cost per RVU by specialty can be quite important. A contract that proposes a multiplier for Ob/Gyn services that is less than \$75 per RVU will create problems for this practice.

The analysis of cost per RVU can also allow a practice to evaluate the adequacy of service-specific, fixed-rate reimbursement proposals. For example, imagine that an HMO proposal to Pittsburgh Family Practice includes a flat fee of \$27 for a visit to a

TABLE 3.3. ALLOCATION OF COSTS TO VISITS AND TO RVUs.

Department	Direct Costs	Cost After Overhead Allocation	Visits	RVUs	Total	Total
					Cost/ Visit	Cost/ RVU
Utilities & rent	\$100,000					
Administration	150,000					
Billing	50,000					
Ob/Gyn	350,000	\$448,090	4,000	6,000	\$112.02	\$74.68
Pediatrics	300,000	370,437	12,000	10,000	30.87	37.04
Internal medicine	300,000	386,865	10,000	11,000	38.69	35.17
MRI	250,000	294,608	750	3,000	392.81	98.20
TOTAL	\$1,500,000	\$1,500,000	27,750	30,000	\$54.05	\$50.00

normal newborn after delivery. This activity carries an RVU value of .84.³ Based on the cost per RVU values for pediatrics in Figure 3.3, the fully allocated cost is \$31.11. Therefore the proposed fee may not be adequate because it does not cover the fully allocated costs of the activity. Note, however, that as illustrated in Figure 3.4, it exceeds the direct cost in the pediatrics department of providing the care. Whether the practice should accept the proposed fee may depend on its confidence in its ability to work within its existing indirect cost framework.

FIGURE 3.3. FULLY ALLOCATED COST FOR NEWBORN VISIT.

RVU for normal newborn visit	= .84
Practice cost per RVU for pediatrics	= \$37.04
Reimbursement required to cover practice costs	= \$31.11
HMO fixed-rate proposal	= \$27.00

FIGURE 3.4. PROPOSED HMO FIXED RATE TO COVER DIRECT COSTS FOR NEWBORN VISIT.

Direct cost for pediatrics	= \$300,000
Total pediatrics RVUs	= 10,000
Direct practice cost per RVU for pediatrics	= \$30.00
RVU for normal newborn visit	= .84
Reimbursement required to cover direct costs	= \$25.20
HMO fixed-rate proposal	= \$27.00

Fixed and Variable Costs

Where the distinction between direct and indirect costs is based on function and organization a different distinction is captured by the concepts of fixed cost and variable cost. This distinction is based on behavior in relation to fluctuations in business volume. *Fixed costs* stay the same in total over a wide range in volume. In general, fixed costs include rent, salaries, utilities, malpractice insurance, property taxes, and other costs that are incurred at a certain level by the practice regardless of the number of visits provided. Although these costs may change over time or in response to certain changes in the complexity or size of the practice, within the relevant range defined by a constant operating model, they vary little as a result of changes in volume.

Variable costs are costs that increase in a one-to-one relationship with volumes. In general, physician practices have only a few truly variable costs. These are limited to consumables like medical supplies and X-ray film, contract lab fees, temporary labor, and some pharmaceuticals.

Fixed and variable costs do not relate in a simple way to indirect and direct costs. It may be the case that indirect costs are more likely to be fixed than direct costs and vice versa. However, there are strong counterexamples in both directions. The costs for billing clerks and customer service representatives are examples of indirect expenses that might vary in relation to volume or hours of operation. The cost of supervision in a clinical department is an example of a direct cost that generally remains fixed in relation to fluctuations in volume.

It is important to be aware that the distinction between fixed and variable is based on management practice at least as much as on the nature of the cost element. In a retail setting even rent can be a variable cost when, as is often the case, the lease rate is based on gross sales. In a home care agency, the cost of supervision can be partially variable if the number of supervisors called to work on a given day is based on the number of nurses who are scheduled to work. In a medical practice, X-ray, lab, and clinic staffing can be variable if staffing decisions are made daily in response to scheduled or predicted visit volumes. However, if management practice is to staff all functions at the same level in all situations, then those staffing costs will be, for all practical purposes, fixed.

Although fixed costs *as a total* don't change in response to changes in volume, they most definitely do change on a *per unit* basis. As volume increases or decreases, fixed costs are spread out over a different number of units of service. Take, for example, a practice that has fixed costs for the year of \$100,000 and has 12,500 visits. The fixed cost per visit is \$8 ($\$100,000 \div 12,500$). However, if the number of visits for that same practice happens to be 15,000, then the fixed cost per visit becomes \$6.67 ($\$100,000 \div 15,000$). The costs haven't changed, but the denominator has. This is how

economies of scale are created in a practice: the same fixed costs are spread over a larger volume base. Because physician practice costs are largely fixed and because of the piece-rate basis of physician reimbursement (the same payment is received for each occurrence of the same service), economies of scale in physician practices are a very powerful source of incremental profit.

Fixed and variable costs are important concepts when making decisions about investments associated with new services because they allow the practice to calculate *breakeven* points, which are critical for evaluating the likelihood of profitability. They may also be important when a practice wants to benchmark itself against other practices through data sources such as the Medical Group Management Association (MGMA).

Activity Based Costing

The accounting systems used in most physician practice settings are designed primarily to ensure accurate reporting of total practice costs and to protect the physician-owners from theft and financial mismanagement. They are not designed to provide highly precise information about product costing and the costs of the various activities undertaken in the daily course of business, such the cost to send out an invoice, to obtain authorization from an HMO for a patient service, or to administer chemotherapy after hours. A well-designed chart of accounts and a carefully chosen departmental structure can make it possible for a practice to achieve moderate insight into many questions about such costs, using standard accounting reports and statistical summaries of business activity, but there will inevitably be questions that are not well answered even by the most carefully planned system.

The discipline of *activity based costing* is broadly intended to identify the cost of core products and activities. Its methods are varied. Its goal is the assembly of all the relevant information necessary to understand the costing associated with these core elements. On a practical basis this means that information not provided by routine accounting practice is developed independently.

Take for example the question of the cost of preauthorization. If the staff who perform this function are housed in a single department, it may be possible to use accounting data to identify the total costs of supporting that staff. However, it is unlikely that staff are so specialized that all preauthorizations are obtained by people who do only that task. In order to isolate the costs pertaining to preauthorizations, it is necessary to determine the specific amount of time spent by the relevant individuals in this task. Interviews, time logs, or other observational techniques will almost certainly be necessary to achieve the needed information.

Despite its potential complexity, the value of activity based costing cannot be overstated. Without a thorough understanding of how costs portion out over the total range

of the practice's activity, strategic decision making is at best a partially informed guess. A good understanding of which costs are truly fixed and which costs vary and how they vary is one key component of investment and pricing analysis.

Breakeven Analysis

Breakeven analysis assesses whether or not revenues are sufficient to cover investment and associated fixed costs on an annual basis for a given service. It is used to evaluate the advisability of initiating or maintaining such services. Although there are more sophisticated ways to evaluate investment decisions, such as methods that take more explicit account of the time value of money and the weighted cost of capital, as more fully discussed in Chapter Five, breakeven analysis is a practical and intuitively useful tool.

Breakeven is generally measured in volume and occurs at the point where service revenue less total variable costs (at a specified volume point) equals the fixed cost of providing the service, including an annual allocation for capitalized investment costs. This is the point of zero profitability for the service, and it defines the volume point beyond which the service will begin to earn a profit. Figure 3.5 displays the algebraic formula.

For an example (greatly simplified for the moment) of how the breakeven formula is applied, consider a practice that is evaluating whether to offer mammography screening. The practice manager has collected the financial data shown in Figures 3.6 and 3.7. As illustrated in Figure 3.7, when the practice is able to perform 5,950 screenings per year for five years, it will be paid back for its investment and will break even on the costs of providing the service. In order to earn a profit, however, the practice must perform more than 5,950 exams per year, although not necessarily in each year. Over the course of five years the yearly average must exceed 5,950. Note that even though five years may represent the standard depreciation period for a mammography machine, it may exceed the practice's goals for a return on investment. The time period used in setting up the breakeven calculation should represent the investment goal. In this case, if the goal is for repayment in three years, then the annual volume required to break even would increase to 6,584 procedures, because of

FIGURE 3.5. SIMPLIFIED BREAKEVEN FORMULA.

$$\text{Annual Breakeven in Units} = \frac{\text{Fixed Costs} + \text{Annual Allocation of Investment Costs}}{\text{Revenue per Unit} - \text{Variable Cost per Unit}}$$

FIGURE 3.6. MAMMOGRAPHY SCREENING DATA.

Rates	
Price per screening ^a	\$ 65
Investment costs^b	
Equipment	95,000
ANNUAL ALLOCATION OF INVESTMENT COSTS	\$ 19,000
Fixed costs	
Salaries (2 technicians @ \$35,000)	70,000
Increase in malpractice premiums	<u>30,000</u>
TOTAL FIXED COSTS	\$ 100,000
Variable costs (per mammogram)	
Radiologist's fee	15
Processing and supplies	<u>30</u>
TOTAL VARIABLE COST PER MAMMOGRAM	\$ 45
Volume required for breakeven over 5 years	?

Remember, in evaluating a new service, amortization costs are included as part of fixed costs. All incremental costs that are a direct result of adding the service are to be included.

^a Price per screening refers to the amount the practice expects to be reimbursed, not the amount that it may charge for a mammogram.

^b Allocation of investment costs: \$95,000 ÷ 5 years = \$19,000; \$95,000 ÷ 3 years = \$31,667.

FIGURE 3.7. BREAKEVEN CALCULATIONS.

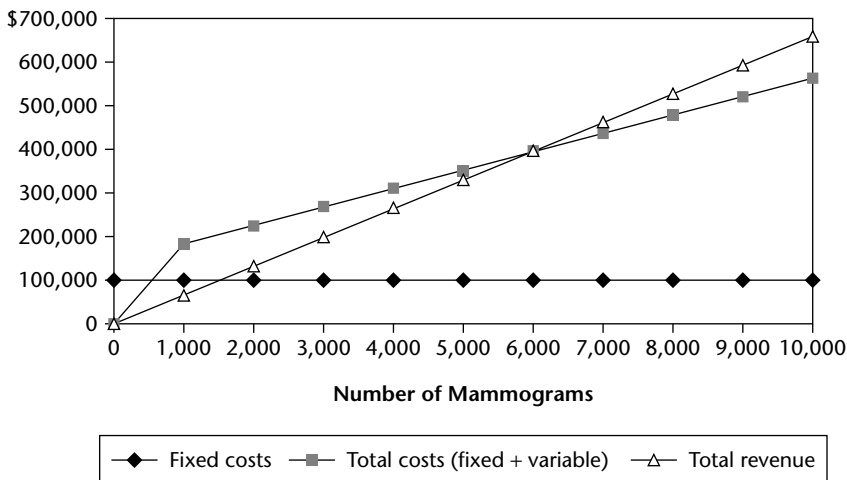
$$\text{BE in Units} = \frac{\text{Fixed Costs} + \text{Annual Allocation of Investment Costs}}{\text{Revenue per Unit} - \text{Variable Cost per Unit}} = \frac{119,000}{20} = \$5,950$$

$$\text{BE in Units} = \frac{\text{Fixed Costs} + \text{Annual Allocation of Investment Costs}}{\text{Revenue per Unit} - \text{Variable Cost per Unit}} = \frac{131,667}{20} = \$6,583$$

the increase in the breakeven numerator caused by reducing the payback period (\$95,000 ÷ 3 = \$31,667).

Figure 3.8 offers a graphical representation of the breakeven function. It demonstrates how profitability increases in response to volume variations in excess of or less than the breakeven point in the mammography example.

FIGURE 3.8. BREAKEVEN GRAPH FOR MAMMOGRAPHY SCREENINGS.



Breakeven Analysis with Goals for Annual Profitability and Contribution to Overhead

The breakeven formula can be extended to consider factors beyond investment and fixed costs. Suppose that the practice wishes to assign \$5,000 of nonincremental overhead expense to mammography (in addition to the incremental amounts) and also wants to make a \$10,000 profit on an annual basis. As illustrated in Figure 3.9, by expanding the breakeven formula to include indirect costs and the desired profit in the numerator, the practice can now determine that it needs to perform an additional 750 mammograms (6,700 – 5,950) in order to achieve those goals and break even.

FIGURE 3.9. BREAKEVEN CALCULATION INCLUDING PROFITABILITY AND OVERHEAD.

$$\text{BE in Units} = \frac{\text{Fixed Costs} + \text{Annual Allocation of Investment Costs} + \text{Overhead} + \text{Desired Profit}}{\text{Revenue per Unit} - \text{Variable Cost per Unit}} = \frac{134,000}{20} = 6,700$$

Special Considerations for Breakeven Analysis

In most practice settings breakeven analysis must be adapted to account for payer mix. Practices with capitated contracts may also use the breakeven formula to identify effective rates.

Adjusting Reimbursement Rates: Multipayer Analysis. Average rates of reimbursement for services are highly dependent on payer mix. A practice is likely to have multiple payers that make up its revenue stream, each with different contract terms or fee schedules. Payers can be sorted into the categories described in Table 3.4.

TABLE 3.4. PAYER TYPES.

Payer Type	Description
Fixed fee	<p>Fee schedules are sometimes dictated by the payer or they may be negotiated. They are usually structured with RVUs and a base rate multiplier. RVUs and multipliers are often different from one payer to another and from one specialty to another. Fixed-fee payment is characteristic of large HMOs and Medicare. Complications include the fact that nominal rates included in contract terms usually are maximum allowable rates, a portion of which must be collected directly from patients in the form of copays and deductibles. Further contract terms may include withholds and retrospective, periodic adjustments that are received in lump sums and not booked to individual patients.</p> <p>This type of payment may also take the form of a global, prospective rate, the same rate for all services. This approach is occasionally used in certain circumstances by state Medicaid programs, county mental health departments, and other such organizations.</p>
Cost	<p>Reimbursement rates are based on the cost of providing the service. This approach may be either prospective (the rate is set in advance in relation to a base year's costs) or retrospective (the rates are not final until the practice files a cost report with the payer and final adjustments are calculated). This is the predominant mode of payment to federally qualified community health centers by state Medicaid programs. It is otherwise rare.</p>
Charge, usual and customary rates (UCR), and discounted charge	<p>Many small insurance companies still reimburse based on billed charges. In some cases a fixed discount is applied; in others a community and/or practice-specific adjustment is made; and for a dwindling number of companies, full charges are reimbursed.</p>
No pay	<p>This is a self-explanatory category that includes professional courtesy services performed at no charge for staff or for other physicians and their families.</p>

The challenge presented by this complex mix of payers is to determine the average expected rate of reimbursement to use when evaluating a new service. The calculation needs to produce a simple weighted average based on the expected reimbursement for each class of payer and the expected percentage of total volume each will represent. Figure 3.10 illustrates the formula that could be used. The degree of sophistication and precision that can be brought to this calculation is highly dependent on a practice's accounting system and financial reporting. All practices should be able to calculate what they get paid for their total book of business as a percentage of their charges. Most should be able to separate out their Medicare and Medicaid patients and calculate relative reimbursement rates. Many will also be able to separate out their largest HMO contracts. But very few will be able to break out all private insurance and individuals and sort them into categories by discount rate and fee schedule. The analytical problem extends beyond average payment for services, as ideally one would be able to identify average payment for the specific service that is under analysis, and it must be expected as well that the payer mix for that particular service will differ from that of the whole, so one would want independent data to forecast that payer mix too.

In practice, these averages are obtained from

- The accounting and billing system of the practice
- Statistical data purchased from MGMA
- A combination of accounting information, record sampling, and literature review
- Best guesses of the practice manager and his or her coworkers, augmented by conversations with colleagues in other practices

Precision differs under each of these circumstances, but the requirement to make the estimates and factor them into the analysis is the same in all practice settings.

When determining expected payer mix and calculating average reimbursement rates for screening mammography, for example, as illustrated in Table 3.5, the weighted average rate becomes the new price, and this price should be entered into the breakeven equation. The breakeven volume then, assuming that no additional fixed cost or desired profit is factored in, is an average of 12,526 per year over five years.

FIGURE 3.10. EXPECTED AVERAGE RATE OF REIMBURSEMENT.

$$\text{Average Rate} = (\text{Average Fixed Payment} \times \% \text{ Fixed}) + \text{Average Cost Payment} \times \% \text{ Cost} + (\text{Average Charge Payment} \times \% \text{ Pay}) + (0 \times \% \text{ No Pay})$$

TABLE 3.5. PAYER MIX AND AVERAGE REIMBURSEMENT RATES FOR MAMMOGRAPHY.

Payer Type	% of Total	Charge	Payment	Weighted Average Amount (Payment × %)
Medicare	35%	\$90	\$45	\$15.75
Other fixed fee	40	90	60	24.00
Charge based	15	90	80	12.00
Cost based	5	90	55	2.75
No pay	5	90	—	\$ —
TOTAL				\$54.50

Breakeven and Capitation. The breakeven formula can also be adjusted to help practices determine the appropriate rate for reimbursement to be paid through capitation. Capitation reimburses providers an up-front fee, typically on a per member per month (pmpm) basis, for managing the care of the health plan's members. This arrangement is generally thought to shift the financial risk of providing care from the managed care organization to the physician. This occurs because the physician assumes all or part of the financial responsibility for providing care after the capitated rate has been exceeded.

Capitation was once a widespread and growing form of reimbursement, predicted to eventually become the dominant form of payment. Two unforeseen factors have caused these expectations to change. First, growth in the cost of care has proven no more containable under capitation than under fee for service, and many practices have lost money on capitated arrangements. In 2000, the share of all physician groups (single and multispecialty) that received no revenue from capitation was 68.4 percent, up 4.7 percent from 1999, as illustrated in Figure 3.11. Second, physicians have regained much of the bargaining power that was lost to HMOs in the early and mid-nineties, and many practices have been able to achieve a return to fee-based payment from even the largest HMOs.

Although the number of physician groups accepting capitated contracts has declined somewhat, capitation is still a fact of life for many physician practices. Thus it still important for practices to understand the basic requirements for evaluating capitation rates. A variant of breakeven analysis offers a valuable method for determining the capitation rate that will allow a practice to cover its expected costs under such a contract. In this variant, rather than solving for units of service, one solves for the per capita rate required to generate the total revenue needed to cover expected expenses, as illustrated in Figure 3.12.

FIGURE 3.11. GROUP PRACTICE ACCEPTANCE OF CAPITATED CONTRACTS IN 2000.

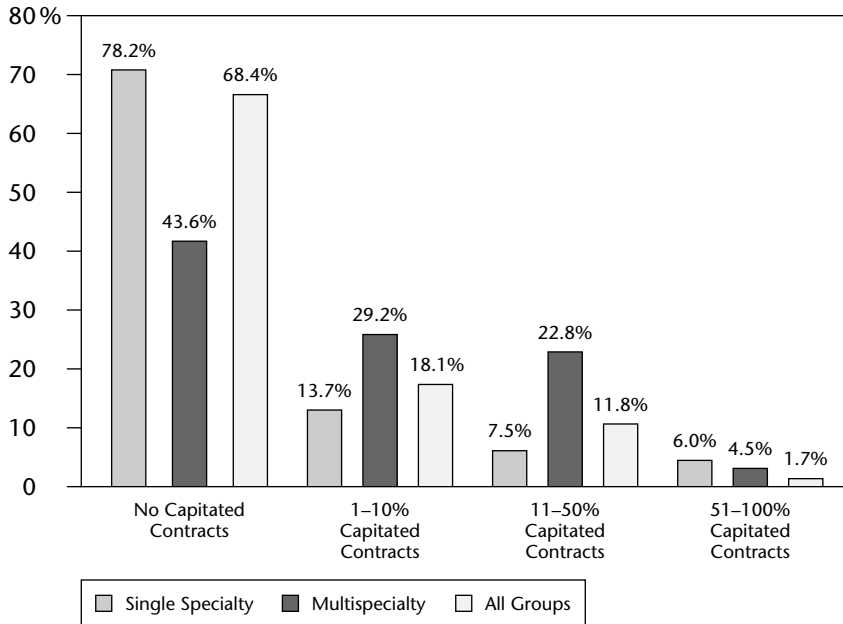


FIGURE 3.12. CAPITATION BREAKEVEN FORMULA.

$$\text{Breakeven Capitation Rate} = \frac{\text{Fixed Costs} + \text{Total Variable Costs}}{\text{Total Capitated Members}}$$

Where

$$\text{Total Variable Costs} = \text{Total Capitated Members} \times \text{Expected Use per Member} \times \text{Variable Cost per Use}$$

Consider the example shown in Figure 3.13 for the primary care practice of Dr. Foster. This practice has two services—routine primary care and office-based preventative care. Dr. Foster has been asked to switch his contract with an HMO from fee for service to capitation. The three-year contract will cover 15,000 HMO members,

**FIGURE 3.13. DR. FOSTER'S CAPITATION
BREAKEVEN CALCULATION.**

Capitated members			15,000
Expected utilization			
Visits per member per year		2	
TOTAL ANNUAL VISITS			30,000
Incremental fixed costs			
RN care manager		\$65,000	
Software upgrade (one time fee)	\$24,000		
Amortized annual fee (3-yr. period)		8,000	
ANNUAL TOTAL			\$73,000
Variable costs per visit			
Supplies, and so forth		15.00	
Physician salary support		50.00	
Opportunity cost of change		20.00	
Total variable cost per visit		85.00	
ANNUAL TOTAL			\$2,550,000
TOTAL ANNUAL COST OF SERVICE			\$2,623,000
BREAKEVEN ANNUAL CAPITATION RATE			\$174.87
MONTHLY RATE			\$14.57

all of whom are currently patients at the practice. The HMO has supplied data indicating that these members use primary care services at the rate of two visits per year. It is requesting that the practice add a care manager for these patients to help manage members with chronic problems, and it has asked for a new set of utilization reports that will require an upgrade to the practice's information system. The practice has internal data showing that its variable cost for all consumable supplies is \$15 per visit. Because this group of patients represents such a large number of visits, management has decided to treat physician costs as variable, even though the individual physicians are currently members of the group and do not see themselves as subject to reductions in force or major reductions in compensation. Treating the physicians as variable is an implicit acceptance of the possibility of reducing physician FTEs or compensation if negotiations are not successful; otherwise the costs associated with keeping them must be treated as fixed.

An additional opportunity cost has been added to the breakeven analysis, the contribution to overhead currently earned from the fee-for-service reimbursements received for these patients, an amount that must be made up in the capitation rate if the practice is to remain whole. This amount is the difference between reimbursement and variable costs under the current fee schedule. These “facts” drive a breakeven capitation rate of \$174.87 per year and \$14.57 per month. Note that of the \$2.6 million total cost, less than 3 percent is fixed; the rest is all variable. Note too that the inclusion of an opportunity cost for existing contribution to overhead serves to partially define a desired margin in excess of incremental costs.

Use Rate Sensitivity. Most practice managers find that the variable with the greatest sensitivity in this analysis is *use rate*. Variable cost per visit should be reasonably well understood. Membership is a variable that can be quite uncertain, but because so much of the cost in this analysis is counted as variable, changes in membership will not greatly affect the capitation rate. Of course the loss of any portion of the membership would require a comparable reduction in physician manpower in the example practice. Use rates, however, are often uncertain in ranges of substantial magnitude, and they can have a major impact on the total cost of caring for a given population. Consider the breakeven capitation payments in Table 3.6. These have been recalculated from the base example by substituting alternative visit rates for the covered population. The impact of a .5 visit per member increase over the original estimate drives \$560,000 in additional practice expenses and a 24 percent increase in the required capitation rate. An increase of 50 percent, to 3 visits per member, drives \$1.2 million in additional cost. This range of variation is not beyond possibility. For this reason use rates constitute the greatest risk in capitation contracting.

TABLE 3.6. USE RATE SENSITIVITY.

	Visits per Member per Year			
	2	2.5	3	3.5
Members	15,000	15,000	15,000	15,000
Visits	30,000	37,500	45,000	52,500
Fixed costs	\$73,000	\$73,000	\$73,000	\$73,000
Variable costs	\$2,550,000	\$3,187,500	\$3,825,000	\$4,462,500
Variable cost per unit	\$85	\$85	\$85	\$85
BE yearly				
capitation rate	\$174.87	\$217.37	\$259.87	\$302.37
BE monthly				
capitation rate	\$14.87	\$18.11	\$21.66	\$25.20

New Patients Versus Existing Patients. Another very important sensitivity in evaluating capitation arrangements is whether the capitated patients represent new or existing volumes. On the one hand, as noted in the preceding example, capitating existing patient volumes means the practice will lose previous fee-for-service revenues from those patients, a loss that must be accounted for in the analysis. Failure to conclude a contract and loss of those patients to other providers, to the extent that this is an outcome of a failed negotiation, jeopardizes existing jobs. On the other hand, new patients carry no opportunity costs in lost contribution to overhead, and failure to negotiate a successful agreement for new patients puts no existing jobs at risk. However, large volumes of new patients can bring a substantial increase in fixed costs for rent and practice support staff and costs associated with adding new physicians, and a practice can still be justified in wanting to achieve a margin to offset current fixed costs and add to overall profit.

The cost structures associated with these two types of patients are quite different. Consider the example in Figure 3.14, with 100 percent of the patients new to the practice. In this revised example, fixed costs have been added to create the physical and staff capacity to care for the additional patients. Rent for new space, the associated buildout, maintenance, utilities, and support staff have increased fixed costs from \$73,000 to \$495,500 per year. As previously mentioned, there is no opportunity cost in this example; however, a desired profit of \$15 per visit, or \$450,000 annually, has been built into the example. As a result of incurring supplementary fixed costs to manage the additional patient volume, capitation rates have increased to \$193.03 per year and \$16.09 per month. The cost structure is now approximately 20 percent fixed (as opposed to 3 percent in the previous example), which increases the sensitivity of the analysis to changes in membership without substantially reducing risk from utilization. As a result this is a very different business proposition from that represented in the first example.

In practice, capitation opportunities are likely to represent a combination of both new and existing patients. Approaching each as a separate analytical task can help focus the issues associated with each population. The rate required of the whole population is a simple weighted average of the rate required for each, with the weights equal to the percentage that each is of the total. Assume for a moment that the two examples given earlier (Figures 3.13 and 3.14) represent a single population of 30,000 members, 50 percent of whom are new to the practice and 50 percent of whom are existing patients. The monthly capitation rate required of the whole population would be $\$14.57 \times .5 + \$16.09 \times .5 = \$15.33$.

Variable Cost Calculation for a More Diverse Service Mix. In a multispecialty group practice the range of physician services covered under capitation will be greater than the range in a primary care setting, and the calculation of variable costs may

**FIGURE 3.14. CAPITATION BREAKEVEN
CALCULATION FOR NEW PATIENTS.**

Capitated members			15,000
Expected utilization			
Visits per member per year		2	
TOTAL ANNUAL VISITS			30,000
Incremental fixed costs			
RN care manager		\$65,000	
Software upgrade (one time fee)	\$24,000		
Amortized annual fee (3-yr. period)		8,000	
Rent for new space (8,500sf @ \$20/sf)		170,000	
Buildout cost at \$30/sf	255,000		
Amortized annual buildout cost		85,000	
New billers, records, staff, and so forth		125,000	
Maintenance & utilities for new space		42,500	
ANNUAL TOTAL			\$495,500
Variable costs per visit			
Supplies, and so forth		15	
Physician salary support		50	
Total variable cost		65	
ANNUAL TOTAL			\$1,950,000
Desired profit per visit			
Contribution to overhead & profit		15	
TOTAL DESIRED PROFIT			\$450,000
TOTAL COST OF SERVICE			\$2,895,500
BREAKEVEN ANNUAL CAPITATION RATE			\$193.03
MONTHLY RATE			\$16.09

require weighting. For example, assume that a practice is negotiating a capitated rate for pediatric and adult primary care and for annual gynecological exams for adult women. Its variable cost per visit is \$70 for adult primary care, \$60 for pediatrics, and \$95 for the annual gynecological exam. It expects that 10 percent of all visits will be gynecological exams, 60 percent pediatric, and 40 percent adult primary care. The calculation of the weighted average variable cost per visit to be used in the breakeven analysis is illustrated in Figure 3.15.

FIGURE 3.15. AVERAGE VARIABLE COST PER VISIT.

$$\text{Average Variable Cost per Visit} = [.1 \times \$95 \text{ (Gyn)}] + [.6 \times \$60 \text{ (Peds)}] + [.4 \times \$70 \text{ (Adult)}] = \$73.50$$

Sunk Costs, Avoidable Costs

In investment and growth analysis, the manager would focus on incremental costs. These may be incremental costs for facilities, equipment and capital, and fixed overhead, and for variable costs associated with producing services. Occasionally practices must also consider downsizing and reductions in service. For these decisions, two additional and complementary concepts are important, sunk costs and avoidable costs.

Sunk costs are costs that cannot be recouped or avoided. They are the “spilt milk” of business activity. The mammography service mentioned earlier contains an example in the X-ray machine that must be purchased. Once this machine is bought, its purchase costs are *sunk*; they cannot be recouped, and they are not relevant to future decision making. The depreciation costs carried by the practice in relation to that purchase relate to the original purchase. They do not represent the cost of continuing to own the mammography machine. That cost is now better described by the opportunity to sell the machine; it is a function of resale value, not book value, and that can be substantially less.

Avoidable costs are costs that can be eliminated with the elimination of a service or with a significant change in the size of the practice or its scope of work. This is an important notion because it is easy to overestimate the amounts that can be saved through such changes. Direct costs are more likely to be avoidable than indirect costs, but not all direct costs are avoidable and not all indirect costs are unrelated to volume. Certain types of allocated costs such as administration, quality assurance, and depreciation associated with space are highly resistant to change, whereas billing and reception may be more flexible. It may be possible to reduce physician compensation in response to the loss of a contract, but malpractice insurance, CME allowances, and benefits do not change unless positions are completely eliminated.

As with the notions of *fixed* and *variable*, whether a cost is *avoidable* depends as much on management practice as it does on the nature of the items in question. Management’s responses to downturns in business and the desires of the physician partners make a difference.

Productivity Management

Productivity management is the task of attempting to reduce costs in relation to units of revenue or units of service. In the first instance it is measured as the reduction in dollars of cost per dollar of revenue; in the second as the reduction in dollars of cost per unit of service. In both instances the goal is generally to be more efficient, to produce more with less. Some of the most useful tools for doing this are beyond the scope of this chapter. Process reengineering and continuous quality improvement can lead to improvements in both efficiency and quality when properly applied in a physician practice setting.

Benchmarking

Benchmarking can also be a useful tool for identifying potential areas in which to achieve productivity improvements. In its simplest form, benchmarking is the comparison of specific aspects of one practice against the same aspects of another. It is generally expected that the comparison practice will be an outside group of comparable composition and activity. In practice, however, such outside comparisons are often of limited use. Practices are rarely directly similar: accounting systems often vary so that one-to-one departmental comparisons are not possible, and data are often two or three years out of date. Nevertheless, good outside benchmarking data can be very useful.

Internal benchmarking is a simple technique that can be easy and inexpensive. In internal benchmarking, the comparison group is another operations center within the practice or a group may be compared against itself in terms of its performance in two separate time periods. Ratios of cost to revenue from the current time period are analyzed against those from the comparison group or from an earlier time period. Changes and disparities are identified for further analysis, and goals are set for certain levels of performance. Use of benchmarks is more fully discussed in Chapter Six.

Variance Analysis

Another important tool in productivity management is variance analysis. Here the goal is to determine where costs are *not* performing according to plan and to bring them back into the desired range. The budget provides the framework for variance analysis. The key question in variance analysis is, Is the practice performing to budget expectations? This concept has applicability for all budgeted activity.

Variance analysis will be only as accurate as financial systems allow. If the chart of accounts does not separate medical assistant and receptionist salaries, variance

analysis will not be able to distinguish between these two classes of employee; if internal medicine and pediatrics are accounted as a single department, it will be difficult to ascribe cost variances to just one or the other. Similarly, if these distinctions are carried in the practice's accounting system but not budgeted, it will be difficult to relate observed changes to expected performance. The budget, which is more fully discussed in Chapter One, is the record of expected performance.

Variance analysis begins with the question, Are we on budget or not? It then proceeds to ask why observed discrepancies exist. Variance analysis is usually conducted on a monthly basis at the level of the practice as a whole and at the level of individual departments, both direct and indirect. Allocated costs are sometimes discussed at the service department level, but generally it is the costs that are directly controllable by individual managers that are reviewed with those managers.

Over or Under Budget. Variance analysis is a very effective technique, yet it is not performed by all practices. Variance analysis requires several basic items:

- A chart of accounts into which transactions are recorded in a consistent way for all the business and clinical activity of the practice
- A budget stated in terms of the chart of accounts
- A means of producing reports that compare budgeted to actual performance

When performing variance analysis it is very important to compare apples to apples. This means that consistency is paramount when recording transactions.

Rate and Skill Mix Versus FTEs. Larger practices that employ a range of skill mixes with substantial variation in compensation rates may benefit by analyzing salary by rate and by skill mix. In such practices salary variance may be caused by an overly rich skill mix as well as by simple overstaffing. Two levels of analysis are possible, each with different accounting and budgeting requirements. In order to distinguish whether a variance is caused by rate mix or by overstaffing, it is necessary to budget both FTEs and total salaries and to report both in financial statements. The relevant comparison then is FTEs and salary rate per FTE. The higher the rate in relation to budget, the more likely it is that mix is a factor in the variance. However, rates can vary in relation to factors other than mix. Bonuses may be paid for extra shifts; longer-term, higher-paid employees may work more hours than originally expected. To allocate the mix with certainty, it is necessary to have separate salary accounts for different skill levels. One good option is to group employees like X-ray technicians and RNs into a separate account with its own budget and reporting. This account can then be compared with other salary accounts with respect to both FTEs and rates.

Volume Versus Other Causes. A variance between budgeted and actual performance may be due to changes in volume or to other causes. The distinction between volume and other causes is useful to make when analyzing physician compensation, lab costs, costs of supplies, and other costs that have a strong variable function in relation to volume of units. The variance analysis question relates to whether a change from expected costs is driven by a change in volume or by some other combination of possibly more controllable factors. If the practice is to be able to answer this question, the budget and associated financial reporting must explicitly include volumes along with the elements of overall cost. To the extent that volumes do not vary from budget while other costs do, the inference is that other factors are responsible for the variances. The units of volume that can be included in the budget include visits, tests, exams, procedures, bills processed, and hours of operation. A more precise measurement of the relationship between volume and cost can be obtained when fixed and variable cost functions are budgeted and reported separately and when the expected relationships between variable costs and the associated volumes are specified. Careful application of these tools can allow for a monthly *volume adjustment* of the overall budget as the basis from which to begin variance analysis.

Intensity Versus Other. The distinction between intensity of service and other causes is useful where one unit of service may be substantially more expensive than another. This distinction can be applied when analyzing physician compensation, lab and other ancillary department costs, supplies, and other costs that have a strong variable function in relation to acuity. This factor is closely related to volume. In a physician practice, units of service are not equivalent; some are more expensive to purchase or produce than others. In analyzing variation from budget, it is often useful to understand to what extent the intensity of service mix is at cause. Exact intensity information cannot be captured, but approximations are possible. Currently, RVUs offer the best method for doing this. The requirement therefore is to budget and report RVUs for relevant practice service areas. As with volume the separation of fixed and variable costs with just the variable component linked to RVUs allows a more precise monitoring of the impact of intensity on practice expenses.

Seasonal Variation Versus Unexpected Change. Some calendar periods may be expected to have lower volumes than others. The distinction between seasonal variation and unexpected change is useful when analyzing patterns of utilization over the year. It is important to distinguish between expected change and unexpected change, which may be related to competition or other economic or business conditions. To make this distinction apparent, budgeted volume must be spread throughout the year

in a way that parallels expected fluctuations in volume. The same thing applies to changes in cost.



It is not in the interest of every practice to attempt to budget and report at the same level of detail. The amount of information that is routinely produced should match management goals for performance monitoring and adjustment. The cost of maintaining highly sophisticated financial systems is also a consideration.

Discussion Questions

1. Discuss the role that fixed and variable costs play in the management of physician practices.
2. Give examples of fixed costs that are indirect and fixed costs that are direct, and examples of variable costs that are indirect and variable costs that are direct.
3. Discuss situations in your practice where breakeven analysis might be appropriate.
4. What practice variables should be included in a breakeven analysis for a satellite clinic in an urban setting?
5. Discuss the merits of using step-down and activity based costing.
6. Determine the necessary breakeven volume for a practice that is considering adding magnetic resonance imaging (MRI) to its services. The cost of the machine is \$1,800,000. The practice has determined that the repayment period is three years and expects to incur the following costs as part of adding this service:

Remodeling: \$200,000

Technicians: \$60,000 (two technicians at \$30,000 each)

Information system upgrade: \$100,000

Table 3.7 shows the payer mix for the practice.

TABLE 3.7. PAYER MIX FOR DISCUSSION QUESTION 6.

Payer Type	% of Total	Charge	Payment
Medicare	30%	\$850	\$790
Other fixed fee	20	850	700
Charge based	40	850	825
Cost based	5	850	800
No pay	5	850	0

Web Resources

- Case study
- PowerPoint presentation
- Answers to discussion questions

Notes

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Suggested Reading

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CHAPTER FOUR

TAXATION AND PHYSICIAN PRACTICES

Anne M. McGeorge

Objectives

This chapter will help the reader to

- Identify tax issues relating to physician practices.
- Understand the pros and cons of various entity structures.
- Describe the tax implications of physician compensation arrangements.
- Discuss tax issues affecting the operations and financial management of physician practices.

Although many regulations affect physician practices, including federal anti-kickback and self-referral laws, the federal and state tax considerations of physician practices are often overlooked. Failure to appropriately address tax issues when forming or operating a physician practice often results in unexpected and even disastrous consequences.

As recently as a decade ago, physician practices were small two- to three-person entities. Physicians coming out of medical school would join one of these small practices or form their own. These physicians were considered entrepreneurs, and they or members of their families performed many of the financial and administrative functions of the practice. The physicians in each group tended to be of like mind and about the same age, with similar skills, goals, and work ethic. However, in the past ten years payment arrangements have become more complex and reimbursement has declined. It is not unusual for practices to have ten or more payment sources and even more contracts. Salaries for clinical and office staff have increased, not to mention the dramatic rise in malpractice premiums. It is no wonder that more and more physicians have found efficiencies in banding together to form larger and larger practices. Like most other organizations, physician practices find that the larger their organization the more complex the management of the operations becomes. Insurers and

Medicare and Medicaid agencies also continue to impose more and more restrictions on practices, causing physicians to rethink many of their strategies.

The complex regulations of Medicare, Medicaid, and HIPAA and the regulations affecting corporate compliance (the Stark and anti-kickback laws) are not the only governmental regulations that affect physician practices. Changes in tax laws also burden physicians and their practice administrators. As the margins of physician practice operations become smaller and smaller, it is important to create an efficient tax environment to ensure that the practice and its individual physicians optimize their bottom lines. It is important to understand the tax laws affecting physician practices and how to apply them.

Selecting an Entity Structure

From a tax standpoint the first step in setting up a physician practice is to determine which type of legal entity best meets the needs of the physicians. There are several possibilities:

- For-profit corporation (Subchapter C or Subchapter S)
- General partnership
- Limited liability company (LLC)
- Limited liability partnership (LLP)
- Nonprofit corporation (tax exempt or taxable nonprofit)

Choosing the best legal structure requires consideration of four important factors:

1. Insulation from liability
2. Tax treatment available
3. Ease and convenience of formation and administration
4. The governance framework required

Clearly, the ideal entity would protect the physicians personally from practice liability, be nontaxable, and be free of requirements, restrictions, and limitations in co-ownership arrangements, formation, and administration. Because this is not really a practical goal, it is prudent to analyze the various alternatives to forming a physician practice.

C Corporation

A *corporation* is a legal entity that is separate from its owners, with its rights and responsibilities defined by state law. A Subchapter C corporation (C corp) is regulated under the rules of Subchapter C of the Internal Revenue Code (“the Code”). A C corp has

centralized management through its board of directors, whose members are selected by shareholders. The board of directors elects officers who carry out the policies of the directors.

A shareholder of a C corp is not responsible for its debts. Consequently the shareholders have limited liability, and this is one factor that makes the corporate structure so attractive. However, there are certain exceptions to this rule that could cause a shareholder to fall under what is known as the *corporate veil*. When this happens he would be responsible for his actions. For example, a shareholder's fraudulent acts could cause that shareholder to be responsible for the liabilities of the corporation, and lawsuits asserting fraud often name both the corporation and its shareholders.

There is no limit to the number of shareholders a C corp can have, and a shareholder can be an individual, trust, tax-exempt organization, C or S corp, or partnership. In addition, a C corp does not have restrictions on the classes of stock it issues to its shareholders.

One important tax issue to consider before organizing the entity as a C corp is double taxation. A C corp's taxable income is subject to corporate income taxes. Any after-tax earnings or profits distributed as dividends to shareholders are also taxed as ordinary income at the shareholder's income tax rate.

S Corporation

A Subchapter S corporation (S corp) is regulated by Subchapter S of the Code. An S corp and a C corp are practically identical except that they are taxed in completely different ways. With an S corp the income or loss of the entity flows through to the shareholders for federal and state income tax purposes. In essence the shareholder is taxed on her pro rata share of the corporation's taxable income, rather than the corporation itself being taxed.

Shareholders of an S corp are generally not responsible for the debts of the corporation. However, to qualify as an S corp and to maintain that status, the corporation must meet the following requirements set forth in Section 1361(b)(1) of the Code:

- The corporation must be a domestic corporation.
- The corporation may have no more than seventy-five shareholders.
- The shareholders must be individuals.
- No shareholder may be a nonresident alien.
- The corporation may only have one class of stock.

If at any point in time the S corp violates any of the requirements, it is treated as a C corp and its S corp status is terminated.

Maintaining one class of stock is crucial to maintaining S corp status, and proper planning when using such an entity is necessary. For example, setting up differences in

liquidation and distribution rights with respect to stock may result in a second class of stock and, accordingly, the termination of the entity's status as an S corp. In general the corporation's organizational documents set forth the stock ownership requirements, and it is important to consult legal counsel regarding these issues to ensure compliance.

Partnerships

A general partnership, a limited liability company (LLC), and a limited liability partnership (LLP) are all considered unincorporated entities and are taxed as partnerships for federal income tax purposes under Subchapter K of the Code. A partnership is an association of two or more persons or entities who agree to carry on a business as co-owners for profit. The income or loss of the partnership flows through to the partners, or members, for federal and state income tax purposes. Accordingly, partnerships are not taxable themselves. The partner, or member, is taxed on its share of the entity's taxable income

A general partnership consists of two or more partners. Each partner is jointly and severally liable for all debts and obligations of the partnership. A partner in a general partnership should be another entity; this offers limited liability to its owners. Each partner has the same management powers and is entitled to bind the partnership unless otherwise stipulated in the partnership agreement. Most general partners participate in the active management of the partnership.

An LLP consists of at least one general partner and one limited partner. A general partner in a LLP is liable for all the debts and obligations of the limited partnership. A partner in a limited partnership should be another entity; this offers limited liability to its owners. A limited partner is generally not responsible for the debts of the limited partnership, unless the partner actively participates in the management of the partnership, then the limited partner is treated as a general partner.

Partnerships are subject to Subchapter K of the Code unless an election to be treated as a corporation is filed with the IRS.

LLCs

An LLC has characteristics of a corporation and of a partnership and may be owned by one or more persons. An LLC is a noncorporate entity, and the members of an LLC are not responsible for the debts and obligations of the LLC. However, the members of an LLC are personally liable for their own professional practice.

The earnings of LLCs also pass through directly to the owners, or members, for tax purposes, as in partnerships. Consequently, no tax is imposed on LLCs. Also, unlike S corps, LLCs have no limitation on the number or type of owners of LLCs.

A single-member LLC (an LLC with only one owner) will be disregarded for tax purposes or taxed as a component part of the one owner. For example, a single-member LLC owned by an individual would be taxed at individual tax rates and reported on that individual's Form 1040. (Table 4.1 summarizes the tax structures discussed so far.)

Nonprofit Corporation (Tax-Exempt or Taxable Nonprofit)

Generally, organizations that have a charitable mission may seek tax exemption under Section 501(c)(3) of the Code. Such an organization must first obtain approval from the Internal Revenue Service (IRS) to operate as a tax-exempt entity. The nonprofit form of organization is useful only if there are no for-profit participants. Net income must be retained and used for the nonprofit purposes for which the corporation was formed. A tax-exempt organization must operate exclusively for exempt purposes, such as promoting community health or treating indigent or elderly patients. If the corporation is exempt from federal and state income taxes under §501(c)(3) of the Code, there are a myriad of regulations governing organizational activities, such as the “excess benefit” rules in §4958 of the Code, imposing penalties on any individual receiving an excess benefit from a tax-exempt organization. Excess benefit transactions and intermediate sanctions are discussed in Chapter Eight. Other tax regulations require that the organization be operated for the good of the public and that no part of the earnings of the entity may inure to the benefit of a private individual.

The IRS has been evaluating the exemption standards applicable to medical groups in an effort to identify the characteristics of organizations entitled to recognition of exemption and to distinguish them from medical group practices that

TABLE 4.1. COMPARISON OF TAX STRUCTURES.

Entity	Tax	Form
C corporation	Double taxation	<ul style="list-style-type: none"> • No limit on shareholders • No restrictions on classes of stock
S corporation	Flows through to taxpayer	<ul style="list-style-type: none"> • Cannot have more than 75 shareholders • One class of stock • Must be a domestic corporation • No nonresident aliens
Partnership LLC	Flows through to taxpayer Flows through to taxpayer	<ul style="list-style-type: none"> • Partner can be any entity • Must have more than 1 owner • No limitation on owners

are operated for a profit. Revenue Ruling 69-545 should be applied for purposes of determining whether a medical group is entitled to exemption. It states that a medical group is entitled to exemption if it meets this organizational test:

- The medical group must be organized and operated exclusively for one or more charitable purposes.
- Assets of the organization must be dedicated exclusively to charitable purposes.

These limitations are significant for 501(c)(3) organizations and should weigh heavily in determining whether a medical group is taxable or tax exempt. A medical group may qualify for exemption itself, or it may qualify as tax exempt by virtue of being a part of another tax-exempt organization with the same mission, such as a hospital, teaching facility, research group, or low-income clinic.

There are several operational characteristics that will help a medical group establish that it promotes health for the benefit of the community in a charitable sense. The medical group should

- Maintain a schedule of fees for services rendered by its physicians that is reasonable in light of the community it is serving.
- Be a participating provider under the Medicare program, unless its physicians are in a specialty, such as pediatrics, where Medicare participation is not applicable.
- Be eligible to treat Medicaid patients.
- Provide some level of uncompensated or below-cost care.
- Offer additional health-related community services: for example, administering flu shots to the public, offering free health tests or screenings, or offering health education to the public or to schools.

In order to choose the entity structure that best suits their practice, physicians should consider the advantages and disadvantages of each structure (see Figure 4.1).

Compensation Arrangements

From a tax standpoint the three most important issues related to compensation arrangements for physicians are reasonableness, process, and documentation. For tax purposes compensation includes salary, fees, bonuses, severance payments, deferred compensation, and some reimbursed expenses. Compensation arrangements for physicians need to reflect the growing importance of group goals and performance while

FIGURE 4.1. ADVANTAGES AND DISADVANTAGES OF TAXABLE AND TAX-EXEMPT STATUS.

	ADVANTAGES	DISADVANTAGES
TAXABLE	<ul style="list-style-type: none"> • Has more independence from regulations • Is easy to set up • Has more flexibility with the board of directors • May pay little or no tax • Can avoid filing an application for tax-exempt status 	<ul style="list-style-type: none"> • Must pay tax if profitable • May be subject to state and local taxes • Finds it more difficult to obtain donations because there are no tax deductions
TAX-EXEMPT	<ul style="list-style-type: none"> • Has the ability to avoid federal and state income taxes and possibly other state and local taxes • May solicit tax-deductible donations • Is perceived positively by the community 	<ul style="list-style-type: none"> • Must file application for exemption with the IRS • Must follow IRS regulations regarding tax-exempt organizations • Must have a community board • Must carry out all transactions at fair value and at arm's length

being fair to individuals. In some practices the physicians perform dissimilar functions, such as taking calls or performing certain screenings and tests, and thus may generate dissimilar revenue streams or require dissimilar resources, particularly physician time, to perform their work. In multispecialty groups there are more internal referrals to specially trained physicians within the group and a greater division of labor. Thus productivity becomes more difficult to define in these groups and so does the basis of fair and equitable income division.

Some practices use collections per physician to determine compensation allocations, whereas others use units of work or RBRVS (resource-based relative value scale) methodologies to allocate compensation. Whatever the allocation of compensation, it is important that all the physicians in the practice perceive the arrangement as fair, or as with any business, internal disagreements may affect the quality of the services provided to the patients.

It is also important to make sure the unique compensation plan avoids a number of legal land mines. Medicare fraud and abuse laws as well as the Stark I and II laws (“Stark”) and regulations should be considered when designing an effective compensation-sharing arrangement among physicians in a group practice. Under Stark, a bona fide physician employee may be compensated based on personal

productivity provided that compensation is commercially reasonable and consistent with fair market value and does not take into account the volume or value of referrals between the physician and the employer. Chapter Eight offers guidance on these regulations and on safe harbors to avoid violations of these rules.

Compensation in Tax-Exempt Organizations

There are two important types of restrictions on exempt organizations. As noted earlier, laws dealing with private inurement state that no part of the net earnings of a 501(c)(3) organization may inure to the benefit of any private shareholder or individual. Compensation based on gross earnings is viewed as permissible as long as total compensation is reasonable. The IRS has provided informal guidelines to assist in determining physicians' compensation arrangements:

- A physician's compensation from a tax-exempt medical group must be derived from arm's-length negotiations that reflect competitive rates for the specific medical services rendered or to be rendered that do not exceed reasonable compensation rates based on the market value of the services.
- The medical group's compensation plan must be comparable to payment arrangements adopted by other medical groups of similar size and composition in the same geographic area.
- The compensation for each physician must be comparable to that for physicians with the same specialty in other medical groups in the geographic area. (Table 4.2 provides suggestions on how to establish comparability of compensation of physicians in similar specialties.)
- If a physician compensation committee is established to determine compensation, members must be independent of the physicians providing services to the integrated delivery system (they must have no past or present affiliation with the medical group or with anyone related to someone in the medical group).

Taxability

Generally, compensation is taxable in the year in which it is paid. Exceptions to this general rule include certain forms of deferred compensation, such as retirement plan contributions made on behalf of the physician employee. A physician-owner of an S corp or an LLC is subject to self-employment tax on the amount of distributions received from the corporation. The self-employment tax comprises a tax for old age, survivor, and disability insurance (FICA), which is 12.4 percent, and a tax for

TABLE 4.2. ESTABLISHING COMPARABILITY OF PHYSICIANS' COMPENSATION.

Source	Description
Regional compensation studies Published compensation studies	Likely to be available in urban areas The American Hospital Association's annual survey of average physician compensation for given specialties The 1993 Hay Hospital Compensation Survey, sponsored by the Hay Group and the American Society for Healthcare Human Resources Administration (containing information on the compensation practices of 1,256 hospitals)
Contemporaneous written evidence of arm's-length salary negotiations between the physicians and the entity is another helpful factor in determining reasonableness of compensation	Data (from sources such as state and local medical societies and national trade associations for physicians) showing the ranges of salaries for like specialties in the same state, which can be compared with data from communities similar in size and socioeconomic demographics to the IDS in question Examples include evidence of formal offers that passed between the parties or contemporaneous memoranda that document face-to-face negotiations and proof of valid job offers that the physicians received from other institutions

hospital insurance, or Medicare, which is 2.9 percent. There is a cap on the amount of income to which an individual must apply the 12.4 percent. That cap was \$87,000 in 2003.

Compensation that is not part of a "qualified retirement plan," such as a Section 401(k) plan or a pension or profit-sharing plan, may be deferred from taxation as a nonqualified plan. Such contributions are not tax deductible by the entity making the contributions and are not taxable to the employee until they are received. Generally, for an individual to defer tax on these amounts, she must face a "substantial risk of forfeiture," according to Section 83 of the Code. In other words there must be a risk that the employee may not receive the funds. As soon as there is no longer a risk of forfeiture, the employee is taxed on the amounts. An example of a substantial risk of forfeiture is that the employee has to remain with the employer until she reaches a certain age or has to achieve certain performance goals before she can actually receive the amounts.

Financial Accounting Issues

The practice will calculate its taxable income on the basis of its tax year. A *tax year* is an annual accounting period for aggregating transactions and reporting income and expenses. A *fiscal year* is twelve consecutive months ending on the last day of any month except December. The tax year may be either a fiscal year or a *calendar year*. However, a flow through entity, such as an S corp, LLC, or partnership, must have use the same year ending in the same month as its partners or owners use. Unless a practice is required to have a certain tax year, the tax year preferred can be adopted by filing the entity's first income tax return using that tax year. Generally, any entity can adopt a calendar year, but there are certain requirements for adopting a fiscal year. Certain professional entities, such as medical practices, may be able to adopt a fiscal year, but the IRS requires that the deferral period (the period of deferring the tax potentially owed by the entity) cannot be greater than three months, and the entity is required to make a "deposit" with the IRS of the estimated amount of deferred tax. Accordingly, it is not advantageous from a tax standpoint to maintain a fiscal year. Most practices use a calendar year.

Accounting Methods

A tax accounting method is a set of rules used to determine when and how income and expenses are reported for tax purposes. A practice's chosen tax accounting method affects not only its overall method of accounting but also the treatment it will use for any item of financial significance. The practice will choose an accounting method when it files its first tax return. The practice must then use the same accounting method from year to year. If the practice later wants to change its accounting method, it must get IRS approval.

The practice must use an information system that accurately accumulates its income and expenses and enables practice management to file an accurate tax return. In addition to the permanent books of account, the practice must maintain any other records necessary to support the entries on the practice's financial records and tax returns.

Taxable income can be computed using either the *cash* or the *accrual* method of accounting. When a practice uses the cash method, it includes all items of income actually or constructively received during the tax year in its gross income. *Constructive receipt* means that all restrictions on receiving the revenue in question have been lifted; therefore the practice is legally entitled to the funds even though they have not been paid. For example, if the services have been rendered and no restrictions exist on receiving the funds for those services, those funds are currently taxable even though the actual cash has not been received. Expenses are deducted in the tax year in which they are paid.

When a practice uses the accrual method it includes in its income all amounts that have been earned and can be determined with reasonable accuracy. Expenses are deducted or capitalized when all events that fix the fact of liability have occurred, the liability can be determined with reasonable accuracy, and economic performance has occurred. This means that all necessary legal obligations are met or that performance occurs out of the taxpayer's use of property (namely, rent).

Some additional tax accounting issues to be considered by the medical practice include the following:

Depreciation. A practice uses the technique of depreciation to obtain a tax deduction for "wear and tear" on the assets it purchases and uses in the practice. Generally, the IRS requires that the "modified asset cost recovery system" be used in determining the amount of tax deduction taken for each year of an asset's life. The IRS has set forth specific lives for certain assets. For example, computers and electronic equipment, such as phone systems, must be depreciated over five years. Longer lived assets, such as leasehold improvements, have to be depreciated over longer periods. Special rules, however, allow the expensing of up to \$25,000 worth of assets in the year the assets are purchased. This is commonly referred to as a Section 179 expense, and it is often used by medical practices. There are also special rules relating to the years immediately after the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001, to assist businesses in recovering losses attributable to that event. These rules allow for "bonus depreciation" deductions of up to 50 percent of certain asset costs.

Deductibility of meals and entertainment. Specific rules relate to the deductibility of meals and entertainment. Generally, certain entertainment expenses (such as country club dues) are totally disallowed. Meals and entertainment expenses that are allowable are limited to 50 percent deductibility. It is necessary to keep track of all meals and entertainment expenses to determine the appropriate deductibility of such expenses.

Deductibility of accrued vacation. Generally, accrued vacation expense is deductible only if it is paid within two and a half months of the entity's year-end.

Deductibility of other accrued expenses. Generally, accrued expenses are deductible as long as the expense is actually paid within eight and a half months of the entity's year-end.

Deductibility of compensation. Generally, compensation for the owners of a professional corporation is deductible only when paid, so bonus payments must be actually paid by year-end for a corporation to get a tax deduction for those amounts.

Deductibility of retirement plan contributions. Generally, retirement plan contributions are allowed to be accrued and are considered deductible as long as the payment to the retirement plan is made by the time the entity files its tax return, including extensions.

Deductibility of organizational and start-up costs. The IRS requires all costs involved in setting up the organization and costs incurred before the organization actually starts business to be spread out over five years rather than being deducted entirely in the year paid.

Independent Contractor Versus Employee Status for Workers

As a general rule the relationship of *employer* and *employee* exists when the person for whom services are performed has the right to control and direct the individual who performs the services. The employment tax statutes, the income tax withholding statutes, and the associated regulations provide very little guidance for evaluating the classification of workers as independent contractors or employees. Over the years the courts and the IRS have struggled to establish a concrete test for determining the appropriate status of workers, but the control test seems to have the most weight in these decisions.

Because the tax withholding requirements are set and determinable for employees and because the employer has virtually no responsibility for the payment of taxes on behalf of independent contractors, the IRS prefers that workers be classified as employees, and it imposes significant penalties (as much as 25 percent of the salary) on misclassifications. Consequently, it is advisable to analyze the specific duties of each worker in an effort to classify correctly. If practice management can answer yes to most of the following factors in relation to a specific worker, then it is likely that a sufficient degree of control is exercised over that worker for classification as an employee:

- The organization requires the worker to comply with instructions that state when, where, and how the worker is to perform work.
- The organization provides training (either on the job or otherwise).
- The worker is integrated into the business.
- The services are to be performed personally by the worker.
- The organization has the right to hire, supervise, and pay assistants.
- The organization has established or set hours of work for the worker.
- The worker is full time.
- The work must be performed on the organization's premises.
- The organization controls the order in which work is completed.
- Written reports are required of the worker.
- The worker is paid by the hour, week, or month.
- The organization pays business and travel expenses.

The following factors are indicative of an independent contractor relationship:

- The worker has a significant investment in the facilities that are used to perform the services, facilities that are not typically maintained by employees.
- The worker can realize a profit or loss.
- The worker provides services for various unrelated persons or firms at the same time.
- The worker cannot be terminated as long as the work meets certain specifications.
- The worker cannot terminate the relationship with the organization without incurring liability.

Tax Filings and Registration for Start-Up

It is important to apply for an employer identification number (EIN) as soon as the practice's structure has been determined. Form SS-4 is used to apply for the EIN. The EIN is used for tax filing and reporting purposes. An EIN can now be obtained over the phone in certain circumstances. The instructions on Form SS-4 outline the specific process. Any subsequent changes to the mailing address are made on Form 8822. It is important to use the full legal name of the practice shown on line 1 of Form SS-4 on all tax returns. This will help the practice avoid processing delays and errors.

Also, states require registration of new entities for purposes of collecting state employment taxes, franchise taxes, business licensing fees, and property taxes. The best way to comply with all state registration and compliance requirements is to check your specific state's Web site and follow the instructions outlined or call the Department of Revenue for the state and inquire about the requirements for new businesses.

Tax Compliance

The entity structure of the practice will determine the types of tax returns that need to be filed with the IRS and the state:

Federal income tax returns and estimated payments of tax. Corporations will file Form 1120; S corps will file form 1120-S; partnerships and LLCs will file Form 1065. Because corporations are directly taxed (whereas S corps, partnerships, and LLCs pass through the tax liability to their respective owners), they are responsible for paying tax ratably throughout the year, rather than only when the tax return is filed. Corporate taxes need to be "estimated" and paid four times during the year, with a "true up" due when the tax return

is actually filed. If the tax is not paid ratably throughout the year, the IRS will impose an underpayment penalty on the corporation.

State income tax returns and estimated payments of tax. Most states impose filing requirements similar to the federal ones, and each state has specific forms on which to report financial information. Many states require a copy of the federal tax return to be attached to the state return. The estimated tax rules for most states are similar to the federal rules, and the states may impose underpayment penalties as well if taxes are not paid ratably throughout the year.

State franchise tax returns. These returns are required by many states as a means of taxing the capital of business entities.

State sales and use tax returns. These returns are required by many states as a means of taxing sales to customers.

State property tax returns. These returns are required by many states as a means of taxing the value of property held by business entities.

Federal and state employment tax returns and deposits. Entities are required to report payroll information and withholding payments made on behalf of employees.

Federal and state information reporting (Forms 1099 and 1098). Entities are required to report payments made to noncorporate entities, such as individuals. Medical payments of any kind need to be reported regardless of the entity to which they were paid.



The tax considerations of a physician practice are as important as any other regulatory issue. Failure to address them during the formation as well as during the ongoing operations of the practice can be costly. Practice management should stay abreast of changes in tax law and engage a competent tax adviser when needed.

Discussion Questions

1. Discuss the pros and cons of the various types of legal entities: C corp, S corp, and LLC. Which entity structure would best fit a typical independent medical practice with two to four physicians?
2. Why would a medical practice consider obtaining tax-exempt status? What are some examples of a charitable mission?
3. Give two examples of tax accounting methods, and describe how each is used in determining the taxable income of a practice.
4. Discuss the characteristics of an employee, and contrast them to the characteristics of an independent contractor. Give an example of an independent contractor to a physician practice.
5. What form is used to obtain an employer identification number?
6. What forms must a practice file at year-end?

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions

Suggestions for establishing comparability for compensation

Suggested Reading

- Cornwell, D., McGeorge, A., Crowley, V., and Frank, J. *Arthur Andersen Guide to Navigating Intermediate Sanctions*. San Francisco: Jossey-Bass, 1999.
- Demuth, D. L., and Miller, D. C. *Physician's Guide to the Tax Reform Act of 1986*. Montvale, N.J.: Medical Economics, 1986.
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- Tinsley, R. *Medical Practice Management Handbook for CPAs: Policy Guide to Accounting and Tax Issues, Daily Operations, and Physicians Contracts*. Gaithersburg, Md.: Aspen, 2002.



CHAPTER FIVE

CAPITAL INVESTMENT DECISIONS

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Elisabeth Fowlie Mock

Objectives

This chapter will help the reader to

- Understand the components that go into the business case for a capital investment decision.
- Evaluate capital investment alternatives using three common methods.
- Understand financing options for capital investments.

Capital budgeting is the process that practice leadership uses to evaluate the practice's long-term investment needs and determine how those needs will be financed. *Capital investment* can be defined as expenditures that benefit the practice's operations for more than one year. Expenditures that benefit the practice for one year or less are considered *operating expenses*. Although small equipment items are technically capital expenditures, because they benefit the practice for more than one year, their purchase does not require lengthy evaluation, and they are not discussed in this chapter. The size of the practice and the preferences of practice leadership will determine the dollar threshold for capital budgeting.

Capital investment decisions are an important aspect of the planning and budgeting process because they represent a substantial commitment of the practice's resources. As illustrated in Figure 5.1, there are three general categories of capital investments:

1. *Strategic*: investments intended to better an organization's strategic position
2. *Expansion*: investments intended to increase operating capacity
3. *Replacement*: investments intended to replace an older asset with a newer one or one that represents more current technology

FIGURE 5.1. TYPES OF CAPITAL INVESTMENTS.

Strategic	Expansion	Replacement
<ul style="list-style-type: none"> • Investing in new programs • Adding a new service • Developing physician networks 	<ul style="list-style-type: none"> • Adding a new site 	<ul style="list-style-type: none"> • Replacing existing information systems with new technology • Adding or replacing equipment • Upgrading facilities

Each capital investment decision deserves careful consideration. Not only will the implementation of those decisions require significant monetary resources, it will also consume the time and focus of the organization's human resources. In addition, capital investment decisions set the practice agenda for the intermediate to long term. Good capital investment decisions can enhance the value of the practice and make it much easier to attract capital for future investments.

The capital budgeting process has four stages:

1. *Planning*: identifying the organization's needs and possible alternatives to meet those needs
2. *Evaluation of opportunities*: accumulating information about the investment alternatives, and performing the financial and qualitative, or nonfinancial, analyses referred to as the *business case*
3. *Financing*: determining how the practice will pay for the investment, and obtaining the necessary financing through contributions of capital from the physician-owners, leases, or loans
4. *Assessment*: evaluating the results of operations related to the investment, and determining how these results differ from the forecasts made in planning

Planning

As more fully discussed in Chapter Sixteen, practice management should review the strategic goals of the organization to ensure that capital investment decisions support them. The next step is to evaluate the options available to the practice to achieve the objectives.

When a physician practice makes a capital investment, it can expect to achieve both financial and nonfinancial benefits. Financial benefits include an immediate return to the owners of the practice in the form of dividends as well as a long-term return in the form of the appreciation of the capital assets.

Nonfinancial benefits, also referred to as qualitative or strategic benefits, are often equally as important to the practice as financial ones and sometimes more important. Examples of nonfinancial benefits are

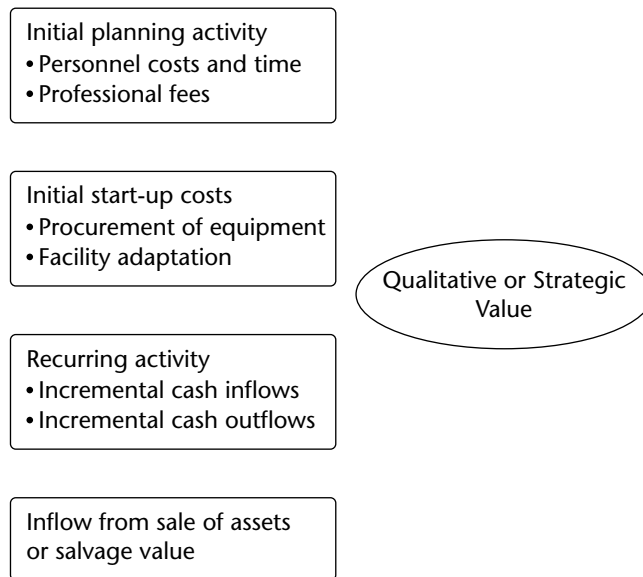
- Benefits to the community
- Recognition from members of the community
- Enhanced market share
- Employee satisfaction or retention
- Patient satisfaction
- Fulfillment of regulatory or other mandated requirements

A prudent practice manager will evaluate the financial impact of various alternatives to find the most cost-effective way to accomplish practice goals. There are generally multiple vendors and multiple financing options that the practice manager can consider. When financial and human resources cannot be made available for the project without jeopardizing another part of the practice, the practice manager may also have to consider altering the scope of the project.

Whereas large physician practices often have multiple demands for capital investment at the same time, smaller practices are likely to have capital needs that emerge one at a time. Each situation has its own challenges. Larger organizations will be able to use the decision-making tools discussed later in this chapter to rank potential investments. Smaller organizations can use the same tools to decide whether to accept or reject potential investments. Advance planning is important to ensure that adequate financial resources are available for the practice's immediate needs as well as for the needs it will have in the future.

Evaluation of Opportunities

The practice manager will need to gather the information necessary to prepare a business case for the project. As illustrated in Figure 5.2, the business case incorporates the costs that will be incurred in the planning and start-up phases of the project as well as the recurring cash flows associated with the project. When evaluating decisions about enhancement or replacement of a current piece of equipment or a service, the recurring cash flows will be the incremental revenues and expenses. At the end of the

FIGURE 5.2. COMPONENTS OF THE PROJECT BUSINESS CASE.

project the practice may sell the assets or the business unit. The terminal value or salvage value at the end of the life of the project should be added into the projections. Once the business case has been developed, it can be considered in light of the non-financial information.

Using Discounted Cash Flows

Capital investments generally extend over a period of time. Revenues generated and expenses incurred in one year may not be received or paid until the next year. In addition, the project may require an inventory of supply items that will not be used until another year. Therefore the practice manager will have a more accurate analysis if the revenues and expenses for the project are converted to cash inflows and cash outflows.

A practice will have certain expenses that do not use cash. *Depreciation* is the allocation of a portion of a capital expenditure to expenses to reflect its use in the production of a good or delivery of a service. Because depreciation is not a cash outflow, it would not be considered in the business case at all except for the fact that

depreciation is deductible for tax purposes. In practices where income taxes are not a factor, depreciation would not be considered a cash outflow. The *net cash flow* of the project refers to the cash inflows less the cash outflows.

It is important to consider the time value of money in the business case, because a dollar generated by the practice today is worth more than a dollar generated in the future, for these reasons:

- The dollar that the practice has today is certain. This may not be true of dollars expected in the future.
- Inflation decreases the buying power of a dollar over time.
- In choosing the dollar generated in the future over the dollar generated today, the practice loses the opportunity to make a return on some other investment.

Cash flows are discounted to reflect their value at the time the analysis is being performed. The discount rate is a reflection of the cost of capital. A practice will generally have a target or required rate of return. This is the amount that the practice considers an adequate return on investment. A return on investment is adequate when it is equal to or exceeds

- A risk-free rate of return, such as that for a government security of the same duration
- Expected average inflation per year
- An amount that covers the risk the investment

The more risk an organization takes with a project, the higher the return needs to be. One way to determine a discount rate is to start with the practice's cost of capital and then add additional percentage points for investments that carry above-average risk. A practice's cost of capital, illustrated in Table 5.1, is the weighted average of

- The average cost of its debt
- The return on the practice's equity

Here is a fuller explanation of the steps in Table 5.1.

Step 1. To compute the weighted average cost of debt, calculate the annual interest for each debt instrument by multiplying the outstanding balance by the interest rate. The sum of the interest for the year is divided by the total outstanding debt to get the average interest rate.

Step 2. The percentage assigned to equity is the return that the practice brings its physician-owners. (If the organization is a not-for-profit, other ways to calculate the return on equity can be found in advanced finance texts.)

TABLE 5.1. WEIGHTED AVERAGE COST OF CAPITAL.

	Balance Outstanding	Interest	Rate	Weight	Weighted Average
Step 1: Debt					
Mortgage	\$500,000	\$37,500	7.50%		
Note payable	350,000	28,000	8		
TOTAL	\$850,000	\$65,500	7.75%	68%	5.27%
		Return			
Step 2: Equity					
Return to owners	400,000	60,000	15%	32%	4.80
Step 3: Total Capital					
	\$1,250,000	\$125,500			10.04%

Step 3. The proportion (the weight) of the debt and the proportion of the equity are calculated as percentages of total capital. The average interest rate is multiplied by the percentage (the weight) of debt and the percentage return on equity is multiplied by the percentage of equity, and the resulting weighted averages for debt and equity are totaled to come to a weighted average cost of capital.

Some practices may choose to use their incremental borrowing rate, that is the amount it would cost to borrow the next dollar, as the base discount rate. This base discount rate is then adjusted for risk. Figure 5.3 illustrates the capital investment model.

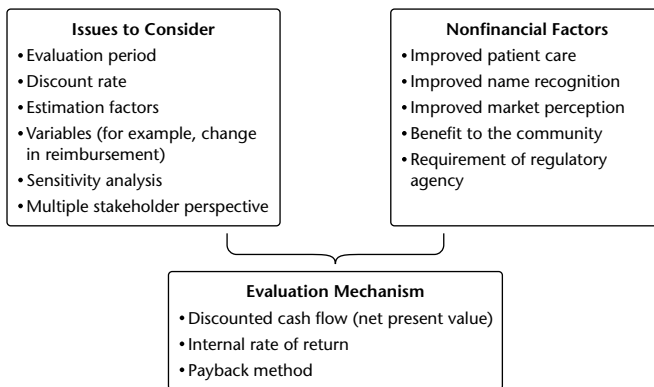
Capital Investment Analysis

It is important to take the time to obtain accurate data for the capital investment analysis. The analysis will generally necessitate making assumptions about future trends. To this end the practice manager may want to request assistance from an accountant or tax adviser in selecting assumptions.

Once the initial scenario has been constructed it is prudent to perform a sensitivity analysis, performing the relevant calculations using varying assumptions for patient volumes, reimbursement levels, and staffing levels. This process can give the practice manager an idea of which changes in assumptions have the most impact on the analysis. The assumptions that have the largest impact on the net cash flows of the practice when they are changed are the most sensitive assumptions. The more sensitive the assumption, the more effort the practice manager should place on gathering

FIGURE 5.3. CAPITAL INVESTMENT ANALYSIS.

Initial Investment	+	Cash Inflows	-	Cash Outflows	+/-	Adjustments	=	Estimated Net Cash Flow
• Equipment		• Operating revenue		• Direct: labor and supplies		• Incremental new investment		
• Labor and supplies: start-up expenses		• Grant revenue (ongoing support)		• Indirect: labor and supplies		• Depreciation		
• Facility adaptation				• Overhead		• Change in working capital (if significant)		
• IT				• Taxes, if applicable				



accurate data. The practice manager should understand the best- and worst-case scenarios.

Three methods are commonly used to analyze capital investment decisions: payback, net present value (NPV), and internal rate of return (IRR). A recent survey of financial officers of Fortune 1000 companies showed that first the NPV and next the IRR were the preferred methods for evaluation of capital investment opportunities.¹

To examine all three methods we'll use the example of Chrysalis Family Practice, a primary care medical group. Chrysalis is considering the purchase of either a bone densitometer or a mammography unit. The practice manager has determined that cost of the densitometer is \$3,500 a year. The annual net cash flow estimated to be attributable to the densitometer is \$900. The cost of the mammography unit is \$7,500. The annual net cash flow attributable to the mammography unit is estimated to be \$1,875.

Payback Period Analysis. This method calculates the amount of time necessary to recover initial costs. A simple spreadsheet can be constructed to show the beginning balance, cash flow, and cumulative cash flow for each year of the project, as shown in Table 5.2. The point at which the cumulative net cash flow equals the investment is the

TABLE 5.2. PAYBACK PERIOD ANALYSIS FOR TWO ALTERNATIVE INVESTMENTS.

	Year 1	Year 2	Year 3	Year 4	Year 5
Densitometer					
Initial investment	\$(3,500)				
Beginning of year balance					\$100
Annual net cash flow	900	900	900	900	900
Cumulative net cash flow	(2,600)	(1,700)	(800)	100	1,000
Breakeven: 3 yrs. 11 mos.				Payback	
Mammography unit					
Initial investment	(7,500)				
Beginning of year balance					0
Annual net cash flow	1,875	1,875	1,875	1,875	1,875
Cumulative net cash flow	(5,625)	(3,750)	(1,875)	0	1,875
Breakeven: 4 yrs.				Payback	

point of payback. The payback period for the densitometer falls between the third and fourth year. To calculate the month of breakeven, determine how much needs to be paid back in the last year (in Table 5.2, Year 4 begins with an amount of \$800 remaining to be paid back). Assuming that Chrysalis receives its cash flow ratably over the year, the practice would have a net cash flow of \$75 ($\$900 \div 12$) each month from the investment. The month at which the practice would break even is approximately the eleventh month ($\$800 \div \$75 = 10.7$). Thus the breakeven point occurs at three years and eleven months.

Another, more straightforward method to calculate payback period for Chrysalis's investment is to divide the initial investment by the annual cash flow. For example, for the mammography unit the payback is exactly four years ($\$7,500 \div \$1,875$). However, this formula will not work unless the net cash flows are the same each year, something that is not likely in a physician practice. So the first method described is the one that will most likely be used.

When comparing the investment in the densitometer to the investment in the mammography unit only one month separates the breakeven point for the two investments. However, it is evident from the analysis that the mammography unit is a better investment from a financial standpoint because its net cash flows are twice as large after the payback period.

The payback method is easy to calculate and understand. It answers the question, How long does it take to pay back the investment? However, it disregards cash flows after the payback and does not consider the time value of money.

Net Present Value Analysis. Using the net present value (NPV) method for investment analysis requires a little more effort, but the fact that it considers all cash flows as well as the time value of money makes it superior to the payback method. Using electronic tools like Excel or present value tables makes the net present value method a better choice. The net present value is the difference between the initial investment and the present value of the net cash flows.

Chrysalis Family Practice uses a 10 percent discount rate. This reflects the practice's cost of capital. (Computing the cost of capital will be discussed later in this chapter.) Neither of the proposed investments carries greater than normal risk, so a risk adjustment is not made. As illustrated in Tables 5.3 and 5.4, the project net cash flows are multiplied by the present value factor for the applicable time period of the investment at the discount rate. Table 5.5 illustrates a portion of a present value of \$1 table. The factors for Years 1 through 5 are found under the column labeled "10%."

In situations where there are regular cash flows, the present value of an ordinary annuity (PVOA) table can be used. The ordinary annuity table simply sums the

TABLE 5.3. COMPUTATION OF NET PRESENT VALUE FOR DENSITOMETER.

	Year 1	Year 2	Year 3	Year 4	Year 5
Initial investment					
Project net cash flows	\$900	\$900	\$900	\$900	\$900
Discount rate	10%	10%	10%	10%	10%
Present value (PV) factors	0.9091	0.8264	0.7513	0.6830	0.6209
Annual PV of net cash flows	\$818	\$744	\$676	\$615	\$559
PV of net cash flows					
Net present value	\$3,412				
	\$(88)				

TABLE 5.4. COMPUTATION OF NET PRESENT VALUE FOR MAMMOGRAPHY UNIT.

	Year 1	Year 2	Year 3	Year 4	Year 5
Initial investment					
Project net cash flows	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300
Discount rate	10%	10%	10%	10%	10%
Present value (PV) factors	0.9091	0.8264	0.7513	0.6830	0.6209
Annual PV of net cash flows	\$2,091	\$1,901	\$1,728	\$1,571	\$1,428
PV of net cash flows					
Net present value	\$8,719				
	\$1,219				

TABLE 5.5. EXCERPTS FROM PRESENT VALUE OF \$1 TABLE ($PV = 1 \div (1 + i)^n$).

Period	2%	4%	6%	8%	10%	12%	14%	16%
1	0.9804	0.9615	0.9434	0.9259	0.9091	0.8929	0.8772	0.8621
2	0.9612	0.9246	0.8900	0.8573	0.8264	0.7972	0.7695	0.7432
3	0.9423	0.8890	0.8396	0.7938	0.7513	0.7118	0.6750	0.6407
4	0.9238	0.8548	0.7921	0.7350	0.6830	0.6355	0.5921	0.5523
5	0.9057	0.8219	0.7473	0.6806	0.6209	0.5674	0.5194	0.4761
6	0.8880	0.7903	0.7050	0.6302	0.5645	0.5066	0.4556	0.4104
7	0.8706	0.7599	0.6651	0.5835	0.5132	0.4523	0.3996	0.3538
8	0.8535	0.7307	0.6274	0.5403	0.4665	0.4039	0.3506	0.3050
9	0.8368	0.7026	0.5919	0.5002	0.4241	0.3606	0.3075	0.2630
10	0.8203	0.6756	0.5584	0.4632	0.3855	0.3220	0.2697	0.2267

PV factors displayed in Table 5.5 together for the relevant years. For example, the PVOA for five years at 10 percent is 3.7908 (Table 5.6). That same factor can be found in the Period 5 row and the 10 percent column of Table 5.7, which shows part of the PVOA table.

Under the NPV method the mammography unit should be chosen and the densitometer rejected, because the NPV for the mammography unit is higher. The rule of thumb for capital investment decisions is to choose those investments that yield a rate of return larger than the practice's target rate of return, adjusted for risk. Risk relates to the chances that the assumptions made by the practices will not come to pass. For example, heavy competition in the marketplace increases risk. The net present value is the amount of the discounted net project cash flows that is larger than the 10 percent return the practice would expect on investment. When there is a choice between two investments the one with the larger NPV should be chosen. Bear in mind that some investments, such as those mandated by regulatory bodies for safety purposes, may not bring cash inflows into the practice. In those cases there is no decision to make; the practice purchases the equipment.

TABLE 5.6. CALCULATION OF PRESENT VALUE OF ORDINARY ANNUITY FOR FIVE YEARS AT 10 PERCENT.

Year 1	0.9091
Year 2	0.8264
Year 3	0.7513
Year 4	0.6830
Year 5	<u>0.6209</u>
PVOA	3.7908

Note: Due to rounding, the numbers in this table will be slightly different from those computed by calculator.

TABLE 5.7. EXCERPTS FROM THE PRESENT VALUE OF AN ORDINARY ANNUITY TABLE ($PVOA = 1 - [1 \div (1 + i)^n] \div i$).

Period	2%	4%	6%	8%	10%	12%	14%	16%
1	0.9804	0.9615	0.9434	0.9259	0.9091	0.8929	0.8772	0.8621
2	1.9416	1.8861	1.8334	1.7833	1.7355	1.6901	1.6467	1.6052
3	2.8839	2.7751	2.6730	2.5771	2.4869	2.4018	2.3216	2.2459
4	3.8077	3.6299	3.4651	3.3121	3.1699	3.0373	2.9137	2.7982
5	4.7135	4.4518	4.2124	3.9927	3.7908	3.6048	3.4331	3.2743
6	5.6014	5.2421	4.9173	4.6229	4.3553	4.1114	3.8887	3.6847
7	6.4720	6.0021	5.5824	5.2064	4.8684	4.5638	4.2883	4.0386
8	7.3255	6.7327	6.2098	5.7466	5.3349	4.9676	4.6389	4.3436
9	8.1622	7.4353	6.8017	6.2469	5.7590	5.3282	4.9464	4.6065
10	8.9826	8.1109	7.3601	6.7101	6.1446	5.6502	5.2161	4.8332

Note: Due to rounding, the numbers in this table will be slightly different from those computed by calculator.

As noted earlier, even if a project does not meet the target rate of return, it may still be worthwhile. Nonfinancial factors should be considered before the investment is rejected. Here are some examples of important nonfinancial factors:

- The investment benefits the community in a significant way.
- The practice believes that the expertise of its physicians can be leveraged.
- The investment may attract additional patients to the practice.
- The investment brings additional synergies to existing services.

The benefits of the NPV method are that

- It calculates the answer in dollars.
- It accounts for all cash flows in a project's life span.
- It considers the time value of money.

The drawbacks to using the NPV method are that the discount rate is not easy to estimate and the cost of capital may change over the course of the project.

Internal Rate of Return Analysis. The internal rate of return (IRR) is defined as the rate at which the present value of net cash flows equals the amount of the investment. For a project with equal cash flows, the IRR can easily be computed manually. However, when computing the IRR for a project with unequal cash flows, it is easier to use a financial calculator or a computer. To manually calculate the IRR for a project with equal cash flows, divide the initial investment by the annual cash flow. This produces a present value of annuity factor. Find this number in a PVOA table

by looking in the row corresponding to the period of your equipment's useful life. Once you find the number from your calculation on that line, the column heading will give you the interest rate.

The Chrysalis Family Practice computed these IRRs when analyzing its two investments under consideration:

Densitometer ($\$3,500 \div \$900 = 3.8889$). The factors in the PVOA chart closest to 3.888 are 3.9927, which reflects an interest rate of 8 percent, and 3.7909, which reflects an interest rate of 10 percent. The factor 3.888 is very close to the midpoint. Therefore the densitometer has an internal rate of return of approximately 9 percent.

Mammography unit ($\$7,500 \div \$2,300 = 3.26087$). The factor in the chart closest to 3.26087 is 3.2743, which reflects an interest rate of 16 percent. Therefore the mammography unit has an internal rate of return of approximately 16 percent.

Follow these steps to calculate the IRR manually for an investment with irregular cash flows:

1. Using a present value of \$1 table, compute the PV for each year's cash flow as was illustrated in the NPV method, using the discount rate that appears likely to be the internal rate of return.
2. Compare the sum of the discounted cash flows to the investment.
3. If the net present value is positive, then the internal rate of return is higher than the rate selected.
4. If it is negative, then the internal rate of return is lower.

This method is one of trial and error. For investment decisions with irregular cash flows, it is much easier to make the calculations with a computer.

The project should be accepted if the quantitative evaluation shows that the IRR is greater than the required rate of return. If the IRR is less, the project should be rejected. Therefore, if Chrysalis sets a required rate of return of 10 percent, the densitometer should be rejected and the mammography unit accepted.

The IRR method of capital investment evaluation considers all the cash flows in a project and accounts for the time value of money. It is a measure that business people tend to understand because it is commonly used. The weaknesses of the IRR method are that it assumes that all proceeds are reinvested at the same rate and it can result in more than one rate of return.

Table 5.8 summarizes the strengths and weakness of the three capital investment evaluation methods.

TABLE 5.8. STRENGTHS AND WEAKNESSES OF RETURN ON INVESTMENT ANALYTICAL TOOLS.

Method	Strengths	Weaknesses
Payback	<ul style="list-style-type: none"> • Is easily calculated • Is easily interpreted 	<ul style="list-style-type: none"> • Gives answer in time, not dollars • Doesn't consider cash flows after payback time • Doesn't consider the time value of money
Net present value	<ul style="list-style-type: none"> • Gives answer in dollars • Accounts for all cash flows in a project's life span • Accounts for the time value of money 	<ul style="list-style-type: none"> • Discount rate may be difficult to choose • Discount rate may change over the course of the project
Internal rate of return	<ul style="list-style-type: none"> • Considers all cash flows in the project • Accounts for the time value of money • Is a commonly used method 	<ul style="list-style-type: none"> • Assumes that proceeds are reinvested at the IRR • Sometimes results in more than one number

Illustrative Problem: Cornerstone ENT. Cornerstone ENT is a three-physician specialty practice. It has experienced an increase in demand for services over the past year. Appointment waiting time, especially in the winter months, has increased to three to four weeks, and this is deemed unacceptable by the managing partner. In order to expand the capabilities of the practice, the managing partner has proposed that the practice hire another physician and expand its amount of total office space. This would involve the renovation of the current building, the purchase of new equipment, and the hiring of additional staff. The assumptions for the project are as follows (see Table 5.9):

The cost of the new equipment and furnishings is \$100,000.

The cost to renovate the space (leasehold improvements) is \$177,000.

Additional staffing cost for the project is anticipated to be \$435,000 for salaries and benefits for one additional physician and two additional staff. Salaries are expected to increase by 2 percent a year.

The increase to the practice in terms of operating costs such as utilities, medical supplies, and office costs is expected to be \$110,000 in year 1 with an increase of 2 percent each year.

Incremental revenue produced by the additional physician is expected to be \$600,000 in the initial year. It is expected to increase by 5 percent each year.

The practice itself pays no taxes but the net earnings and losses are taxable to the physician-owners. Therefore this analysis will include a tax rate of 40 percent.

The additional investment in current assets and current liabilities is anticipated to be \$1,000 each year.

The depreciation on the equipment and furnishings and on leasehold improvements will be computed on the straight-line basis. Both have a useful life of five years.

The terminal value associated with the project is \$130,000.

There is no salvage value on the equipment.

The practice will use an evaluation period of five years. (It is hard to feel comfortable with assumptions that extend beyond five years.) To account for the net cash flow for the years after the five evaluated, the practice has calculated a terminal value. The terminal value represents the practice's best estimate of the goodwill established by the expansion. This is a very subjective factor.

Step 1. Determine the initial investment. The initial investment by Chrysalis will consist of furnishings and equipment and leasehold improvements. The practice intends to depreciate them on the straight-line method ($\$277,000 \div 5 = \$55,400$). The practice will not try to forecast the amount of personnel time involved in the initial start-up.

Step 2. Forecast incremental net revenue for the evaluation period. After looking at reimbursement rates for the practice as a whole and the additional visits that the proposed expansion would add, the revenue is calculated for Year 1. This number also considers amounts the practice believes will not be collectible (bad debt) and contractual allowances for third-party payers. The revenue is increased each year by the amount anticipated by the practice.

Step 3. Forecast incremental operating expenses. The incremental operating expenses are those either directly attributable to the expansion or an allocation of practice expenses based on the overall increased expenses of the practice.

Step 4. Factor in depreciation. Depreciation is a noncash charge. It is a systematic and rational allocation of the cost of the asset and represents the use of the asset in the practice. Depreciation in this example is calculated on the straight-line basis over five years. Although it is a noncash item, it has an income tax effect so it is included as an expense and then is added back after income taxes.

Step 5. Sum all the incremental expenses, and subtract them from revenue to get pretax operating income.

TABLE 5.9. CORNERSTONE ENT EXPANSION EVALUATION.

	Year 1	Year 2	Year 3	Year 4	Year 5
Initial investment					
Equipment, furnishings	\$(100,000)				
Leasehold improvements	(177,000)				
Total initial investment (Step 1)	\$(277,000)				
Assumptions					
Incremental revenue (Step 2)	\$600,000	\$630,000	\$661,500	\$694,575	\$729,304
Operating expenses (Step 3)					
Salaries (Step 3)	(435,000)	(443,700)	(452,574)	(461,625)	(470,858)
Additional operating expenses	(110,000)	(112,200)	(114,444)	(116,733)	(119,068)
Depreciation (Step 4)	(55,400)	(55,400)	(55,400)	(55,400)	(55,400)
Total incremental expenses	(600,400)	(611,300)	(622,418)	(633,758)	(645,326)
Pretax operating income (Step 5)	(400)	18,700	39,082	60,817	83,978
Income taxes (Step 6)	160	(7,480)	(15,633)	(24,327)	(33,591)
Net operating income (Step 6)	(240)	11,220	23,449	36,490	50,387
Add back depreciation (See Step 4)	55,400	55,400	55,400	55,400	55,400
	55,160	66,620	78,849	91,890	105,787
Change in working capital (Step 7)	(4,000)	(1,000)	(1,000)	(1,000)	(1,000)
Net operating cash flows	51,160	65,620	77,849	90,890	104,787
Recapture of working capital (Step 8)					8,000
Terminal value (Step 9)					130,000
Net cash flows	51,160	65,620	77,849	90,890	242,787
Discount rate (Step 10)	10%	0.826	0.751	0.683	0.621
Net present value (Step 11)	\$372,020	\$54,202	\$58,465	\$62,078	\$150,771
Internal rate of return (Step 12)	19.7%				

Step 6. Compute income taxes. Where there is a loss for Year 1 the calculation will produce a tax benefit. The net income that results in the following years is taxed at 40 percent because this is assumed to be the marginal tax rate of the physician-owners. Net operating income is pretax income less income tax expense.

Step 7. Forecast change in working capital. The revenue and expense estimates reflect the practice's accrual method of accounting, where revenue is recognized when it is earned and expenses are recognized when incurred. However, because this is a cash flow projection, the operating income must be converted to cash. The easiest way to do this is to determine the amount by which current assets exceed current liabilities. This amount is referred to as net working capital. One way to visualize the concept is to think of the current assets as amounts owed to the practice or yet to be used in the practice and to think of the current liabilities as amounts the practice owes to others. If the net working capital increases, then the practice has its assets tied up and there is a cash outflow. If the net working capital decreases, then the practice has assets released and there is a cash inflow. The practice forecasts this change in working capital to adjust from the accrual basis to the cash basis. In a growing practice there is generally an increase in net working capital as current assets are likely to grow more than current liabilities. Liabilities tend to be paid within one month, whereas receivables can take sixty to ninety or more days to collect. Note that many smaller practices are already on the cash basis of accounting, so this step does not apply for them.

Step 8. Recapture working capital. Because the practice has decided to use an evaluation period of five years, there is an artificial cutoff, as if that part of the business were to be sold at that point. The sale of the asset, or termination of the service, would include recapturing all of the working capital that had built up in the practice since the service started. In our example it is assumed that the net current assets continue to increase during the five years. At the end of the fifth year, the current assets exceed the current liabilities by \$8,000. Using this artificial cutoff the practice assumes that the current assets are collected (receivables) or liquidated (inventory) and that the liabilities are paid. The net result is an inflow of \$8,000.

Step 9. Compute terminal value. In actuality the service will probably remain ongoing for more than five years. To account for the net cash flow for the years after the fifth year the practice has calculated a terminal, or ending, value. The terminal value represents the practice's best estimate of the goodwill established by the expansion. This is a very subjective factor. If the practice were evaluating one asset, then the terminal value would be the salvage value or the proceeds from the sale of the asset. Here it is assumed that the expansion added to the overall value of the practice.

Step 10. Apply the discount rate. Chrysalis is using a discount rate of 10 percent. As discussed earlier, this could represent the weighted average cost of capital. It could represent the physician-owners' target rate of return. It could be the incremental borrowing rate of the practice. The factors are taken from the present value of \$1 table because the cash flows are irregular. Interest on the debt that the practice will likely incur to fund the project is not included as an expense in this evaluation because it is included in the cost of capital.

Step 11. Determine NPV. The net present value is the difference between the initial investment and the present value of the project's cash flow. If it is positive, it means that the practice believes that the discounted cash flow generated over the evaluation period will exceed 10 percent. If the amount is negative, it means that according to this evaluation the project will not generate discounted cash flows of 10 percent. In the example the net present value of the investment is \$95,050.

Step 12. Determine how much the project will generate. The way to state more precisely how much the project seems likely to generate is to calculate the project's internal rate of return. Using Excel to calculate the IRR, the manager would insert the project's initial investment as a negative number and the project cash flows (undiscounted) as positive numbers (-277000, 51160, 65620, 77849, 90890, 531935). Excel will calculate the IRR. In the example the investment's IRR is 14.38 percent.

Given this evaluation, the practice will accept this project because the net present value is positive and the internal rate of return is greater than the practice's cost of capital.

Financing the Capital Investment

A practice needs to determine how its capital investment will be financed. It can finance the project from operations or borrow the money. Some assets can also be leased.

Internal Financing

If the practice has money that is available to be used for investment then it may not need to borrow. The advantage of this approach is that the practice saves the interest cost. However, it may not be a good idea unless the practice has an excess of working capital. The practice could also make a capital call on its physician-owners or ask these physicians to loan money to the practice.

Leasing

Certain assets, such as equipment, can be leased. Leasing has certain advantages over borrowing:

- In a practice that is part of a larger organization, such as a hospital system, leasing can avoid the delays usually incurred in processing capital budget requests.
- By leasing equipment, especially computers, the practice can avoid technological obsolescence, because many leases contain provisions for trading in old equipment for new at a preferred cost.
- Maintenance may be included in a lease and provided through the equipment vendor. There is a cost, of course, but it may be less expensive than buying a maintenance agreement for purchased equipment.
- Leasing does not typically require a down payment.
- Practices that may need to borrow in the future may prefer to lease equipment with operating leases so neither the asset nor the liability will be recorded in the financial statements.

It is important to understand that not all leases are considered operating leases. Accounting rules require an organization to capitalize the leased asset and record the liability if any of the following conditions are true:

- The lessee takes possession of the asset at the end of the lease.
- There is a bargain purchase option at the end of the lease.
- The present value of the minimum lease payments represents 95 percent or more of the economic value of the asset.
- The lease period is greater than 75 percent of the economic useful life of the asset and the asset is leased within the first 25 percent of its useful life.

If any one of these factors is true, then the lease is a capital lease, and the practice must record both the asset and the liability at the present value of the minimum lease payments.

Analyzing the Lease Versus Purchase Decision

To determine whether an asset should be purchased and financed with debt or leased, a practice compares the present value of cash flows associated with the lease payments over the period of the lease with the present value of the interest on the debt and

the depreciation of the asset. Assuming that the practice or the physician-owners pay income taxes, the tax break (or tax shield) from the purchase (in the form of depreciation and interest) or lease (in the form of the payment itself) will also be a factor and will decrease the net cash outflow. The tax shield is calculated by taking the interest and depreciation for the purchase or the payment for the operating lease and multiplying by $1 - \text{tax rate}$.

To illustrate, Chrysalis Family Practice is contemplating the purchase of lab equipment with a value of \$100,000. The practice manager wants to know whether it is preferable to purchase the machine with a loan from the bank or to lease the machine under an operating lease. The annual cost of borrowing and leasing is set forth in Tables 5.10 and 5.11. The after-tax cost of borrowing is used when calculating the present value of the cash flow for debt because the interest and depreciation are tax deductible. Because lease payments are tax deductible, the after-tax cost of borrowing is used for the evaluation of leasing as well (Table 5.12).

In this case the present value of the cash flows associated with purchasing is more favorable.

Financing with Debt

A practice may prefer to finance its capital investments with debt, especially if the lease option is not available or the cost is high. Debt financing involves borrowing money at a specified rate of interest. The interest rate will depend on a number of factors, including the financial health of an organization, whether the loan is secured by an asset that could be repossessed if payments are not made, and the state of the overall economy. The primary types of debt financing are listed in Table 5.13. Long-term investments should be financed with long-term debt.

TABLE 5.10. LEASE OR BUY DATA.

Equipment	\$100,000
Useful life	5 years
Depreciation	\$20,000
Tax rate	40%
Cost of borrowing	10%
After-tax cost of borrowing ^a	6%
Lease payment	\$27,000
Debt payment	\$26,385

^a The rate is $1 - \text{tax rate}$ ($1 - .4 = .6$).

TABLE 5.11. CASH FLOW EVALUATION FOR PURCHASE.

	Payment	Interest	Principal	Carrying Value	Interest (tax shield)	Depreciation (tax shield)	Net Cash Flow	PV Factor ^a	PV Cash Flow
Year 1	\$26,385	\$10,000	\$16,385	\$100,000	\$4,000	\$8,000	\$14,385	0.9434	\$13,571
Year 2	26,385	8,362	18,024	83,615	3,345	8,000	15,040	0.8900	13,386
Year 3	26,385	6,559	19,826	65,592	2,624	8,000	15,761	0.8396	13,233
Year 4	26,385	4,577	21,808	45,766	1,831	8,000	16,554	0.7921	13,113
Year 5	26,385	2,396	23,957	23,957	958	8,000	17,427	0.7473	13,023
				(0)					<u>\$66,326</u>

^a After-tax cost of borrowing (10% × .6); PV of 1.

TABLE 5.12. CASH FLOW EVALUATION FOR OPERATING LEASE.

	Payment	Tax Shield	Net Cash Flow	PV Factor ^a	Total PV Cash Flow
Year 1	\$27,000	\$10,800	\$16,200		
Year 2	27,000	10,800	16,200		
Year 3	27,000	10,800	16,200		
Year 4	27,000	10,800	16,200		
Year 5	27,000	10,800	16,200	4.2124	\$68,267
PV of cash flow for purchasing					<u>66,326</u>
Difference					\$1,941

^a After-tax cost of borrowing (10% × .6); PVOA.

TABLE 5.13. TYPES OF DEBT FINANCING.

Type	Issued By	Life	Comment
Line of credit	Banks		Used for short-term borrowing
Term loan	Banks	1–10 years	Level payment amounts over the life of the loan
Conventional mortgage	Commercial banks, savings and loans institutions, insurance companies	20 years	Generally for buildings

Assessing the Investment

Once the capital investment decision has been made and the financing secured, practice managers must still monitor the implementation process. In the case of a capital investment to renovate an existing facility or build a new practice space, the process is just beginning. Practice managers will need to work closely with the architect to ensure that the final space meets the current and future needs of the practice, a critical step to avoiding costly mistakes that could require additional renovations in the near term. Additionally, as the construction proceeds the practice manager will need to ensure that plan specifications are met and that workmanship is of high quality.

Once the asset is placed in service and operations begin, the practice manager should monitor the operations of the project periodically to be sure that operating targets are met. Keep in mind that projections are only as good as the assumptions

that are made. A project that does not meet its financial target can be a drain on the practice.



Forecasting capital investment needs in conjunction with the practice's strategic planning activities will help practices anticipate and prepare for significant expenditures.

Discussion Questions

1. Name and describe three types of capital investments.
2. Describe the four stages of the capital budgeting process.
3. Name three capital budgeting techniques, and discuss their strengths and weaknesses.
4. A tax-paying physician practice is evaluating whether to buy or to lease two EKG machines. The cost of each machine is \$6,875. The practice would be able to finance the purchase at an 8 percent interest rate. The annual payments would be \$2,668 for each machine. The practice could also lease the machines. The annual lease payments would be \$3,000. Assume an effective tax rate of 30 percent. On a purely quantitative basis, is it better for the practice to lease or to purchase the machines? What are the nonfinancial factors that should be considered?
5. A practice is evaluating adding a lab to its facility to bring that capability in house. The cost of the equipment and to build out the additional space is \$500,000. The equipment and leasehold improvements will be depreciated over five years. The practice manager has made the following assumptions:

Depreciate the leasehold improvements and equipment on a straight-line basis over five years.

Use an effective tax rate of 40 percent and a cost of capital of 8 percent.

Incremental revenues from the lab tests will be \$350,000 for the first year and are expected to increase at 2 percent each year after that.

Incremental expenses for those same lab tests will be \$35,000.

Additional salaries will be \$50,000.

Expect an increase in working capital of \$4,000 in the first year with an increase of \$1,000 each year after that.

The terminal value of the investment will be \$50,000.

What is the net present value of this investment? What is its internal rate of return? Should the practice proceed with this investment?

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions

Present value tables

Note

1. P. A. Ryan and G. P. Ryan, "Capital Budgeting Practices of the Fortune 1000: How Have Things Changed?" *Journal of Business and Management*, 2002, 8(4), 355–364.

Suggested Reading

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- Barney, D., and White, H. "Project-Specific Financing and Interest Rate Risk in Capital Budgeting." *Engineering Economist*, 2003, 48(2), 169–183.
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- Gapenski, L. C. *Understanding Healthcare Financial Management*. Chicago: Health Administration Press, 2003.
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- Migliore, R. H., and McCracken, D. E. "Tie Your Capital Budget to Your Strategic Plan." *Strategic Finance*, 2001, 82(12), 38–43.
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CHAPTER SIX

MONITORING FINANCIAL PERFORMANCE

Teresa L. Edwards

Objectives

This chapter will help the reader to

- Understand the importance of monitoring financial, operational, and clinical performance.
- Know where to obtain standards for measuring practice performance.
- Decide what indicators the practice should measure.
- Create a practice report card.
- Evaluate practice performance.

Practice managers have a twofold responsibility in managing a medical practice effectively. First, they are responsible for coordinating the strategic planning process of the practice, with a focus on the future envisioned for the practice. They are also responsible for the operational performance of the practice in three key areas:

- Financial
- Operational
- Clinical

When the leaders of a medical practice are forward thinking, they create a unified mission and vision. They are also instrumental in the development and periodic revision of the practice's strategic plan. As more fully discussed in Chapter Fourteen, the physician leaders and the practice manager (the leadership team) should work together to analyze both the current state of the practice and where it wants to be. The leadership team should then devise a plan to move toward the shared vision for

the practice. During the development of this strategic plan, goals are set and action-oriented, measurable objectives are created. Time frames for completion of the objectives are set, and an *owner*, a person who is accountable for ensuring that the objective is accomplished, is assigned to each objective. Strategic goals may relate to the planned growth of existing services, the development of new services, or the expansion of the geographic market for a practice. They may also include overall operational and financial goals that require unified effort to accomplish.

The Role of the Practice Manager and Some Tools for Monitoring

The physicians in the practice are responsible for generating its revenue. Generally, they delegate to the practice manager and hold him or her accountable for implementing and monitoring the strategic plan as well as for overseeing the operational performance of the practice. The practice manager provides value to the practice and fulfills the expectations of the physicians when she meets or exceeds the strategic and operational goals of the practice.

The Value of Developing a Practice Report Card

The effective practice manager creates a framework for measuring the operational performance of the medical practice. One framework that is popular with practice managers is the *practice report card*, a statistical snapshot of how the practice is performing in the areas most important to it. The areas most commonly measured are financial performance, operational performance, and clinical performance. The operational stability of the practice relies on successful performance in each of these three areas, and the practice manager should clearly and succinctly communicate the results of practice activities to the physicians. A target should be set and performance measured for each area, and a portion of the practice manager's performance evaluation should address his success in meeting the targets. A review of the selected indicators should be part of the practice manager's monthly, quarterly, and annual reports to the board of directors.

Practice performance can be measured through

- Comparison of the measurements for the current year to the measurements for the prior year
- Comparison of the measurements for the current month to the measurements for the same month in the prior year

- Comparison of the measurements to published standards (aggregate) for a similar type and size of practice
- Comparison of the measurements to the measurements of individual group practices of similar type and size

Benchmarking

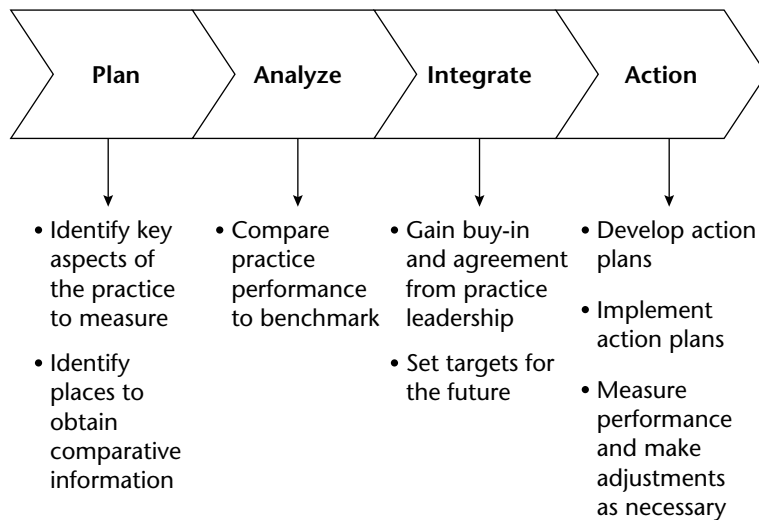
Benchmarking is the process of measuring certain financial, operational, and clinical aspects of a practice and comparing them to the practice's past accomplishments, to the practice goals, and to the results of other organizations. The practice must first decide on a set of indicators to measure. These indicators should reflect only aspects of the practice that are important and make a difference, because the practice manager will need to devote time and resources to ensuring that accurate data are gathered. For example, a practice should consider defining an indicator that measures a significant portion of revenue or expense or that differentiates the practice from its competitors.

Benchmark data can be obtained from a variety of sources. The Medical Group Management Association (MGMA) publishes benchmark data on financial, operational, and clinical aspects of medical practices by type of practice.¹ These data are aggregated from numerous practices around the country. The practice manager might also identify a group practice in another service area and invite its members to share their best practices. Figure 6.1 illustrates a four-step benchmarking process.

Variance and Ratio Analysis

Whether a practice is measuring the dollar difference of an income statement line item from one year to the next, the dollar difference of a line item from budget to actual, or a computed ratio, the key to improvement lies in understanding the components of the indicator. For example, in the case of revenue, a change in a certain line item could be due to volume or to price. The practice manager would need to look at both components to determine where the change or variance occurred. With ratios, the practice manager would determine where the organization is with regard to the indicator and whether its relative position is the desired one. Then she would make changes that affect either the numerator or denominator to improve the ratio. For example, if the indicator is the ratio that reveals operating margin, the practice manager needs to look at increasing the numerator, operating income.

This chapter discusses some benchmarks that can be used by practice managers on a practice report card. It is by no means a comprehensive list. Additional benchmarks can be found in Chapter Two and among the Web resources.

FIGURE 6.1. STEPS IN THE BENCHMARKING PROCESS.

Financial Performance

Four areas of practice financial performance that should be monitored are

- Demand for services
- Patient charges
- Management of the revenue cycle, including the payer mix
- General accounting

Demand for Services

In measuring the demand for services, practice managers can usually identify several key services that are drivers of income for the practice. These are usually high-volume or high-dollar (per unit) services and account for the majority of the annual revenue budget. It is important that these services are clearly identified and that volume is measured by service, by site, by provider, and by payer source.

Table 6.1 displays a report card for the Richardson Obstetric Group. For the month of June all three of the group's offices had the same volume budgets for deliveries and surgeries. The report card shows, however, that the actual June performances of the three offices were quite different from one another.

TABLE 6.1. REPORT CARD FOR THE RICHARDSON OBSTETRIC GROUP.

Physicians	Month to Date (June)			Year to Date (6 months)			Variance											
	Actual		Budget	Actual		Budget	Month to Date		Year to Date									
	Del. Surg.	Tot.	Del. Surg.	Tot.	Del. Surg.	Tot.	Del. Surg.	Tot.	Del. Surg.	Tot.								
Downtown	20	40	12	20	32	60	131	191	70	140	210	8	0	8	-10	-9	-19	
Dr. Smith	12	22	34	12	20	32	70	130	200	70	140	210	0	2	2	0	-10	-10
Dr. Jones	15	28	43	12	20	32	60	132	192	70	140	210	3	8	11	-10	-8	-18
Dr. Richardson	47	70	117	36	60	96	190	393	583	210	420	630	11	10	21	-20	-27	-47
DOWNTOWN TOTAL																		
Westside	10	15	25	12	20	32	67	129	196	70	140	210	-2	-5	-7	-3	-11	-14
Dr. Parker	15	16	31	12	20	32	76	138	214	70	140	210	3	-4	-1	6	-2	4
Dr. West	10	30	40	12	20	32	58	140	198	70	140	210	-2	10	8	-12	0	-12
Dr. Haba	35	61	96	36	60	96	201	407	608	210	420	630	-1	1	0	-9	-13	-22
WESTSIDE TOTAL																		
Northside	13	20	33	12	20	32	67	139	206	70	125	195	1	0	1	-3	14	11
Dr. Salsa	11	21	32	12	20	32	66	132	198	70	125	195	-1	1	0	-4	7	3
Dr. Ricardo	10	23	33	12	20	32	65	160	225	70	135	205	-2	3	1	-5	25	20
Dr. Sisson	34	64	98	36	60	96	198	431	629	210	385	595	-2	4	2	-12	46	34
NORTHSIDE TOTAL																		
TOTAL	116	195	311	108	180	288	589	1,231	1,820	630	1,225	1,855	8	15	23	-41	6	-35

Note: Del. = delivery; Surg. = surgery; Tot. = total.

The Downtown office exceeded the expectation for the volume of deliveries and surgeries for the month of June. One month can be deceiving, however. The more important statistic is the year-to-date volume. In looking at those numbers, it appears that the office is under budget by a total of forty-seven procedures, with deliveries and surgeries under budget by twenty and twenty-seven procedures, respectively. Each of the three surgeons is contributing to the negative variance, but Drs. Smith and Richardson are down by almost twice as much as Dr. Jones. In comparing the Downtown office to the Westside and Northside offices, it is clear that the Downtown office is the site that requires additional analysis. The practice manager needs to determine the root cause of this variance and make the needed changes to turn the situation around.

The Westside practice presents a little different story. Dr. Parker has the most significant variance in the office year to date, and Dr. Haba is close behind. The underperformance of Drs. Haba and Parker could be an issue with Dr. West if the income is distributed equally among the three. Dr. West is carrying the load by exceeding his expected volume by four procedures.

The Northside office's physicians are consistently exceeding the budgeted volumes for the year. Even though the office is under the budgeted amount for total deliveries, it is exceeding the plan for the year because of its volume of surgical procedures.

By constructing this report card the practice manager can show each physician her volume in detail. The total practice volume reflects a deficiency in deliveries (forty-one). Moreover, looking at the volume of the individual physicians it is clear that the practice may have a problem that reflects an overaggressive plan because only two of its nine physicians have either met or exceeded the budget. It is possible either that the goal that was set was unrealistic or that there is a more global issue to be addressed, such as a failure of the practice to attract the necessary patients to meet its goal. Surgery offers yet another story. The Northside office is exceeding the volume budget by forty-six procedures, but the other two offices are not meeting expectations. The practice manager should perform further analysis to understand these differences between the three offices.

The practice manager can use this report card to initiate discussions with the physicians about the factors contributing to the variances from budget. Viewing the data in a report card style format may help the physicians understand their contribution to the variances. Because the overall budget for the Richardson Obstetric Group is based on the volume projected for the year, if the volume budget is not met the physicians can anticipate less compensation than planned, unless steps are taken to reduce operating expenses. For example, if the Richardson Obstetric Group performs thirty-five fewer procedures than planned and the average revenue per procedure is \$1,800, this negative volume variance will mean \$63,000 less revenue for the practice. If staffing and other expenses do not fluctuate with the volume, then the practice has a shortfall of \$7,000 per physician for the first

six months of operation. If this trend were to continue for the rest of the year, each physician would have \$14,000 less income. Once physicians are aware of negative trends, they are much more interested in making any changes needed to narrow the gap.

Measurement of patient volume is particularly critical for the distribution of the practice's human resources and other expenses. In addition, in many physician practices the payment structure for the physicians is determined, in part, by the volume of the procedures they complete. In practices where the incomes are equal among the physicians, the physicians want to be assured that the workload is also fairly equal over the year. If there are considerable variances between physicians, the physician's schedules and practice resources may be altered to redistribute the work. In many cases the physicians in a medical group all have the same base salary but receive individual bonuses for achieving volumes beyond the expected amounts.

Measurement of Patient Charges

The capture of patient charges and the billing of those charges should be monitored in every practice. A physician and his staff may be top performers, but if the surgical procedures are not billed completely, accurately, and timely, the practice will lose money. It is therefore critical for a medical practice to take steps to ensure that physicians realize the financial implications of capturing charges. The practice should have an efficient method of billing that (1) captures all charges accurately, (2) ensures coding is consistent with the level of services provided, and (3) is performed on a timely basis.

There are four primary area of billing for physician practices:

- Charges for office visits, using evaluation and management (E and M) codes
- Charges for inpatient hospital care, including surgical procedures
- Charges for laboratory, radiology, and other ancillary services provided by the medical practice
- Charges for home care where the physician provides oversight of the home-care process

From an operational as well as a compliance perspective, it is important to monitor the levels of charges for each practitioner and to compare each physician's production against the standards for the practice. There is published information for most specialties on the average number and percentage of billable procedures for specific

types of patient visit. It is important to provide this information periodically to the physicians so that they can understand how each physician's level of billing compares to the national benchmarks as well as to the billing done by others in the practice.

For example, during the medical practice office visit, any one of five levels of service may be provided. E and M codes have been established by the federal government, with Level 1 being the most simple and Level 5 the most complex. In cardiac surgery practices approximately 80 percent of the office visits are usually characterized as Level 4 visits. If a physician in one of these practices codes 80 percent of her visits at Level 2, it is important to identify the issues related to this low average level. Conversely, if a physician codes 100 percent of his visits at Level 5, the issue could involve either up-coding or the physician's not understanding what activities define a visit at each level.

In addition to benchmarking by level of charges, the practice can benchmark each specialty by looking at the Current Procedural Terminology (CPT) codes used by physicians and by each office. Analysis of CPT code distribution is very helpful to the practice manager's understanding of the services the physicians perform and of the variances among the physicians. For example, if there are two pediatricians and they have the same office visit volume, the practice manager can compare the percentage distribution of the CPT codes to assess the complexity of the services provided. More complex cases usually mean that the physician is spending more time with the patient and that more office help is required for the visit. There should be additional revenue associated with the incremental intensity of the services provided by the pediatrician with more complex cases if the two pediatricians have similar payer mixes.

The Revenue Cycle

Each practice should set standards for business office employee performance, for example, a standard should be set for the activity of logging patient charges into the billing system after the service is rendered. The number of days that pass before the billing is entered into the information system may vary by type and complexity of the patient visit. In many practices the standard is three days. Claims may be batched for processing depending on the size of the practice and the number of its locations. Most practices transmit claims electronically to the clearinghouses of the various insurers. Electronic submission of claims can cut processing time in half for "clean claims," and this will significantly improve practice cash flow. For example, Medicare pays electronic claims in fourteen days and paper claims in twenty-eight days. This fourteen-day difference can make a considerable impact on cash

flow. The indicators that are generally measured on a report card for a practice's business office are

- Time from service rendered to account billed (in days)
- Time from account billed until account collected (in days and by payer—Medicare, Medicaid, Anthem, Aetna, Cigna, and so forth)
- Percentage of clean claims per month
- Percentage of claims denied by insurance carrier for specific reasons
- Percentage of claims “dropped to paper” for some reason
- Days in accounts receivable
- Percentage of accounts receivable greater than 90, 120, and 150 days

The practice manager should consider putting incentives in place for the business office staff for achieving the targets established by practice leadership. One level of this bonus could be awarded for reaching the target, with a higher level awarded for exceeding the target by 10 percent or 20 percent. Having these key indicators in place and monitoring them weekly and monthly will give the practice manager a good understanding of the practice's expected cash flow. The bonus will give the staff an incentive to strive for improvement.

Payer Mix Monitoring

Another important item to monitor on a monthly basis is the distribution of practice volume and revenue in relation to the payer mix. Changes in payer mix can explain significant positive or negative variances in the revenue budget that are not due to volume changes. Practices establish a fee schedule that sets a price for each CPT code in the practice. These fees, also known as charges, may be established in various ways. Some practices charge a percentage of the Medicare relative value unit (RVU). Other practices may set their charges according to the physicians' perception of what a fair charge is for each procedure.

Every medical practice has specific written contracts. As more fully discussed in Chapter Seven, the practice leaders agree in writing to the terms of the contract and should make sure they fully understand the fee schedule and the other conditions. Although most contracts are for a one- or two-year period, governmental programs such as Medicare and Medicaid continue indefinitely unless the provider elects to become nonparticipating. In that situation the practice needs to complete a specific form and notify the appropriate agency of its plan to become nonparticipating by a specific date.

It is not uncommon for medical practices to have as many as thirty different contractual agreements with Medicare, Medicaid, commercial insurers, and various

networks. Medicare and Medicaid pay according to their set fee schedules. Arrangements are generally negotiated for each commercial insurer or network. It is rare for government or commercial payers to pay the full charges of the practice and the amount that is not paid is deducted from revenue as a *contractual allowance*. If the information system is not able to produce a report with the payer mix information, the practice manager should maintain a spreadsheet with the most frequently used CPT codes for the practice and the various contracted rates for major payers. Table 6.2 illustrates such a spreadsheet.

In the example in Table 6.2, a charge has been established for each CPT code. The left-hand column lists the CPT codes commonly used by the practice. In the next column the practice manager lists the practice's charge for each code. In subsequent columns each practice payer is listed along with the amount that it pays for each CPT code. This tool is helpful for comparing the reimbursement levels of various payers. It also enables the practice manager to compare, by CPT code and by insurer, any procedure performed by the practice. When negotiating insurance agreements, it is helpful to compare commercial agreements by CPT code to determine whether the proposed rates, based on the volume of services provided, are within the expectations of the medical practice.

Some practices compare the commercial payers to Medicare by percentage of payment. For example, a practice may state that although it charges three times the Medicare rate, it will accept no contract less than 150 percent of a certain selected year of the Medicare fee schedule. The practice manager should understand the payer mix of the practice and should monitor changes in the mix on a monthly basis for trends. This is especially important when events could lead to an increase in volume from lower-paying sources. Table 6.3 illustrates the effects of a change in payer mix on the distribution of revenues for the Stonehill Family Practice. A 20 percent decrease in Insurance Plan A offset by a 20 percent increase in Medicaid patients would decrease revenue by \$40,000.

General Accounting Function

In many practices the business office function is separate from the general accounting function. The accounting department records and monitors the financial transactions of the practice. The practice manager should understand the changes in the revenues and expenses in the practice from year to year. For example, in specialty physician surgical practices, the MGMA data show that for every dollar in revenue taken into the practice, 70 percent of the expense should be directly related to physician expenses such as salary, benefits, malpractice, and the like.² The remaining 30 percent should cover the remaining expenses of the practice, such as personnel, rent, medical supplies, and so on. For each specialty, MGMA data contain metrics for benchmarking

TABLE 6.2. PAYER EVALUATION SHEET.

CPT Code	Top 80% of CPT Codes for Cardiothoracic Surgery	Practice Charge ^a	Medicare ^b	Anthem	CIGNA	United Healthcare	Southern Health	Aetna	MAMSI
33512	CABG w/ 3 coronary venous grafts	\$6,400	\$1,797						
33513	CABG w/ 4 coronary venous grafts	6,500	1,815						
33514	CABG w/ 5 coronary venous grafts	6,600	1,857						
33516	CABG w/ 6 or more coronary venous grafts	6,800	1,969						
33517	CABG + one venous graft	500	128						
33518	CABG + two venous grafts	800	241						
33519	CABG + three venous grafts	1,200	353						
33533	CABG w/ arterial grafts	6,500	1,686						
33860	Repair AAA (ascending aorta graft)	5,500	2,106						
33861	Asc. aorta graft w/ coronary reconstr.	6,000	2,294						
33863	Aortic valve replace. w/ root replace.	6,200	2,443						
99202	New patient, Level 2	150	59						
99203	New patient, Level 3	300	88						
99204	New patient, Level 4	450	76						
99243	Office consultation, Level 3	350	111						
99244	Office consultation, Level 4	480	158						

Note: CABG = coronary artery bypass graft.

^a Practice charges are examples based on estimates.

^b Medicare fees are for Virginia, 2003, rounded to the nearest dollar.

TABLE 6.3. STONEHILL FAMILY PRACTICE PAYER MIX EVALUATION.

Payer	Reimbursement	Before	% of Mix	After	% of Mix
Medicare	100% Medicare rate	\$500,000	20%	\$500,000	20%
Medicaid	95% Medicare rate	400,000	16	480,000	20
Insurance plan A	200% Medicare rate	600,000	24	480,000	20
Insurance plan B	175% Medicare rate	550,000	22	550,000	22
Insurance plan C	150% Medicare rate	450,000	18	450,000	18
TOTAL		\$2,500,000	100%	\$2,460,000	100%

the practice in the 25th, 50th, 75th, or 90th percentile. The practice manager should select a target percentile and measure the practice's performance against those standards. This information is very helpful because it gives the physicians an assurance that practice expenses are in line with standards and that the money distributed to each of them is an appropriate percentage of the whole, given each individual's specialty.

Comparing Budget to Actual

It is the practice manager's responsibility to

- Establish targets for the financial performance of the practice.
- Communicate the targets to and obtain agreement from the physicians.
- Monitor the performance of the practice.
- Report any variances from the targets to the physicians, using a simple and consistent method.

Where variances exist, explanations and corrective action plans should be formulated. The practice manager should provide status reports on the corrective action plans in subsequent months.

For example, assume that the patient receipts for a large multispecialty practice are down by 10 percent for the month. When the practice manager walks into the board meeting and delivers the financial analysis for the month, the physicians are likely to ask why receipts are down. And finding the answer to this question is not likely to be as simple as it might first appear. There are four contributing factors

to the patient receipts question. The practice manager must have sufficient knowledge of practice operations and indicators to be able to determine the source of the decrease in revenue and then explain how each potential contributing factor is or is not having an impact. The four factors that affect patient receipts can be summarized as follows:

Patient Volume

- The number of patients changes.
- The payer mix for patients changes.
- A contractual arrangement changes, becoming better or worse.

Staff Delays and Errors

- Staff submit inaccurate or incomplete charge information.
- Billing is backlogged or delayed.
- The account appeal process is poorly managed (high percentage of rejected claims).

Physician Coding and Billing

- Physicians are not billing all charges (too busy to record charges, oversight, and so forth).
- Physicians are not billing at the expected level of charges (billing a visit at Level 2 rather than Level 4 because the visit was not as thorough as it could have been).

Insurance Delays

- A new physician doesn't yet have the provider number needed to bill certain insurance companies.
- Errors are made by the insurance companies (20 percent of their staff turn over each year also).
- New methods of insurance processing (precertification, new policies) cause delays.
- An insurance company's cash flow needs result in intentional delays of payment for any "special" claims.
- An insurance company has a delayed review process, which holds up payment.
- An insurance company installs a new computer system and subsequently experiences glitches in payment processes.

Failure to identify and correct issues with any of these factors can lead to decreases in revenue as well as cash flow. When the practice manager notes a variance, she should

perform the research necessary to understand the contributing factors and develop a corrective action plan before the situation becomes worse.

Operational Performance

In addition to monitoring the financial performance of the practice, the practice manager should be tracking the operational indicators that reflect the efficiency of the practice. From the human resource perspective, one of the indicators typically monitored is employee turnover by office location and by category of staff:

- Office staff
- Nursing staff
- Ancillary staff (lab, radiology)

Health care organizations typically experience a turnover rate of approximately 20 percent per year (number of new employees as a percentage of total employees). As more fully discussed in Chapter Twelve, it is expensive and disruptive to lose employees. Excessive turnover can result in gaps in services, overtime work for existing staff, expenses for training and educating new employees, and loss of morale for the practice as a whole. It is important to monitor staff turnover in order to clearly define how the practice is doing, by site, compared to national and regional averages.

It is important to understand that a large practice may appear to have very little turnover even though a specific office in that practice is having significant turnover. Quantifying turnover by office will pinpoint trouble spots in the practice. If there are negative trends in specific job types or locations, it may be a warning sign of a larger issue that requires further analysis. The practice manager should perform the necessary research to determine the contributing factors and make plans to correct the issues.

Other general performance indicators that practice managers should consider are

- Delays in scheduling patient visits (time of call to time of visit)
- Wait times in waiting rooms (time of appointment to time patient is seen)
- Expectations for communication:
 - Number of rings of office phone (should be no more than three)
 - Delays in returning calls (all calls should be returned in two hours)
 - Delays in returning pages from hospital

- Expectations for how long a patient can be placed on hold
- Expectations for turnaround times for reports:
 - Dictation to transcription
 - Dictation to placement on patient chart
- Patient satisfaction scoring evidenced by patient surveys

Clinical Performance

In addition to financial performance and general office performance, an underlying indicator for every practice is the overall quality of the patient care delivered. Insurers and the general public are becoming more aware of quality. Patients now have more access to information because of the Internet and can easily perform research on their diagnoses and learn the potential for morbidity, mortality, or complications from their illness. Some Web sites, such as Mayoclinic.com, are very helpful. Unfortunately there is also a lot of information on the Internet that can be misleading to patients.

Some insurance carriers are beginning to provide information to patients, or to employers who purchase coverage for their employees, on the clinical outcomes of the physicians who participate in their plans. In an effort to improve quality, they publish volume and complication data to help steer clients to one physician or another. Additionally, there are now reporting groups, such as healthgrades.com and [Solucient](http://Solucient.com), that publish hospital data with a rating system. Several payers, such as Medicare and Anthem, are also beginning to publish comparative data to increase the public's awareness of the various options for procedures as well as the clinical outcomes that the patient may expect.

Malpractice carriers, which provide insurance coverage for physicians and their employees, are also assessing the covered members of the medical practice by measuring their performance against national standards. Using this information, the carriers assign risk factors to physicians. High risk factors result in higher malpractice premiums. Many carriers have optional or required audit processes in place to review the medical records at the practice and look for potential risks and areas in documentation or statistics that need to be improved.

Accordingly, it is very important that each medical practice establish a method to monitor the clinical performance of the physicians and other clinical staff to ensure that the outcomes are consistent with national benchmarks. Where there are variances, they need to be explained and actions taken to reduce the negative ones. Typically the

areas to be monitored are high-volume, high-dollar, and high-risk areas. For example, typical indicators for a surgical practice are

- Morbidity
- Mortality
- Returns to surgery within twenty-four hours and within thirty days
- Readmissions to the hospital within thirty days
- Complications (such as stroke)
- Infections

These indicators should be monitored for the practice as a whole, for each physician, and for each site (hospital) in which the practice operates.

Compliance Planning

Chapter Nine discusses the development and implementation of a compliance plan for the medical practice. The compliance plan addresses clinical quality, accurate billing, and putting processes in place to ensure that the practice is in compliance with governmental and ethical standards. In many practices the compliance officer is the practice manager, and he bears the overall accountability for ensuring that there are performance standards and measurements in place to prevent fraud and unethical practices.



Practices that take the time to evaluate which indicators should be measured, collect the necessary data, compare practice results against benchmarks, and make improvements to operations based on evaluation results will realize significant financial benefits from their effort.

Discussion Questions

1. Use the report card information for the Richardson Obstetric Group (Table 6.1) as you answer the following questions:
 - a. If you were managing this practice, where would you expect Dr. Sisson to focus his questions, based on the information in the report card? What about Drs. Parker and Smith?

- b. How could you use this information in a discussion of the reallocation of resources?
 - c. What other factors would you need to know to have a complete assessment?
2. The practice manager for a major cardiology practice knows that Medicare patients represent approximately 50 percent of her practice volume. The remaining volume includes patients with the payers shown in Table 6.4. Use this information as you answer the following questions:
 - a. The practice manager learns that a government housing project is being built within walking distance of one of the practice offices. What do you think will happen to the practice's payer mix as a result?
 - b. The practice manager learns that a large employer in town is contemplating switching from Payer A to Payer C. What implications would this change have for this practice?

Web Resources

Case study

PowerPoint presentation

Answers to discussion questions

Summary of performance indicators

Notes

1. E. Pavlock, *Financial Management for Medical Groups* (Englewood, Colo.: Medical Group Management Association, 2000), pp. 496–499.
2. Medical Group Management Association. *Cost Survey: 2002 Report Based on 2001 Data*. (Englewood, Colo.: Medical Group Management Association, 2002).

TABLE 6.4. PAYER MIX FOR DISCUSSION QUESTION 2.

Payer	Reimbursement	% of Mix
Commercial payer A	200% Medicare	20
Commercial payer B	175 Medicare	10
Commercial payer C	110 Medicare	10
Medicaid	85% Medicare	5
Self-pay	Charges	5

Suggested Reading

- Gapenski, L. C. *Understanding Healthcare Financial Management*. Chicago: Health Administration Press, 2003.
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- Weiss, G. G. “Monitoring Business Performance.” *Medical Economist*, 2003, 80(13), 94–95.
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PART TWO

REGULATORY ENVIRONMENT AND RISK MANAGEMENT



CHAPTER SEVEN

NEGOTIATING MANAGED CARE CONTRACTS AND CONTRACT MANAGEMENT

Beacham Wray

Objectives

This chapter will help the reader to

- Evaluate the state of the practice preparatory to contracting.
- Understand key contracting terms.
- Identify and evaluate alternative reimbursement methodologies.
- Determine whether or not to accept a contract.
- Implement a contract.
- Monitor existing contracts.

Managed care organizations (MCOs) negotiate reimbursement rates for network providers, which include physicians, hospitals, and other health care providers. For a practice to negotiate contracts with an MCO successfully, it first must develop its own basic profile. Its leaders and administrators must understand

- Its strategic vision, goals, and objectives
- Its financial situation, including its present payer mix
- The market in which it operates

The practice must then analyze the contracts, which may involve engaging legal counsel, modeling the financial impact of the contracts, evaluating the practice's

administrative and operational capabilities, and performing due diligence on the MCO. Finally, the practice will go through a negotiation phase and, if an agreement is reached, will then implement and monitor the contract. Figure 7.1 illustrates the steps involved. Failing to understand implications of a contract can result in accepting contracts that are a detriment to the practice.

Preparing to Contract with an MCO

The practice leaders and the practice manager must undertake a broad range of evaluative activities prior to contract review and negotiations.

Understanding the Goals and Objectives of the Practice

A practice with excess capacity may want to consider contracting with additional MCOs to increase patient volume. The practice with excess patients may want to consider terminating poorly performing contracts. If the practice plans to be aggressive about growth by adding additional physicians for existing specialties or by introducing new

FIGURE 7.1. STEPS IN CONTRACTING WITH MCOs.

Preparation	Contract Review	Final Steps
Understand the goals and objectives of the practice.	Obtain and review the contract. Engage legal counsel where appropriate.	Summarize all information and decide whether or not to contract.
Understand practice costs.	Perform financial analysis and model the contract.	Conduct final negotiations.
Evaluate current payer mix.	Evaluate who the payer is.	Implement contract.
Evaluate the marketplace.	Evaluate administrative and operational capabilities related to contract terms.	Manage contract.
Choose a contracting team.	Perform due diligence on MCO.	

specialties or additional locations, it makes sense to seek contracts. If, however, the practice expects to keep its current volume of patients and is satisfied with current reimbursement levels and operational performance, the practice may need no additional contracts. If the practice plans to downsize, trimming unprofitable contracts would achieve a decline in patient visits.

Understanding Practice Costs

It is essential to understand the cost of operating the practice. One way that costs can be expressed is in terms of relative value units (RVUs). It is likely that the cost per RVU for the practice overall will not be the same as the cost per RVU for individual physicians or for different specialties within a multispecialty practice. It is important to develop the cost per RVU for each of the practice's clinical cost centers so that the practice will have a guide during negotiations with MCOs for adequate reimbursement. Once the cost per RVU is established, it can easily be indexed to a practice's Medicare allowable charge schedule. In general a practice does not want a contract in which the reimbursement is lower than its cost per RVU.

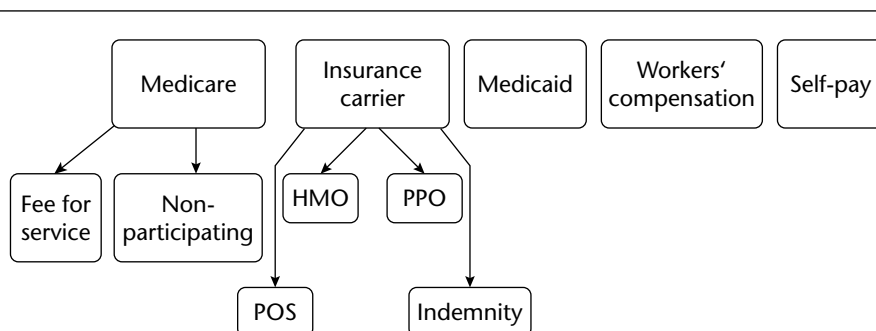
If a practice has significant excess capacity and the marginal cost of treating an additional patient is low, one strategy is to retain existing contracts in which reimbursement is not optimal until such time as the practice has no excess capacity. At that point such contracts should be renegotiated or terminated.

Understanding Current Payer Mix

Knowing the current payer mix of its patients will help the practice make decisions through an understanding of which portions of the practice have fixed reimbursement, such as Medicare, and which portions can yield additional revenue through renegotiating existing contracts or taking on new contracts with acceptable reimbursement. Figure 7.2 displays the typical categories of payers to examine. If 40 percent of a practice's patients are covered by managed care contracts, and this is the best-paying segment of its total patient mix, it makes sense to try to expand this segment.

Evaluating the Marketplace

A good understanding of the competition, major employers in the area, and the contracts held by hospitals in which the practice has admitting privileges will help the practice prioritize its MCO relationships.

FIGURE 7.2. CATEGORIES OF PAYERS.

Major Payers. Major payers such as Blue Cross Blue Shield or large insurance companies such as United Healthcare, Aetna, and Cigna generally have the greatest number of covered lives in a large metropolitan area. The practice manager should obtain information about the local marketplace from the state department of insurance (DOI) to determine which payers are the market leaders.

Preferred provider organizations (PPOs) are not fundamentally insurers but provide self-insured employers and even some managed care plans with networks of providers for a fee. They may also perform utilization reviews and other services. These payers offer a variety of managed care insurance products to employers and individuals. The financial risk for health care costs resides either with the insurance company or the self-insured employer.

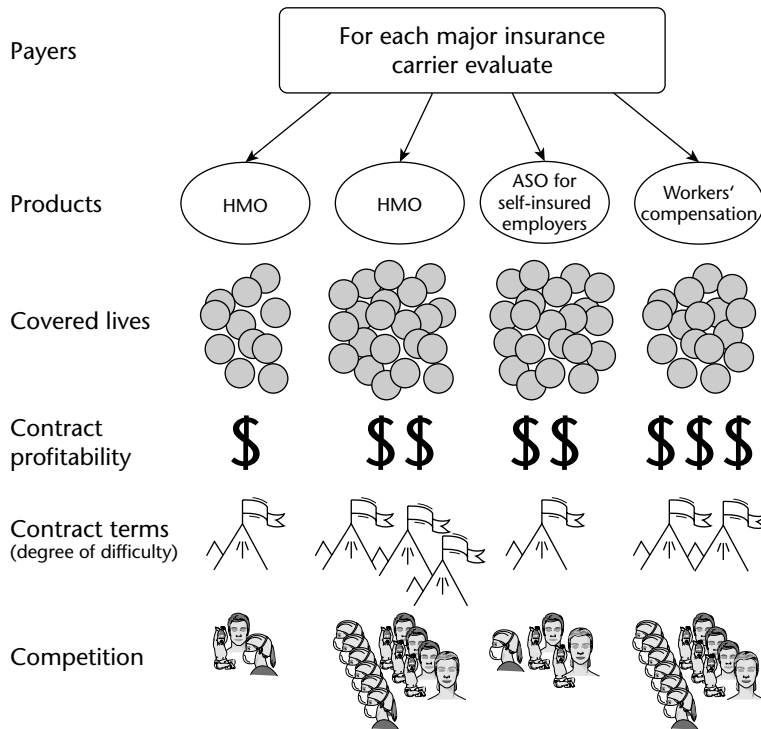
Generally, the larger payers have more market power and offer lower reimbursement rates. The practice should know what insurance coverage has been selected by major employers in the area so that contracts may be sought with the MCOs involved. MCOs initially will concentrate on seeking contracts with hospitals before contacting physicians in the local area because physician contracts require patients to be admitted to participating hospitals. Administrators at the hospitals at which the practice has admitting privileges can guide the physician group in selecting MCOs for contract negotiation.

Competition. An evaluation of the practice competition (Figure 7.3) will determine whether the practice's services are important to an MCO in the local area or whether many practices with the same specialty already exist. In the latter case it may be more

difficult to negotiate an acceptable reimbursement rate. A dominant practice should demand more favorable contract terms because without that practice's services the MCO cannot provide adequate network coverage in that specialty for subscribers in the practice's area. Generally, in order to meet state requirements MCOs must have an adequate number of providers in each of certain specialties within a certain county or within a specified radius of the residence of the subscriber. The maximum distances patients should have to travel for care are generally less for primary care than for specialty care.

Networks. A practice becomes a participating member of a network organized by an MCO by signing a contract with that organization. But the physicians in the network of one MCO are not always the same as those in a network organized by a different MCO because of different practice decisions regarding participation. Networks

FIGURE 7.3. EVALUATING THE MARKETPLACE.



called *independent practice associations* (IPAs) may also be formed by physician organizations in an attempt to gather large groups of providers together for joint contracting and participation with MCOs.

Sometimes a practice may have to choose between an existing contract with a particular MCO and an attempt to contract through an IPA with the same MCO. It is common for practices to believe they can “get a better deal” by contracting directly with an MCO instead of through an IPA. This may or may not be true, and it undermines the contracting efforts of the IPA. For the IPA to be successful, it must have authority to represent all its member practices when negotiating contracts.

Choosing a Contracting Team

A practice must determine who in the organization will represent the practice in discussions with MCOs. Practice governance should reserve the right to approve or disapprove all contracts, but the physician leaders or practice manager should be responsible for conducting negotiations. The individual or team selected by the practice to conduct negotiations should expect to meet with the MCO to gather information and present the strong points of the practice. Multiple meetings will probably be needed before contract closure. The contracting team should include those with negotiating expertise and strong analytical skills and should be representative of senior administrative and physician leadership.

Reviewing the Contract

The MCO will present the practice with a contract, provider manual, and other information that is vital to the proper analysis of the proposed relationship between the practice and the MCO. It is a mistake to focus only on reimbursement rates. The practice should give equal consideration to the many obligations and operational requirements involved with a contract.

Understand Contract Structure

Generally, the DOI in each state regulates certain content in contracts, primarily to protect consumers. The content required by the DOI applies only where the MCO is assuming risk for payment for health care services. DOI requirements do not extend to MCO arrangements in which the ultimate payer is not the MCO but another organization, such as a self-insured employer. Although the various contracts a provider

receives may not be consistent in their structure, they generally contain at least the following information.

Minimum Categories of Information Found in Managed Care Contracts

1. Identification of participants
2. Definition of terms
3. Physician obligations
4. MCO obligations
5. General provisions
6. Other
7. Reimbursement
8. Referenced documents

1. Identification of Participants. The contract supplies the legal names of all the organizations that are parties to the contract. The contract does not apply to organizations affiliated with the named organizations unless they are specifically identified.

2. Definition of Terms. Each time a defined term is used in the contract, it should be capitalized (for example, “Coinsurance”). It is not unusual when reviewing a contract to find a term used in the body of the contract that is not in the general definitions. The contracting team should ask the MCO to correct this omission.

3. Physician Obligations. The contract defines what the provider is required to do to be in compliance with the contract. Examples of such obligations are likely to include, but not be limited to, the following:

- Agreement to render medically necessary services and covered services to members of the MCO. If all parties are not clear about exactly what the covered services include, the practice may find that it is obligated for services it never intended to perform at the contract rate. *Medical necessity* is a term that is subjective. It is important to understand who at the MCO is making the decisions relative to medical necessity and to be clear about the grievance procedures available to the provider in the event of a disagreement.
- Acknowledgment by the provider that the provider has sole responsibility for the delivery of services.

- Agreement not to discriminate against patients based on race, gender, or religion.
- Agreement to provide medical care that conforms with accepted and prevailing medical practices, sometimes known as *community standards*.
- Agreement to participate in the grievance and appeals process established by the MCO.
- Agreement to provide all equipment and supplies used in the delivery of health care services.
- Agreement to provide backup or on-call coverage at all times and to be accessible according to the definitions in the provider manual.
- Agreement that information supplied to the MCO during the credentialing process is accurate and up to date.
- Agreement that the provider is properly licensed to practice medicine in the state involved.
- Agreement that the provider has a current Drug Enforcement Administration (DEA) number, as appropriate for the scope of practice.
- Agreement that the provider is in good standing on the medical staff of a participating hospital.
- Agreement to maintain professional liability insurance and general liability insurance, with minimum limits as defined by the MCO. The practice should review these limits carefully because what is *adequate* to the MCO may be something the provider is not willing to pay for.
- Agreement to provide notice in writing of changes in the status of any provider information, license, or insurance coverage. This requirement of notice of changes may be extended to changes in ownership, governmental or legal action initiated against the provider, bankruptcy, or any other situation that would materially impair the provider's ability to carry out the duties and obligations of the agreement. Some contracts may state that the notice should be given immediately.
- Agreement to notify the MCO of any changes in the status of physicians in the practice, such as additions and terminations.
- Agreement to accept the contracted reimbursement rates as the full reimbursement for services provided and to not pursue the patient for any amounts above the contracted rates. This does not prevent the practice from pursuing patients for co-payments, coinsurance, or deductibles, but it does prevent balance billing.
- Agreement to give the MCO the lowest price the practice charges any payer. This troublesome clause is known as a most-favored-nation clause and should be avoided.

4. MCO Obligations. This section of the contract sets out the services and obligations of the MCO to the provider. Here are some examples:

- Agreement to conduct marketing, enrollment, administrative, and financial functions as may be necessary for providing services to the members enrolled with the MCO.

- Agreement to furnish identification cards to patients and to educate patients on the policies of their benefits plan.
- Agreement to list the provider in a network providers directory made available to patients and referring physicians.
- Agreement to provide access so that the provider can verify that individual patients are covered by the MCO. The practice should be careful to understand how this verification is to be accomplished (electronically or by telephone) and what procedures are in place to verify eligibility when the MCO's systems are down. In addition, retroactive termination by the MCO for nonpayment by an enrollee should not penalize the provider who has appropriately verified the enrollee's eligibility.
- Agreement to provide copies of a provider manual that includes current information on utilization management programs, quality programs, and provider compliance policies.
- Agreement to pay the provider for covered services provided to patients.
- Agreement to process claims within a set time frame from the receipt of a clean claim and to remit payment or denial promptly. The practice should be sure to understand what constitutes a *clean claim*. The MCO may delay payment until all claims are complete and accurate to its satisfaction.

5. General Provisions. The general provisions may include a variety of requirements such as the following:

- During the early discussions with the MCO, the practice should request a copy of a standard remittance advice containing payment information. The remittance advice needs to be specific regarding such details as the patient account number, date of service, CPT codes, payment responsibility, and contractual discount. The operations staff responsible for receipt posting should be consulted and given an opportunity to evaluate whether the data elements are adequate for efficient posting to a patient's account. It would also be wise to set up a mechanism for reviewing and discussing claims with the MCO if it and the practice do not agree.
- Arbitration is growing as an acceptable and low-cost alternative to filing lawsuits over contract issues. Providers should strongly consider asking for the contract to include a nonbinding arbitration clause that makes such arbitration a first step in issue resolution. This arbitration requirement, whether binding or nonbinding, should include a provision that each party to the disagreement will submit the names of three acceptable mediators or arbitrators. The hope here is that at least one name will be common to both lists. The alternative is to have no provision for arbitration and to reserve the right of the practice to file a lawsuit instead. Lawsuits, however, can be expensive and time consuming.

- Provisions concerning the *right of offset*. The practice should understand the ramifications of the right of offset if that provision is included in the contract. The MCO should not be able to offset payments to providers with amounts it deems owed to it by the provider, based on utilization review, audits, or inaccurate payments, until both parties agree that these amounts are owed to the MCO. Most practices prefer a refund request from the MCO to come in the form of a letter with sufficient specific detail that the practice can determine exactly what is being requested. The practice then has the opportunity to determine whether the requested amount was ever received or is in fact appropriate for refund. Recoupments frequently present problems for practices because they impose deductions on future remittance advices. Recoupments also are difficult to reconcile with patient accounts and specific transactions. Frequently, recoupments lack detail sufficient for accurate patient account posting. The contract should include wording that restricts recoupments only to situations in which the practice has not responded to a refund request letter within sixty days.
- Provisions governing utilization review. These provisions can be complex and will vary from payer to payer. Practice management should ask to read the documents describing the utilization review program and ask that the MCO provide it with updates and amendments before they take effect. Practice management should have discussions with the MCO to determine as much information as possible regarding advance authorizations for services and claim-editing rules applied at the time of claim processing. MCOs are hesitant to release information regarding claim edits, citing that such rules are proprietary and cannot be disclosed. These rules, applied at the time of claim payment, relate to determinations of medical necessity, which may result in denials, and to the bundling of services with other services, which also may result in denials or down-coding. Unjustified claim denials that result from applying such edits may be most successfully pursued through complaints of unfair business practices organized by a state medical society, a specialty association, or other groups broader than a single practice. On the national level, class action lawsuits and settlements have resulted from challenges to such unfair denials.
- Provision for contract renewal. The MCO may include language that will cause the contract to automatically renew at the end of its term unless the MCO is notified by the practice a certain number of months before the ending date. Such a provision is called an *evergreen clause*. Because many providers are not good at monitoring MCO contracts, this time could slip. Another frequent provision is that either party can terminate the contract with ninety days notice. If the practice will incur significant expense in preparing for additional patients brought in by the

contract, it should be aware that the one-, two-, or three-year contract it thinks it will have is actually a 90-day contract if it contains this provision. That being said, the practice may wish to have the ability to terminate the contract with 90 to 120 days notice. The contract should also have an immediate termination provision that can be exercised if either party is in breach of or materially violates the contract. Such provisions are open to some level of interpretation but would not be questioned in the case of an event such as the bankruptcy of either party. A good rule to follow is to be sure the practice knows how to get out of a contract before getting into the contract.

- Provision for termination over amendments. Many MCOs will suggest contract wording that states that if the MCO presents a contract amendment to the provider and the provider is not willing to accept the amendment, the provider has the right to terminate the contract. This is an unacceptable clause because the provider has the right to terminate the contract anyway, and it is a way to put pressure on the provider to accept the amendment. All amendments should be required to be in writing and to be signed by both parties, without threat of termination by either party.
- Description of MCO level of service. The provider should seek a description of the level of provider service supplied by the MCO. This contract provision may be needed to resolve issues that arise as the relationship matures. Service deficiencies can be a major source of dissatisfaction with a contract, and MCOs frequently devote inadequate staff to this area. MCOs with locally based provider service representatives offer the greatest likelihood of an acceptable service level. MCOs operating on a regional or national basis and having few local provider service representatives will generally deliver levels of service that are not acceptable. Such things should be considered in evaluating whether to sign an agreement.
- Agreement that the provider will maintain appropriate medical and billing records in accordance with standards of the MCO and as may be required by law. This section also defines the MCO's rights to audit provider medical and billing records and governs MCO access. The practice should be sure it understands the different types of audits that the MCO intends to conduct on its records. Along the same lines the practice should understand the types of reports that the MCO expects it to provide along with the time frame in which they are to be provided. Some MCOs require more onerous reporting than others.
- Agreement by the provider that all patient medical records are confidential as required by various laws including the Health Information Portability and Accountability Act (HIPAA).

- Provisions that define where notices must be sent, in writing, and that specify the method of delivery, such as the U.S. Postal Service.
- Provisions that define the relationship between the MCO and the provider, including any rights of third parties. Included here is the agreement that the respective organizations are independent contractors and that neither party exercises any direct control over the other and neither is an agent of the other.
- Provisions that govern assignment of contract. This section defines whether one party has any rights to transfer duties and obligations to a third party with or without the consent of the other contracting party.
- Provisions that state that the contract includes the entire agreement between the parties and that no other agreements or promises are of any legal effect.
- Provisions that define the rules governing amendments to the contract. MCOs prefer to have the right to amend the contract simply by notifying the provider. The provider should require that any amendment be in writing and signed by both parties. Oral agreements are not lasting and can be totally disregarded when the individuals involved move on to other positions or to other companies. New representatives at an MCO who are unfamiliar with past oral agreements will not honor anything not put in writing.
- Agreement that the contract will be governed by the laws of the state in which the practice is located.
- Agreement that the provisions of the contract will not be disclosed to anyone other than the two parties involved and that all information related to the contract is confidential.

6. Other. Here are two examples of additional agreements and provisions the contract may cover:

- Provisions that define carve-outs. Major MCOs frequently will *carve out* certain types of services, assigning them to a separate network in an attempt to transfer financial risk and control utilization. The most common examples of such carve-outs are mental health services and optical care. The practice should ask the MCO whether it has carved out these or other services to separate organizations. If so, a separate contract will be required with the carve-out organization if one's practice also offers these services.
- Agreement by the practice that each provider in the practice must be credentialed by the MCO before becoming part of the network. There may or may not be a uniform credentialing application mandated by state authorities. The

MCO should agree to process the application promptly, within a specified number of days, and agree that the approved provider will be assigned an effective date on the day that the application is approved by the MCO credentialing committee. Services rendered by providers before this effective date will not be paid by the MCO. This is a difficult period in the relationship with the MCO because frequently a new provider in the practice will end up rendering services to MCO patients for free unless the practice can intercept and steer such patients to other providers.

7. Reimbursement. The section of the contract governing reimbursement must include a full and clear description of the methodology for reimbursement to the provider. For fee-for-service contracts, which are the most common, it should list the individual CPT codes and the specified allowable charge amount for each code. Capitation payment methodology is discussed later in this chapter. The basis for reimbursement must be clearly understood by the provider so that determinations can be made regarding the accuracy of the paid amount. Reimbursement amounts for the services of anesthesiologists and for provider-administered outpatient drugs must also be included in the contract if such services are part of the practice. Reimbursement for anesthesiologists generally is based on time units and base units determined by the procedure involved. Reimbursement for drugs may be based on average wholesale price (AWP), indexed to Medicare reimbursement, or calculated by other methodologies.

8. Referenced Documents. Contracts frequently will include other documents in the contract by reference. Such referenced documents are considered part of the contract. The most frequently occurring example is the MCO-supplied provider manual. This section may also include a provision that the MCO has the right to modify the provider manual at will, with or without providing notice to the provider. This is an open-ended opportunity for MCOs to modify the contract by changing the content of the provider manual. The provider should seek the right to be notified in advance of such changes and the ability to reject such changes without termination of the contract. MCOs dislike this approach because it can require MCO processes and procedures to be administered differently from one provider to the next. This issue should be negotiated by the provider to obtain the best compromise in order to protect the provider from negative changes to the contract.

Various laws and regulations may also be referenced in the contract and thus incorporated into it. The practice should engage legal assistance to determine the applicability of such laws and regulations to the contract.

Contract Discussion Issues. Other issues may come up during discussions between the provider and the MCO even though they are not actually incorporated into the contract. Here are two important examples:

- The practice should consider setting a policy that all providers in the practice should participate in the MCO contract. Significant patient dissatisfaction will result if some providers participate and others do not. It is common for patients to make contact with the practice to determine whether it participates with a particular MCO. If the answer is yes but only for certain providers, confusion will result, and the patient will be in network for some providers but out of network for others. Setting a policy of full participation by all providers is the responsibility of practice governance.
- Many MCOs will say that the contract they have for providers cannot be modified because of state law or the requirements of their parent organization. Although consumer protection provisions generally cannot be modified if they are required by the state DOI, any other part of the contract is fair game. The state DOI can be contacted to determine standard approved wording. All contracts can be revised in the negotiation process, provided that both parties are willing to agree to make such revisions.

Analyze and Model the Effects of the Contract

If a practice is to analyze the financial aspects of a contract adequately, it must have in-house capability to model various reimbursement scenarios or be able to acquire such ability from a competent source with short turnaround times.

Payers use several methodologies for reimbursement, but by far the most predominant is *fee for service*. This method reimburses a set amount per CPT code. Other methodologies are *capitation* and *case rate*. In fee-for-service arrangements the payer and the practice negotiate an allowable charge, which becomes the maximum amount that the practice can collect from the payer and the patient. They also set an amount that is owed by the patient. The patient's portion may take the form of a copayment, coinsurance amount, or deductible. A copayment is a set dollar amount, such as \$10, and is common for office visits. A coinsurance amount is a percentage of the allowable charge and is normally set at 20 percent, although it may be higher depending on the quality of the patient's insurance coverage. It may also be higher if the patient receives care from an out-of-network provider. The patient may also owe a deductible, which is a set amount per year that the patient has to pay before insurance coverage begins.

When obtaining the allowable charge information from the payer, a practice should be specific in its use of modifiers because an allowable charge with a modifier

will be different from the allowable charge for a global amount, which includes both the technical and professional portions of the CPT code reimbursement. An example is the modifier “26,” which is used to indicate professional interpretation.

To analyze the negotiated allowable charge with the payer properly, the practice needs to be able to obtain volume and billing information from the practice management system. It needs this information for the practice overall and for specific departments and divisions, including individual physicians, where desirable. For each of these *revenue centers* the most important CPT codes should be arrayed from highest to lowest. The indicator that determines the most important codes is volume of billed charges, not frequency of use. Large practices may want to identify a large sample size, perhaps the codes that account for 80 percent of billed charges, as a way to concentrate on the most important CPT codes. Other practices may want to analyze all CPT code usage. In either case it is important to negotiate acceptable allowable charge rates for the most important codes because that is where the billing volume is concentrated. The positive effect of a high reimbursement rate for an infrequently billed CPT code is of minimal importance when a frequently billed code has a poor reimbursement rate.

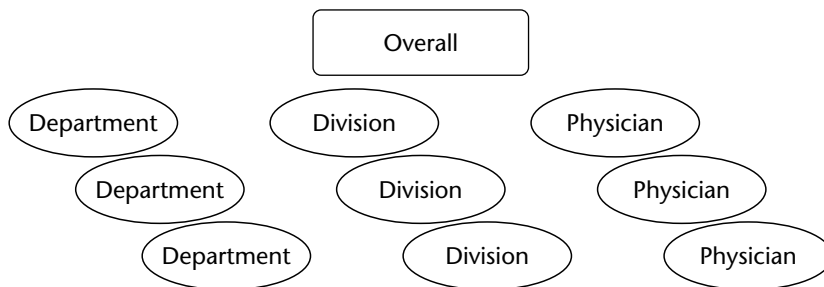
Performing the Analysis. Once the important CPT codes have been identified for analysis, the practice can begin comparing the negotiated allowable charge against practice billing patterns. The analysis process is illustrated in Figure 7.4. Here are important data elements in this analysis:

- The list of CPT codes, in descending order of financial importance
- The standard billed charge by CPT code
- The frequency with which each CPT code was billed over a one-year period
- The total amount of billed charges for each CPT code
- The Medicare allowable charge
- The proposed payer allowable charge
- An index of the Medicare allowable charge (Payer Allowable \div Medicare Allowable)
- The projected maximum gross collection rate (Payer Allowable \div Standard Billed Charge)
- The number of RVUs per CPT code
- A fee conversion factor (Standard Billed Fee \div Number of RVUs)

The practice can index its fees to the Medicare fee schedule both as a way to determine adequacy of reimbursement and to evaluate the standard fee structure for the practice. The Medicare resource-based relative value scale (RBRVS) system is generally accepted as an objective benchmark for making reimbursement comparisons. Relative value units (RVUs), as part of the RBRVS system, are partially updated

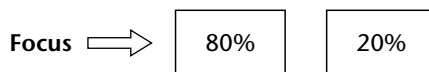
FIGURE 7.4. PERFORM FINANCIAL ANALYSIS AND MODEL THE EFFECTS OF THE CONTRACT.

Step 1. Obtain volume and billing information from practice management system.



Step 2. Determine which CPT codes are most frequently billed.

Step 3. Compare allowable charge per the contract with Medicare allowable charge, RVUs per CPT code, and cost per RVU for the codes most frequently billed.



annually through the efforts of the Review Update Committee. The RVU value assigned to an individual Current Procedural Terminology (CPT) code may or may not change, but the fee conversion factor is modified annually, according to Medicare rules. If Medicare is used as a reimbursement basis when negotiating a contract, the practice should specify the year, such as 2001, that will be the basis on which the index is computed. The Medicare fee schedule changes each year, so if the basis year is not specified and the conversion factor is reduced, as it was for 2002, the practice's allowable charges will also become lower.

The disadvantage of using an earlier year of Medicare for this analysis is that RVUs do change from year to year for some codes, and the practice would then have no Medicare allowable charge for codes introduced in the most recent year. The calculation of the fee conversion factor can be useful for identifying a standard billed charge that is either too high or too low. In addition, indexing standard charges to Medicare will help the practice evaluate the adequacy of the fee structure.

- The percentage that the charges in the sample represent of the total billed charges for the practice over the period of a year can be calculated. A shorter time frame can be used if the number of CPT codes billed is not extensive.
- The weighted average reimbursement rate can be calculated for all codes in the sample, and this figure can be used to evaluate the adequacy of the MCO's allowable charges. This is also the maximum expected collection rate for all codes combined.
- The weighted average index to Medicare will give the practice an indication of the total value of the contract as it compares to Medicare. An individual code-by-code indexing to Medicare will allow the practice to identify codes with inadequate reimbursement and those at higher levels. Some contracts are negotiated as a straight percentage indexing to Medicare, in which case the weighted average would be the same as the index number, except for situations in which a billed standard charge is below the negotiated allowable.

Anesthesiology is negotiated on a unit basis, with a set dollar amount reimbursed per unit. Anesthesia practices are reimbursed both for units of time (typically fifteen-minute units) and for units relating to the specific surgical procedure or classification of surgical procedures performed (known as *base units*). Some anesthesiology practices may have a significant amount of RVU-based services, but the vast majority of their work is general anesthesia and uses the base and time units. Depending on market conditions, the calculations discussed here may show that indexing to Medicare as a basis of reimbursement for anesthesia may not be advisable.

Practice management should evaluate acceptable reimbursement based on practice costs and market rates. Because of antitrust considerations, comparing reimbursement rates directly with those of other physician practices is not allowed. However, using practice management consultants and information from other sources can provide some guidance. A practice that is dominant in the market area may possess more negotiating power and demand higher reimbursement.

Using practice costs per RVU as a basis for negotiating acceptable allowable charges provides a good foundation and one that is based on information from one's practice alone. If, for example, the cost per RVU for the practice is \$50, the goal would be to negotiate an allowable charge at this amount or higher. To compute the proposed allowable charge, the practice would multiply this amount times the number of RVUs for each CPT code involved. Another alternative is to express practice costs as a percentage of the Medicare fee schedule. Acceptable reimbursement would be some amount that is higher than this Medicare indexed amount. Most practices provide some amount of unreimbursed care to patients; thus an amount higher than the practice cost per RVU is required to reach practice financial goals. In addition,

because practice expenses tend to rise, the practice will want to negotiate an escalation clause that accounts for such increases on an annual basis.

Considering the Product Line. The product line offered by the MCO may include a health maintenance organization (HMO) plan, a PPO plan, a point-of-service (POS) plan, Medicare managed care, Medicaid managed care, workers' compensation, and other such products. The MCO is motivated to have the practice participate in all products offered so that the MCO does not have to maintain separate networks. The practice should be motivated to participate only in those products that make sense from a reimbursement and operational standpoint. The practice should resist its automatic inclusion in all products in existing and future contracts. Generally, reimbursement rates should differ based on the numbers of patients likely to be steered to the practice by each product line. For example, patients having PPO insurance have more freedom to select providers, fewer requirements for authorizations prior to treatment, and greater coverage for out-of-network providers, so higher reimbursement should be demanded.

Examining MCO Ability to Deliver Patient Volume. MCOs should be able to provide fairly accurate estimates of the volume of covered lives in the market area and in the state. Licensed HMOs generally have the most accurate information because of the reporting requirements of state DOIs. This accuracy may also be true of point-of-service products when provided on the HMO platform or license. It may or may not be true of patient volume from self-insured employers when an HMO is designated as the claims-processing agent. PPO products offered by payers also have reasonably accurate volume estimates. PPO networks that are formed for the purpose of selling access to the network but that do not underwrite financial risk or pay claims have less accurate volume estimates. MCOs in a fee-for-service environment cannot guarantee patient volume to the practice. However, an exception to this inability to estimate volume accurately occurs when the practice has signed a capitation agreement for specialty care. In this case the MCO should be able to provide an estimate of the volume of services by CPT code, and this estimate can be confirmed by an actuary. One caution about actuarial reports, however; they are not always accurate, and the practice should consider seeking language in the contract to prevent the practice from realizing losses should the expected volume exceed expectations.

The incentives for patients to stay in a network change as the benefits plan changes. In general the strongest steering mechanism is seen in HMO products that give the patient no out-of-network benefit. In this situation the patient who uses the

services of a noncontracted provider receives no benefit from the payer, and the provider may bill the patient for full charges. This presents a strong incentive for the patient to stay in the network.

Understand Who the Payer Is

Part of the due diligence examination of the MCO should include a determination of which organization is the ultimate payer for services rendered. For name-brand MCOs in the practice's market area such as Blue Cross Blue Shield, the ultimate payer is either BCBS or a self-insured employer that is using BCBS for network access and claim payment purposes. For PPO networks that do not bear the financial risk of health care expenses, most frequently the payer is a self-insured employer who has hired a third-party administrator (TPA) for claim payment purposes. The timeliness of payment, the benefits involved, utilization management, and claim processing edits all vary depending on each employer's benefits package and the TPA. In their contracts, providers should obtain the ability to exclude specific payers due to nonperformance of contract provisions. In addition the contract should include wording that states, "The provisions of this contract with Network X prevail over any conflicting provisions of a contract between Network X and a third party."

It is also important to know whether the practice will be dealing with a national MCO corporate office for contract interpretation in the event of disputes or whether the local MCO office handles these implementation issues. Dealing with a corporate office may require more time and is generally more frustrating.

Avoid Silent PPOs

A silent PPO is an organization that gains access to a provider's contracted rates through an indirect relationship with a contracted network. Physicians and their practices are usually unaware that this has happened and learn of it when the remittance advice from the payer indicates the name of a network that is different from the network identified on the patient's health insurance card or lacks a network name. The third party using the network has all the benefits of the negotiated discounts but doesn't have an obligation to abide by other contract terms. The practice may protect itself by placing these items in the contract:

Provisions to Protect the Practice from Silent PPOs

1. The name of the plan or network must be prominently displayed on the patient's ID card.

2. Payers must clearly identify the name of the plan or network on any remittance advice for payments made to the provider and the fact that the contractual discount is being taken per the terms of the agreement.
3. The payer's failure to identify the contracted network results in the loss of the contractual discount.
4. A contracted network may not allow the insurer or self-insured plans access to contractual discounts after services have been provided to a patient.

Consider Administrative Issues

The practice office staff involved in operations should be involved early in the question of whether contract requirements can be met efficiently. The in-service training program offered by the MCO will help with some of these issues, but this training takes place after the contract signing, which is too late to be helpful with implementation glitches. For smooth implementation a checklist of important administrative and operational considerations should be developed jointly by the contracting and the operational staff.

Credentialing and Provider Directories. MCOs credential all providers according to certain standards. Once credentialed, the provider will be added to the MCO provider directory. The provider directory is used by the MCO, patients, and physicians.

Some state legislatures have passed laws requiring a standard comprehensive application that is filled out by providers and used by all MCOs for credentialing purposes. The administration of the practice can maintain completed applications for its providers and submit updated versions to a variety of payers for credentialing purposes. Periodic recredentialing processing is also required by MCOs. If a uniform application is not mandated, the practice and physician must complete the forms specific to each MCO, which is a much larger administrative task.

A provider does not become a participating physician in the network until the MCO credentialing committee approves the application. On this date the provider may render services and be reimbursed. As discussed earlier, if a new provider has not been credentialed by the contracted MCOs by the time he or she joins a practice, a confusing situation arises in which the provider may render services but not be paid for the work. It is difficult to restrict a provider to seeing only selected patients for specific MCOs in order to avoid seeing patients for MCOs for which credentialing has not been completed. In addition, if a patient has an out-of-network insurance benefit and sees a provider who is not credentialed with the patient's insurance company, the benefits paid to the physician are reduced, and the patient is responsible for a higher out-of-pocket payment, perhaps as much as double the normal amount. This causes

patient satisfaction problems and means the practice must make more collections from the patient. This at times can be less than successful.

The practice should periodically audit the directory of providers published by each of its contracted MCOs and confirm that the providers are accurately entered in each MCO's claim payment system. It is not unusual for MCOs to fail to add providers in a timely fashion and to record them inaccurately once they are added. This can result in denied claims, claims paid at out-of-network rates, and claims suspended awaiting provider numbers. Some MCOs do not see the addition of physicians to their network systems as a high priority and develop backlogs that create much frustration among physicians and patients.

Operational Capabilities. The practice should thoroughly evaluate the processes and procedures required to receive payment from the MCO. Most MCOs' procedures, although not standardized, fall within a reasonable level of variability, but occasionally an MCO will have special requirements that go well beyond the norm. This creates exception processing, which is inefficient and can be inconsistent. The result is higher overhead costs and higher claim denials. Some MCOs require provider numbers for individual physicians that must be placed on claim forms, but others do not. All such requirements should be evaluated with the other requirements and be considered when determining whether to sign a contract.

Capitation. Capitation is a method of financing health care by transferring the financial risk from the insurer to the providers of care. As discussed in Chapter Two, it is becoming a less prevalent form of reimbursement.

Primary care capitation is paid to internists, family practitioners, and pediatricians, according to the patient's selection of an individual primary care provider. The capitation follows the patient. In the *gatekeeper*, or care management, model the patient selects a particular primary care practice, and this information is noted by the MCO. The MCO subsequently will calculate a per member per month (pmpm) amount and mail a check to the practice for its enrolled individuals. The primary care practice then is responsible for delivering care from a defined list of services within the capitation amount. No additional payment is made, unless the contract contains specific carve-outs. Then it is possible that those services provided outside the capitation agreement will be billed on a fee-for-service basis for reimbursement. It is important for the primary care provider to have a complete definition of services that fall within the capitation agreement. If these services cannot be specifically defined by CPT code by the payer, the practice should not sign a contract that includes this method of reimbursement. The popularity of this type of reimbursement has declined since the end of the 1990s.

Specialty care capitation is also paid on a monthly basis and is calculated on a negotiated rate for a defined patient population. Under this model the payer will designate a specific population of covered individuals to be directed to the practice for care. This should be an exclusive arrangement, so that patients in a defined area do not choose among different practices or providers in the same area. The definition of services to be provided under the capitation must be specific and by CPT code. Mechanisms must be in place to prevent only the most seriously ill patients within that specialty from being steered to the practice while the less expensive care is provided by others. This would overload the practice's capitation revenue and cause a significantly poor financial outcome. Like primary care providers, specialists may be part of a network of similar providers with the capitation negotiated and collected by an IPA. Subsequently, the IPA would make payments to each practice based on a previously arranged contractual agreement defining reimbursement amounts.

Full professional capitation for all physician services rendered is much less common and normally limited to large networks of physicians who represent many specialties. Any care rendered by specialists not represented in the network would have to be paid at a significantly higher cost than in-network physicians command. This would expose the capitation pool to excessive costs that are not sustainable. Out-of-network care in a capitated environment is risky and difficult to control. Many IPAs that have agreed to full professional capitation arrangements are bankrupt. This form of capitation has declined significantly. If it is agreed to, a comprehensive definition of the services to be provided is a necessity to protect the practice and network from assuming responsibility inappropriately, for example, for transplants. Stop-loss reinsurance coverage should be seriously considered in this model, either on a per patient basis or in aggregate.

Physicians rarely accept financial responsibility for global capitation that would include virtually all covered services rendered to the patients of a particular payer. By far the most common model is for a hospital or group of hospitals under common ownership to accept global capitation, with the professional medical costs being paid from the global pool of funds. Payers are reluctant to negotiate global capitation arrangements with physician groups because the financial risks involved can be significant. When a hospital accepts global capitation, many different models of physician reimbursement can be negotiated. Primary care and specialist physicians may be paid on either a fee-for-service or capitated basis.

For each of these forms of capitation, the practice should insist on developing with the payer a list that specifies services and which party is responsible for the medical costs. For example, a primary care provider would expect to be responsible

for evaluation and management services but would probably have no interest in responsibility for the costs of outpatient prescription drugs. This is an extreme example, but it points out the need for each party to clearly understand exactly which party is financially responsible for services rendered. This grid can become quite detailed, and it gains importance as the breadth of capitated services increases. A responsibility grid is even more important for global capitation than it is for primary care capitation. Capitation amounts are calculated on actuarial assumptions about the risks represented by people of the age and sex of the covered patients. The provider does not have access to the payer's actuary but should become familiar with this concept and acquire the services of an actuary if the capitation pool is large enough.

Fee-for-Service Equivalents. Services delivered under the capitation agreement should be captured in the practice management system and analyzed monthly. Standard billed charges covered under capitation should be compared to the actual cash received from the payer, including any patient out-of-pocket amounts collected. Dividing charges for services rendered into the amount of capitation plus patient collections will yield a *fee-for-service equivalent*. This will answer the question, How does the capitation plus patient-paid amounts compare to what would have been collected if all charges had been paid in full? A result of 1.0 or higher means that the collection rate would have been 100 percent or higher in a fee-for-service environment. A result of 0.5 means a collection rate of 50 percent, and so forth.

Distributing Capitation to Providers. The distribution of capitation may be accomplished by different methodologies, and internal agreement is necessary so providers do not feel that the distribution is unfair. For a practice that pools all collected funds and that does not determine salaries according to production, the capitation check may be recorded in the general fund without regard to who rendered the service.

The distribution method becomes important where providers are paid based on their production. If the payer provides primary care capitation reports that give amounts for each of providers with whom patients are enrolled, the capitation amount per provider may be credited to that provider's "account." This may also create problems, however, because cross-coverage for vacations and so forth may interfere with obtaining an accurate distribution.

Another distribution method is to use the collection rate calculated with the fee-for-service equivalents and simply apply this collection rate to billed charges for the specific provider. Capitation may also be distributed to providers based on receipts per RVU. Whether these methods or other methods are considered, the practice must have the administrative infrastructure to implement them successfully.

Dependence on Payer Information Systems. The payer determines the identification of patients for which capitation is paid. The quality and accuracy of the payer's information system and processes is extremely important in calculating the capitation correctly. Retroactive adjustment is needed in this calculation to account for patient additions and terminations that were not known or processed in a timely manner. The larger the patient population under a capitation agreement, the more dependent the practice becomes on the MCO's calculations, because the monthly payments are much harder to reconcile. This is both an operational and a financial risk of any capitation agreement, but total accuracy cannot be expected.

Case Rates. When case rates are used, the contract must contain specific wording that defines which services are included under the case rate and the time frames associated with the delivery of such services. Transplants, for example, typically have several phases, such as initial evaluation, pretransplant care, the transplant admission, and posttransplant follow-up services. Services delivered that are unrelated to the transplant should not be included in the case rate and should instead be reimbursed on a fee-for-service basis. Identification of the services not included in a case rate can be difficult and can become a source of disagreement with payers.

Payers may require that all insurance claim forms for services covered by the case rate be filed together. In addition, if the case rate was established in partnership with the hospital where services were rendered, the physician claims may need to be forwarded to the hospital for matching with the hospital claims. The hospital may be responsible for submitting both its own claims and those of the participating physicians. When case rates are established through a hospital contract with a payer, it is common for the resulting receipts to be forwarded to the hospital and subsequently to the physician group. Although this process is common, specific procedures need to be established so payments may be received in a timely and orderly manner from either the hospital or the payer.

If the physician services provided under the case rate represent the work of more than one provider, rules need to be established at the practice level for sharing the receipts once received. The two most common methods are distribution of receipts based on billed charges by each provider and distribution of receipts based on the relative value units for services rendered. The relative value unit method is preferred because it does not depend on the charge structure of the participating physicians. However, the method using billed charges, or a percentage of billed charges, is easier to implement although perhaps not as equitable. Whichever method is chosen, the providers involved should be in agreement so issues do not arise between them later.

Perform Due Diligence

Gathering financial and operational information about the MCO will help the practice determine whether to proceed with a contractual agreement. The information the practice should know includes

- Ownership of the MCO
- Recent ownership changes
- Home office and local office locations
- Financial stability
- Volume of covered lives in the local market area and statewide
- How long the MCO has been in business
- Opinions from the state medical society that might be useful
- Publicly available information from the state DOI
- Opinions of other providers

Reaching the Practice Participation Decision

The practice should obtain a revised draft of the contract, including all the agreed-on language, for review by practice governance. Areas of remaining disagreement should also be identified. The lead negotiator should be responsible for assembling the relevant materials and presenting the information to the decision group. For small practices, this may be the lead physician or officer of the practice. Larger practices may have a managed care committee or other internal group that handles contracting matters. The important contract provisions and reimbursement analysis should be presented to the decision group along with a recommendation either to accept or to reject the contract. Assuming that the contract is approved, the practice should obtain two originals of the contract to be signed by both parties. The practice should retain one fully executed contract original for internal filing.

If the approval body rejects the contract, that decision must be communicated to the MCO. The MCO may compromise further in order to reach closure.

Conducting the Final Negotiations

After all the preparation work and meetings with the MCO, the practice should be in position to know its desired contractual changes, including reimbursement rates. This information should be organized so that the contracting team knows which are

the “must have” items and which are less important and could be compromised. The MCO has much flexibility in contractual changes as long as it does not violate a DOI rule or cause operational changes that would require the entire network administration to be modified for a single practice. The most flexibility, of course, lies with reimbursement rates. It is wise to schedule a meeting with the MCO and go through the outstanding issues item by item. This will give the practice a better understanding of where both parties are willing to compromise, and it should yield a short list of items in disagreement.

Implementing the Contract

The MCO will schedule an adequate number of training sessions with practice personnel to educate them on the requirements for fulfilling the provisions of the contract. This training is operational in focus and covers insurance identification cards, claim filing procedures, authorization requirements, and so forth. The practice management system will need to be updated with various information so that such tasks as claim filing and receipt posting may proceed without delay.

Approximately three months after the contract’s effective date, practice staff should conduct a postimplementation review to determine whether any problems exist, as outlined in the following list:

Items to Address in the Postimplementation Review

- Verify that the MCO loaded into its claim system the negotiated allowable charge reimbursement schedule contained in the contract.
- Check for delays in credentialing providers or in assigning physician numbers required for claim forms.
- Ask practice staff whether there are unusual problems with obtaining authorizations for care.
- Determine whether the remittance advice that comes with payments accurately and clearly identifies the patients and services being reimbursed.
- Determine whether claims are being paid correctly.

Contract Management

Contracts need periodic analysis to determine whether the financial and operational performance is adequate. For a new contract that is fee for service–based, the volume of patient services and receipts builds slowly. Patients and referring physicians need time to become aware that the practice is participating in the network of a

particular MCO. A contract management analysis will indicate whether a contract has financial or operational trouble spots and indicate action to resolve these issues. As discussed in Chapters Two and Six, persons responsible for contract management should monitor

- Receipt trends
- Collection rate variance
- Days in receivables outstanding (DRO)
- Claim payment timeliness
- Denied charges
- Unpaid claims

An integral part of contract management is the examination of operational aspects of the contract that are not strictly financial. Some of these considerations follow:

- How fast are physicians added to provider directories and claim payment systems?
- Are authorizations obtained quickly? Are claims denied even though an authorization exists?
- Does the MCO have an efficient method for verifying eligibility at the time of service or before?
- How adequate is the information on the MCO's Web site? Is the site easily understandable? Can it be navigated quickly to yield the information the practice needs?
- Does the MCO respond to service needs promptly?

Contracts that have excessive extra requirements or are accompanied by processing failures increase practice overhead. Problems on the administrative end of a contract, when added to financial difficulties, could indicate the need to terminate a contract.

Termination Considerations

It is much easier to sign a contract than it is to terminate one. It is never wise to sign a contract without first knowing how to get out of the contract later on terms that are acceptable to the practice. A practice should never mail a termination letter to a payer as a negotiating tactic unless the practice is prepared to lose the business. Reasons for contract termination follow:

- Reimbursement is too low and is not covering the cost of providing services.
- Claim payment is slow; denials are high; the payer loses too many claims.
- The payer is unresponsive to service needs.

- The payer is bankrupt or in poor financial condition.
- The administrative effort needed to meet the requirements of the payer is excessive.
- The payer is demanding a reimbursement reduction and threatens termination.
- The payer conducts extensive audits of past claim payments and issues unreasonable demands for repayment along with inadequate documentation.

The following questions should be satisfactorily answered before terminating a contract:

- What actions can the practice take to replace the business lost by terminating the contract?
- What is the capacity of the practice to absorb a revenue reduction, perhaps temporary, until the patient volume can be restored?
- What is the likelihood that lost patients will be replaced by patients with other contracts with higher reimbursement?

Finally, it is easier to terminate a poorly performing contract when the practice has no excess capacity.



Discussion Questions

1. How should a practice organize its physician and administrative leadership to address managed care business matters?
2. What actions can a practice take to gain an understanding of its internal business fundamentals and its external marketplace environment?
3. How might a practice design the financial analysis necessary to evaluate MCO proposals and practice counterproposals?
4. What outside sources of information and expertise are required to understand managed care negotiations and contract management?
5. What factors need to be considered when evaluating whether to terminate a contract?

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions

Suggested Reading

- Marcinko, D. E. (ed.). *The Business of Medical Practice: Profit Maximizing Skills for Savvy Doctors*. New York: Springer, 2000.
- Pavlock, E. *Financial Management for Medical Groups*. Englewood, Colo.: Medical Group Management Association, 2000.
- Tinsley, R. *Managed Care Contracting: Successful Negotiation Strategies*. Chicago: American Medical Association, 1999.
- Todd, M. A. *The Managed Care Contracting Handbook*. Burr Ridge, Ill.: Irwin, 1996.
- Zelman, W. N., McCue, M. J., and Millikan, A. R. *Financial Management of Health Care Organizations*. Malden, Mass.: Blackwell, 1998.



CHAPTER EIGHT

FEDERAL AND STATE REGULATIONS

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Objectives

This chapter will help the reader to

- Identify the sources of law applicable to physician practice organizations.
- Understand the substantive legal rules related to physician relationships, physician practice operations, and external relationships.
- Identify legal issues, and know when to consult legal counsel.

Numerous laws and rules affect the operation of physician practices. Some are highly specific laws and regulations that apply only to the health care industry, such as the requirements of the Medicare program, which are more fully discussed in Chapter Nine. Others are of more general application, such as those dealing with labor and employment, workplace safety, competitive activities, business structures, and taxation. Experience demonstrates that essential practice management skills include the ability to access and understand the numerous legal and regulatory requirements that apply to the practice organization; to identify the situations in which legal issues and disputes may arise; and to manage the practice organization, its participants, and its relationships with third parties in a manner that minimizes risk and promotes compliance with applicable laws.

Law and Sources of Law

No single definition of *law* is likely to be adequate, but the law certainly has a number of important characteristics:

- It is made up of a complex system or body of rules, requirements, and standards

- that are developed, articulated, defined, and generally accepted by society
- for the purpose of defining, managing, and controlling conduct, behavior, and relationships.

Physician practices are subject to laws and rules of both general and specific application. Laws of *specific application* are designed to address particular issues related to health care, medical practice, or physicians. They include laws governing physician training, licensure, and professional conduct; health and safety rules specific to health care organizations; and similar requirements. Such laws tend to have a relatively narrow scope in that they apply specifically to health care.

Conversely, laws of *general application* impose standards, requirements, and rules that are applicable to a wide variety of organizations, including but not limited to physician practices and others involved in health care. They include federal and state tax, antitrust, and labor and employment laws.

Legal requirements of both general and specific application may be expressed in a variety of locations or sources. Some guiding principles are expressed in federal and state constitutions, but most law is expressed in statutes, governmental regulations, and administrative policies enacted or promulgated by federal, state, or local jurisdictions. Laws and legal norms are also defined and expressed in precedential case decisions of courts and administrative or other authoritative bodies. Many nongovernmental and professional organizations also define norms, standards, and rules that although generally not having the same independent authority as statutes or rules defined by government, still have significant implications as systems of rules designed to structure and manage conduct and relationships.

The fact that a number of laws relating to physician practice operations are defined by numerous governmental units and expressed in numerous ways makes ensuring legal compliance all the more difficult. Table 8.1 illustrates this fact by cross-referencing different physician practice issues with the locations or sources of law that commonly relate to each issue in a typical jurisdiction.

An Analytical Framework

Three guideposts provide a useful framework for understanding the contexts in which legal issues commonly arise in connection with physicians and medical practices. First, legal issues tend to arise in connection with the internal operations of the physician practice as it delivers medical care services. Examples are laws and rules of specific application governing medical record requirements and laws of more general application governing such things as workplace conditions, wages, and labor and

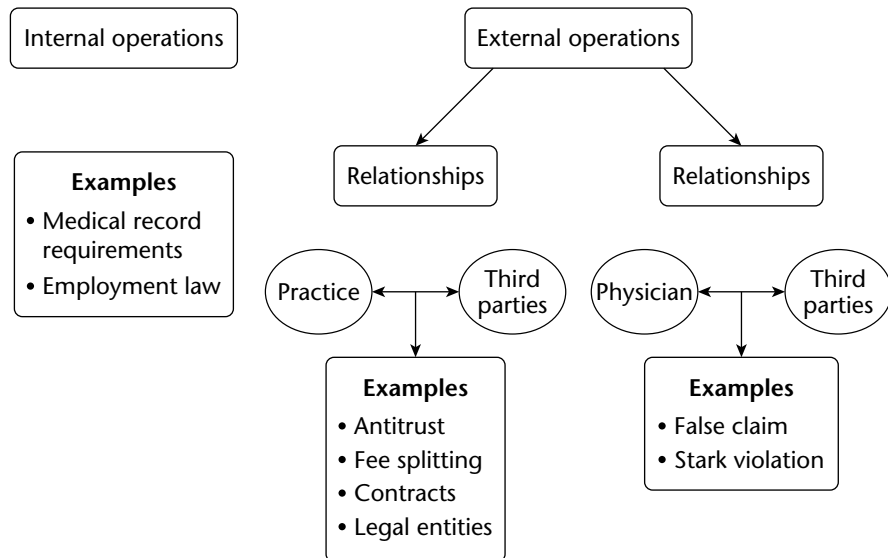
TABLE 8.1. SOURCES OF LAW BY PRACTICE ISSUE.

Topic	Select Sources of Law
Professional conduct and licensure	<ul style="list-style-type: none"> • State licensing statutes • Professional licensing board rules • Professional society ethical standards
Practice-employee relations	<ul style="list-style-type: none"> • Federal laws—for example, Fair Labor Standards Act, antidiscrimination laws • State wage and hour statutes • State and federal laws governing workplace safety • Rules promulgated by state and federal labor departments • Case law governing employment at will • State workers' compensation laws
Business license and operations	<ul style="list-style-type: none"> • Federal tax laws and rules • State income, excise, and related taxes • State form of entity acts • Local business licensing requirements • Professional society ethical standards
Patient health information and confidentiality	<ul style="list-style-type: none"> • Health Insurance Portability and Accountability Act (HIPAA) • State confidentiality laws
Relationships between physician practice owners or partners	<ul style="list-style-type: none"> • State laws and rules governing medical records • State laws governing professional organizations • State corporate, partnership, and LLC laws • Common law (case law) governing contracts • Federal and state laws governing the issuance and sale of securities

employment. These legal requirements generally govern how the practice operates, how its employees (including physicians) are treated, and related issues.

Second, legal issues tend to arise in connection with practice operations that involve relationships with external parties, or third parties. Laws of specific application that pertain to the practice's external operations include those governing fee splitting as well as laws that have more general application, such as laws governing contracts, antitrust activities, legal entities, and other areas. Third, legal issues and disputes commonly arise in the context of relationships or interactions involving one or more individuals and organizations. For example, if a physician practice submits a fraudulent or false claim for reimbursement to Medicare, the context for the legal issue is the relationship between the practice and the federal Medicare program. Because the physician has a relationship with Medicare, he or she is subject to Medicare rules, and the physician's submission of a false claim can result in legal liability. Figure 8.1 displays this analytical framework.

FIGURE 8.1. ANALYTICAL FRAMEWORK FOR LAWS THAT APPLY TO MEDICAL PRACTICES.



Two or more parties are not always required for a legal issue or dispute to arise, and the behavior, acts, or omissions of a single individual, such as a physician or other provider, can sometimes be sufficient to constitute a violation of a law. For example, a physician's unprofessional conduct or failure to meet specific licensing requirements involves the action of a single individual yet breaches the relationship between the state and the physician in the context of the state licensure system.

Laws Applicable to Internal Physician Practice Activities

Many of the laws and regulations governing internal practice operations fall into one of four categories, relating to the legal form of the organization, to physician licensing and restrictions on the corporate practice of medicine, to contracts and contractual relationships, or to employment practices.

Form of Entity Concerns

In today's health care delivery environment, a physician practice can be operated by a single physician who elects to create a practice enterprise and hang out his shingle. However, it is more common for physician practices to be created as separate legal entities that provide a legal foundation upon which the practice organization can be built. Different physicians will select and use different legal forms because each form provides different limitations on legal and financial liability and different tax and other advantages in relation to the participants' goals. Three principal legal forms are commonly considered for use by the physician practice enterprise:

1. *Corporations*, including for-profit business corporations; nonprofit, or not-for-profit, corporations; and professional corporations (PCs) or associations (PAs) for the practice of medicine
2. *Limited liability companies* (LLCs), including professional limited liability companies (PLLCs)
3. *Partnerships*, including general partnerships and limited partnerships and also professional limited liability partnerships

State laws of general application provide the basic legal framework for each organizational form, and the specific requirements applicable to each basic form will commonly vary depending on the state in which the enterprise is chartered. Nevertheless these three principal forms of entity for the physician practice tend to vary along the following major lines:

- Legal liability of the enterprise's owners
- Tax treatment of the enterprise's net earnings, which is more fully discussed in Chapter Four
- Management
- Transferability and flexibility with respect to ownership rights and privileges

The primary advantage of the corporate form is the limited legal liability provided to the corporation's shareholders in the case of a for-profit company or to the corporation's members in the case of a nonprofit entity. As a general matter this shield of limited liability generally allows a physician or other investor to invest in the practice and limit personal liability in his or her capacity as an owner of the enterprise to the extent of the investment. It should be noted that in the case of medical practices that engage in professional service, the provider of care will still remain liable for his or her acts of professional negligence, although the risk of such loss is typically addressed through the purchase of professional liability insurance. Apart from

this risk, and assuming that the group practice is operated in a manner consistent with legally required corporate formalities, the personal assets of the owners of the enterprise are generally shielded from the corporation's creditors. This means that if the practice has debts due to adverse legal judgments or failure to meet financial obligations, the practice's physician investors will generally not be held personally liable for the obligation, as they enjoy limited liability in their capacity as shareholders.

Corporations. Corporations are easy to form and continue their existence until dissolved or affirmatively terminated. Corporations are managed centrally through a board of directors elected by the corporation's shareholders. It is typically this board that selects officers to manage the organization's business. A corporation's shareholders do not run the corporation's day-to-day business and affairs. In medical practices organized as professional corporations, the number of shareholders may be so small that all the company's owners also sit on the corporation's governing board, so many of these distinctions tend to become blurred in practical application.

Ownership interests in a corporation are generally freely transferable from one party to another, although additional laws and requirements will commonly govern such transfers, as is discussed later in connection with medical practice licensure and buy-sell arrangements.

Partnerships. A partnership is an association of two or more persons to carry on, as co-owners, a business for profit. Partnerships are established by contract (a partnership agreement) and are subject to state partnership laws. In contrast to the shareholders of corporations, partners or owners in a general partnership do not enjoy the shield of limited liability, and the partners are jointly and severally liable for the liabilities of the partnership. It is for this reason that true general partnerships are rarely the form of entity selected for a physician practice. Partnerships also have a limited life; they remain in existence only so long as the contractual relationship that established the partnership continues.

Limited Liability Companies. The limited liability company, or LLC, is a form of entity that combines the limited liability provided by the corporate form with the pass-through tax and other organizational benefits associated with partnerships—effectively combining the best of both the corporate and partnership worlds. LLCs are chartered under state statutes of general application, such as a Limited Liability Company Act or similar statute. Medical practices organized as LLCs will commonly take advantage of state laws providing for professional and other special purpose LLCs—commonly referred to as PLLCs. These laws establish special requirements governing medical

practice organization, operation, ownership, and related issues when the practice uses the LLC form.

LLCs are typically created by filing articles of organization with the appropriate state agency. The LLC's owners or members are afforded the benefit of limited liability through the LLC form as long as the enterprise is organized and operated in accordance with the requirements of state law. Unlike corporations, LLCs typically are established for a maximum duration (for example, thirty years), provided that none of the specified terminating events comes to pass (for example, the withdrawal of a member), unless the other members affirmatively elect to continue the enterprise's existence.

The LLC form provides considerable management flexibility. It allows the enterprise to be governed by a central board of managers, analogous to a corporation's board of directors, or more directly by the LLC's member-owners themselves. LLCs can also have various classes of membership interests (similar to separate classes of stock in a corporation) that permit the creative allocation of different governance and economic rights.

In today's changing environment most physician practices are organized as professional corporations or professional limited liability companies. Practices that have been in existence for a lengthy period of time will most commonly use the PC form. Those practices that have been established more recently often use the LLC form due to the tax benefits and greater flexibility this form commonly provides.

Physician Licensure and Restrictions on the Corporate Practice of Medicine

All fifty states and the District of Columbia have laws of specific application, commonly called Medical Practice Acts, that establish physician licensure requirements for persons practicing medicine. Medical Practice Acts establish requirements for the licensing of physicians and other health care professionals, define professional and unprofessional conduct, and create professional licensing bodies (commonly called boards of medical examiners or boards of professional licenses). These boards oversee and administer on the state's behalf state-specific laws and rules directed at professional licenses and conduct. Similar state laws and regulatory bodies govern the licensure and professional activities of other health care disciplines (for example, chiropractors and podiatrists), including midlevel providers such as nurse practitioners and physician assistants. These legal frameworks also establish prohibitions on fee splitting and impose limitations on marketing activities, management relationships, fee sharing, and related arrangements.

Some jurisdictions also prohibit, either through explicit statements in their Medical Practice Acts or through case law, the so-called corporate practice of medicine. This

legal doctrine generally forbids physicians from practicing medicine on behalf of, or in concert with, any organization other than a professional services corporation (or similar professional entity) for the practice of medicine. Many states have diluted this strict prohibition to allow hospitals, nonprofit hospital service corporations, HMOs, and certain other enterprises to employ physicians, and some states impose no such restriction, thereby allowing physician practices to be owned and operated by laypersons.

State corporate practice prohibitions typically originated in the early 1900s and were based on the state's interest in (1) avoiding layperson control over professional medical judgment, (2) preventing commercial exploitation of medical practice, and (3) preventing any conflict between a physician's duty of loyalty to his or her patient and to his or her employer. In many states, physicians who violate the prohibition on the corporate practice of medicine are subject to disciplinary action, including potential loss of their medical license. Corporate practice of medicine laws restrict who may own interests in the medical practice (for example, by limiting owners to licensed physicians, hospitals, or certain other providers) and affect the particular form of legal entity that is used for the practice enterprise (many states allow, for example, professional corporations but not business corporations to employ a physician to provide medical services on the corporation's behalf). Corporate practice of medicine prohibitions can also be violated if a physician sells the stock of her medical professional corporation to persons or entities that are not licensed or authorized to practice medicine in the state. Thus they limit the marketability of ownership interests in the enterprise.

Contracts and Contractual Relationships

Regardless of the form of entity they select, the practice's physicians will generally have a number of contractual relationships with the practice enterprise, including those commonly referred to as buy-in and buy-out (or, collectively, buy-sell) arrangements and employment arrangements.

These arrangements, coupled with the basic organizational structure, serve as another essential component of the practice's legal structure and operating format. Physician buy-sell and employment arrangements generally deal with the benefits, burdens, and economic and other rights that are associated with being an employee, owner, or partner in a medical practice. Physicians who become employees of the practice gain certain rights and opportunities. Those who buy into the practice to become owners typically gain certain additional rights and opportunities related to monetary benefits, as well as a defined role and certain rights with respect to practice governance and decision making.

Together, a practice's buy-sell and employment arrangements typically address the treatment of the practice's various assets, including revenues from professional and other services; the furniture, equipment, and other hard assets; the accounts receivable (AR); the buildings and facilities; and other tangible and intangible assets. The specific terms of buy-sell and employment arrangements in a medical practice are governed by the law of contracts, so the basic freedom to contract that is enjoyed by agreeing parties will govern many terms of any arrangement. This flexibility will, however, commonly be influenced by the laws governing the physician practice's particular form of organization (corporation, LLC, or partnership), legislation affecting the corporate practice of medicine, and Medical Practice Act requirements.

Buy-sell and employment arrangements between a physician and his medical practice will commonly be expressed through a number of contractual documents. The names of these legal documents may vary depending on the group's form of legal entity, the jurisdiction, local legal customs, and other factors, but the principal legal documents (and the common buy-in terms they address) include

- Corporate articles of incorporation, bylaws, and similar organic legal documents that define how the practice is governed
- Shareholders' or buy-sell agreements that restrict the transfer of practice stock; define the buy-out calculation method and the events leading to buy-out such as death, termination of employment, disability, and so forth; and may address deferred compensation or other issues relating to the accounts receivables of the practice
- Physician employment agreements that establish the relationship between the physician and the practice, define the physician compensation system, and may address the physician's rights to a portion of AR upon termination and other continuing obligations (for example, noncompetition, access to patient records, and ownership of professional fees)
- Stock purchase agreements that define the stock (equity) purchase price and the payment terms and wrap together the stock purchase transaction.

Employment Law and Practices

Apart from the practice's physician-owners and physician-employees, another essential resource of the practice is its nonphysician employees, including medical assistants, nurses, receptionists, billing staff, and administrative and other employees. A host of employment-related laws of general application govern all employees of the physician practice. These laws include federal provisions governing wages and other terms of employment, such as the Fair Labor Standards Act, and workplace safety, such as the Occupational Safety and Health Act, and also state workers' compensation laws and analogous state laws.

Fair Labor Standards Act. The federal wage and hour law known as the Fair Labor Standards Act (FLSA) was enacted during the Great Depression to provide workplace protections for employees. Among the law's most important provisions is the required payment of overtime to certain employees. As a general matter, individuals who are not exempt under the act must be paid one and one-half times the employee's regular hourly rate for all hours in excess of forty worked during a given workweek. Given the financial implications of exempt versus nonexempt status, considerable importance is attached to an employee's classification.

In 2003, the U.S. Department of Labor proposed a major update of the federal regulations implementing the FLSA, which define exempt employees for overtime purposes. Historically, the so-called white-collar exemption from overtime pay for executive, professional, and administrative employees applies to employees who (1) meet defined criteria relating to their duties in that they exercise discretion and independent judgment and (2) receive a guaranteed salary that is paid regardless of the quality or quantity of their work and (3) that is above a certain defined minimum amount. Under these existing regulations, if an employee's salary is more than the defined minimum level, then the question of exempt or nonexempt status is determined based on the employee's duties.

The proposed regulations would make a number of changes to the existing rules by increasing the minimum salary level for qualification as an executive, administrative, or professional employee to \$22,100 per year and by streamlining the test of employee duties that would be applied to determine whether the employee has exempt status. Specifically, the proposed rule would adopt a *standard duties test* that would consider such factors as the employee's ability to hire and fire and the number of persons she supervises.

In addition, a streamlined rule has been proposed for highly compensated employees, defined as those who receive more than \$65,000 per year and perform non-manual work. Employees who meet these criteria and perform certain executive, administrative, or professional functions would be exempt from overtime pay requirements. These highly compensated employees would, moreover, not need to meet all the elements of the standard duties test to qualify for the overtime exemption. Under the proposed rules this would mean, for example, that an employee who receives more than \$65,000 per year and supervises two workers but does not participate in any hiring or termination decisions in the company would still be exempt from the FLSA's overtime requirements because he has a function identified as an executive function and is highly compensated. In the context of physician practices and other health care organizations the classification of certain employees has significant financial implications for overtime pay purposes.

Other specific employment laws and rules affecting medical practice operations include the following.

Family and Medical Leave Act. The Family and Medical Leave Act (FMLA) requires employers with fifty or more employees to provide eligible employees with up to twelve weeks of unpaid leave per year to care for their own health conditions, for newborn or newly placed adopted children, or for certain relatives with serious health conditions. An employee who is out of work for no more than the FMLA-protected twelve-week period is entitled to be restored to the job she held before the leave, but employees who are on leave longer than this will have no such rights. However, employers must give notice to employees who request leave that the absence will count against their FMLA twelve-week total. In most circumstances the employer must provide appropriate notice within two business days after the employee's leave begins for the notice to be retroactive to the original date of absence. If the employer fails to provide notice for a lengthy period of time, then the employee's right to be restored to her original job will extend beyond the twelve weeks of leave required by the statute.

Equal Employment Opportunity and Antiharassment Laws. All employers, including physician practices, are required to take steps to prevent and correct harassment in the workplace. They also have obligations to make employment decisions without regard to age, race, sex, and other legally protected characteristics and to provide reasonable accommodations to employees with disabilities. Equal opportunity and antiharassment laws are more fully discussed in Chapter Twelve.

Americans with Disabilities Act. The Americans with Disabilities Act (ADA) prohibits discrimination against people with disabilities in employment and other contexts. Effective in 1992, the ADA applies to employers with fifteen or more employees. It requires these employers to provide equal opportunity in hiring qualified applicants with disabilities, reasonable accommodation for workers with disabilities, and nondiscrimination in employee benefits and promotions. The provisions of this law, which is enforced by the Office of Disability Enforcement Policy, U.S. Department of Labor, are more fully discussed in Chapter Twelve.

Occupational Safety and Health Act. The Occupational Safety and Health Act of 1970 establishes federal rules designed to promote workplace safety. The Act is administered by the Occupational Safety and Health Administration (OSHA) in the U.S. Department of Labor and by states that adopt plans to establish state-specific rules to govern job safety and health programs. Approximately twenty-six states currently have their own state-specific OSHA plans. OSHA promulgates standards and enforces compliance with general laws, rules, and standards relating to workplace safety as well as compliance with specific requirements applicable to health care activities and organizations such as physician practices.

Employee Retirement Income Security Act. The federal Employee Retirement Income Security Act of 1974 (ERISA) has significant implications for health care and physician practice activities. ERISA was enacted to address many perceived problems in the nation's pension and employee benefit systems and encompasses all employee benefit plans, including health plans and retirement programs, in its regulatory scope. ERISA has a direct impact on physician practices as employers are required to comply with the ERISA law as implemented through the Internal Revenue Code rules regarding employee benefit programs. Numerous rules cover a variety of different employee benefit programs including pension, profit-sharing, and other retirement plans; cafeteria plans; life insurance plans; and others. Applicable rules impose on all such benefit systems a variety of requirements that must be followed for the program and its underlying expenditures to receive favorable tax treatment.

Policies Mandated by State Law. Many state laws impose a variety of rights and obligations relating to employees and the employer-employee relationship. These include state-specific workers' compensation laws and state mini-FMLA laws governing leave for the birth or adoption of a child or for care of a parent or other loved one. Numerous state laws also establish specific requirements related to employee rights to review and receive copies of their personnel files, to receive payment of wages within a specific time period following termination of employment, and other employee matters. These rules are generally expressed in laws of general application, as the specific provisions are rarely limited in their application to physician practices but instead are generally applicable to all employers in the state.

Other Issues Affecting Internal Operations

The preceding discussion focused on some of the principal legal concerns that are commonly relevant to the internal operation of physician practices. It is not, however, an exhaustive summary of every potential issue, and literally dozens of other laws and regulations can and do arise in connection with the various health care-related activities. Depending on the jurisdiction and the particular activities of the practice organization, these legal provisions may include the following:

Certificate of need laws may become important in connection with the creation of new provider capabilities within a physician practice or external to the practice (for example, the establishment of ambulatory surgical centers, surgical hospitals, or open MRI or similar diagnostic centers) or in connection with changes in a provider's business structure and business capabilities. Certificate of need laws are generally designed to promote the effective allocation and management of health care resources within a state or local community by requiring individuals and organizations who wish to develop a new health care capability (such as a new ambulatory surgical center or new

hospital beds) to justify the need for such a new service in the community. Such justification is typically provided in the form of information about the health care service needs of defined populations in a community, coupled with studies showing a deficiency in the existing delivery system's ability to meet those needs, a deficiency that can be addressed through the creation of a new health care provider or entity.

Not all states have certificate of need requirements. Among those states that do, the practical operation and application of the requirements can vary greatly. Because the certificate of need process deals with the rational allocation of health care resources, the process is commonly highly charged politically, as those providers who have existing service capabilities will commonly challenge the need for additional capability and those who wish to establish new services will assert that existing needs are not being met. The level of conflict continues to grow in today's competitive health care delivery environment as declines in health care reimbursement drive physician practices and other providers to look at other segments of the health care industry as a source of revenues.

The Clinical Laboratory Improvement Act (CLIA) and other federal and state licensing or certification statutes affect the operational aspects of health care delivery. For example, CLIA establishes minimum proficiency standards that must be met by organizations operating clinical laboratories. Analogous state laws also commonly govern the licensure and operations of various forms of medical practice and other health care-related organizations.

Facilities licensure provisions require separate licenses for different types of health care-related transactions, including ancillary service providers, outpatient clinics, and others. Some states provide, for example, for the licensing of physical therapy clinics, diagnostic radiology centers, and other facilities that furnish services on an ambulatory care basis.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) establishes stringent requirements related to the security, privacy, and confidentiality of health information, and also imposes requirements related to health information transactions. As a general matter the privacy rules apply when protected health information (PHI) is produced or received by an entity covered by the law. PHI is information in any form relating to an individual's physical or mental health, treatment, or health-related payments. Physician practices are among the large number of entities that are subject to the HIPAA requirements, including institutional and individual health care providers, health care clearinghouses, and health plans. In the privacy arena, HIPAA establishes *minimum* federal confidentiality standards, but state laws that provide greater consumer protection also still apply, creating a patchwork of standards from state to state—thus both federal and state laws affect patient health information and confidentiality concerns. HIPAA is more fully discussed in Chapter Twenty-Two.

Payment reimbursement provisions include Medicare provisions governing provider reimbursement and state insurance laws governing commercial payers. Such provisions commonly impose their own requirements on how services are furnished, by whom, and under what level of supervision—factors that also influence and will commonly define how the practice operates and furnishes care. Laws governing Medicare fraud and abuse are discussed in Chapter Nine.

Tax laws affect both the form of business enterprises and the manner of their operation. In some states, for example, certain types of organizations (such as professional service corporations) are subject to excise taxes, gross receipts taxes, and similar tax obligations, whereas other enterprises (such as limited liability companies) are not. A wide variety of sales, use, and other taxes may be imposed upon the business activities of physician practices. Moreover, federal, state, and local tax codes each have their own reporting, payment, and other operational requirements that must be followed. Tax law is more fully discussed in Chapter Four.

Zoning and land use restrictions may affect the types of activities that may be undertaken at different locations in a community. Such provisions may, for example, affect the business options available to physicians, hospitals, and other providers including the development of outpatient service centers, joint venture arrangements, and similar enterprises.

Laws Applicable to External Physician Practice Activities

The statutes that affect the external operations of a physician practice are concerned mainly with applying antitrust rules and with the characteristics of tax-exempt organizations and sanctions for violating those characteristics.

Antitrust Laws

Federal and state antitrust laws, with their proconsumer and pro-free-market orientations, are designed to eliminate restraints of trade and control related practices that interfere with competition. Antitrust laws arise out of the policy rationale and economic premise that a vigorously competitive marketplace in a free market economy keeps prices low, encourages efficient resource allocation, results in greater consumer choice of goods and services, and provides consumers with numerous other benefits. Federal antitrust laws, including the Sherman and Clayton Antitrust Acts, and the Federal Trade Commission (FTC) Act, along with analogous state law provisions affect health care business activities in every state. These laws may be enforced by federal officials, by state attorneys general, and through private lawsuits brought by individuals or organizations,

including those in the health care market, claiming to have suffered injury due to alleged anticompetitive conduct.

Violations of the federal antitrust statutes carry with them potential civil and in some cases criminal penalties. In civil suits brought by private parties, so-called treble damages may be imposed. Criminal penalties may be imposed only for certain violations, and courts or administrative bodies may also grant equitable relief, including injunctive orders barring further prohibited conduct and the divestiture or forced unwinding of prohibited arrangements.

In health care and the operations of physician practices, the application of the antitrust laws tends to be clustered around two general types of antitrust issues: (1) the actions of a single organization involving a monopoly or attempts to monopolize, and (2) restraints of trade, which generally involve the joint action of two or more parties that are otherwise competitors in the marketplace.

Monopolies and Market Power. The first major antitrust theme relates to the actual or potential power of a single organization. Provisions of the federal Sherman and Clayton Antitrust Acts deal with monopolization, attempts to monopolize, and combinations and conspiracies to monopolize. Antitrust violations can be found when a single health care organization, including a physician practice, is so large and powerful that it effectively possesses market power and, because of its size in the relevant market, has the capacity to control prices or exclude competition.

Whether market power is present depends on two issues: the definition of the relevant product and the definition of the geographic markets. The questions raised by these issues primarily concern the degree to which there are reasonable substitutes available to consumers and other purchasers of health care services (for example, payers) for the services provided by the physician practice or other organization. The likelihood of market power will generally be less where there are many other providers in the geographically defined market who can provide the same product or service. For a physician practice the relevant product would generally consist of the services provided by each physician specialty within the organization (for example, orthopedic surgery services). Similarly, the geographic market would consist of the other providers in a given area who provide the same product or service and whom health benefit plans and other subscribers would consider to be good substitutes for the providers participating in the organization in question.

Restraint of Trade. Provisions of the federal Sherman Antitrust Act also prohibit contracts, combinations, and conspiracies in restraint of trade. As a general matter, such prohibitions generally apply to the actions of individuals or entities who otherwise compete in the marketplace (such as individual physicians or practices) or the actions of a single organization that restricts competition or competes unfairly. Essential requirements for a violation include some form of joint action between two or more

parties in the form of a contract, combination, or conspiracy, coupled with action that is in restraint of trade. For the most part, conduct by a single actor (for example, a single physician practice) is generally not prohibited joint action.

The courts have not defined a list of activities that are in restraint of trade but have instead considered the economic consequences of certain actions to determine whether they restrict competition or obstruct trade in an unreasonable manner. And although the precise language of the Sherman act prohibits *every* contract, combination, or conspiracy in restraint of trade, a literal interpretation of this prohibition would invalidate virtually every form of agreement found in business, and courts have elected to invalidate only unreasonable restraints of trade. The body of judicial precedent has further subdivided restraints of trade into two broad categories—per se offenses and those that are subject to the rule of reason.

Certain restraints presumed to be so anticompetitive in nature that they are always illegal are classified as illegal per se. Illegal per se restraints consist of a narrow class of business practices and activities that the courts have repeatedly examined and consistently found to be illegal. They include price-fixing, agreements among competitors to divide or allocate markets, group boycotts, and tying arrangements (in which the purchase of one product or service is expressly tied to or conditioned on the purchase of another). Where such a business practice is found to be present, the conduct is automatically deemed to be a violation of the antitrust laws, and no further assessment or consideration of the potential value or positive attributes of the restraint will be undertaken. Thus the practice or restraint is said to be illegal per se.

Although an activity may not be illegal per se, it may still be found illegal under the antitrust laws through the application of the more fact-specific rule-of-reason analysis. Under rule-of-reason analysis, an activity may restrain or interfere with trade, but it will be deemed unlawful only if found to unreasonably restrain trade. As a result, the challenged individual or business is allowed to demonstrate the procompetitive economic benefits associated with the practice in question, and the alleged restraint will generally be upheld where the economic benefits of the activity are judged to counterbalance the activity's harm to competition.

Because of the fact-specific analysis associated with the rule of reason, efforts are typically taken to structure new businesses and business activities to help ensure that this analysis will apply. Likewise, parties defending antitrust lawsuits generally attempt to demonstrate that the nature of their activity is such that rule-of-reason analysis should apply. Arrangements that are commonly tested under the rule of reason are joint ventures among competitors, joint buying agreements, covenants not to compete, and exclusive-dealing arrangements.

Antitrust concerns associated with potential restraints of trade may arise whenever two or more competitors seek to combine their forces or work jointly in a competitive market. The development of various forms of provider network organizations

involving physicians from more than one practice, such as PPOs and IPAs, tends to raise potential restraint of trade issues. These networks bring together health care providers who are also typically competitors in the marketplace and, in the process, raise the potential for decreased competition, to the public's overall detriment. Many such provider organizations are viewed as legitimate joint ventures among the otherwise separate providers, so as to benefit from the rule-of-reason analysis, although other such entities may be designed or operated in a manner that raises possibilities of price-fixing among competitors or other illegal purposes.

Integration. Antitrust concerns about prohibited joint action are usually minimized when competitors join forces in the framework of a new integrated venture that enhances competition in the marketplace. Integration can take two basic forms—economic or clinical. A venture is said to be sufficiently economically integrated when its owners (that is, the individual physicians or the organizations that have joined together to establish a new enterprise) share the risk of loss as well as the opportunity for profit from their joint activities. Where there is sufficient integration, the participants effectively cease to be competitors for purposes of the joint venture arrangement, and the requisite that must be present for an antitrust violation is missing because the participants are acting as a single entity.

Clinical integration has also been identified as a potential means of providing sufficient integration for avoiding an antitrust violation, but this concept has been operationalized only recently. Clinical integration generally involves development of care management, monitoring, and other practices among otherwise separate (and competing) providers that is directed at coordinating health care and therefore is sufficiently different from other clinical activities to provide the necessary level of integration.

In instances where neither economic nor clinical integration is clearly present (that is, the adequacy of integration for antitrust purposes is questionable), organizations building provider networks will frequently use a messenger model endorsed by federal antitrust enforcement officials. In this model the organization (or an outside representative) conveys contract offers from payer organizations to providers. Each provider then makes an independent decision whether to accept or reject the tendered contract offer. The network is serving merely as a messenger for communication, rather than bargaining collectively on behalf of the network's participating providers.

In addition to the concepts of joint action and market power, a number of other issues also have antitrust implications:

Provider exclusivity. Networks and other provider organizations that contract with a large number of the providers in a particular market can be potentially problematic, particularly when exclusivity arrangements prevent these providers from participating in otherwise competing ventures.

Exclusion of providers. Almost by definition, some providers in a community will be able to participate in a provider organization and others will not. Those who are left behind, owing either to front-end credentialing or later deselection, may claim that they have been hurt by their exclusion from the enterprise. In antitrust terminology this might be classified as a group boycott, in violation of Section 1 of the Sherman Act. Allegations of a group boycott (a collective refusal to deal) are often subject to rule-of-reason analysis rather than being deemed illegal per se.

Proscriptions on competition. Covenants not to compete and similar restrictions on competitive activities can also be challenged on antitrust grounds. Such restrictions are generally subject to rule-of-reason analysis. They may also be evaluated under state law and will generally be deemed valid where they are reasonable in duration and geographic scope.

Tax-Exempt Organization Concerns

Many health care organizations, such as large physician practice organizations, hospitals, medical foundations, and community clinics, enjoy an exemption from federal income tax pursuant to Section 501(c)(3) of the Internal Revenue Code (IRC). Tax-exempt status confers a number of benefits on organizations, including the ability to use tax-exempt bonds as a beneficial means of financing and to receive contributions that are tax deductible for the contributing party. To obtain and retain their tax-exempt status, 501(c)(3) tax-exempt organizations must engage exclusively in charitable and other exempt activities and must comply with a number of other requirements. These are more fully discussed in Chapter Four.

In 1996 Congress made important changes to federal policies governing tax-exempt organizations by enacting Section 4958 of the Internal Revenue Code—commonly known as the *intermediate sanctions law*. This law allows the IRS to impose sanctions on certain persons who receive or approve excessive economic benefits from tax-exempt charities and social welfare organizations. However, Section 4958 also provides a remedy short of revoking the organization's tax-exempt status; it allows the IRS to impose penalty excise taxes on the individuals who are involved in such transactions.

The intermediate sanctions law imposes taxes on persons who are influential in tax-exempt enterprises and who either benefit from or approve transactions that are not consistent with fair market value (FMV). Specifically, IRC Section 4958 provides for the imposition of personal excise taxes on disqualified persons who benefit from excess benefit transactions.

As a general matter, an excess benefit transaction occurs when a covered organization provides an economic benefit to a disqualified person and receives less than the value of the benefit in return. Transactions that are reasonable and consistent with

FMV will not constitute excess benefit transactions. The most common form of excess benefit transaction involves unreasonable compensation for services, but excess benefit transactions can also involve exchanges of property, such as rent or loan arrangements between an exempt organization and a disqualified person that contain terms inconsistent with FMV. Excess benefit transactions can result from both direct and indirect dealings between a tax-exempt organization and a disqualified person, including dealings through intermediary entities such as an exempt organization's taxable subsidiary.

Disqualified persons who receive excess benefits are subject to two penalty excise taxes. First, the disqualified person must pay a tax equal to 25 percent of the amount in excess of FMV. Second, if the transaction is not corrected—which generally means undoing the transaction by repaying the amount of the excess benefit plus interest before the IRS mails a deficiency notice—an additional penalty of 200 percent of the excess benefit is assessed. Managers of tax-exempt organizations who approve such transactions may also be subject to penalty excise taxes under certain circumstances.

The intermediate sanctions law applies to all 501(c)(3) and 501(c)(4) organizations—with the exception of private foundations—so hospitals and physician practices that are tax-exempt are subject to the law's provisions. It is important to understand that the requirements of Section 4958 apply not only to physician practices that are themselves tax exempt but also to physicians who work with or engage in transactions with tax-exempt organizations through medical director, lease, recruitment, or similar arrangements.

Other Laws and Rules

Other health care-specific laws that govern the operation of physician practices and their external relations include the following:

Facility licensure provisions. These regulations require practices to obtain separate licenses for the development of some types of health care-related facilities, such as ancillary service providers and outpatient clinics.

The Health Care Quality Improvement Act and other laws related to provider credentialing activities. Certain statutes provide limited immunity for peer review activities undertaken to meet managed care requirements and performed in addition to traditional medical staff activities. Provider organizations may be engaged in credentialing or peer review activities that may also come within the scope

of these laws. Moreover, organizations may also have an obligation to provide reports to, and obtain periodic information from, the National Practitioner Data Bank in connection with their credentialing and peer review activities.

Payment reimbursement provisions. These include provisions of the federal Medicare law governing provider reimbursement, provider numbers, the appropriate method of billing, and related concerns. These issues and associated compliance activities are discussed in greater detail in Chapter Nine.



Practice management is responsible for compliance with all the various laws and regulations that might have an impact on physician practice activities. The issues that generally need to be considered are discussed in this chapter. Practice management should be aware, however, that other legal issues can and inevitably will arise. Health care legal counsel must be consulted and relied on to guide the establishment of any new health care business activity and to promote compliance with all relevant legal requirements.

Discussion Questions

1. Discuss the differences between laws of specific application and laws of general application.
2. List three challenges practice managers face when ensuring legal compliance.
3. Discuss the major forms of physician group structure, and identify advantages and disadvantages of each form.
4. What are certificate of need laws, and how might they affect group practices?
5. Identify the federal act that addresses patient privacy and confidentiality of health care information, and explain why privacy standards may differ across states.
6. Discuss the strategy most often used by defendants in antitrust lawsuits.

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions

List of principal forms of legal entities

Laws with implications for physician buy-sell and employment agreements

Suggested Reading

- Drake, W. "On Alert: Reducing Risk in the Medical Office." *MGMA Connexion*, 2003, 3(6), 46–49.
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- Harris, D. M. *Contemporary Issues in Healthcare Law and Ethics*. Chicago: Health Administration Press, 2003.
- Rich, J. P., Rinn, C. C., and Morgan, S. D. "Recent Significant Federal and State Court Decisions and Statutes That Affect Managed Care Provider Contracting." *Managed Care Quarterly*, 2003, 11(2), 39–47.
- Robinson, J. C. *The Corporate Practice of Medicine: Competition and Innovation in Health Care*. Berkeley: University of California Press, 1999.
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CHAPTER NINE

CORPORATE COMPLIANCE IN A MEDICAL PRACTICE SETTING

Bruce A. Johnson

Objectives

This chapter will help the reader to

- Identify the major laws and regulations that relate to Medicare fraud and abuse.
- Understand the major compliance risk areas in a physician practice.
- Implement an effective corporate compliance program for a physician practice.

Compliance has become an essential way of life in today's health care legal and regulatory environment. Medical practices of all sizes are developing, implementing, and living by compliance programs in an effort to prevent, detect, and remedy improper, unlawful, or unethical conduct by the practice and its providers, agents, and staff. These activities are driven in large part by the external enforcement activities of the Office of Inspector General, the Department of Justice, and state and local enforcement officials and by the internal ethical principles and business practices of medical practices and their providers.

The focus on corporate compliance in health care had its genesis in the 1980s, when the U.S. government threatened to impose controls on defense contractors due to their perceived overcharging and abuse of lucrative government contracts. In response, defense industry executives created the Defense Industry Initiative, to develop industry standards of conduct directed at self-policing, ethical business conduct, public accountability, and compliance in their activities. The industry adopted a strategy of self-policing and prevention as an alternative to more onerous governmental regulation.

Health care fraud investigations and enforcement activities have reinforced the importance of corporate compliance to physician practices and other health care

organizations. These activities include the Physicians at Teaching Hospitals (PATH) audits, the Columbia/HCA investigations, and enforcement resulting from the qui tam whistle-blower lawsuits (qui tam is discussed further later in this chapter). As a result of these enforcement actions, formal compliance programs are increasingly viewed as an essential ounce of prevention to help ensure that the medical practice operates in a legally compliant and ethically appropriate manner. The establishment and maintenance of effective corporate compliance programs involves self-policing, discovery, and correction of noncompliant activities and is viewed as an important step in both preventing and mitigating unlawful conduct.

Relevant Laws and Regulations

Provisions of federal Medicare and state Medicaid laws impose a variety of restrictions designed to prohibit fraud and abuse directed at Medicare, Medicaid, and other federal health care programs. The federal False Claims Act deals with activities such as submitting false claims for reimbursement, making false representations, and engaging in other fraudulent activities involving misrepresentations of fact. A second, related set of prohibitions addresses activities considered abusive of the Medicare and Medicaid programs—the so-called anti-kickback prohibitions and the federal physician self-referral provisions, or Stark law. Civil and criminal penalties for failure to comply with these laws can be very high. The ultimate penalty is the offender's removal from a federal health care program.

False Claims Act and Other Civil Monetary Penalties Laws

Although the U.S. civil False Claims Act (FCA) has been in effect since 1863, it underwent significant changes in 1986 to make it a more effective tool. It is the law that is used most frequently to prosecute health care providers. Civil liability may be imposed under antifraud provisions specific to the Medicare program and under a more general statute prohibiting any type of fraud against the U.S. government. The False Claims Act prohibits knowingly submitting a false or fraudulent claim for payment or approval, whether it is to Medicare, Medicaid, or another federal health care program.

Examples of False Claims

- Claim for service or supply that was never provided
- Claim for service in which the diagnosis code submitted for payment is not the actual diagnosis code for the service
- Claim for service that was not reasonable and necessary

- Claim for service provided by an unlicensed individual
- Claim for a higher level of service than was diagnosed

The word *knowingly* is important in this context. A practice is considered to have submitted a false claim knowingly when that submission is due to

- *Deliberate action.* The provider purposely submits a false claim.
- *Deliberate ignorance.* The practice does not keep abreast of changes in laws or regulations and fails to update its billing systems accordingly.
- *Reckless disregard.* The provider is not concerned with whether the information is true or false and permits untrained staff to file claims.

The Medicare program provides for civil monetary penalties of up to \$2,000 for each item or service on each improperly filed claim subject to the law. Improper claims under the law include, among others, claims for services that were not provided as claimed, claims for physician services that were delivered by a person who is not a physician or who is otherwise not qualified to deliver the services, claims for services that were furnished during a period in which the provider was not a Medicare or Medicaid provider, and claims submitted in violation of an assignment.

In addition, under the FCA the practice is liable for a civil penalty of not less than \$5,500 up to a maximum of \$11,000 for each false claim and can also be found liable for three times the amount of the false claim, unless certain exceptions apply.

When the FCA is used in the context of health care claims, this means that civil money penalties of \$5,500 to \$11,000 may be imposed for each item on the health care claim form, plus a penalty equal to three times the amount of improper charges. And because the FCA involves a civil (as opposed to a criminal) action, the government has a lesser burden of proof than that required in a criminal prosecution, thus making a verdict in favor of the government more likely.

Although the FCA has been in existence for many years, it is increasingly being applied in the context of health care, and this, combined with certain whistle-blower provisions in the statute, is raising the importance of the FCA for health care providers. The FCA expressly provides that in addition to the U.S. government, private parties may bring civil actions for violations of the act. Such private prosecutions are called *qui tam* actions. The FCA's *qui tam* provisions are designed to encourage whistle-blower actions that help to ferret out fraudulent activities that affect governmental programs. Under these provisions the private party who brings the action (or assists the government in bringing the action) stands to gain from any money judgment and recovery. Suits under the False Claims Act must be brought within six years from the date of the claim or within three years after the government knows or should

have known about the illegal conduct. Suits can be brought no later than ten years after the claim. Under certain circumstances qui tam plaintiffs can receive up to 30 percent of the award of civil money damages and penalties in a successful suit. Thus these provisions serve as a potent incentive to self-interested insiders and others who have knowledge of activities that might be in violation of the FCA. Whistle-blowers most commonly bring their qui tam suits under the FCA, although some have recently sought to bring suits under other federal laws, including the Anti-Kickback Act.

The Civil Monetary Penalties Act is similar to the False Claims Act. It prohibits a provider from presenting claims for services that he or she knows or should have known were not medically necessary; were furnished by a person not licensed as a physician or supervised by one; were furnished by a physician who obtained a license by misrepresentation; or were furnished by a physician who is excluded from participating in that federal health care program, who contracted with an individual or an entity who is excluded from participating in a federal health care program, or who offered payment or other remuneration to a Medicare or Medicaid beneficiary in order to induce him or her to use the provider. The terms *known* or *should have known* refer to deliberate conduct, deliberate ignorance, and reckless disregard (as described earlier in this chapter).

Violations of the Civil Monetary Penalties Act may invoke penalties up to \$10,000 per item or service, and treble damages apply, as they do under the FCA. The provider may also be excluded from participation in the federal health care programs.

Laws Dealing with Self-Referrals and Kickbacks

The provisions of the statutes prohibiting kickbacks and self-referrals require physician practices to pay careful attention to the structuring of their business relationships.

Anti-Kickback Act. The Anti-Kickback Act of 1986 prohibits the offer, payment, solicitation, or receipt of any remuneration—directly or indirectly, covertly or overtly, in cash or in kind—in return for (1) the referral of patients (or an arrangement for the referral of patients) to others for the provision of items or services for which payment may be made under federal health care programs; and (2) the purchase, lease, or order (or arrangement for the purchase, lease, or order) of any good, facility, service, or item for which payment may be made under federal health care programs. Essentially, the Anti-Kickback Act prohibits an exchange of value for federal health care program patient service opportunities. A violation of the anti-kickback statute constitutes a felony criminal offense, punishable by imprisonment for up to five years or fines up to \$25,000 or both. All parties to the transaction may be sanctioned. In addition to these criminal sanctions, individuals or entities that commit an act described

in the anti-kickback statute are subject to certain civil sanctions, including civil monetary penalties and exclusion from the federal health care programs. It is important to be aware that the Internal Revenue Service has stated that the tax-exempt status of a hospital or other exempt facility may also be jeopardized if that facility violates the provisions of the anti-kickback law.

Safe Harbors. Because the anti-kickback statute is so broad, it can at times be difficult to determine which transactions and relationships between health care providers and entities are legal and which are not. The Office of Inspector General (OIG) in the U.S. Department of Health and Human Services (HHS) has responded to this uncertainty by providing guidance in the form of regulations concerning *safe harbors*, advisory opinions, and the publication of fraud alerts. The safe harbor regulations identify transactions and relationships that will not be treated as violating the Anti-Kickback Act and will not serve as a basis for criminal prosecution and exclusion from the Medicare and Medicaid programs. The following list summarizes the safe harbors promulgated for a number of specific transactions and arrangements that may relate to physician practices.

Safe Harbors to the Anti-Kickback Act

- Certain investment interests
- Arrangements involving the rental of space and equipment
- Personal service and management contracts
- Bona fide employment arrangements
- Transactions involving the sale of physician practices
- Warranties and discount arrangements
- Referral services
- Transactions involving group purchasing organizations
- Waivers of beneficiary copayment and deductible amounts
- Certain price reductions offered by providers to health plans
- Practitioner recruitment arrangements
- Obstetrical malpractice insurance subsidies
- Investments in group practices
- Investments in ambulatory surgical centers
- Referral arrangements for specialty services

In the current health care enforcement environment, health care transactions are typically structured to meet as closely as possible the elements of a voluntary safe harbor. It should be noted, however, that an arrangement that does not meet the requirements of a safe harbor is not necessarily illegal. The most important consideration for

anti-kickback statute compliance is that no part of any remuneration between the parties be intended to induce referrals.

Stark Self-Referral Prohibitions. The federal physician self-referral prohibition is commonly referred to as the Stark law, after the act's chief sponsor, U.S. Representative Fortney (Pete) Stark. The Stark law prohibits physicians from making referrals for certain designated health services (DHSs), paid for by Medicare or Medicaid, to entities with which the physician (or an immediate family member of the physician) has a financial relationship, *unless* an exception under the law applies. The designated health services are

- Clinical laboratory services
- Physical therapy, occupational therapy, and speech and language pathology services
- Radiology and certain other imaging services, such as MRIs
- Radiology therapy services and supplies
- Durable medical equipment and supplies
- Parenteral and enteral nutrients, equipment, and supplies
- Prosthetics, orthotics, and prosthetic devices and supplies
- Home health services
- Outpatient prescription drugs
- Inpatient and outpatient hospital services

A violation of the highly technical Stark law requires three broad elements:

- A *financial relationship* (which may consist of an ownership interest or a compensation arrangement) between a *physician* (or a physician's family member) and an *entity that furnishes a DHS*
- A *referral* of a Medicare or Medicaid patient by the physician *to the entity for the furnishing of a DHS*
- The *absence of an exception*

Under the Stark law the individual or entity receiving a prohibited referral is not allowed to bill Medicare or Medicaid, the patient, or any third party for the services; any payment received in violation of the law's provisions must be refunded, and payment by Medicare or Medicaid for a DHS resulting from a prohibited referral is also denied. Civil monetary penalties that include penalties of up to \$15,000 per service provided in violation of the law may be imposed upon both the physician making a prohibited referral and the entity submitting a claim for service. Physicians and entities found to be in violation of the Stark law may also be excluded from Medicare and Medicaid program participation.

The Stark law applies generally to physician practices because physicians in these practices have direct ownership or compensation relationships with the practice given their status as owners or employees of the group, satisfying the first element for a Stark law violation. Moreover, individual physicians typically make referrals of Medicare and Medicaid patients for services that are defined as DHSs, as required for the second element of a Stark law violation. Therefore Stark law violations can be avoided only when physicians' referrals to DHSs fall under an applicable Stark law exception. Exceptions to the Stark law are

- Certain space and equipment rentals
- Bona fide employment relationships
- Personal service contracts
- Certain physician incentive plans in the managed care setting
- Remuneration unrelated to the provision of designated health services
- Hospital and physician recruitment contracts
- Physician payments to laboratories or other entities for ancillary services
- Isolated transactions
- Certain arrangement contracts between hospitals and group practices
- Fair market value compensation arrangements
- Certain indirect compensation arrangements

Exceptions for Group Practices. Medical practices and their physicians commonly rely on the Stark law's in-office ancillary services exception when referring, providing, billing for, and receiving payment for DHSs that are furnished to Medicare and Medicaid beneficiaries who receive services through the practice. The in-office ancillary services exception has a number of highly technical and specific requirements that must be met for the exception to apply. They include a requirement that the practice be operated as a bona fide group practice, which in turn imposes numerous specific and highly technical requirements on the practice and its physician participants, including requirements related to the group's compensation system for its employee and independent contractor physicians. Central to the Stark law compensation test is the requirement that physicians in the group practice not receive compensation that is directly or indirectly based on the volume or value of DHS referrals except through certain profit-sharing or productivity bonus arrangements deemed to be sufficiently indirect that they do not result in a Stark law violation.

Other Exceptions to Financial Relationships. A host of financial relationships involving physicians and organizations outside the medical practice can also result in a violation of the Stark law unless an exception applies. These relationships include financial relationships with hospitals, nursing homes, or any other organizations that furnish

services defined as DHSs and with which the physician (or immediate family member of the physician) has a financial relationship and to which the physician makes Medicare or Medicaid patient referrals. Examples include medical director arrangements involving hospitals and a physician (because DHSs include inpatient and outpatient hospital services), equipment or space lease arrangements involving external health care providers (such as a diagnostic imaging or laboratory service company leasing space in a medical office building owned by physicians or a physician practice or a physician renting equipment or space from hospital), and physician ownership of interests in specialty hospitals.

Because of the Stark law's broad application, these and other financial relationships must commonly be structured to comply with a recognized exception to the law, otherwise referrals to the entities will result in Stark law violations. The Stark law and applicable rules provide these additional exceptions:

- Certain space and equipment rentals
- Bona fide employment relationships
- Personal service contracts
- Certain physician incentive plans in the managed care setting
- Remuneration unrelated to the provision of designated health services
- Hospital or physician recruitment contracts
- Physician payments to laboratories or other entities for ancillary services
- Isolated transactions
- Certain under arrangement contracts between hospitals and group practices
- Fair market value compensation arrangements
- Certain indirect compensation arrangements

State Restrictions. A growing number of state self-referral and anti-kickback prohibitions are also in effect. They may prohibit much of the same conduct as the federal anti-kickback law, or they may be cast as state-level Stark laws. Many of these state laws require disclosure of investment or financial interests, impose outright prohibitions on self-referrals, or impose some other variation of the common theme, although many of the statutes also differ from their federal counterparts in significant respects.

For example, provisions of California law establish a referral prohibition akin to that of the anti-kickback statute by prohibiting “the offer, delivery, receipt or acceptance by any person . . . of any rebate, refund, commission, preference . . . as compensation or inducement for [referrals].”¹ A self-referral provision akin to the Stark law is also established under California law. It prohibits physician referrals for diagnostic imaging, physical therapy, and certain other services to an organization in which

the licensee (or an immediate family member) has a financial interest, although exceptions are also available under this law. These examples illustrate that in addition to the applicable federal prohibitions, the provisions of the relevant state anti-kickback and self-referral laws must be closely examined in connection with the operation of physician practices.

Corporate Compliance Programs

The structure of formal compliance programs in medical practice settings draws in large part on principles expressed in the U.S. Federal Sentencing Guidelines and in compliance guidance published by the HHS Office of Inspector General. In all contexts the establishment and maintenance of effective corporate compliance programs involving self-policing, discovery, and correction of noncompliant activities is viewed as an important step in both preventing and mitigating unlawful conduct. Compliance programs are voluntary unless the entity is operating under a corporate integrity agreement resulting from previous violations of Medicare law. The OIG released its latest guidance for the creation of a compliance program for individual and small-group physician practices on October 5, 2000.²

Corporate Integrity Agreements and Compliance Guidance

Compliance programs may be distinguished from compliance agreements or corporate integrity agreements that are entered into by health care providers and governmental agencies as part of the settlement or actual prosecution of unlawful activity. Corporate integrity agreements are typically more onerous than voluntary, self-instituted compliance programs in that they require annual reports, audits, inspections, and other mandated activities. And although formal compliance programs can be instituted following prosecution, prevention is a fundamental concept underlying compliance, so these programs are typically developed before problems arise.

Voluntary compliance programs should also be distinguished from government-developed model plans or compliance guidance. To date the HHS Office of Inspector General has published compliance guidance directed at such segments of the health care industry as hospitals, physician practices, third-party billing companies, and pharmaceutical manufacturers. Such compliance guidance represents the government's wish list of features a formal compliance program should address. Such guidance does not, however, constitute an off-the-shelf program to be implemented in a medical practice.

Objectives of Compliance

Provisions of the Federal Sentencing Guidelines define the essential elements of an effective compliance program. They state that an effective compliance program will be designed, implemented, and enforced so that it can be reasonably effective in preventing and detecting illegal conduct. The following list summarizes the seven core elements of an effective program as defined in the Federal Sentencing Guidelines.

Elements of Effective Compliance Programs

- Compliance rules and procedures that are reasonably capable of reducing the prospect of wrongdoing
- Assignment of high-level personnel to oversee the compliance effort
- Use of due care to prevent the delegation of substantial discretionary authority to individuals whom the company knew or should have known to have a propensity to engage in illegal activities
- Effective communication of the rules and procedures to all employees, through either training programs or the dissemination of information
- Enactment of reasonable steps to achieve compliance with the standards: for example, using monitoring and auditing systems reasonably calculated to detect unlawful conduct and establishing reporting systems employees can use to report misconduct without fear of retribution
- Consistent enforcement of the standards through disciplinary mechanisms, including disciplinary action for individuals responsible for failure to detect or report offenses
- Appropriate responses to offenses detected, including reporting of the offense to the government, refunding overpayments, and if necessary, modifying the compliance program to better detect and prevent future offenses

There is no one-size-fits-all compliance program. The nature, size, and resources of each medical practice's compliance program will vary from those of other programs. Moreover, the topics that will be reviewed as part of the compliance effort, both initially and long term, will commonly vary depending on practice resources, target areas identified by the government, the organization's prior history and experience with compliance-related problems, and other factors. It is important to understand that given program goals of both preventing illegal or improper conduct and identifying it if it does occur, the failure to prevent a compliance problem does not necessarily mean that the formal program is ineffective. Rather the hallmark of an effective program is *due diligence* directed at identifying compliance issues and correcting those improper or problematic activities once they are found in the organization.

Formal compliance programs are important because they can help a practice avoid prosecution or an investigation in the event of unlawful conduct. They can also help the practice prevent qui tam or whistle-blower lawsuits brought by disgruntled employees or others that identify problems that may not be adequately addressed within the organization. Effective compliance can mitigate poor publicity and promote the reputation of the medical practice as a good corporate citizen. Clearly, compliance programs and compliance-related activities can discourage wrongdoing by employees; can detect, correct, and contain wrongdoing that does occur; and fundamentally, are viewed as “the right thing to do.”

Developing the Program

Compliance programs, although commonly developed and implemented in medical practices and other health care organizations, are nevertheless still voluntary. There is no government mandate requiring a formal compliance program in organizations in general, although formal compliance activities may be mandated in conjunction with legal settlements and corporate integrity agreements. A medical practice that elects to develop a formal compliance program generally follows these important steps:

1. *Provide education.* Education of practice members typically focuses on the importance of compliance, the nature of a compliance program, and the benefits and costs associated with formal compliance activities.
2. *Assess needs.* The needs assessment typically involves a review of policies, systems, and controls that are already in place and designed to promote compliance, including those developed by the practice itself and those acquired from or performed by third parties (for example, companies that provide billing and related services on the group’s behalf). In addition to understanding what policies and practices already exist, the practice assesses the effectiveness of these existing systems, identifying gaps, weaknesses, and other deficiencies that may need to be addressed in the compliance program.
3. *Make a formal decision to develop a compliance program.* Most medical groups elect to adopt a formal compliance program. But even practices that do not adopt a formal program may nevertheless elect to adopt a compliance focus that fosters increased attention to compliance activities.
4. *Make a commitment to implement the compliance program.* The medical practice leadership (such as the board of directors or executive committee) makes a formal decision to devote practice time and resources to program development and implementation. Approval and direction for the compliance initiative is required from

those at the highest level of the organization. That approval is typically expressed in a formal corporate resolution that sets the tone and directs the development of the program.

5. *Identify the compliance planning and development team.* Typically, a subset of the group practice will focus on the compliance initiative. An effective compliance committee is likely to involve representatives of the physician leadership, practice administration, line staff, and any other personnel. This committee will head up the development process and typically become the formal compliance committee that may exist as an integral part of a formal compliance program.
6. *Identify target areas.* The practice will identify the substantive issue areas for the compliance effort. The initial target areas will commonly be informed by the data collected through the needs assessment process. Close attention is usually paid to appropriate billing and coding activities, including the documentation for evaluation and management services. To these base-level compliance activities will be added substitutive issue areas related to Medicare reimbursement, the Stark and anti-kickback laws, HIPAA, and related issues.
7. *Conduct document review, modification, and creation.* An essential component of an effective compliance program is the review, modification, and development of compliance-related policies. These typically include an overarching code of conduct or mission statement that expresses the group's formal commitment to corporate compliance and to legally and ethically appropriate conduct. From these big-picture policies will be derived the more specific policies and procedures related to specific practices (for example, billing, coding, credit balances, and write-offs).
8. *Write the plan.* The formal compliance plan will typically set out in formal terms both the high-level policies and procedures and the more detailed and specific policies and procedures governing the practice and its operations. Thus the program plan and the program itself will address the key compliance-related themes, including
 - The rules and procedures directed at compliance issues and concerns
 - The personnel responsible for direction and oversight of the compliance effort
 - The employment-related practices designed to prevent the hiring and delegation of authority to persons who may have a propensity to engage in illegal activities
 - The training and information dissemination activities that will communicate standards and policies
 - The monitoring, auditing, and reporting systems that will identify and detect improper conduct and provide a means for employees and others to report illegal or improper conduct without fear of retribution

- The disciplinary mechanisms to enforce compliance standards
 - The appropriate responses to offenses that are detected, including refunding of overpayments, modifying the program to better detect and prevent future offenses, and other activities
9. *Implement.* Finally, the practice implements the program, following the specific work plan and objectives previously defined, including providing education and conducting audits.

The OIG's compliance guidance for individual and small-group physician practices identifies the following risk areas (more fully described in Table 9.1):

- Claims for services, equipment, or medical supplies
- Kickbacks
- Improper inducements
- Self-referrals
- Record retention

Practice management should focus significant effort in these areas to help ensure that internal controls are in place to prevent and detect violations of law. In addition to its compliance guidance, the OIG publishes its work plan each fiscal year, listing the issues on which the OIG will be concentrating during the year.



In today's health care regulatory and enforcement environment, the creation, implementation, and maintenance of effective compliance policies, procedures, and practices is essential to the viability of any medical practice organization. Enforcement actions brought by governmental agencies, whistle-blowers, and others demonstrate the importance of paying appropriate attention to legally compliant business activities. Moreover, prosecution of or enforcement action against a medical practice or its providers can have potentially disastrous effects in the court of public opinion, and this outcome further supports the importance and appropriateness of close attention to compliance. Thus even though compliance activities are sometimes viewed as a bitter pill, successful group practices view compliance as the right thing to do.

Discussion Questions

1. What law is used most frequently to prosecute health care providers?
2. Identify and discuss the three criteria used to determine whether a provider "knowingly" submits false claims under the FCA.

TABLE 9.1. RISK AREAS IDENTIFIED BY THE OIG FOR PHYSICIAN PRACTICES.

Risk Area	Examples
Coding and billing	<p>The practice should avoid</p> <ul style="list-style-type: none"> • Billing for services not rendered • Billing for equipment and supplies not used or not reasonable and necessary • Billing for a service more than once, resulting in excess payment, or billing for a service that has been billed by another provider • Billing for noncovered services • Using another physician's Medicare provider numbers • Failure to use appropriate coding modifiers • Clustering (the practice of using one or two codes consistently, in the belief that the charges will average out) • Up-coding (the practice of billing for a higher level of service than provided)
Reasonable and necessary services	<p>A physician may submit claims for services that are not considered reasonable and necessary by Medicare only if he or she needs the denial in order to submit the claim to another payer.</p>
Documentation of services in the medical record	<p>Guidelines to ensure accurate documentation should address</p> <ul style="list-style-type: none"> • Completeness and accuracy • Reason for the encounter • Relevant history • Examination findings • Prior diagnostic test results • Diagnosis • Plan of care • Date and identity of observer • Rationale for ordering diagnostic and ancillary services (must be able to be inferred by third party) • CPT and ICD-9-CM codes • Health risk factors identified • Patient progress, responses to treatment, changes in diagnosis
Proper completion of the HCFA 1500 form	<p>The practice should</p> <ul style="list-style-type: none"> • Link the diagnosis code with the reason for the visit or service • Use appropriate modifiers • Provide complete information about a beneficiary's other insurance coverage
Improper inducements, kickbacks, and self-referrals	<p>The practice should carefully monitor financial arrangements with entities outside the practice, such as joint ventures, consulting contracts, medical directorships, office and equipment leases, and gifts and gratuities (soliciting, offering, or receiving).</p>

Risk Area	Examples
Record retention	<p>The practice should ensure that</p> <ul style="list-style-type: none"> • Policies and procedures include a section on record retention (both business and medical records) • Attention is paid to documentation of investigations of potential violations uncovered through a compliance program • Federal and state statutes are consulted for the length of time that records should be retained

Source: Adapted from Office of Inspector General, Notice, "OIG Compliance Program for Individual and Small Group Physician Practices," *Federal Register*, Oct. 5, 2000, 65(194), 59434–59452.

3. What activity do the FCA's qui tam provisions attempt to encourage?
4. Discuss the purpose of safe harbor regulations, and identify the agency responsible for developing them.
5. What are the three broad violation elements under the Stark law?
6. What is the most commonly used exception under the Stark law?
7. What is the Stark law compensation test?
8. Discuss the differences among a compliance program, compliance agreement, and corporate integrity agreement.
9. Name four benefits of a formal compliance program.

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions

Sample compliance program development and implementation work plan

Notes

1. State of California, *Business and Professions Code*, Div. 2, Chap. 1, Art. 6, "Unearned Rebates, Refunds and Discounts" [www.leginfo.ca.gov/calaw.html], accessed Feb. 2004.
2. Office of Inspector General, Notice, "OIG Compliance Program for Individual and Small Group Physician Practices," *Federal Register*, Oct. 5, 2000, 65(194), 59434–59452.

Suggested Reading

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CHAPTER TEN

RISK MANAGEMENT

Kathryn Johnson

Objectives

This chapter will help the reader to

- Understand the goals of an effective risk management program.
- Become aware of loss prevention strategies used to improve patient care and reduce exposure to malpractice claims.
- Appreciate the appropriate manner in which to explain untoward events to patients and families.
- Understand ways of maintaining good communication with patients and families.

Payouts for medical malpractice claims have increased substantially in recent years for both settlements and jury verdicts. As illustrated in Table 10.1, the situation has reached a crisis stage in many states. Physicians are having a difficult time obtaining affordable liability insurance, and those in some specialties (obstetrics, emergency medicine, general surgery, surgical subspecialties, and radiology) are especially at risk.¹

Strategies to address this problem include maintaining excellent communication with patients and families, practicing proactive risk management, and using aggressive litigation management. Tort reform, at both national and state levels, is also an important strategy for combating the malpractice crisis.

Medical Malpractice Defined

Medical malpractice refers to a finding of negligence or carelessness on the part of a health care provider in his professional capacity. More specifically, the term has been used to describe individual civil actions brought by patients (as plaintiffs) against

TABLE 10.1. MALPRACTICE CLIMATE IN VARIOUS STATES, 2003.

States Currently in Crisis		States Currently OK
Arkansas	New Jersey	California
Connecticut	New York	Colorado
Florida	North Carolina	Indiana
Georgia	Ohio	Louisiana
Illinois	Oregon	New Mexico
Kentucky	Pennsylvania	Wisconsin
Mississippi	Texas	
Missouri	Washington	
Nevada	West Virginia	

The states not listed in this table are all showing problem signs.

Source: American Medical Association, "America's Medical Liability Crisis: A National View," 2003 [www.ama-assn.org/ama1/pub/upload/mm/31/crisismap0303.pdf].

physicians and surgeons (who become defendants) for "professional misconduct or unreasonable lack of skill in the provision of medical care."² *Professional negligence*, that is, substandard examination or care delivery, is identified as a deviation from the "accepted standard of care" as it is defined in a reasonable consensus on what should transpire given a specific set of medical facts.³

The civil legal system seeks to provide a legal remedy, usually in the form of money damages, to return an injured patient to a state of being as *whole* as is feasible. The adjudication of what makes a person whole launches a complex discussion about how to decide the extent of damages that should be awarded.

In a civil action, where a plaintiff charges a defendant in a private capacity, society does not have a direct interest. In contrast, in the matter of a criminal charge, the legal perspective is that the charged crime is an offense against society. A crime victim may bring a private civil action against a defendant perpetrator, but a public official (local, country, state, or federal prosecutor) may bring a public criminal legal action against the same defendant perpetrator. Obviously, a criminal offense has the potential for greater stigma and other adverse consequences than a civil offense has. Thus the relative standards for establishing proof of criminal guilt are significantly higher than those for a civil liability. The standard of proof for criminal guilt is "beyond a reasonable doubt," whereas for a civil defendant's culpability a lesser standard of "preponderance of the evidence" must be identified. Criminal guilt requires the satisfaction of a moral certainty, meaning a judge or jury must eliminate all reasonable potential excuses, justifications, and defenses and conclude that no reasonable person or persons could conclude otherwise.⁴ For a judge or jury to find a defendant culpable in a civil trial, the ruling must find the defendant guilty based on a standard of "more likely than not."

Remedies can differ markedly. In civil legal actions, attempts to make the victim as whole as possible generally manifest as awards of money damages sufficient to return the victim to the status quo ante (state in which she was before the injury). Sometimes an award of punitive damages may be used to make an example of a tort-feasor (a person who has committed a tort), on alleged matters of principle. In contrast, remedies in criminal cases take the form of criminal sentences, the purpose of which is to deter individual offenders and others who may be related to the case from future misconduct and to provide rehabilitation, retribution, and isolation of a dangerous offender. The stigma is much greater with a guilty verdict for a felony.

Malpractice Trends and Their Causes

The overall numbers of malpractice claims have not increased remarkably in recent years; the national average grew only 5 percent from 1996 to 2000, according to the 2000 edition of *Current Award Trends*.⁵ However, in a few states, the number of claims increased by 40 to 97 percent in that same period. And the amounts of the payouts have skyrocketed. The median medical malpractice claims payment between 1996 and 2001 increased by 139 percent, from \$52,250 to \$135,000.⁶ In addition, from 1995 to 1998, the percentage of malpractice claims paid that exceeded \$1 million increased by 600 percent.⁷ These excessively large verdicts incite plaintiff attorneys to increase their settlement demands. The severity of verdicts is rising, but the frequency of verdicts for plaintiffs is not. Plaintiffs still lose more than half of the cases that go to trial.⁸ It is possible that the relative stability of this win-loss ratio is due to juries' still having faith in health care providers, although this view has not been substantiated with data. It is also likely that defendants are becoming much more selective in the types of cases they are willing to send to a jury.

This exponential upswing in trends can be traced largely to three primary causes:

1. Use of new and more effective treatments
2. Advent of managed care
3. Reports in the media

Newer forms of treatment are used more often, and they extend life expectancy demographics. This has increased juries' expectations of the curative power of medicine. As a result, when a patient has any type of adverse outcome, the likelihood has increased that the public will presume the physician or hospital has done something wrong. In addition, the severity of the injury may affect how expert witnesses speak in a case, and juries may then assess the defendant's liability more stringently.⁹

The advent of managed care and a higher degree of medical specialization has elicited a general public attitude that health care is at its best impersonal and at its worst accompanied by arrogance, avarice, and self-interest. The media instigate and perpetuate such stereotypes. The traditional image of the physician-patient relationship has become badly tarnished. The theory that the nature of the care a patient receives can be tied to the financial incentive available to the health care provider can make cases potentially explosive.

It is customary for stunningly large jury verdicts to be reported daily in the media. The public, accustomed to seven-digit salaries of athletes and corporate moguls, have become somewhat inured to such numbers. Other negative information about the health care industry may also be attributable to the media; well-publicized stories of health care gone wrong make the national news every week. The 1999 report of the Institute of Medicine (IOM) on medical errors, projecting that more people die each year from health care errors than die from AIDS, breast cancer, or automobile accidents, remained in the news for weeks and is referred to repeatedly.¹⁰ Those figures were estimated to range between 44,000 and 98,000 per year. A response in the *Journal of the American Medical Association (JAMA)* questioned the IOM findings and disputed the numbers because there was no consensus among the doctors consulted on what constitutes a “deadly error.”¹¹ However, most people who serve on juries do not read *JAMA*. The media are quick to report “a good story,” and when they do, the reputation of the health care industry suffers.

Malpractice Costs and Patient Safety

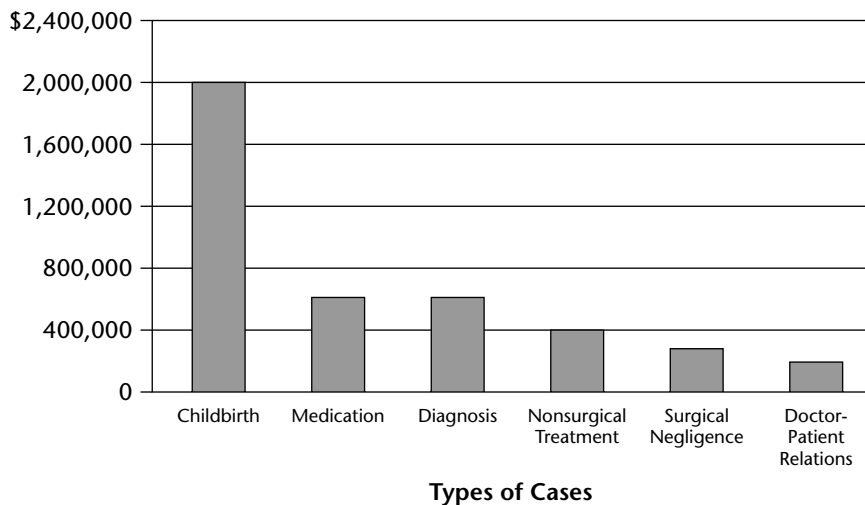
Skyrocketing monetary awards resulting from jury verdicts and settlements are driving upward the cost of health care malpractice insurance. This phenomenon has led a great number of hospitals to close or to restrict services because they cannot afford this cost. Many physicians, faced with increasingly hefty insurance premiums or, in some states, an inability to obtain coverage, have been driven out of practice or have had to limit their practices. Although no studies have yet examined these effects, the anecdotal evidence is strong that access to care is affected by the overall malpractice crisis.¹² Plaintiffs’ attorneys claim that rising costs can be traced to insurance companies’ investing unwisely or charging premiums that were too low for too long. In other words, their argument advances the premise that the insurance companies created this crisis.¹³

The crisis may influence the specialties that physicians choose to pursue and even whether people decide to become physicians at all. Anecdotal observations

suggest the crisis may be hitting rural areas particularly hard, areas where risks may be greatest and payments for services lowest. Obstetrics is the specialty that is the most seriously affected. Jury Verdict Research has reported that in 2002 medical negligence in childbirth cases resulted in the highest median award (\$2 million) of all types of medical malpractice cases analyzed.¹⁴ Other types of awards are shown in Figure 10.1.

The high cost of medical malpractice has repercussions for the safety of patients. Money that might be spent for improving health care facilities, systems, and competencies is often spent for medical malpractice insurance. Many physicians, such as obstetricians and neurosurgeons, now turn away high-risk patients or practice defensive medicine; they order more tests in order that nothing be overlooked in diagnosis and treatment. Practitioners may also be viewing their patients as potential adversaries. All of this figures into the larger equation of overall care and provider-patient relationships.

FIGURE 10.1. MEDIAN AWARDS FOR MEDICAL NEGLIGENCE, 2002.



Source: Data from Jury Verdict Research, *Current Award Trends* (Horsham, Pa.: Jury Verdict Research, 2004).

Risk Management Defined

Responsible medical entities must practice effective risk management to combat a surge of financial loss by health care institutions and to protect the care and safety of patients. Risk management evaluates the possibility of injury, the probability of loss, and the potential for dangerous and serious outcomes. For the University of North Carolina Hospitals, for example, *risk management* is defined as “identifying, evaluating, and minimizing exposure to the risk of liability that is inherent in the provision of health care services.”¹⁵

Risk management involves providing superb medical care, thorough documentation, prompt referrals, and honest and respectful patient rapport. Practicing effective risk management has two overall goals. The first is to ensure that practitioners are competent and patients are safe. The second is to minimize the damage to physicians and practices from marginal or unwarranted lawsuits. This can best be done by identifying opportunities to prevent adverse events before an injury or loss occurs. This entails prompt reporting and investigation of adverse events and proactive investigation before a lawsuit is ever filed. Physicians and other health care providers must serve in this proactive role to identify early warning situations in which liability is potentially or definitely threatened. For physicians, risk management means striving for excellence in their practice, maintaining good communication with patients and other health care professionals, and ensuring accurate documentation of care rendered.

Climate for Tort Reform

The *tort reform* movement is an effort to change the way that tort claims are paid. Activists and lobbyists for tort reform embrace a number of issues. The one that heads the list is legislated capitation on verdict and settlement payouts. In North Carolina, for example, no cap exists on how much a patient can be compensated for damages from an adjudication of malpractice. There is no conclusive evidence to suggest that damage caps (for either economic or noneconomic damages, or for both) reduce payouts.¹⁶ Studies dating back almost two decades denote mixed findings.¹⁷ However, initiating tort reform for noneconomic damages could eradicate the unpredictable judgments that juries may award. One factor working against these reforms is that some caps on payouts can result in undercompensating patients who have been gravely injured.

Nationally, at the time of this writing, the leading liability reform bill is HR 4600, the Help Efficient, Accessible, Low Cost, Timely Healthcare (HEALTH) Act of 2002.

This legislation would reduce medical malpractice insurance premiums. It proposes combining capitation of noneconomic damages, that is, pain and suffering, with reforms to eliminate joint and several liability and to shorten statutes of limitations. Under the doctrine of joint and several liability, irrespective of each defendant's portion of fault in a case, each named defendant may be found jointly liable for the entire amount of the plaintiff's damages. Shortening statutes of limitations would restrict the amount of time following the discovery (as opposed to the occurrence) of the injury during which claims could be made. This proposal aims to inhibit the severity of claims and expand the predictability of payouts. At the state level, existing proposals also attempt to curb the current crisis via capitating payouts for noneconomic damages, with \$250,000 mentioned as the most frequently proposed figure. Note, by the way, that capitation might be based on either the amount for which an individual can be sued or the amount of money the plaintiff can recover.

Tort reform also includes statutes designed to pronounce limits on plaintiffs' attorney fees. Two ways proposed to implement these limitations are (1) placing a flat percentage maximum on fees or (2) imposing a sliding scale for fee payment. There is a groundswell of support for bills of this nature from the medical community and the malpractice insurance industry, but the battle with plaintiffs' attorneys, who have a strong lobby against this legislation, will pose an ongoing challenge. The system presently offers financial incentives for plaintiff counsel, because counsel typically agree to accept contingency payment of a portion of the malpractice damages recovered. The limitations described here would mean that plaintiff counsel would accept far fewer lawsuits, thus reducing the number of malpractice suits. However, the opposing argument proclaims that restricting fees would eliminate the potential for many legitimately injured individuals to receive legal assistance. In addition, such reforms may make the system less efficient because lawyers may lose the incentive they have when working on a contingency basis to move cases quickly to completion. Reform legislation may reduce the quality of counsel, increase tort lawsuits in other areas, and cause a concentration of high-damage claims.¹⁸ Data show that lawyers already reject a good number of the cases they screen; even in 1973, a government report projected that this happened in approximately seven of every eight cases.¹⁹

In some states, state-administered hospitals and other facilities are not subject to claims awards over a capped amount. In North Carolina, for instance, that cap is \$500,000. Currently, however, there is no cap for individuals who work for the state; thus a physician, nurse, or pharmacist employed by the state may be sued for an unlimited amount.

Individual states differ in their proposals for reform. Recent years have seen significant activity in a number of states, including Nevada, Mississippi, Pennsylvania,

and Florida. The California Medical Injury Compensation Reform Act (MICRA) of 1974 serves as a gold standard for many proponents of national tort reform in their efforts to lobby Congress. California's reforms put caps specifically on noneconomic damages. Dramatic reductions in the costs of health care malpractice insurance and the amounts of jury verdicts have been demonstrated in that state since MICRA's inception. It has been estimated that if tort reform similar to the MICRA statute were enacted nationally, the savings in premiums could approach \$10 billion annually, and the indirect savings to health care in reducing the need for defensive medicine would be approximately \$50 billion annually.²⁰

One important shortcoming of tort reform is its lack of a stimulus to prevent medical errors and injuries. Other strategic reforms, including alternatives to adversarial litigation, are the subject of intense scrutiny and radical experimentation. However, it is clear that at the moment, malpractice payments will continue raising the bar for the current all-time-high payouts. Tort reform will remain an important component in efforts to stem the malpractice crisis nationwide.

Risk Identification in Ambulatory Care Organizations

Ambulatory care organizations (ACOs) provide outpatient procedures and evaluations in facilities such as physicians' offices, multispecialty clinics, free-standing surgical centers, urgent care or walk-in medical clinics, and community health or public health sites. Generally, it is up to the patient to seek treatment in an ACO, and care in ACOs is more likely to be fragmented or protracted than is care in hospitals and other settings where the patient can be attended to more closely and for a longer period of time. In ACO situations a provider may be less likely to identify a patient's changing or deteriorating condition. This presents a special risk where more physician-controlled circumstances might not.

Another reason that delivery of care in these settings might be less than efficient is that appointments may be delayed because of the difficulty of scheduling when patient volume is high. The lack of continuity of care may lead to inadequate examination or incomplete patient assessments.²¹ The failure to follow up properly on test results and lab reports is especially critical in ambulatory care settings. It is the provider's responsibility to inform the patient of the results. Therefore risks associated with ambulatory care include the heightened potential for delays or omissions in diagnosis and treatment, miscommunication with patients that may lead to adverse outcomes, and complications of treatment.²²

Studies of ambulatory care have been relatively lacking. In 2002, the Agency for Healthcare Research and Quality conducted a conference of health services researchers and health policy and medical group management professionals to focus

on patient safety in outpatient care. Their conclusions about risk are summarized in the following list:

Areas of High Risk for Medical Errors in ACOs

- Diagnosis
- Screening
- Follow-up
- Patient identification
- Patient oversedation
- Complex technology
- Inadequate training of personnel

Errors in infrastructure—especially in coordinating communication among a number of clinicians, the patient, and the patient’s family—are a pitfall that may cause care delivery lapses and mistakes. Data show that more than 77 percent of all medical procedures, including many surgeries, are performed in ambulatory settings.²³ Yet most ACOs are subject to less regulation than hospitals. They have less peer interaction and less well developed policies and procedures to establish the training and experience required to perform some of those procedures.

Overall, strong risk management programs in these circumstances have unique issues and require such risk strategies as these:

*Recommended Risk Strategies in ACO Settings*²⁴

- Structured organization
- Risk identification and analysis mechanisms
- Loss prevention and loss control
- Risk financing
- Careful claims management

Leading policy experts recommend two key strategies to preserve patient safety: (1) design and follow *systems approaches* to reducing errors, and (2) improve mechanisms to track incidents involving mishaps and injuries.²⁵

Evaluation of Patient Complaints

Patient complaints can alert practicing physicians to ways to improve care. They serve as bellwethers, identifying areas that might present litigation risks. Over time, trending complaint data can reveal areas in the practice where one can improve

patient care and increase patient satisfaction. Keeping aware of patient complaints allows practitioners to monitor those cases that have potential liability and those individuals who may be most likely to bring suit. Four types of patients are most likely to sue:²⁶

1. Patients who have sued before, have a pending lawsuit, or simply talk as if they have a contentious nature.
2. Patients who are unhappy, often for reasons unrelated to their health.
3. Patients who do not understand their diagnosis, treatment, or instructions for self-care. If the patient needs translation (because of a hearing impairment or cultural difference), it falls upon the physician to accommodate this need. It is wise in all cases for the physician and staff to verify that the patient has fully comprehended the conversation. Failure to do so puts the practice at risk.
4. Patients or patients' family members, acquaintances, friends, or colleagues who are busy and do not want to take the time for consultations or detailed instructions. This may be the category of people about which the physician is least suspicious, but that is a dangerous conclusion. Bad tempers can erupt quickly in any relationship when there is an unfortunate outcome.

Patients are not oblivious to the subtleties of how they are treated, whether or not they themselves play a part in the chemistry of the relationship. If a particular patient or type of patient seems difficult for a physician to get along with, the best thing may be to arrange for a colleague to care for that patient.

Typically, patients who sue have complained about their care. Litigation does not ordinarily arise without warning signals. Fifteen percent of patients will create 90 percent of the litigation.²⁷ Therefore foresightful practitioners will allot time to track the satisfaction and needs of their patients and will educate their staff in the same regard. Training practice staff to be sensitive, regardless of the way patients relate to them, is another important proactive step in risk management.

Patient Satisfaction Surveys

Patient satisfaction surveys are a good way to get retrospective feedback from patients after they have emerged from the angst of a particular medical encounter. A 1999 report showed that only one third of patients surveyed gave excellent or very good ratings to their doctor's knowledge of their whole-person situation.²⁸

Distributing surveys is proactive work against later litigation. People are reluctant to complain or share their feelings about how they are treated (humanistic treatment as opposed to medical treatment) when they are in the midst of an illness and relying on their physician to care for them. After patients have recovered from an illness

episode, however, most are able and willing to give concrete, objective, and subjective feedback that can aid in establishing risk prevention practice systems.

Surveys can be done through corporations that specialize in large-scale evaluations or through smaller and more intimate means. A patient might, for example, report on a survey or in a follow-up conversation, “I had that Pap smear done, and a month went by, and no one called me. I had to call you back to get the results.” This kind of information must be taken seriously and addressed quickly so that mechanisms of communication can be modified.

Incident Reports

An *incident* is “any perceived or actual negative event related to patient care, or any other medical or administrative occurrence that deviates from the normal course of patient interaction or treatment.”²⁹ Early notification of incidents puts legal representatives and carriers on alert so that they may investigate and if necessary intervene immediately. Every medical practice’s insurance carrier will have its own form for reporting incidents involving patients, visitors, or employees. If medical equipment is involved, the device should be identified and isolated but not adjusted, disassembled, cleaned, or altered in any way because it may later be subpoenaed as evidence in a trial.

Attorney Contacts

Any correspondence received from an attorney that requests copies of a patient’s medical records should be a red flag for practice managers. Sometimes a patient is simply making a disability claim or has been in a car accident, reasons for requesting copies unrelated to the patient’s care and treatment. However, practicing physicians should not rule out the possibility that an attorney is requesting information to evaluate the care provided and possibly lodge a legal complaint on behalf of the client. Although varying advice is given in these situations, it is best not to call the patient to inquire about the reason for the request for records. Instead, the insurance representative may contact the plaintiff’s attorney to ask why the patient is requesting records. The explanation may be a simple one, and the patient deserves the opportunity to clarify the circumstances.

Noncompliant Patients

Besides presenting a dilemma about how best to help the noncomplying patient, non-compliance can signal potential problems that may lead to complaints or litigation. Patients have been known to become noncompliant (*nonadherent* is often a more

politically correct and respectful term) for a number of reasons, but one potentially litigious reason arises when patients neglect their self-care as a purposeful or subconscious reaction of dissatisfaction or anger with the health care provider who prescribed the regimen or activity. A practitioner may need to consider officially discharging that patient from the practice. However, this is an act that requires caution. Terminating a relationship with a patient, without warning, can generate repercussions of risk. Before discontinuing care it is best to allow patients at least thirty days to identify another care provider. Recommendations on referrals to other providers should be documented.

Loss Prevention Strategies

A strategy for loss prevention is an important part of overall risk management. Loss prevention includes monitoring, documentation practices, provider-patient communication, billing adjustments, disclosure of errors, and confidentiality.

Monitoring

Particular areas of high risk that need to be monitored carefully and that require an established system are the following:

- Reporting abnormal lab results
- Addressing the issue of patients who fail to keep appointments
- Maintaining and documenting excellent telephone communications
- Monitoring patients on high-risk medications

Abnormal Lab Results. It is imperative that every physician practice have in place an efficient follow-up mechanism for abnormal laboratory test results. It is important to create a system for (1) documenting lab results immediately as they arrive in the practice, (2) flagging abnormal results, (3) notifying the physician, and (4) communicating expeditiously with the patient to report results and advise what actions are necessary.

Failure to Keep Appointments. When a patient does not show up for an appointment, the patient's chart should be reviewed to determine whether the individual (or family) needs to receive a call or a letter. (The Web resources for this book contain a sample letter.) Typically, a new patient will not expect the physician or practice to be excessively concerned about notifying him to return, but established patients may expect the practice's participation in monitoring appointments.

For example, when a patient has been notified that she had an abnormal Pap smear that was suspicious for cancer and she then fails to arrive for an appointment, this constitutes an incident that requires attention. Although the burden of responsibility can be seen to lie mostly on the shoulders of this patient, the physician's legal responsibility lies in confirming that the patient receives the information she needs.

Telephone Communication. Telephone conversations with patients can be difficult for physicians to manage effectively. Instructions, advice, and requests to be seen for evaluation all need to be documented in the patient's chart. Legally, telephone communications are seen as just as integral to care as scheduled visits. The physician practices that have the best safety nets to reduce malpractice risks are the ones in which each physician is assigned an advice nurse through whom communications are first channeled. It is a challenge to document all calls and advice, including prescription information, but this is fundamental documentation that will be investigated if a patient's treatment comes under scrutiny or if a complaint is filed. One method that works for many practices is to keep one log, either computerized or manual, where all call notes are listed.

Medical Regimens for High-Risk Patients. When patients are using a medication that requires careful adherence or compliance in monitoring their blood levels and these patients are put in charge of regularly reporting their status to the practice, vigilant monitoring is essential. Providers should create a mechanism in the practice for following these patients, because adverse events can result when patients are left responsible for remaining compliant over long periods of time without follow-up.

Medication errors can occur when patients are given the incorrect prescriptions or medicine, take an incorrect dose, take the medication at incorrect times, or inappropriately combine prescription drugs with nonprescription drugs, food, or beverages. The elderly are especially susceptible to risk. From 1999 to 2000, more than 1.9 million medication errors occurred among Medicare patients, and more than a fourth of these errors were preventable.³⁰ The Agency for Healthcare Research and Quality (AHRQ), which funded a study in this regard, has a guide available for patients, titled "Your Medicine: Play It Safe."³¹

Documentation

The negligent or intentional failure to effectively document patient histories, examination data, and intervention findings constitutes what is called "medical malpractice by omission." If this failure results in patient injury, it is legally actionable. All physicians

intending to practice in independent practices must remain aware that documentation of clinical patient health care is as important as the care that is rendered.³²

Several key aspects of a patient's care and treatment must be documented for clinical decision making. They include the informed consent material that has been provided to the patient stating the patient's options for treatment and the benefits and advantages versus the drawbacks and risks of those options. When a patient chooses a particular option, it is also important to document the reasons he or his family caregiver give for his choosing that option. For credibility, medical records need to be complete, accurate, and unaltered. In cases of litigation, altered records can provoke allegations of fraud and cover-up and may place the credibility of the entire document or defense witnesses at risk.

If the patient has any problems, the physician must document that there has been some appropriate and adequate follow-up conducted or action taken. Nothing better serves a physician who becomes a defendant in a legal action than excellent documentation. It is the primary component of first-rate prevention for litigation risks. The better the documentation, the better the ability to defend the care decisions. Consider that the statute of limitations for litigious actions is anywhere from one to three years, depending on the state, for an adult, and up until the first day of the nineteenth year of the patient's life for children. Yet physicians with thousands of patients can have trouble remembering what they did the week before, not to mention years earlier.

Documentation that reflects the quality and history of a patient's care can also be used to prepare another practitioner to handle the case should the original physician be unavailable. Dictated notes allow accurate, legible documentation of care. But these more detailed notes may not be immediately available to other caregivers. If a visiting consultant sees a patient, that person should write a brief note to say that the patient was seen, what actions were taken, and at what times. If the patient was told he would be called or contacted in another way or was asked to call on a specific day, this should also be noted. All notes should be placed in the record at the time of the interview, with a comment that the dictated note will follow. Documentation is necessary to answer questions about whether the patient is worse or better, what has changed, what was done the last time the patient was seen, whether the patient's treatment has been successful and to what degree, and what might need to be done differently next time. Detailed documentation is also a source for peer review and related quality management activities and can be crucial in cases where patients move away or change practices for other reasons.

Financial incentives for keeping thorough documentation also exist. It is necessary for billing purposes to substantiate services rendered and products used for which a practitioner is calling for reimbursement. Insurance companies often deny coverage for claims when documentation is insufficient.

The difference between winning and losing a malpractice case often can be traced to faulty or absent documentation. Many times practitioners have to settle with large payments on malpractice claims cases, because the documentation did not support the claim that appropriate care was provided. “If it’s not documented, it’s not done.”

Medical records that cast the physician in a poor light are often the result of lapses in four key areas:

*Causes of Poor Documentation*³³

- Time allotted to creating the record
- Attending to details
- Clear and organized recording of one’s thoughts
- Timeliness in completing the record

Assume that every mark made on a medical record (even the doodles in the margins!) could be used as evidence in court and considered by a jury in its deliberations regarding whether the defendant acted professionally.

Provider-Patient Communication

Legal data show that most patients who have bad outcomes do not file suit.³⁴ Patients litigate for a variety of reasons, but chief among them is that they perceive they have suffered owing to administrative errors, rude practitioners or support staff, or denial of tests and referrals they requested and thought were reasonable.³⁵ No particular communication skills can be directly linked with reducing malpractice claims, but when patients perceive that their providers are treating them fairly and humanely, they are less likely to sue.³⁶ It is for this reason that the physician-patient relationship is the prime area that can and should be proactively monitored as the most effective preventive for malpractice claims.

In primary care practices the most frequent allegations of wrongdoing are, in order of frequency, errors in diagnosis, medical misadventure, improper performance of procedures, failure to supervise or monitor care, medication errors, procedures performed when not indicated or when contraindicated, and failure or delay in referral or consultation.³⁷

Best Means to Protect Communication with Patients and Families. When the practitioner accepts patients into the practice, it marks the establishment of a physician-patient relationship that implies professional legal duties:³⁸

- The duty to disclose the risks of treatment
- The duty of keeping patient information confidential
- The duty of providing “reasonable care” under the supervision of resident physicians

All these duties imply the proper, appropriate, and propitious use of communication. Special attention should be given to the following areas.

Explaining Untoward Events. When an adverse event occurs, the natural tendency may be to want to avoid the patient and her family because the experience is unpleasant. Predictably, patients are unhappy, disappointed, fearful, and angry. Anger is the main emotional motivator that leads many patients to file malpractice claims. Patients are far more likely to consult an attorney when they have not been prepared sufficiently as a part of the informed consent process or separately or when they believe that their physician has not attended to them in the role of healer, the original meaning of *physician*, as opposed to the role of a technical consultant. Physicians need to do the best job they can of explaining and comforting and also allowing themselves to express their own sadness or disappointment when there is a bad outcome. Practitioners who do this are the least likely to get sued.³⁹ Even in cases where something unexpected but not necessarily adverse happens (so there is no negligence involved), patients need good communication.

The American Academy on Physician and Patient (AAPP), a specialty society dedicated to research, education, and professional standards in physician-patient communication, is an excellent resource for courses on key areas pertaining to provider-patient relations.⁴⁰

Listening. Patients need to be heard by their practitioners. Patients look to be both “treated” in the medical sense and “cared for” as human beings. Physicians need to realize that reaching a diagnosis, advising a regimen, asking the patient for his questions, and then allotting only thirty seconds for the patient to respond is demeaning to patients and their families. If patients have an overabundance of questions, the physician should devise a system for responding to them using other mechanisms of communication, such as letter, fax, or e-mail.

All patients and family caregivers need the time to process information, ask questions, and get answers to their concerns. This cannot always be accomplished on a practitioner’s timeline. This may be particularly the case with elderly patients and those with impairments or circumstances such as deafness or diversity of culture and language that make communication more difficult.

Providing Comprehensive Informed Consent. Obtaining informed consent from patients is a critical area in which to use the powerful tool of communication. Patients need to understand what will be done and what is being asked of them, in the most thorough way possible.

Speaking with Patients at a Level They Can Understand. Some have estimated that medical students must learn 10,000 new technical terms before they complete their professional education. Yet in most practices the average reading level for patients is between the sixth and the eighth grade. The disparity in vocabulary level is great and is potentially dangerous.

Physicians need to estimate how well each patient can understand their explanations. Nurses and technicians often find that when they enter an exam room after the physician has obtained informed consent, patients remain far from being “informed.” Often they are feeling troubled, frightened, and confused. Giving “consent” in such an official manner can itself provoke anxiety in patients and families. Furthermore the apparent authority, confidence, and rushed schedules of physicians and other health care professionals may intimidate many patients. Consequently, patients will agree quickly to sign papers, with much less than a full understanding of what they are authorizing.

Although some practices have a patient population that is fairly homogeneous in its cultural, educational, and literacy dynamics, some patient populations are very diverse. The physician must quickly assess the level of detail and language each patient can comprehend. However, she should be careful not to jump to simplistic conclusions and stereotypes. She may anticipate this potential problem by explicitly inviting patients to stop her when they do not understand a term or phrase.

Allowing Patients to Partner with the Practitioner and to Contribute to the Practice. Practitioners often approach a medical encounter with an expectation that the patient should respect and trust them because they are physicians. Patients, too, want to feel they are respected and that their input and ideas will be given weight. The practitioner will get a reputation by one means or another. Practitioners who seek a positive reputation are those who prioritize communication and relationship as among their most important tools.

Billing Adjustments

Adjusting a patient’s bill is a courteous gesture and can also serve as a means to avoid liability. If a patient experiences a major inconvenience because of something pertaining to the practice or professional management, offering to reduce or eliminate charges is a way to apologize and to make sure the patient experiences positive feelings and goodwill. If a mistake occurs that is clearly the fault of the clinic and the patient must return for a second appointment, the physician might offer not to charge him for part of the services. If the physician orders an incorrect drug for a patient and as a result the patient must go to a hospital emergency department or return for more blood work, insofar as is possible the patient

should be reimbursed or not charged for subsequent tests or the provider's time. Another option is to offer the patient some free visits. Patients appreciate these kinds of considerate offers, and such conduct is ethical, generous, and good public relations.

Disclosure of Errors

Being honest with patients and their families when a mistake is made is the ethical thing to do. Disclosure of errors is also an important loss prevention strategy. Although this behavior is hard to quantify, it probably reduces the number of lawsuits and may reduce settlement values when suits do occur.⁴¹ There is a school of thought that says full disclosure may be too upsetting to the family. Above all, however, the patient has the right to know. Therefore a decision to withhold information from a patient can have legal ramifications. When an error is discovered, the best response is to be honest with patients. If this means that a physician might be more likely to get sued because it might sound as if he is admitting negligence, then the practice will handle the repercussions generously and professionally. In the long run this strategy defuses more situations than it inflames, and it pays off financially, emotionally, and in practice morale.

As long as there are human beings working in health care, errors will occur. One hopes that a practice will strive to limit those occurrences to a minimum. The maxim may be, "first, do no harm." However, when harm is done, it should be dealt with in a way that includes honesty and compassion.

Risk management departments in health care systems often educate staff on ways to handle such events. Role playing is an excellent way to prepare practitioners to anticipate these circumstances and to handle them appropriately when they arise. It is usually advisable for the person who makes the error to apologize, but if this is not the best choice, then a supervising attending physician or head nurse should do so.

Confidentiality

Physicians owe their patients confidentiality. The people who work at front desks as receptionists may be most prone to breaches in confidentiality. Patient information should not be discussed in elevators, coffee lines, or public eating places. Avoid leaving medical records on counters, in lounges, in automobiles, in exam rooms, or in on-call rooms. Breaching a patient's confidentiality is the basis for a claim of malpractice. A physician can be sued based on the extent of damages to the patient.

Claims Management

To take the first step in managing adversarial claims, actively monitor all areas and systems of the practice. Certain preventive practices can reduce claims for malpractice risk.

Communication

1. Maintain a steady flow of communication with the patient and the patient's family. Calling just to follow up, with no particular agenda, can inspire a patient's trust in a provider.
2. Identify potentially high-risk patients, but also be careful to not stereotype patients.
3. Be aware of cultural diversity and how that plays into first interpretations of incidents. If the practice is situated in a region where a language other than English is also a primary language, arrangements to quickly access translation should be made. Forty-five million people in the United States speak a language other than English, and approximately nineteen million are limited in English proficiency. Errors in interpretation are shockingly common, averaging thirty-one errors per clinical encounter.⁴²
4. Use caution in terminating relationships with patients.
5. Use a sense of humor in a way that lets patients feel it is part of their whole-person care. Laughing and using a sense of humor, along with process-orienting language and facilitative comments, were noted more often in the communication skill sets of physicians who have not had malpractice claims made against them than they were in the skill sets of those who had.⁴³
6. Use the telephone effectively. Call patients personally when possible.
7. Keep expectations about treatments realistic. The public is aware of stories of health care miracles, and patients and families can become resentful when doctors close down hope and do not allow for an unpredicted course of disease or treatment.
8. Obtain informed consent from patients. Patients can accept or refuse treatment, but they can also ask for help in understanding all aspects of their procedures and its risks.

Systems

1. Develop fail-safe systems in every area of the practice, including a system for dealing with patients and their families when things go wrong. Educate staff about procedures for mishaps and injuries. If an error occurs, address the patient's care first, including communication with the patient and the family. Next, contact the appropriate insurance carrier.

2. Use formal tracking systems for patient satisfaction, but also allow patients to informally contribute their feelings.
3. Do not treat cases that fall outside of your specialty. When patients have problems outside your expertise, refer them to others who are more knowledgeable.
4. Avoid disagreements among health care team members. They subject the provider to risk when documentation reflects animosity among the team instead of a common concern for the patient.

Respect and Punctuality

1. Schedule patients so that they have the shortest waiting time possible. If they must wait for unreasonable amounts of time, explain to the patients the reason they are experiencing a delay.
2. Be familiar with the costs of diagnosis and treatment. Patients can feel disgruntled when providers do not know what treatments and procedures cost in their own practices.
3. Do not criticize the staff or other providers in front of patients, family members, or visitors. This may undermine the patient's confidence in the care provided.
4. Do not criticize or in any way berate a patient (for noncompliance, being late, and the like). The tone of voice that physicians use has been shown to have more impact than their actual words.⁴⁴

The Quality of Practice Records

1. Use only approved medical record forms; make all writing legible, in blue or black ink.
2. See that physician dictations are transcribed and placed in the medical record in a timely manner, preferably within twenty-four hours. (The practice's bylaws or regulations should specify the amount of time that is acceptable.)
3. Be certain that all notes are signed and have a time and date included.
4. List the patient's name and medical record number on every page of record forms and on all other patient records: for example, electrocardiograph strips or fetal monitoring strips.
5. Make certain that attending or head physicians read notes written by other staff members and make the appropriate additions and corrections.
6. Do not remove or alter any part of the medical record. If corrections are necessary, leave all documentation in its original state, modifying in later places with legible dates and signatures.
7. Chart significant findings.
8. Initial all lab results before they are inserted into the chart.

9. Chart all interactions with the patient or the patient's family, including all telephone calls.
10. Record the reason for any deviation in standard treatment.
11. Use only standard medical abbreviations.
12. Avoid subjective observations and language, such as "the patient is demanding." This language might be customary in medical settings, but it will not play well in front of a jury, who will consider such interpretations demeaning and judgmental. Do not write any derogatory comments about the patient or the patient's family.
13. Do not squeeze words into a tight space or omit necessary words.
14. Document provider absences if they are extended.
15. Do not record disagreements among practitioners in documentation.

Litigation Management

The potential for a lawsuit begins when a patient-plaintiff files a complaint with an attorney. The process that ensues for the practice is technically referred to as *litigation management*. The steps in this process can be summarized as follows:

1. Notify the insurance company.
2. Solicit expert reviews.
3. Collect depositions.
4. Decide whether to settle or defend.
5. Prepare for trial.

Once litigation has begun, keep documents regarding the lawsuit separate from the patient's clinical record. It is essential to refrain from discussing the case after the lawsuit is filed, because anything the defendant writes, says, or records in any way is discoverable, that is, it may be used as evidence. Defense attorneys provide extensive advice on the process and particulars of cases when the claims are served, but a few essentials are valuable to know up front.

Early Notification to the Insurance Company

The insurance carrier should be notified as soon as possible and sent a copy of the plaintiff attorney's letter announcing that the patient is contemplating taking legal action. The insurance representative will know the proper procedures for intervening at this point. By no means should the practitioner personally try to persuade the patient to drop the case.

After a claim is filed the first priority is to continue to attend to the patient's care in the same manner as is customary. In some circumstances the physician may elect or be advised to give over the patient's care to a colleague. Communication with the patient and the patient's family should also continue according to practice routine. However, the provider should be careful to not discuss the case in any manner. At this juncture she should also avoid saying anything that could be construed as an apology. Apology does have an important place in provider-patient relations, as mentioned previously; however, in a charged litigious environment an apology, as opposed to expressing sympathy and sadness, could be interpreted as accepting responsibility for the bad outcome or mishap, that is, negligence.

The physician may be treating other members of the patient's family. Although this may be awkward, it is favorable to continue treating those individuals. Again, no aspect of the case should be discussed with the family, and if patient care is compromised by the discomfiting circumstances, the family should be kindly advised that another physician will handle their care.

Expert Reviews

Typically, the plaintiff's attorney will solicit an expert review to obtain a record of an unbiased opinion regarding the care provided. The expert will be a physician with a similar practice in the same local area. He will be asked to review the case to evaluate whether or not the care was appropriate or whether there was a breach in the standard of care.

Depositions

Once a plaintiff has filed a complaint initiating a lawsuit and the physician-defendant has answered that complaint, the physician-defendant will need to prepare for a deposition. The deposition is a question-and-answer interview of a witness, conducted by an attorney. This is the core of the discovery process. A deposition is sworn testimony, transcribed by a court reporter and sometimes recorded on videotape. The goal of the deposition is to collect information from a witness about what the witness knows regarding the facts of the case or to examine information about which the witness might be asked to testify at trial. The deposition establishes the credibility of the defendant. Although most physicians are familiar with public speaking in the format of informal talks or formal lectures, the experience of going through a deposition is radically different. Good preparation for deposition can help lead to an early dismissal or offer a greater potential for a favorable verdict at trial.

The attorney uses the information from the deposition to prepare the case for trial. A witness who is summoned for deposition must be familiar with the medical record and other facts of the case. The defendant must be prepared to explain the course of selected treatment and to discuss the differential diagnoses and inherent thought processes involved. If a witness's trial testimony differs from what the witness said when being deposed, the attorney can use that testimony to contradict or impeach the witness at trial. A deposition may also be read aloud (or viewed, in the case of videotaped depositions) at trial in lieu of having the deponent appear. Attorneys frequently present expert witness testimony in this manner if the witness is unable to be present at the trial.

Settle or Defend?

The decision of whether a case should be settled out of court or defended is complex, determined primarily by the appropriateness of the care that has been provided. If no breach in the standard of care can be substantiated, one might presume that it is prudent to defend the case. However, there are other variables that must be considered, such as whether the physician can accommodate being away from his practice for three or four weeks while the case goes to trial. The physician also may choose to settle when the documentation is clearly insufficient. The economics of the case must be analyzed as a secondary consideration—whether it is possible to settle for what it would cost to defend the case. Other considerations are how the physician conducted himself in the deposition and what the expert reviews were. Do the physician's peers support the care that was provided? Many times the physician has the final say regarding whether the case should be settled or defended, but sometimes the insurance carrier makes this decision.

Trial Preparation

Preparation may involve role playing or mock focus groups to identify key issues that may have an effect, either positively and negatively, on the jury in the case. However, once the case reaches the courtroom it is impossible to predict the actual trial conditions and how they will affect the outcome. Foremost will be the observations and interpretations of the jury about whether this defendant physician is fundamentally committed to his patient. Jurors will want to see whether that physician is committed to the process of justice enough to be sitting in that courtroom every day of the trial. When jurors see that the defendant's chair is empty during the trial process, this leads them to form a negative impression of the defendant.

National Practitioner Data Bank

In response to the increasing frequency of medical malpractice litigation and the need to improve the quality of medical care in the United States, Congress passed, and subsequently amended, Title IV of Public Law 99-660, the Healthcare Quality Improvement Act of 1986. Among other things, this legislation called for the creation of the National Practitioner Data Bank (NPDB), which serves as a central clearinghouse for information about the competence and conduct of health care practitioners. The NPDB's mission is "to improve the quality of health care by encouraging state licensing boards, hospitals and other health care entities, and professional societies to identify and discipline those who engage in unprofessional behavior; and to restrict the ability of incompetent physicians, dentists, and other health care practitioners to move from state to state without disclosure or discovery of previous medical malpractice payment and adverse action history."⁴⁵ Adverse actions are defined as those involving revocation of license to practice, clinical privileges restrictions by hospitals, revocation of membership in professional societies, and exclusion from Medicare and Medicaid programs.

The NPDB functions primarily as "an alert or flagging system" that facilitates a comprehensive review of a professional's credentials. The NPDB cautions users that other relevant data must be evaluated in addition to the data contained in its data bank and that the NPDB is meant to "augment, not replace, traditional forms of credentials review." Information from the data bank is not available to the general public. Only licensed entities are entitled to receive information from the data bank. Any individual practitioner may submit a self-query. When a practitioner is the subject of an adverse action report or medical malpractice payment report, the practitioner may be sent a list of all those who requested this information.

Reports must be submitted to the data bank and the appropriate state licensing board within thirty days of a payment by malpractice payers and within fifteen days of an adverse action by hospitals, other health care entities, and professional organizations.⁴⁶ For a particular physician, dentist, or other health care practitioner to be reported to the data bank, the practitioner must have been named in both the written complaint or claim demanding monetary payment for damages and the settlement release for final adjudication, if any. Practitioners named in the release but not in the written demand, or named only as defendants in the lawsuit, are not reportable to the data bank.

Insurance Coverage

Physicians in independent practice need to arrange adequate insurance coverage for professional liability as well as other key types of insurance. It is important to understand the extent of a practitioner's professional liability. When a malpractice

claim is issued, a plaintiff must prove these four elements by preponderance of the evidence:⁴⁷

1. That the professional (defendant) owed the plaintiff a duty to conform to a specific standard of conduct
2. That the defendant breached this duty to the plaintiff—that is, the defendant was negligent
3. That the plaintiff suffered damages to his or her person or property
4. That the plaintiff's damages were caused by the defendant's breach of duty

It is important that physicians have appropriate levels of liability insurance coverage. Historically, physicians typically have taken out policies that provided \$1 million of coverage per incident and \$3 million of coverage for an annual aggregate. In this era, however, physicians need to be perspicacious about their financial practices. If this is not something a physician wishes to engage in directly, he should assign someone who can be mindful of the cost-benefit ratio and, in consulting with experts and insurance brokers, can assess needs carefully depending on the type of practice and its business.



The two major areas of preventive risk management are patient safety, including excellent communication with patients and families, and foolproof systems for preventing adverse events. Such systems include ensuring provider and staff competence, the development and implementation of proper reporting procedures, prompt referral information, thorough patient follow-up, careful, organized documentation, and methods to improve conditions and systems once errors and problems are identified.

Discussion Questions

1. What guidelines should practitioners adhere to when documenting in the medical record?
2. What are the four elements that the plaintiff must establish to prove medical malpractice?
3. What strategies can be used to reduce claims?

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions
 Sample disclosure of medical errors resulting in patient injury
 Sample confidentiality statement
 Sample patient no-show letter
 Sample discharging patient form
 Sample final disposition letter
 Sample informed consent policy
 Tips for informed consent
 Role of apology in law and medicine

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PART THREE

HUMAN RESOURCE MANAGEMENT



CHAPTER ELEVEN

GOVERNANCE AND LEADERSHIP IN A MEDICAL PRACTICE

Blair A. Keagy

Objectives

This chapter will help the reader to

- Understand practice relationships with outside entities.
- Review the evolution of group practices.
- Evaluate the duties and contributions of the practice manager.
- Recognize the reasons for increased physician involvement in practice management functions.
- Understand the various practice management models.

Practice governance depends on the ownership and management structure of the practice group. Solo and group practice governance was less complicated before the advent of government-sponsored health care programs in the mid-1960s and the subsequent emergence of managed care organizations. In addition to these developments, increasing cost and reduced reimbursement mandated more innovative approaches to practice management. Practices developed relationships with such outside entities as community hospitals in an effort to gain access to capital, obtain management expertise, add information technology, and negotiate more effectively with third-party payers. Some examples of these sometimes complex management structures are

Vertical integration. The physicians become employees of an entity such as a community hospital.

Gain sharing. The physicians receive a share of any hospital savings resulting from the joint development of new systems and protocols for more effective care management.

Equity ventures. The physicians have a direct financial interest in a hospital service or outpatient center.

Hospital-based clinics. The hospital assumes all costs associated with a clinic and charges a facility fee based on the clinic services provided; professional fees to physicians are reduced by approximately 15 percent.

Medical consultation agreements. Agreements with the hospital are negotiated under which the physician helps to build or enhance a program and is paid at a fair market value for his services.

External management. The practice is sold to an outside management corporation.

Management services organization (MSO). Physicians and hospitals develop a practice management organization as a joint equity venture.

Quality incentive programs. Physicians are compensated for improving patient outcome; compensation is established by fair market value rates determined by third-party consultants.

Special bond issues. Bonds to finance a new venture are issued to physicians at interest rates that are tied to the profitability of the venture.

Ancillary services. Practices develop laboratory or radiology facilities, sometimes in competition with the community hospital.

Many of these interactions with entities outside a practice are complex, and a number of federal and state regulations may have an impact on some of the more innovative models. The major regulations affecting joint ventures or complex financial arrangements are outlined in Perspective 11.1. Physicians must have a basic understanding of these laws before changing the governance or financial structure of their practice. These laws are discussed in more detail in Chapters Eight and Nine.

Moreover, many of these arrangements have proved unsatisfactory to all parties, and evidence exists that the traditional group practice model is again gaining dominance in the medical community. This chapter explores the ramifications of some of the relationships that exist between physicians and groups outside the practice and concludes with an analysis of the governance models available to the more traditional physician-owned practices. Hospital relationships are discussed in more detail in Chapter Twenty.

PERSPECTIVE 11.1. GOVERNMENTAL REGULATIONS.

- *The Anti-Kickback Act.* It is illegal to receive financial remuneration or gifts of substance from another practitioner, service line, or hospital in return for referring patients to that entity.
- *The Stark law.* Referral of a patient to an ancillary service in which the physician or an immediate family member of the physician has a financial interest is prohibited.
- *The Civil Monetary Penalties Act.* A hospital may not pay physicians directly or indirectly for reducing or limiting services to Medicare and Medicaid patients.
- *The antitrust laws.* Physicians are restricted from collectively negotiating with third-party carriers.
- *Certificate of need requirements.* In some cases a certificate of need is required before an ancillary service line can be established.
- *Purchased diagnostic test rule.* When a laboratory test is performed outside the practice, the physician cannot receive payment from Medicare for more than the amount the supplier charged the practice.

Practice Management Organizations

As the complexity of governing a medical practice increased, physicians perceived benefits in outsourcing the business aspects of their organizations. They believed they could better concentrate on the patient care activities for which they were trained and leave the practice management activities to “experts.” Physicians also believed that a new influx of capital would provide needed upgrades in information technology systems and that the practice would experience both reduced overhead due to centralized management of employee benefits programs and the advantages of group discounts for the purchase of supplies. Finally, older physicians with equity in the group believed they would receive financial compensation that would benefit them in their retirement. In many cases their payment took the form of stock in the management company.

Unfortunately, these perceived advantages did not materialize. Overhead costs were higher than anticipated, and in many instances physician productivity decreased. Large practice management firms saw the value of their stock plummet, with an adverse impact on physicians whose practices were purchased with that stock. Physicians spent large sums of money to buy back their practices, realizing that the economies of scale they had anticipated did not materialize (see Perspective 11.2).

PERSPECTIVE 11.2. EXPERIENCES WITH PRACTICE MANAGEMENT COMPANIES.

In March 2000, a Florida physician repurchased from PhyCor, a physician practice management (PPM) company, eight urgent care clinics that he had previously owned. After the original sale of these companies, he had become increasingly frustrated with what he perceived as PhyCor's poor management techniques. A large medical group in Texas (120 physicians) bought its assets back from MedPartners for \$31,000 per physician. MedPartners had bought the practice for \$793,000 per doctor several years earlier.^a

These two examples highlight the trend among medical practices to repurchase their assets from PPMs or from hospital systems. PPM companies were initially successful, enjoying high equity prices. However, it soon became apparent that managing a medical practice from a remote site was more difficult than the managers had imagined. In addition, the cost of upgrading technology in many medical practices had been underestimated.

Many practice management corporations have seen their share price decrease dramatically and others are under Chapter 11 bankruptcy protection. This is especially difficult for the many physicians who received payment for their practices in the form of PPM stock. Not only were they faced with personal financial difficulties but they also had to find a means of buying their practices back.

During more successful days, PPMs purchased large group practices or developed large groups through the acquisition of a number of small practices. They assumed responsibility for the business management of the practice for a negotiated fee, generally about 15 percent. Initially, physicians welcomed PPMs into the medical community. It is now apparent that PPMs did not understand the complexities of dealing with generally independent-minded physicians.

^a J. A. Jacob, "Physicians Should Be True to Themselves When Looking for a Medical Group Practice to Join," *amednews.com*, Jan. 8, 2001.

Interactions with HMOs

In the early part of the twentieth century most physicians practiced alone. Most patients paid cash for services, and record keeping was minimal. The first group practices in the United States were created in the early 1900s to meet the needs of such employers as railroads and mining companies.¹ By the 1930s, group practices

numbered approximately 150. After the passage of the Medicare legislation in the 1960s, record keeping and handling of reimbursement claims became more difficult, and physicians recognized the need for more active practice management.

Health maintenance organizations (HMOs) rose to prominence in the 1990s, although group or staff HMOs had existed earlier, such as the one developed by Kaiser Permanente. In general, these entities employed physicians, thus exerting substantial control over physician behavior. This pattern gradually evolved to a more liberal type of HMO in which insurers negotiated with physician networks such as independent practice associations (IPAs).

During the 1990s, various reimbursement groups promoted capitation and the gatekeeper concept. These guidelines imposed limitations and preauthorization requirements for referrals or diagnostic tests, which led to complaints from physicians and consumers over perceived loss of autonomy in the practice of medicine.² Under these more stringent managed care contracts, physicians felt that HMOs were influencing their patient management decisions. One survey noted that 57 percent of practitioners felt pressure from managed care organizations to limit referrals, and 17 percent believed that such pressure compromised patient care. In addition, 75 percent felt compelled to see more patients each day than they personally would have chosen to, and 24 percent believed such pressure compromised patient care. Finally, some physicians felt HMOs influenced what they told patients.³

Consumerism contributed to the decrease in the use of the gatekeeper concept, resulting in a revolution against managed care as an instrument of cost control. The three major factors underlying the success of consumerism in influencing health care in the U.S. culture are

- A deeply rooted political culture
- An extended period of economic prosperity
- The growth of Internet technology (“patients increasingly arrive in their physician’s offices armed with printouts, citations, ideological theories, referral requests, and suggested interventions”⁴)

In response to consumer complaints that HMOs limited patients’ choice of physicians, provider networks instituted point-of-service (POS) plans that included some coverage for nonnetwork providers. Expanding on this idea, insurers recently have begun to offer multitiered plans.⁵ In these programs, patients have three options:

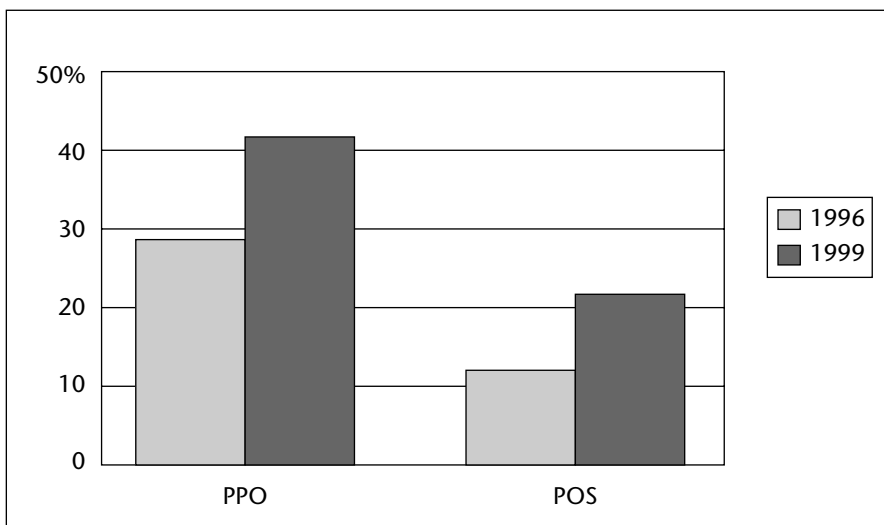
1. Full coverage in an HMO with a limited number of providers
2. Access to a preferred provider organization (PPO), with slightly higher copayments
3. Use of out-of-network providers, with the highest copayments

This allows the patient to make a decision at the time of illness rather than during enrollment. Among patients with employer-sponsored health insurance, the use of patient choice options increased during the latter part of the 1990s (Figure 11.1).

The Traditional Group Practice

Bohlmann notes that the traditional large-group practice has persevered throughout the health care revolution and dominates in many areas of United States. Independent groups have tended to grow through integration of smaller practices.⁶ There will most likely be a resurgence of physician-owned and managed practices in the future as the perceived benefits of complex management structures fail to materialize. Versel has pointed out a “failure to account for human nature that physicians who were

FIGURE 11.1. INCREASE IN PATIENT CHOICE OPTIONS DURING THE LATE 1990S.



Source: Data from R. A. Dudley and H. S. Luft, “Managed Care in Transition,” *New England Journal of Medicine*, 2001, 344(14), 1087–1092.

handed a fat wad of money for their practices and then put on salary wouldn't work as hard as they did when they were self-employed."⁷

Size of the Practice

Opinions vary regarding the optimum size of a medical group. Solo and small-group practices prevailed when less technology was available and fewer regulations governed physicians. In the 1990s, efforts to establish economies of scale and deal with managed care organizations led to an increase in practice size among both primary care and multispecialty groups, and thus an increasing number of physicians were associated with them (Figure 11.2).

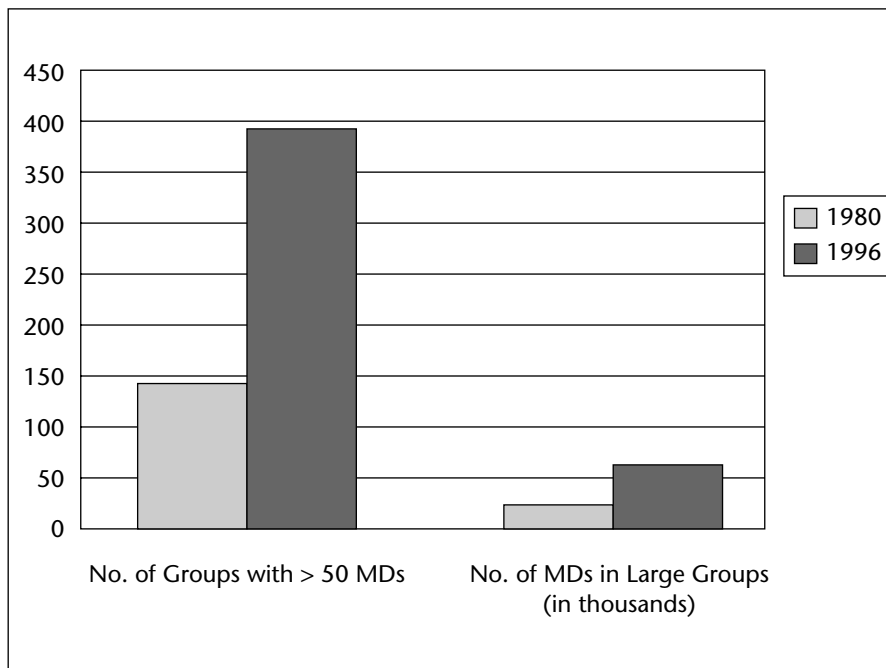
Physicians perceived that a large-group practice would strengthen their negotiating position and result in more cost sharing for expensive information technology, medical equipment, and ancillary services. Recent opinion is varied on the question of whether these cost savings are being realized. In addition, as practice management corporations, hospitals, and others divest themselves of purchased practices, physicians have had to reorganize with regard to governance.

Larger practices offer both advantages and disadvantages, depending on the specialty involved. Palatchi notes that as physicians coalesce into larger groups and recognize the need for structured management, they lose some of their autonomy. Some physicians are trading autonomy for income security and negotiating strength. Many physicians "struggle with the transition from rugged individualists to collaborating group members."⁸ She notes that factors driving the change to a more complex business organization include

- Threats to the continued existence of the group
- Actual or feared loss of income
- Growth or shrinkage of the practice
- Fear of loss of autonomy in the marketplace
- Preparation for changes to the practice
- Changes in working culture values of the practice
- More female physicians in the group

A larger group does not necessarily imply a more effective governance structure. The Medical Group Management Association (MGMA) has emphasized that consolidation of physicians into larger groups might not be economically beneficial. The overhead for twenty-six- to fifty-physician group practices is similar to the

FIGURE 11.2. INCREASE IN PRACTICE SIZE AND IN THE NUMBER OF PHYSICIANS IN LARGE GROUPS.



Source: Data from T. Bodenheimer, "The American Health Care System: Physicians and the Changing Medical Marketplace," *New England Journal of Medicine*, 1999, 340(7), 584–588.

overhead for groups with eleven to twenty-five physicians.⁹ It is noteworthy that 70 percent of physicians practice in groups of three or fewer.¹⁰

Some suggest that physicians are leaving larger groups to return to smaller practice settings. Merritt, Hawkins & Associates, a staffing and recruiting firm based in Irving, Texas, found that the number of physicians recruited into two-person partnerships increased from 9 percent in 1997–98 to 22 percent in 2001–02. During that same period, physicians placed in group settings dropped from 53 percent to 41 percent.¹¹ (These figures might relate more to primary care practices than to large groups of specialists.) Finally, a panel assembled by the Center for Studying Health System Change concluded that physician groups will best survive in a managed care environment if they are modestly sized, governed locally, and physician owned.¹²

The Practice Manager

Practice managers differ widely in qualifications, job descriptions, and reimbursement.

Education

The educational background of practice administrators varies. Many have advanced degrees such as a master of health administration (MHA) or a master of business administration (MBA), but others have been promoted within the practice because of their tenure and recognized practical abilities. A recent survey by Simons revealed that 30 percent of respondents had an educational level higher than a bachelor's degree.¹³ At present no generally accepted or unified curriculum for practice managers exists at either the graduate or undergraduate level.

Duties

The MGMA has articulated eight areas in which medical practice executives should be proficient:¹⁴

1. Financial management
2. Human resource management
3. Planning and marketing
4. Information management
5. Risk management
6. Governance and organizational dynamics
7. Business and clinical operations
8. Professional responsibility

Kidwell surveyed medical practice managers in Ohio and concluded that they held the majority of their decision-making authority in the areas of human resource decisions and information management.¹⁵ Collaborative decision making was seen in planning, marketing, financial management, risk management, and goal setting.

Duties of the practice manager vary depending on the size of the practice. In large groups a dedicated business manager may supervise financial matters, but in smaller practices the practice manager generally takes direct responsibility for the mechanics of billing, coding, payroll, and financial statements.¹⁶ The scope of the practice manager's responsibilities also depends on the attitudes of physicians in the practice. Some clinicians assume a dominant role in practice finances, and others concentrate their efforts on patient care and give the practice manager a greater degree of autonomy.

Zinober suggests areas in which the practice manager should assume a large degree of responsibility:¹⁷

- Accounts payable and receivable
- Billing
- Facilities management
- Trash and hazardous waste disposal
- Pension and profit-sharing plans
- Other benefit packages
- Purchasing
- Hiring, firing, and supervision of nonprofessional staff
- Physician rotation schedules
- Marketing efforts
- Selected aspects of practice planning

Salary

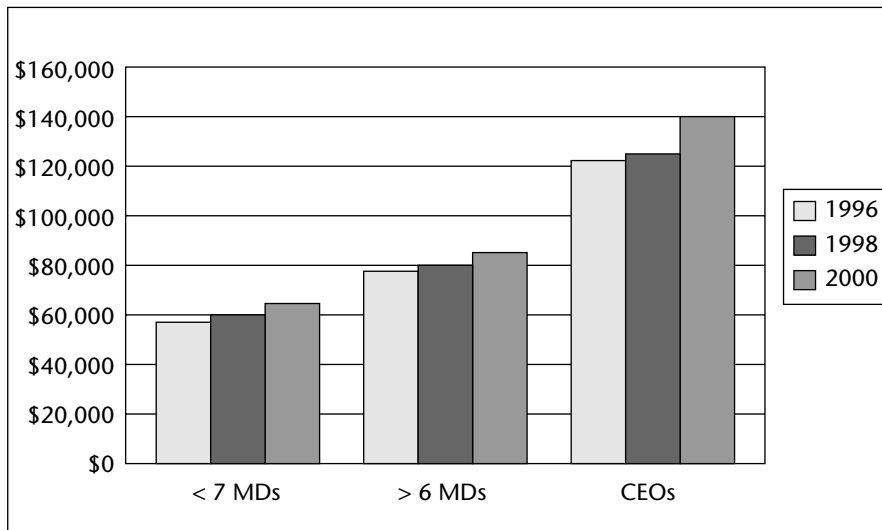
Depending on the size of the practice, administrators with college degrees earn \$70,000 or \$80,000 a year, and in large practices they command salaries in excess of \$100,000 (Figure 11.3).

Physician Involvement in Practice Management

As a result of increasing financial and regulatory pressures, physicians feel the need to increase their involvement in the business aspects of their practices. Unfortunately, their training has not included instruction in the administrative aspects of medicine. Seventy-one percent of physicians in one survey believed that residency training programs are not preparing physicians in practice management.¹⁸ Nevertheless, MDs are becoming more involved in all areas of their business because of

- Worsening attitudes among physicians about medical practice
- Decreasing reimbursement
- Increasing overhead
- Increasing number of physicians
- Increasing number of midlevel providers
- Increasing regulatory restrictions (see Chapters Eight and Nine)
- Increasing malpractice costs (see Chapter Ten)

FIGURE 11.3. INCREASE IN ADMINISTRATOR COMPENSATION, 1996–2000.



Source: Data from D. N. Gans, "Is There a Pay Raise in Your Future?" *MGMA Connexion*, 2002, 2(2), 23.

Medical schools and residency programs now recognize this deficiency in their training programs and are making efforts to correct it. In many cases this involves development of practice management curricula in conjunction with existing MBA or MHA programs. Ridky and Bennett have suggested nine topics for inclusion in such an undertaking:¹⁹

1. Human resource management
2. Basic accounting and financial management
3. Coding, billing, and collections
4. Data management, using computer programs
5. Quality control
6. Health care legislative processes
7. Health care economics
8. Contractual and legal issues
9. Marketing and planning

Physician Attitudes About the Practice of Medicine

In the past, physicians were well compensated and were likely to abdicate responsibility for the business management of the practice. Because of decreased compensation, increased overhead, and an ever-expanding number of governmental rules and regulations, physician morale is deteriorating, and disputes about compensation models and management decisions result in ineffective practice governance. A 2001 Kaiser survey of physicians noted that²⁰

- 74 percent were dissatisfied with the amount of time they spent on administrative duties.
- 56 percent were unhappy with the time left for their outside interests.
- 54 percent were dissatisfied with their level of autonomy in clinical decisions.
- 58 percent said their enthusiasm for practicing medicine has declined.
- 87 percent said the overall morale of physicians has dropped.
- 76 percent said that managed care has had a negative impact on the way they practice medicine.

This pessimistic outlook is supported by data from other surveys:

- Merritt, Hawkins & Associates reported for 2000 that 37 percent of physicians older than fifty plan to retire in the next several years.²¹
- *amednews.com* stated in 2003 that 64 percent of physicians felt their work loads had increased, and 50 percent said their income had decreased; however, 60 percent said they would make the same career choice again.²²

In many cases, dissatisfied physicians do contemplate entering another career. The problem is that most physicians have no alternative training, and if they do choose to move into a less familiar field, they are not likely to maintain the income they presently enjoy.²³

Consumerism has resulted in a patient population that is more difficult to deal with, and the traditional doctor-patient relationship is eroding. Relationships with physicians are more confrontational than was previously the case, and the insistence by many patients on making health care decisions on the basis of incomplete or inaccurate information obtained from the Internet adds to physicians' frustration. Moore expressed the sentiment felt by many physicians: "Patients question their diagnoses with data gathered from the Internet, the government threatens to audit their files, they work like dogs, and their income isn't going anywhere."²⁴

Finally, physicians face decreased income at the same time that they are paying off education debts incurred during their lengthy training. Medical school graduates

in 2000 bore an average debt of \$93,000,²⁵ and they get a later start on funding retirement programs than do most of their contemporaries who have entered other professions.

Decreased Reimbursement

Decreasing reimbursement and increasing practice costs have resulted in a decline in physician incomes. Although salaries of most Americans were increasing between 1995 and 1999, physicians' salaries, adjusted for inflation, decreased by 5 percent (primary care, 6.4 percent; specialists, 4 percent). During that same period, salaries of other professional-technical workers rose 3.5 percent. The mean reported income for specialists in 1999 was \$219,000, compared with \$138,000 for primary care physicians.²⁶ Although procedure-based specialists are faring better than primary care providers in recent years, they are also the ones most affected by the introduction of resource-based relative value units in 1992.

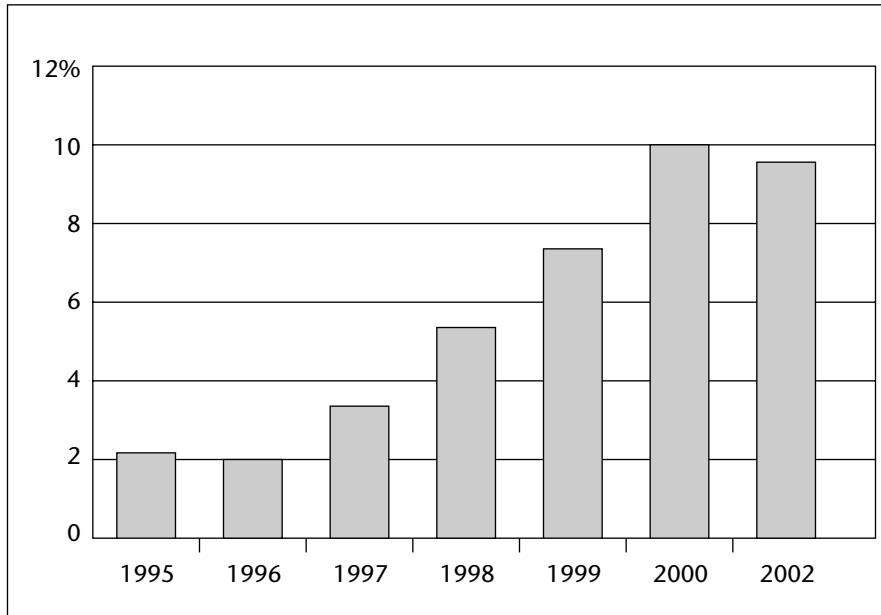
Increased Overhead

The rise in health care costs was reasonably stable during the 1990s. The year 2000, however, saw a 10 percent annual change in per capita health care spending, a number greater than the increase in the consumer price index (CPI) (Figure 11.4).²⁷ Unlike in the 1990s, when prescription drugs accounted for most of the increases, in the first years of the twenty-first century hospital outpatient service costs have surpassed drug costs. In 1999, inpatient and outpatient hospital costs accounted for 36 percent of health care spending growth. In 2001, these items accounted for 51 percent of the total. A small rise in physician service reimbursement accounted for 28 percent of the increase in health care spending in 2001. These rising health care costs contributed to the increase in the cost of employer-sponsored health insurance in 2002.²⁸ Cost increases are passed along to employers, who in turn require that workers assume this burden in the form of increased premiums, deductibles, and copayments.

Rising health care costs are reflected in medical practice overhead. The expenses of running a medical practice increased at a greater rate than both revenue and the CPI (Figure 11.5), and median gross collection percentages fell from 69 percent to 66 percent.²⁹ Some of the reasons for this increase in overhead expenses are

- Increased costs of information technology
- Rising employee salaries due to the nursing shortage
- Increased costs of claims processing
- Increased expense of complying with new governmental regulations

FIGURE 11.4. PERCENTAGE CHANGE IN PER CAPITA HEALTH CARE SPENDING, 1995–2002.



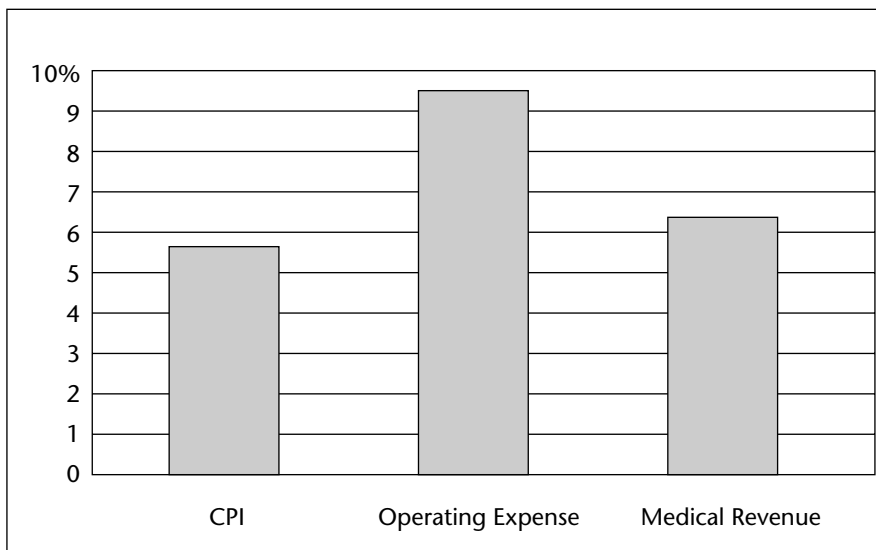
Source: Data from B. C. Strunk and P. B. Ginsburg, "Tracking Health Care Costs," *Data Bulletin: Results from HSC Research*, Sept. 2002, 22, 1–2.

Increased Number of Physicians

As of 2003, more than 800,000 physicians were in practice in the United States. That is approximately 286 per 100,000 population, compared with fewer than 150 per 100,000 population in the early 1970s.³⁰ Nevertheless, predictions made in the 1990s of a large physician surplus have not come true. Indeed, rising salary offers by recruiting groups suggest there is actually a shortage in some specialties. The demand for primary care physicians is weaker than that for specialists because of the large percentage of medical school graduates who were encouraged to enter primary care fields in the mid-1990s and the large increase in nonphysician clinicians, many of whom favor independent practice and reimbursement.

Approximately 25 percent of physicians in practice in the United States are international medical graduates. The future of this group is uncertain. Many individuals

FIGURE 11.5. INCREASE IN OPERATING EXPENSES AND MEDICAL REVENUE, 1998–2000.



Source: Data from D. N. Gans, "The Best Get Better," *MGMA Connexion*, 2002, 2(1).

who train in this country remain after completion of their residencies to enter full-time practice. This swells the ranks of U.S. physicians and siphons medical talent from countries that would most benefit from their services. Finally, accelerated physician retirement patterns and the increased number of female physicians entering the MD workforce will have a great influence on future workforce calculations.

Increased Number of Midlevel Providers

Nonphysician clinicians (NPCs) are having an increasing impact of the delivery of medical care in the United States. Cooper, Laud, and Dietrich define ten groups of NPCs: nurse practitioners, physician assistants, nurse midwives, chiropractors, acupuncturists, naturalists, optometrists, podiatrists, nurse anesthetists, and clinical nurse specialists.³¹ Based on the number of current trainees, it is expected that 384,000 of these individuals will be in place by 2005, roughly 45 percent of the number of practicing physicians. The largest groups are nurse practitioners (NPs) and physician assistants (PAs). NPs plus PAs are expected to number 168,000 in 2005, further

reducing the need for physicians.³² The number of NPCs is growing approximately five times faster than the number of physicians. The major impact of this will be felt in physician practices engaged in primary care. This subject is covered in greater detail in Chapter Fourteen.

The Physician-Administrator Team

In most practices it is not beneficial or cost effective for a physician to take the place of the practice manager. Time constraints related to patient care and lack of formal administrative training preclude total MD practice management for many physicians. The best approach is to form an effective physician-administrator team. Patterson and Kaplan have noted five factors that contribute to the successful development of such leadership:³³

- Clear goals for major initiatives
- Equal status
- Mutual dependence
- Time to get to know each other
- Shared responsibility and accountability

Shared responsibility between physician and administrator is especially important in a smaller practice. (More than 70 percent of MGMA membership consists of groups with fewer than ten physicians.)³⁴

Because the physicians are the owners of the practice, in addition to being the primary income generators, a practice administrator must be skilled in presenting recommendations for change to these physician owners. Bradford states that physicians appreciate the value of data and advances six techniques for strengthening a proposal for change:³⁵

1. *Identify the change in detail.* Give a brief explanation of how the change will work, who will provide it, what it will cost, and how it will be enforced.
2. *Determine what motivates the physicians.* Relate the change to a common motivator for the group's physicians, such as patient care improvement, earning money, saving money, increasing patient satisfaction, or improving physician quality of life.
3. *Tie the case to a bigger picture.* Indicate that the change under consideration relates to a core value that physicians have already agreed on.
4. *Cite the rationale for change.* Use hard data (numbers) in comparisons, such as comparing current revenue or expense levels with earlier levels or some other benchmark.

5. *Anticipate objections and prepare responses.* Analyze the proposal for weaknesses.
6. *Plant the seeds.* Let physicians know that a problem exists and mention it before making the actual proposal.

Much of the success of the physician-administrator team derives from mutual respect of each other's abilities and joint dedication toward the goal of building a successful and profitable practice. Some personalities conflict, and not all teams will be harmonious at first.

MD Compensation

Development of an effective and well-supported physician compensation model is one of the most difficult issues in establishing effective practice governance. In some situations physicians prefer to maintain their autonomy and to function primarily as solo practitioners, and each physician shares overhead expenses depending on use of services. This model is often easy to implement and allows the luxury of shared expenses, but problems often develop with regard to call, cross-coverage, and dealing with an emergency patient on a day when that patient's customary practitioner is not available. Other groups have established relationships in which revenue is shared equally among the providers. The physicians have the attitude that patients belong to the practice and should be treated by any available physician. This concept provides the maximum flexibility with regard to scheduling, call coverage, and vacation allotment. It works well in small-group practices of physicians in the same specialty who have a similar work ethic and share common attitudes about patient management.

In the majority of practices, especially in multispecialty groups, physician compensation is based to some degree on individual productivity. Some specialties are compensated at a higher rate for effort expended than are others. This is a fact of practice life and is generally accepted by most physicians. Organizations such as the MGMA provide much data on median compensation of various specialties. Some specialists in the group may have primarily evaluation and management (E and M) responsibilities, whereas other, procedure-based members of the group will require less in the way of office resources. Compensation formulas must take this information into account.

Many groups advocate a guaranteed base salary with increased amounts of income based on individual productivity. Other considerations in compensating practice group members include group financial performance and quality of care.³⁶ Smith notes five elements that might be considered in a physician incentives program: production units, managed care efficiency, citizenship, patient satisfaction, and group profitability goals.³⁷

Practices must decide how to calculate work. Some use gross charges and others use relative value units (RVUs) to calculate some or all of each physician's compensation.³⁸ Total RVUs are based on

- Work RVUs, which measure physician work
- The expense of providing the service
- A professional liability factor

A more detailed discussion of physician compensation is presented in Chapter Thirteen.

Practice Governance

Traditional corporate structure is difficult to apply to governance of a physician practice. Physicians have a dual function. "When they are not governing, they are essentially employees."³⁹ They have difficulty adapting to a traditional business model because their primary goal is providing the best care for their patients, and they are "held responsible, both legally and by their profession, when caring for patients."⁴⁰ Physicians generally are intelligent, independent, accustomed to making decisions, and confident in their abilities, which makes it difficult for them to conform to a rigid management structure. One survey noted that "80 to 90 percent of all physicians rank their skills in the top 10 percent of their profession."⁴¹ Nevertheless, today's complex health care environment makes a practice governance structure mandatory.

Practices often expand from solo or small partnerships to large multispecialty groups. The process may evolve over many years, and the management infrastructure may fail to advance along with the complexity of the practice. Older physicians may dominate the decision-making process and treat younger colleagues as employees rather than professional associates. Zinober categorizes practice governance models in this way:⁴²

The powerful managing partner. One physician makes the majority of management decisions. This may be successful if the designated physician is skilled at management.

Rule by management committee or board. A select group of physicians is assigned to make management decisions for a definite or indefinite time period. This structure functions well in a larger group and allows younger physicians to feel that they have a voice in governance.

Rule by all. All physician partners are involved in decisions that affect the practice. This may be effective in very small groups, although one physician generally should be selected to make day-to-day decisions regarding minor management issues.

Board with an executive committee. A smaller committee under the auspices of a board makes many of the management decisions. This model generally is used in larger practices.

External management contract. This management structure, discussed earlier in this chapter, generally has not worked well. The economies of scale predicted did not materialize, and practice overhead tended to increase.

Allcorn's analysis of various group practices resulted in these categorizations:⁴³

The homogenized group. Physician members tend to maintain their personal autonomy, and the group often lacks appropriate leadership.

The institutionalized group. Practice members tend to follow a leader, and members suppress their autonomy. The leader follows a set of rules that the group has developed.

The autocratic group. Members of the group tend to surrender themselves to a powerful leader who controls most aspects of the business of the practice. "Favored groups" tend to evolve, thus undermining the success of the practice overall.

The intentional group. In this model the "thoughts and feelings of individuals are respected." Members who are accepted by others often volunteer for group leadership.

Many of these descriptions reference practices that developed when regulatory and financial constraints were less onerous. Failure to evolve a new governance structure as market conditions change prevents a practice from taking advantage of new revenue opportunities and better methods of rendering high-quality, cost-effective patient care. Reinke and Hobson describe some of the characteristics associated with successful group practices:⁴⁴

- They are locale specific and understand the local market.
- They analyze forces that have an impact on the practice, such as number of local physician practices and specialty distribution.
- They are concerned with the flow of patients in the delivery of health care.
- They have sound business practices and financial arrangements.

In summary, successful practices pay attention to the local markets associated with increased demand for services due to changes in patient demographics and an increased emphasis on health and wellness. They take into account the shift from inpatient services to outpatient ones. They pay attention to advancing medical technology and take advantage of the shortage of physicians in certain specialties. The inability to respond rapidly to changing market conditions is the main reason for the failure of external management arrangements. Physicians and practice managers in local communities can be sensitive to changing trends in their area. Astute managers can adapt readily to changing market conditions and take advantage of new opportunities as they develop.

New practices must pay attention to establishing an effective governance structure. Groups experiencing problems that may jeopardize the success of their practice must also consider a revision of the business guidelines affecting their practice. Bohlmann states that the governance system must possess these qualities:⁴⁵

- A formal organizational structure
- A financial information system (budgets, reporting, cost assessment, external measurements, and implementation plans)
- A leadership prepared to evaluate and act
- A supportive physician constituency

Medical practices may exist as partnerships, corporations, or limited liability companies. Partnerships require the least formal governance requirements, but all models have unique aspects with regard to legal requirements, tax status, and liability.⁴⁶ These issues are covered in more detail in Chapter Nine. Medical practices of sufficient size must have bylaws, a board of governors, and a managing partner. When practices have between five and nine physicians, a more formal governance structure is a good idea.⁴⁷ Bylaws are a legal necessity, and they establish guidelines for dealing with employee grievances, developing new programs, creating fair formulas to decide physician compensation, and establishing the role of the office manager.

Bylaws generally set up the governance structure of the practice. They will require amendment from time to time. In addition to the mandated officers and committees, practices often have informal leaders whose opinions are valued by a majority of the physicians. It is important to note that “partners do not own each other; they are drawn together and stay together based on mutual interests, mutual respect, and perceived benefit.”⁴⁸

In addition to bylaws, a practice should have a personnel manual, a compliance manual, a safety manual, and a policies and procedures manual.⁴⁹

Members of the board should reflect the viewpoints of other members of the practice. The bylaws establish the power of the board. Board members generally

should be elected and serve limited terms. In addition, any agenda item that is to be discussed at a board meeting should be circulated to all members of the medical staff in advance, so that their views can be communicated to board members. Board meetings should be conducted at regular intervals, with less frequent meetings scheduled for the entire medical staff.

A practice should designate a managing partner to facilitate decision making. This individual may have no defined term limit but answers to both the board of directors and the staff physicians with regard to his leadership skills. The managing partner must work closely with the practice manager, and together they must have the confidence of the group and possess the desire and ability to make decisions about day-to-day activities of the practice. The managing partner's responsibilities should be spelled out in the bylaws, clearly detailing which decisions are within her purview.

Schryver, a principal in the MGMA Healthcare Consulting Group, suggests that decision making be divided into "routine issues," which may be handled by the managing partner and do not require oversight, and "nonroutine issues," which require board review before being implemented. He notes that the following issues require board approval:⁵⁰

- Approving managed care contracts
- Admitting new providers or equity owners
- Retaining or terminating physicians
- Amending the group's business plan and operating budget
- Entering joint ventures or partnerships
- Changing the physicians' compensation system
- Hiring or terminating external professional consultants, such as attorneys, accountants, and management consultants
- Hiring or terminating executive management
- Approving purchases over a certain amount (for example, \$10,000) that are not components of the group's capital expenditure budget

Selection of practice leaders may be complicated by personal and professional interactions that develop over time. Nevertheless, leaders should be selected for their ability to motivate the practice and keep it at the forefront of the medical profession from both patient care and business standpoints. Keck lists ten characteristics of a successful governance structure in a medical practice:⁵¹

1. Physician ownership and governance
2. Strong leadership with a vision
3. Proper physician incentives

4. Clear financial and nonfinancial data
5. Budget discipline
6. Decisions for consolidation and divestiture of unprofitable clinic sites
7. Improved physician morale
8. Successful care and disease management
9. Business infrastructure success
10. Favorable contracting arrangements

The presence of leadership skills is difficult to determine in an untested individual. Those who have held leadership positions in the past will have a track record in this regard. However, ignoring younger practice members who are willing to serve may preclude potential leaders from proving their skills to the rest of the practice. This is one important reason to limit terms on the board of directors. Macy states that leadership in a practice group should focus on individuals who⁵²

- Are willing to serve
- Can meet the time requirements
- Demonstrate a capacity for attention to the organization
- Are able to function in the group
- Are objective
- Possess good communication skills
- Have no conflict of interest
- Have an ideology and value framework consistent with the views of others in the organization

Physician Contracts

Today many practices are entering into contractual relationships with physicians. These contracts should aim to minimize future disagreements. Stewart emphasizes several broad areas that must be considered:⁵³

Competition. Noncompete arrangements should be clearly spelled out in the contract with regard to scope, duration, and geographic restrictions.

Liquidated damages. The contract should specify the payment the group practice should receive from a former physician employee if the noncompete covenant is violated. This payment is based on loss of practice income and the amount of time it takes to recruit a new physician.

Exclusive service. The contract should specify whether or not a physician may moonlight, or receive income from sources other than the practice: for example, by taking night or weekend call in a hospital emergency department.

Earned fees and honoraria. The disposition of outside physician income, such as expert witness fees and payments for presentations, should be clearly indicated.

Malpractice insurance. The agreement should stipulate whether or not an employed physician should obtain outside malpractice coverage for services rendered outside the practice. In addition, the contract should clearly specify whether or not a physician employee who leaves the practice is responsible for paying malpractice “tail” coverage, in the event of claims made after he or she leaves.

Patient confidentiality. The contract should clearly specify under what circumstances medical record information might be released to departing physicians.

Group practice confidentiality. The contract should contain a provision prohibiting a physician from revealing proprietary information about the practice to a new employer.

Just as the practice should put considerable thought into its contract, any prospective physician employee must carefully review a proposed contract. It is important for a new physician contemplating association with any group practice to understand the governance and financial structure of the organization. Jacob lists specific questions that a prospective new group member should ask:⁵⁴

- How are doctors compensated?
- How is call divided among the doctors?
- What sorts of cases will I be allowed to do?
- How is the group governed?
- How are decisions made?
- How do physicians assume leadership positions in the group?
- How are claims processing and billing handled?
- Is the group making money?
- How much vacation do physicians receive?
- What are the group’s goals for the next three to five years?

Physician Mentoring

One of the best ways to promote collegiality in a practice, enhance productivity, and ensure the retention of new physicians is to establish a physician-mentoring program. Most physicians graduate from medical school with no conception of the administrative and financial responsibilities that face them in the practice world.

Many practices have developed a mentoring program so that more experienced physicians can help younger colleagues adapt to the world of governmental regulations, coding and billing requirements, relationships with office staff, and the personal efficiency required to increase productivity. Keaveney believes that mentoring should be a volunteer activity and that mentors should be approachable and dedicated. Meetings with younger colleagues may be structured or may be as informal as a weekly lunch. Physicians should be paired with those with compatible personalities, and pairings should be changed when appropriate.⁵⁵



Practice governance is a complex undertaking that has become much more difficult in today's medical world of information technology, expanded government regulations, rising overhead, and decreased reimbursement. Governance structure is related to the size of the practice, but all groups need to set guidelines to facilitate cost-effective patient care. The small- to medium-sized group practice seems to give the most flexibility for adapting to a rapidly changing practice environment.

Discussion Questions

1. What are the advantages and disadvantages of forming relationships with entities outside the group practice?
2. Are practice management companies advantageous to a group practice?
3. What are the necessary qualifications of a practice manager?
4. Should physicians be involved in the financial management of a medical practice?
5. What is the optimal structure for a medium-sized medical practice (eight to ten physicians)?

Web Resources

PowerPoint presentation
Answers to discussion questions

Notes

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CHAPTER TWELVE

HUMAN RESOURCE MANAGEMENT

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Objectives

This chapter will help the reader to

- Understand the duties typically associated with the human resource function.
- Apply the laws and regulations that affect the employment relationship.
- Design and implement an employee recruitment and retention initiative.
- Participate in the design of a performance appraisal system.
- Understand the issues in designing a compensation and benefits plan, and contribute to the development of a pay-for-performance plan.

The fundamental goals of human resource management are to recruit and retain a workforce that has the knowledge, skills, and abilities to achieve the mission of the organization, and to develop a team of individuals who work together continually toward improvement on individual, team, and organizational levels. The human resource manager must have the knowledge and skills to recruit the best people available for the practice and to retain those people once they are hired. In addition, he must understand the complex legal environment in which the practice must operate.

Unfortunately, the human resource function is sometimes treated as an afterthought. In smaller practices the person responsible for the human resource function may have other duties as well. Larger practices may need one or more human resource specialists. Specialists typically have depth of expertise in areas such as¹

- Employee recruitment and selection
- Compensation and benefits
- Employee relations
- Training and development
- Labor (union-management) relations
- Training and development
- Performance management
- Equal Employment Opportunity regulations

Managers at all levels need to understand basic concepts associated with human resource management and employee motivation and performance. It is not at all unusual for highly skilled individuals to leave a practice because they were treated inappropriately or were not provided with opportunities for career advancement. In terms of financial significance, the practice's personnel cost, excluding compensation to physicians, can easily equal 60 percent of operating costs.² Thus not only are people the most important component in the practice's service delivery, they also represent the most significant cost to the practice.

In July 2000, the Health Resources and Services Administration issued a report that estimated that thirty states had shortages of registered nurses in the year 2000. The impact of this shortage is being felt by many practices today. The report also predicted that there would be nurse shortages in forty-four states and the District of Columbia by 2020.³ To add to the problem of recruiting qualified personnel in the current tight labor market, it appears that medical practices are competing not only against other health care organizations for qualified staff but also against employers outside the health care field as well. Studies show that employees will change fields two or three times in the next ten years.⁴

There is actually no general shortage of nurses but rather a shortage of nurses willing to work in particular settings or in nursing at all. There are many more employment opportunities for individuals with a nursing credential than existed just a decade ago, and many nurses have left the profession out of simple frustration with compensation, working conditions, and the lack of career development potential. These factors all come under the domain of what is referred to as *human resource management*.

In addition to the problem of finding qualified people, staff turnover can be very expensive in financial, human, and quality-of-care terms. Replacing an employee can cost at least 150 percent of that employee's annual salary⁵ once one figures in the

- Sunk costs of training the old employee
- Costs involved in the actual termination of the employee
- Costs of hiring new staff, which may include fees to a placement firm and costs of advertising and time spent screening résumés and interviewing candidates
- Costs of using temporary employees to fill vacancies in the short term
- Orientation and training costs for the new employee
- Cost of lost productivity during the new employee's first months

Practice managers should consider the human resource function as one of their most important priorities. Effective hiring, use, and retention of human resources can enhance the profitability of a practice and enhance patient satisfaction. Turnover has negative implications for staff morale and the quality, continuity, and coordination of care. Turnover can lead to the breakdown of well-developed patient care teams, and patients may lose confidence and trust in the practice during the time that new employees are becoming oriented to the job and their coworkers and to practice procedures and processes. New employees always experience a learning curve, and this adjustment period can lead to communication problems (both within the practice and between the practice and patients) and lack of coordination and continuity. Serious clinical errors can result from misunderstandings and lack of communication.

Aligning Practice Strategy with HR Practices

Practice managers need to know the strategy of the practice and what the practice wants to achieve. This strategy may include expanding market share by providing high-quality, customer-focused care. Alternatively, a practice may be in a market where specialization is identified as a competitive strategy. In still other areas diversification may be identified as the optimal strategy. Diversification comes in many forms; it can imply the need to offer multiple medical specialties or to offer such ancillary services as social work, nutritional counseling, and multicultural and multilingual services. The more explicit the practice can be about its goals and strategy, the more effective it can be in developing a human resource staffing plan and practices that support them. Most practices conduct some form of performance appraisal. Criteria for these appraisals may be generic or perhaps borrowed from another practice or other organization. However, if the practice is concerned with ensuring that all employees (including the medical staff) interact with patients in a customer-oriented manner, the performance appraisal system should assess customer service activities. Similarly, the practice should ensure that its training initiatives address customer service as one key element. Further, when hiring staff the practice should look for people with a strong customer

service orientation. This is what is meant by *alignment*: human resource management practices are aligned with—or reinforce—employee behaviors that in turn support the strategy of the organization.

Recruiting Personnel

Choosing people whose skills and personality are compatible with the needs as well as the culture of the practice can pay dividends down the road because employees that fit well with the practice are less likely to leave. David Bowen cites three reasons why it is better to hire a person to fit the organization than to hire according to the traditional model that focuses mainly on technical qualifications.⁶ Employees that fit well within their organizations have

- Better job satisfaction and higher commitment to the organization
- Lower turnover and absenteeism and fewer grievances
- Higher performance

Alternatively, a practice where everyone fits may experience stagnation and a lack of innovation and creativity. Diversity is important, and those involved in hiring need to balance the need for diversity and “new blood” with the importance of fit with the practice culture.

In assessing fit the first step is to identify the essential elements of the practice culture. One common cultural element is teamwork. In addition to assessing a job applicant’s technical skills, a practice committed to teamwork should try to determine that applicant’s fit in a team-oriented setting. Alternatively, consider a practice in which the current culture is highly mechanistic and in which patients do not feel welcomed or valued. In such an instance an enlightened manager might choose to hire someone who does not fit the current culture, as a means of facilitating cultural change. Finally, there is the question of job applicants’ “faking it,” for example, presenting themselves as team players when they do not in fact have that attribute. The best ways to avoid hiring individuals who do not fit the culture are to use multiple interviewers, apply situational and behavioral interview techniques, and pay careful attention to information obtained from references.

Hiring for fit therefore means hiring an individual who has both the technical and the cultural characteristics to do the job. Hiring should always begin with a job analysis and a review of the job description. The content of jobs changes over time, and hiring a new employee presents an opportunity to review and revise job responsibilities and expectations. Employees who are provided an honest description of the job prior to starting work—a realistic job preview—are likely to be more satisfied and more

productive and are less likely to leave the organization. Thus the hiring process should include identifying the characteristics important to the practice and incorporating them in the job description. Managers can use the following methods to obtain an understanding of what the job should entail and of the personality characteristics that are a desirable match for the organization:

- Conduct a job analysis to define the essential job functions.
- Ask people who currently have similar positions about the duties and responsibilities of the job.
- Obtain the perspectives of supervisors, coworkers, and (where appropriate) customers on ways to improve the design of the job.
- Conduct a critical incident analysis.
- Develop a new job description that summarizes the job requirements: the knowledge, skills, abilities, and other factors (KSAOs) (such as licensure requirements and working hours) required to do the job.

There are a variety of ways to gather the information for a job analysis, including using observation, diaries of work performed, and interviews or questionnaires for the job incumbent and individuals who work closely with the incumbent. Overall the job analysis should result in a set of essential job tasks and the knowledge, skills, abilities, and other factors associated with successful job performance. This information is then summarized in a job description, which should be used for multiple purposes: recruitment and selection, supervision, discipline, training, compensation, and performance management. It is important for job analysis to be performed for the position in the context of the particular practice. Although it is not uncommon for human resource professionals to “borrow” job descriptions from other organizations, the fact that a job title is similar across organizations does not mean that the job itself is identical. Each job will have unique aspects in a particular practice. Given the variation among practices, a generic job description has only limited use.

Critical incident analysis provides the manager with unique and important information above and beyond the information obtained from a job analysis. In this process the manager asks key informants, including the person in the job or leaving the job, coworkers, customers, subordinates, and supervisors, to provide a list of examples of good and poor job performance. The manager extracts common themes from this list and incorporates these important dimensions of the job into the KSAOs and behaviors desired for the position.⁷

Once the human resource manager has an understanding of the desired knowledge, skills, abilities, and other characteristics, she must decide whether to recruit for the position outside the organization or, where possible, promote someone from within the organization. As illustrated in Figure 12.1 each approach has advantages and disadvantages.

FIGURE 12.1. ADVANTAGES AND DISADVANTAGES OF INTERNAL VERSUS EXTERNAL CANDIDATES.

	HIRING AN INTERNAL CANDIDATE	HIRING AN EXTERNAL CANDIDATE
ADVANTAGES	<ul style="list-style-type: none"> • Other employees may see this as positive. • It is less expensive and quicker. • Internal candidates understand the organization. • Organization already has knowledge about fit. 	<ul style="list-style-type: none"> • Candidate may bring fresh perspective to the organization. • Candidate has no political biases, unlike those who have been in the organization for a while.
DISADVANTAGES	<ul style="list-style-type: none"> • If there are several internal candidates, the ones not chosen may cause morale problems. • "Peter Principle" will often take effect. • Organization forgoes a fresh perspective. 	<ul style="list-style-type: none"> • Candidate may be expensive to recruit. • Candidate may not have the level of knowledge, skills, and abilities the practice thought she had. • Internal candidates may be unhappy. • Candidate may not fit with the culture of the practice.

Source: Adapted from B. Fried, "Recruitment and Selection," in B. Fried and J. Johnson (eds.), *Human Resources in Healthcare* (Chicago: Health Administration Press, 2002).

When a practice has a formal human resource manager, he will typically do an initial review of applications to identify those applicants with the required technical abilities and professional credentials. Where necessary, line managers most familiar with the position may be involved in this initial screening. Throughout the selection process it is important to maintain communication and coordination between human resource personnel and hiring managers because each has a unique body of knowledge to contribute to the selection process. In most cases the human resource manager is familiar with the legalities of the hiring process, whereas the hiring manager has greater understanding of the actual conduct of the job.

The interview is important because it provides the manager and others involved in the hiring process with the opportunity to select the candidate for the practice who will be the best fit. Although the interview is the most common method used for employee selection, it can also be the most unreliable and the least valid, be biased against certain groups, and possess illegal elements. To overcome these difficulties, the process of interviewing has become much more sophisticated in recent years. The two most important criteria are that questions must be (1) job related (thus the need for an accurate and current job description) and (2) legally permissible. There is a great deal of published information available on interviewing techniques and on designing interview questions that meet these two criteria.⁸

Legal Concerns in Interviewing

The human resource manager—or some designated individual in the practice—should stay up to date on federal, state, and local laws and regulations governing the interview process. Violation of employment laws can result in civil fines and penalties, as well as costs in time, for legal assistance, and in damage to the practice's reputation in the community. The Equal Employment Opportunity Commission (EEOC) is an independent federal agency responsible for enforcing most equal employment opportunity (EEO) laws, including Title VII of the Civil Rights Act, the Equal Pay Act, and the Americans with Disabilities Act. The EEOC is charged with three major responsibilities:

1. Investigating and resolving discrimination complaints
2. Gathering information
3. Issuing guidelines

Because of the complexity of federal laws affecting employer-employee relationships, the EEOC, the Department of Labor, the Department of Justice, and the U.S. Civil Service Commission have adopted the Uniform Guidelines on Employee Selection Procedures. These guidelines summarizing the legal implications of EEO are published and periodically updated in the Code of Federal Regulations (CFR). They form the basis for the many publications (including those cited in the following pages) that provide advice on permissible and impermissible interview questions and other employee selection procedures. It may seem as though the employer is very restricted in the questions she can ask of job applicants. However, she can ask any job-related questions she would like about the candidate's knowledge, skills, and abilities. In addition, questions of the following types are permitted:⁹

- Whether or not the person has ever worked under a different name
- Whether or not the person is a citizen of the United States
- Whether or not the person has ever been arrested or interned as an enemy alien
- Whether or not the person is fluent in a foreign language
- What educational level the person has attained, including degrees and certifications
- Whether the person has relatives already employed by the organization
- What military service the person has had
- Whether the person has ever been convicted of a crime
- What the person's prior employment experience has been

Checking References and Credentials

To avoid the liability of negligent hiring, reference checks and credential verification must take place before the job candidate is hired. In the medical practice setting it is critical to determine whether the candidate has ever been convicted of billing fraud. The Civil Monetary Penalties Act allows the government to assess civil monetary penalties of up to \$10,000 per item (or service) against those who contract with a person or entity that has been excluded from participation in a federal health care program if the person who hires the candidate knew or should have known of the exclusion and if the contract is for services that could be paid for under a federal health care program such as Medicare and Medicaid. In addition the physician practice could be excluded from participation in those programs. Compliance guidance issued by the Office of Inspector General (OIG) in the U.S. Department of Health and Human Services stresses the need for practices to have employment-related policies and procedures for preventing fraud.¹⁰

Physician practices, like other health care organizations, can also be held liable for failure to exercise due care in their employment practices. They are expected to ensure that employees are competent. It is essential for managers to verify the licensure of all employees, as applicable, and to require each licensed employee to sign an employment contract promising to maintain the appropriate licensure at all times.¹¹ Rather than doing this entirely by themselves, practices may find it more efficient to hire a company to perform background checks on potential employees.

Retaining Employees

Once employees are hired the manager should focus on retention. Understanding what motivates employees to stay with an organization is half the battle. Compensation is certainly a factor, but studies show that employees generally do not leave an employer for more money unless they are also dissatisfied for other reasons. Harkins discusses five factors that affect job satisfaction:¹²

Confidence factor. When employees understand the strategy of the organization, especially how that strategy is linked to the organization's mission, they are more likely to have confidence in the organization.

Emotional factor. When employees are rewarded for their achievements and feel that their employer is concerned about their personal and professional development, they are more likely to stay with the organization.

Trust factor. When an employer makes promises to employees (concerning, for example, an improvement in the work situation, less overtime, more time for personal development, or increases in compensation) and those promises are kept,

trust develops. Employees who are loyal to the organization are more likely to be productive and to enjoy working at the organization.

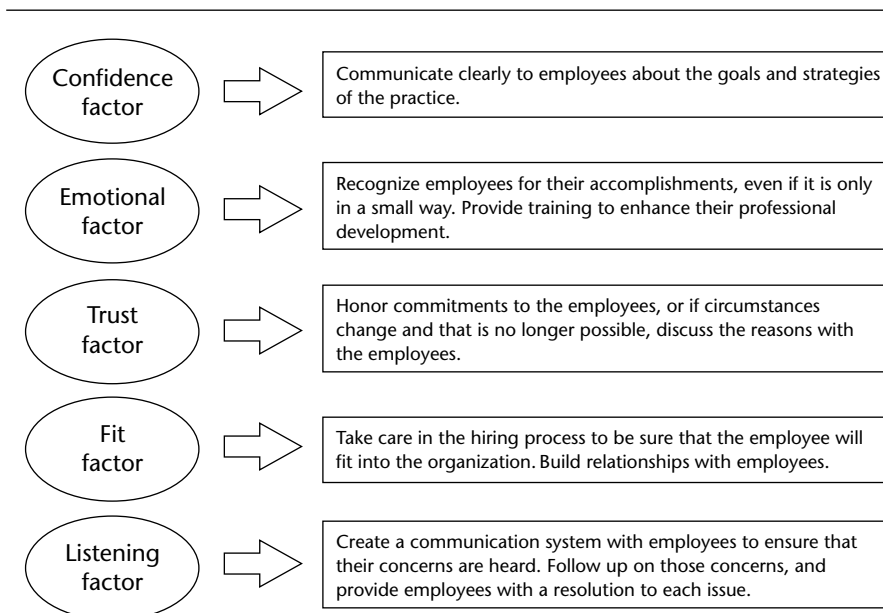
Fit factor. When employees feel that their values and standards match those of the organization, they are more likely to feel fulfilled.

Listening factor. When employees feel that management is listening to them, they are more likely to make contributions that are valuable to the organization. When employees feel that management is not listening to them, they may adopt an attitude of “why bother?” This may be the most frequent reason that people leave the organization.

Figure 12.2 illustrates strategies to address these job satisfaction factors.

Employee recruitment and retention is a major concern for virtually all health care organizations. However, sound research on the effectiveness of retention strategies in health care organizations is limited. Job satisfaction is a major factor in retention, and compensation is but one element of job satisfaction. Money itself is not a motivator, but the lack of adequate compensation can be a demotivator. For health care professionals, satisfaction is to be found in large part in the intrinsic satisfaction they get from the

FIGURE 12.2. STRATEGIES TO IMPROVE JOB SATISFACTION FACTORS.



job, a factor that reinforces the importance of giving employees useful feedback and providing them with as much autonomy and control over their work as is appropriate to the job and the organization.

Research on best practices related to retention is consistent with extant theories of motivation. The Health Care Advisory Board conducted a review of research findings related to retention and identified these points relevant to all health care organizations:¹³

- It is important to distinguish between strategies aimed at building morale and strategies focused on improving retention.
- Such initiatives as satisfaction committees, on-site child care, recognition programs, and educational benefits tend to improve morale but do not substantially improve retention.
- Improved screening of applicants, tracking turnover by department or function, and tracking turnover of key (or scarce) employees can result in reducing turnover but has a negligible effect on morale.
- The most effective strategies improve both morale and retention; they include improving staffing ratios, establishing career ladders, implementing buddy programs, and allowing for and promoting flexible scheduling.

In a labor market and society characterized by frequent job change and deterioration in the level of trust between employees and employers, it is essential that human resource management strategies incorporate initiatives to improve retention. Retention needs to be monitored, and root causes for turnover identified. This requires evaluating the types of employees likely to leave, the departments in which they work, and the reasons for leaving. Use of well-developed and implemented exit interviews is one strategy for obtaining this type of information. In addition, management style and leader effectiveness should not be overlooked as a cause of turnover. There is an often-cited maxim that “employees do not leave organizations; they leave supervisors.”

Evaluating Performance

Performance appraisal is perhaps the most poorly performed human resource management function, and there are several reasons why the performance appraisal earns such low marks as a management tool.

First, the traditional approach to appraisal is punitive, and managers and employees are both often uncomfortable with confrontation and criticism. In recent

years some organizations have relabeled performance appraisal, calling it *performance management*. This implies that the organization is concerned with improvement and not simply with giving employees the bad (and good) news. Effective managers also do not view performance management as an annual event but provide continuous feedback to employees. Under these circumstances the annual review should not contain surprises but should be an opportunity to reflect on strengths and areas needing improvement, to develop strategies to help employees perform, and to provide the employee with the opportunity to offer feedback to the manager on his own performance as a supervisor.

A second issue with traditional performance appraisal is its lack of specificity to the job. Many organizations use the same performance criteria for all jobs in the organization. Certainly, there are key behaviors and attitudes likely to be desirable in all employees, such as honesty, customer focus, and team focus. But jobs are different, and a useful performance appraisal tool should be specific to the job. This ensures that the evaluation criteria are important and meaningful to both the employer and the employee. In many instances there is a lack of alignment between the job description for a particular position and the evaluation criteria. Information obtained in the job analysis and summarized in the job description should be the basis for performance appraisal. If the organization's strategy includes providing excellent customer service, then performance in that area should be addressed by the assessment. In short, practice management should evaluate whether or not the practice's performance appraisal methods measure and evaluate the right things.

There are many sources of bias in conducting performance appraisals. Many of these are rooted in the personality of the manager. For example, managers vary in their levels of strictness and leniency, the extent to which they are able to distinguish different elements of performance in a single employee, and their comfort level with the appraisal process. These bias issues can be addressed by establishing evaluation criteria that are measurable, observable, and previously agreed upon by both manager and employee.

Managers are vulnerable to a major source of bias when compensation issues are mixed in with the appraisal process. When pay increases, bonuses, and other incentives are tightly linked to the appraisal process, it is not unusual for managers to inflate or at times to deflate appraisals. Although there is considerable debate about the merits of pay for performance,¹⁴ sound advice is to separate the two processes. The goals of performance management as a developmental tool are compromised when money enters the picture.

Although there are many methods of evaluating individual performance, two approaches are primary. The first is a comparative approach, in which managers compare each employee's performance with that of others in the organization. This can be performed by simply ranking all employees, using a forced distribution in which the

managers place all employees into predetermined categories, or by conducting a paired comparison, in which each employee is compared with every other employee. A comparative approach has limited utility in most organizations, because it is often not tied to the strategic goals of the organization and lacks specificity for purposes of performance improvement. This approach can be useful for administrative purposes, such as determining promotions, layoffs, pay raises, and bonuses.

A more useful approach in performance measurement is one that focuses on employee behaviors. In the most common version of this approach, employees are rated—typically on a 5-point scale—on such behaviors or attributes as communication, creativity, judgment, and interpersonal skills. Although this approach focuses on specific behaviors (unlike comparative approaches, which simply compare employees to each other), this simple graphic rating scale does not specify the particular behaviors associated with “good” or “poor” performance. Further, a scale that can be used for all employees in the organizations will not take job differences into consideration. For example, although “initiative” may be a valued trait in all employees, it may be of particular importance for certain positions. A graphic rating scale can be improved if it is tailored to specific positions in the organization and if various attributes on each scale can be linked with specific behaviors. A scale improved in this way is known as a behavioral anchored rating scale (BARS). An example is shown in Figure 12.3. The usefulness of the BARS approach lies in the fact that a specific trait or behavior is specified and clear information is provided about observable behaviors associated with different levels of performance. Because of their focus on observable behaviors, such scales reduce conflict by minimizing the subjectivity found in other methods. They also provide a firm basis for supervision and training. These scales do take time and thought to construct and need to be based on the explicit expectations in the job description. Further, expectations about the desired behaviors related to specific areas of performance need to be communicated clearly between the supervisor and the job incumbent.

Performance may also be measured through an outcomes-based approach, which emphasizes what an individual actually produces rather than how the work is performed. Sometimes referred to as Management by Objectives (MBO), this approach is most useful for jobs with measurable outputs. This approach is used most often for sales jobs, where there is relatively unambiguous information about productivity. With caution, it can also be applied to jobs in a medical practice. A lab technician, for example, might be evaluated on the quantity and quality of lab tests performed, or a physician might be evaluated on the number of patients seen in a given period of time. As with any method of evaluation, there is always a risk of unanticipated consequences. A physician whose performance is assessed by patient volume runs the risk of jeopardizing quality and patient satisfaction by focusing too much on volume. Such risks are accentuated when compensation is tied to such methods of output.

**FIGURE 12.3. BEHAVIORAL RATING SCALE
ITEM FOR A PRACTICE RECEPTIONIST.**

1. Poor	2. Fair	3. Good	4. Very Good	5. Excellent
Often ignores patients and families during check-in for two minutes or more, does not greet them by name, and often provides unhelpful information about waiting time.	Greets patients and families without making eye contact and sometimes responds inappropriately to questions about waiting time.	Usually greets patients and families in a friendly manner, makes eye contact, and is sometimes responsive to questions about waiting time.	Always greets patients and families in a friendly manner, makes eye contact, and is always responsive to questions about waiting time.	Always greets patients and families by name during check-in, makes eye contact, and informs patients of the length of time they might expect to wait.

Some organizations are moving toward a 360-degree approach to employee evaluation and development. This approach is based on the premise that a supervisor may not be fully knowledgeable about all aspects of an employee's work and that other individuals may have important information to contribute. Thus *360-degree* refers to obtaining performance information from individuals administratively above, below, and next to (for example, team members) the employee, and even from individuals outside the organization, such as patients. This approach is most useful for obtaining feedback and must be used with care. It is most appropriate for organizations with a high level of trust and where the anonymity of those providing performance information can be ensured. It is recommended for use as a developmental tool and is not recommended for making decisions about compensation.

A final approach to performance management, one that is particularly relevant for medical practices, is the use of team- or practice-based approaches. Using continuous quality improvement tools (likely a combination of volume and quality indicators), the quality of work produced by a practice can be analyzed by examining team processes. In this way the focus of evaluation moves from the individual as the object of evaluation to the team. Such an approach could, of course, be used in conjunction with methods that evaluate the individual.

Most organizations use a combination of these behavior-based and outcome-focused evaluation schemes. Whatever system is selected, it is only as effective as the individuals involved in its implementation. Effective performance management requires a culture of trust in the organization and employee training and retraining in the goals and use of the system. Senior management must be supportive of performance management. Organizations should evaluate their performance management approach to see if it has achieved its goal of improved performance.

Ensuring Ongoing Training

It is important for employees to receive ongoing training in order to maintain competency, understand current issues and regulations in their field of expertise, and maintain licensure or certification. Ongoing training should also focus on personal development and on practice fundamentals like service excellence.

Applying Federal Antidiscrimination Laws

Federal antidiscrimination laws prohibit discrimination against individuals in a variety of work-related situations. As noted earlier, antidiscrimination laws apply during the hiring process as well as to employee promotion, discharge, compensation, and training. Violations of these laws can be very expensive in terms of fines, penalties, and defense costs and can also damage the practice's reputation. Antidiscrimination laws prohibit discrimination based on

- Disability
- Gender
- Race
- National origin
- Color
- Religion
- Age

Disability

Two federal laws deal with discrimination against persons with disabilities. The Vocational Rehabilitation Act of 1973 ("Vocational Act") prohibits discrimination by governmental agencies, federal contractors, and organizations that receive federal funds. Because the majority of physician practices receive Medicare and Medicaid reimbursement, most fall under the Vocational Act. However, even if the practice does not fall under the Vocational Act, it must still be concerned about discrimination against employees with disabilities because the Americans with Disabilities Act (ADA) covers employers with fifteen or more employees.

The Americans with Disabilities Act is far-reaching legislation that extends not only to employment practices but also to public participation and service, public access, and telecommunications. In the employment area the ADA prohibits discrimination against *individuals with disabilities* who are able to perform the essential functions of the job with or without reasonable accommodation.

An employer must be careful not to ask about a disability until a conditional job offer has been made or until it is mentioned by the employee. For example, if a manager overhears one employee tell another that she has a brain tumor, the manager cannot ask the affected employee about the disability. However, if the employer believes that a job applicant would not be able to perform the job or would pose a threat to other employees or patients, then the employer may make disability inquiries or request a medical examination. Of course the employer may ask an applicant, like all other job applicants, if she is able to perform the essential job functions. Employers may also ask the applicant to demonstrate an ability as long as this is asked of all job applicants.

As noted earlier an individual with a disability may ask the employer for a reasonable accommodation. A reasonable accommodation is typically a change in the work environment that will assist a person with a disability to perform his job. Employers are required to accommodate physical impairments or mental impairments unless it would impose undue hardship on the business. There are three categories of reasonable accommodations:¹⁵

1. Those that ensure equal opportunity in the application process
2. Those that enable employees to perform the essential functions of the job
3. Those that enable disabled employees to enjoy the same benefits available to employees who are not disabled (such as training)

Examples of accommodation include physical modification or relocation of the workspace and alteration of work schedules, but employers are not required to alter job expectations.

Under the ADA, people with disabilities are defined uniquely as individuals who

- Have a physical or mental impairment that limits one or more major life activities
- Have a record of impairment
- Are regarded as having an impairment

Employers may refuse to hire someone with a disability when the disability would endanger the employee or others in the practice. Individuals who are current abusers of alcohol or drugs are not covered by the ADA, but individuals recovering from alcohol or drug abuse are covered. Other covered disabilities include vision and hearing impairments, a variety of medical conditions, and mental disabilities. People who are HIV positive or have AIDS are also qualified individuals. However, if a disability is mitigated, for example with corrective lenses, then the individual is no longer covered by the ADA. The ADA is a complex law, and litigation continues to alter its interpretation.

Gender

Although Title VII of the Civil Rights Act of 1964 prohibits gender discrimination, an employer can discriminate in favor of one sex or the other when gender is a bona fide occupational qualification. For example, if the employee will be performing personal care for elderly female patients the employer may specify that a female employee be hired. It is important to note that prohibitions on gender discrimination extend to pregnancy, childbirth, and related medical conditions. The Pregnancy Discrimination Act provides specific protections for employees who are pregnant. Discrimination on the basis of sexual preference is not covered by Title VII, but several localities have passed legislation prohibiting discrimination based on sexual orientation.

Under Title VII of the Civil Rights Act, sexual harassment is considered to be a form of gender discrimination. It includes unwelcome sexual advances, verbal or physical conduct of a sexual nature, and a hostile work environment. In general two forms of sexual harassment have been identified. *Quid pro quo* harassment is relatively straightforward and involves sexual advances toward a person where employment or employment decisions are conditioned on submission to the advances. Hostile environment harassment involves sexual behaviors or the presence in the workplace of materials that employees find sexually offensive. However, what is offensive to some employees may not be offensive to others. There is still debate about whether a “reasonable person standard” or a “reasonable woman standard” should be applied in determining whether a hostile work environment exists. In determining whether sexual harassment exists, the EEOC and the courts examine such factors as whether the harassment was frequent, severe, or physically humiliating such that it interfered with the employee’s performance. Plaintiffs need not demonstrate that they suffered psychological damage.

In 2002, 14,396 sexual harassment charges were filed with the EEOC.¹⁶ Because employers are in fact liable if they knew about, or should have known about, the harassment, it is important for employers to have clear policies prohibiting sexual harassment and to have a well-defined mechanism for employees to report possible harassment. Health care organizations are particularly prone to harassment because it is often coupled with relationships in which one person has power over the other; the relationship between male physicians and female nurses is typically of this kind and thus is conducive to sexual harassment in its various forms.

Race and National Origin

Title VII prohibits discrimination on the basis of race or national origin. It is also important to note that if an employment practice has a disparate impact on a particular class of employees, this may constitute a Title VII violation whether or not the

discrimination was intended by the employer. The employer should be aware that illegal discrimination can also include bias against employees who have¹⁷

- Poor credit
- Garnished wages
- An arrest record
- Children while unmarried

National origin discrimination includes not hiring, not promoting, or firing people because they are of a different nationality or married to someone who is of a different nationality. It can even extend to discrimination against individuals because of their name or physical appearance. Employers may not use employment tests or tests necessary for promotion that are available only in English unless the ability to read English is a requirement of the job.

Religion

An employer should expect to reasonably accommodate the religious practices of employees unless to do so would mean a hardship for the employer. This accommodation might mean, for example, arranging the work schedule so employees can have certain days off to attend religious services.

Age

The Age Discrimination in Employment Act of 1967 provides protection to employees aged forty and older. Employers cannot indicate a preference for employees of a certain age in their advertisements or limit older individuals' employment opportunities or reduce their wage rates. It is very difficult to use age as an employment criterion in the health care industry unless the age requirement for a particular job is related to public health and safety or is a bona fide occupational qualification or business necessity.

Fair Labor Standards Act

The Fair Labor Standards Act (FLSA) is an important piece of federal legislation that (1) establishes the minimum wage, (2) requires employers to pay nonexempt employees at a rate of one and a half times their hourly rate for each hour of overtime worked beyond forty hours in a week, and (3) regulates the employment of children. The FLSA is more fully discussed in Chapter Eight.

Family and Medical Leave Act

The Family and Medical Leave Act (FMLA) was passed by Congress so that employees who have been employed by an organization for at least twelve months can balance work and family life by taking twelve weeks of job-protected, unpaid leave within a twelve-month period, or paid leave if the employee has earned it. The employer must pay the employee's health insurance benefits during the period of time the employee is on FMLA leave. The FMLA requires (with some exceptions for highly paid and key employees) that employees using the leave provided by the FMLA be given their original position back or be given an equivalent position in the organization. FMLA is more fully discussed in Chapter Eight.

Managing Compensation and Benefits

Compensation includes salary, benefits, paid and unpaid time off work, and any other rewards given employees. When job applicants consider a job, they think about total compensation as well as about organizational culture, career advancement possibilities, training and development opportunities, and other factors, and the weight placed on each of the compensation components will vary by individual. Younger employees tend to place more emphasis on salary and potential for growth, whereas older employees tend to place comparatively higher value on such benefits as health insurance and pension plans. Flexible benefit plans represent one approach to allowing employees to select those benefits perceived by them to be of greatest value.

Employees in all organizations expect to be rewarded for their work in an equitable manner. Employers use a variety of methods to determine how much people are paid, including

Point methods. Points are assigned to various *compensable factors*, and each job's factors are identified. The points for each job's factors are then added up and translated into dollars.

Job classification systems. Jobs are classified, based on job content and job requirements, into slots with assigned pay ranges.

Wage and salary surveys. Market assessments determine the worth of a job.

A combination of methods. "Objective" job factors and labor market factors determine the worth of a job.

A central component in determining compensation is the job evaluation. This evaluation identifies such factors as educational requirements, experience required, supervisory responsibilities, and the amount of discretion exercised in the job. The job evaluation process is usually performed without regard to the forces of the labor market or the specific qualifications of a job incumbent. Wages can then be altered to account for such factors as scarcity in the labor market, and pay ranges can be used to provide room for additional compensation for individuals with higher than average skill sets or other qualifications. But the job evaluation process itself should be based on the job description and the requirements needed to do the job.

Regardless of the way in which an organization determines its compensation, it is critically important that employees perceive the compensation system to be equitable. Employees can accept pay differences among employees when those differences are based on objective, clear, and fair criteria. However, when employees perceive a situation of inequity (so that they think, for example, “I’m not getting sufficient compensation for what I’m putting into this job in terms of my education, experience, qualifications, and effort”), it leads inevitably to lower morale, lower motivation and performance, and ultimately, turnover.

The major challenge facing managers in any organization is balancing the need for internal equity (that is, fairness in pay based on transparent criteria) and external competitiveness. For example, the jobs of a nutritionist and a physical therapist in a medical practice may be evaluated as being “worth” approximately the same. That is, they may require a comparable levels of education, experience, supervisory responsibility, and autonomy. However, because of the scarcity of physical therapists, the practice may need to pay physical therapists more than they are objectively “worth” to compete in the job market. This certainly can set up a situation of internal inequity which needs to be acknowledged and managed.

A similar situation arises when a new employee is hired for a position at a rate that is not aligned with rates currently paid for that position in the organization. For example, an experienced registered nurse who has been with a practice for ten years may be earning \$15 an hour, but in order to attract another nurse in a scarce labor market, it may be necessary to pay up to \$15 an hour (or more) to attract a nurse directly out of nursing school. Such wage compression can be very demotivating for employees and a challenge for managers.

There is increasing interest in a variety of pay-for-performance (PFP) schemes, such as offering bonuses above and beyond regular salary, putting some of an employee’s compensation “at risk” and allowing that employee to earn back those earnings (and more), and establishing team- or organization-based rewards for achieving profit, quality, or efficiency goals. Some plans are based on individual performance; others, on the performance on the team, work unit, or organization as a whole. Although such arrangements have intuitive appeal, it is important to carefully think through the

possible consequences of any PFP system. In some instances, employees will sacrifice certain behaviors and practices of value to the organization so that they may receive a monetary reward for those behaviors that are rewarded. For example, a physician rewarded for the number of patients seen in a particular period of time is at risk of providing care at substandard quality. Similar trade-offs between quantity and quality may also be seen in other areas. Claims processors, for example, should be assessed—and perhaps compensated—not only on the basis of the number of claims processed but also on the accuracy of those claims. The important point is that when employers put together a pay-for-performance scheme, there are likely to be consequences of which they may be unaware unless they engage in careful planning and monitoring. In some situations, compensation systems that set up competition may be dysfunctional. For example, in a practice that values teamwork (as most do), there is a clear misalignment between that value and a reward system that rewards only individual work and not the individual's contributions to the team or team performance. When a practice is designing a PFP approach, it should

- Ensure that it has a valid, reliable, and acceptable method for evaluating employee performance. A consistent and well-implemented performance appraisal system is an absolute necessity for a PFP scheme.
- Keep the plan as simple as possible. PFP plans often fail because they are so complex as to be beyond the comprehension of many employees.
- Ensure that monetary rewards are of sufficient value to make a difference in employee behavior. A 1 to 2 percent bonus has little potency; a 15 percent reward is more likely to have an impact.
- Anticipate the unexpected. When we reward a behavior or set of behaviors, are we unknowingly suppressing other desired behaviors?
- Involve employees in the design of the plan.
- Evaluate the impact of the plan.

Offering Rewards and Recognition

Reward and recognition programs are often limited to an annual event recognizing employees for achieving years-of-service milestones. An effective reward and recognition program needs to do more than recognize longevity. It should be focused on rewarding employees for promoting the philosophy and service expectations of the practice. Recognition programs need not be costly to be effective. Personal thank-you notes, certificates of achievement, a letter celebrating an anniversary date, a symbolic award, and a designated parking space for the employee of the month are all low-cost, high-impact recognition opportunities.

There is a great deal of pressure on all organizations' human resource departments to become more cost effective and to demonstrate their value to the organization. Many human resource departments have developed metrics to assess their bottom-line contribution to their organizations. It is important for human resource departments to be held accountable—as other units are—for their contributions. Thus many health care organizations' human resource departments are critically examining their impact on the organization, not simply as cost centers but as entities that add *value* to the organization. In sum, they take an outcomes approach and attend to such key issues as reducing turnover, reducing the cycle time to recruit and hire employees (which reduces overall costs), and improving the extent to which content learned in training programs is transferred to the job.

One method that human resource departments are increasingly using to become more cost effective is process improvement, or in some cases reengineering when the change needed is drastic. This improvement may take the form of decentralizing some functions by training line managers in traditional human resource functions, by allowing employees to act for themselves (for example, by making changes in their benefit plans via the Internet), and by outsourcing certain human resource functions to achieve greater efficiencies. Outsourcing is generally performed in such routine areas as benefits and salary administration; it is less likely to be performed in areas where internal expertise is required, such as employee relations and managing grievances.



All organizations are dependent upon people to achieve their mission and goals. In a competitive environment the manner in which organizations deal with their people can certainly be a source of competitive advantage or disadvantage. Health care is no exception; in fact the critical role that people play in health care epitomizes the importance of thinking strategically about how we manage our human resources. Successful health care organizations are those that create a culture of fairness, maintain high communication, and establish an environment that sincerely invites and uses employee participation.

We increasingly hear the term *human capital* used in discussions of organizations and society in general. Certainly, we have become in large part a knowledge-based economy. An organization's assets can no longer be viewed simply in terms of cash, property, and equipment. The knowledge and skills that people bring to the job are clearly assets and in many cases are not easily replaced. In medical group practices the equipment and physical plant stay in the office at night, but the most important assets of the organization—its employees—leave. A key job for all members of a group practice is to ensure that those assets return to the practice every day and that the knowledge and skill base of all employees is current. Given the availability of alternative employment opportunities for highly

skilled and knowledgeable employees, it is also the responsibility of managers and all employees to create and maintain an organizational culture that promotes cohesion and teamwork, and a work setting that supports creativity, initiative, and continuous improvement.

Discussion Questions

1. Define *alignment* as it is used in this chapter and discuss its role in group practice management.
2. What is critical incident analysis?
3. Discuss the Civil Monetary Penalties Act and its implications for medical group practices.
4. List the five factors that (according to Harkins) affect job satisfaction.
5. According to employee surveys, what is the primary factor effecting employee satisfaction and commitment to the organization?
6. Discuss the differences between a graphic rating scale and an outcomes-based performance measurement system?
7. What are the two general categories of sexual harassment?

Web Resources

PowerPoint presentation

Answers to discussion questions

Summary of federal employment regulations

Sample mandatory education requirements and competency checklist

Notes

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CHAPTER THIRTEEN

PHYSICIAN COMPENSATION

Lou Porn

Objectives

This chapter will help the reader to

- Understand what an effective compensation formula can and cannot accomplish.
- Build a compensation formula that will support corporate vision and direction.
- Understand the need to build capital.
- Understand the role of the compensation methodology.
- Effectively implement the compensation formula.

Physician practices, freestanding or academic, have pondered, contemplated, and fought over compensation methodologies for decades. In most cases changes in compensation methods are reactions to trends or fads in the marketplace. In other cases they are merely reactions to specific physicians or specialties that hold political power in the practice or believe they are being treated unfairly. However, the most successful changes are typically those designed to support organizational vision and direction.

As a result of the introduction of quality initiatives, changes in the payer landscape and governmental reimbursement programs, and the need for clinical financial success in academic environments, many physician practices have developed comprehensive physician compensation methods. The challenge has been determining how to provide incentives related to the various initiatives facing the practice while maintaining a formula that the member physicians can understand. As part of that challenge, practice leadership needs to satisfy its partners, each of whom may have different motivations. Future compensation methods will need to support a solid vision for the medical practice. Payment for physician services is decreasing at the same time costs of professional liability coverage and the requirements for capital investments in specialty hospitals and other capital-intensive projects are increasing.

Before investing the time and energy to develop a new or enhanced physician compensation method, the physician practice needs to address the following questions:

- What is the role of the practice: billing and payroll conduit or clinical or academic market leader?
- Will the practice function as a united entity or as a collection of individuals with limited joint participation?
- Should leadership consider allocating only available dollars?
- Should quality be a generic objective or specifically supported through the compensation method?
- Should the compensation method drive expanded revenues?
- Will the practice control costs or take them as they come?
- Will significant capital investments support the practice's vision?

Organizational Nature and Strategy

The major challenge facing many physician practices today is determining how the entity can provide value to the physician owners (members). For decades, individual practice members have questioned the value of the corporate entity in relation to billing department effectiveness, cost of business, managed care contracting, capital investments, and more. These strategic and cultural issues have driven the development of compensation methods. However, in some cases the very nature of the entity drives the compensation formula. There are many different types of physician practices: freestanding medical practices, academic faculty practice plans, hospital-based practices, and payer-owned practices. Each is unique, with its own culture and strategic issues that affect its choice among alternative compensation approaches.

The foundation of a compensation program is the organization's vision statement. The vision statement should accurately reflect what the practice needs in terms of a compensation method. "To support the corporate mission of XYZ Physician Practice with high-quality medical care" has implications completely different from the implications of "to be the most significant influence and to provide high-quality, cost-effective medical care in the region." Achieving the goals of the latter statement would require a compensation formula that offered significant support of the desired practice culture and that had a retained earnings component. The prior statement would not.

A practice's strategy derives from its vision and provides further insight into the potentially necessary components of the compensation method, the significance of each component, and the timing of the transition to the new method. For a practice that is trying simply to recruit and retain the necessary number of physicians by

specialty, the method may be focused on determining the best balance of base and incentive compensation. In comparison, for a practice with a strategy of growing into the dominant force in the region, the method may include a bonus pool to be used to recruit and support nationally or world-renowned experts and a retained earnings fund to be used to build a stronger balance sheet to support significant technology or other capital investment and to enhance access to the credit markets.

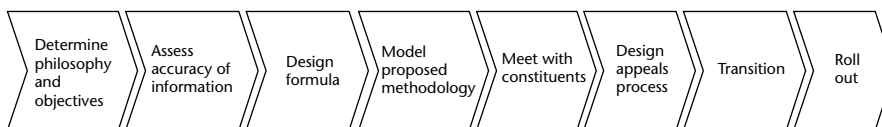
Like the design of the physician entity strategy, the design of the compensation method must consider the current practice culture and its ability to make the necessary changes. It is generally easy to make slight adjustments from current norms and expectations but more complicated to effect more dramatic evolutions. The stronger the leadership and the greater the perceived need for change on the part of the member physicians, the greater the amount of change that can be achieved.

Building a Formula Process

The process of developing the compensation plan is more critical than the end product. Significant effort should be placed on building trust among the physicians and effectively addressing their concerns. The economic realities of any business are that some years will be more profitable than others. A rough financial year can result in frustration with the compensation formula if the physicians believe that it fails to reflect how each one of them performed in that year. Therefore it becomes very important that the physicians understand how the formula supports the overall entity vision and strategy. In addition the physicians must understand how they will realize the benefits of their current efforts in the short and the long term and recognize that prior investments of past practice members provide value to current members.

The most successful compensation change processes are driven by the strategic planning process. As illustrated in Figure 13.1, the process to redesign the physician practice compensation method should include the following steps:

1. Select the compensation redesign committee.
2. Determine the overall compensation philosophy and objectives.
3. Match the corporate strategy and alternative compensation formula components.
4. Develop a conceptual design for the proposed formula.
5. Model the proposed methodology.
6. Meet with key constituencies and highly affected specialties and individuals.
7. Determine payout schedule and cash flow.
8. Design appeals process.
9. Design transition plan as necessary.
10. Roll out the compensation strategy.

FIGURE 13.1. STEPS IN THE COMPENSATION PROCESS.

A rush to implement a boilerplate method, pulled from another practice with a different culture or at a different stage of evolution, without considering how it may affect the individuals in the practice can have severe ramifications. Although a single compensation strategy cannot be expected to meet every individual need, practice leadership must be aware that failure to consider and understand the wants and needs of the physicians in the practice could lead to physician departures, loss of entire specialties, damage to the practice mission, and other similar disasters.

An overhaul of a physician practice compensation method will normally take six to nine months. Sweeping changes in the compensation formula will require more time, and minor modifications and adjustments will require less time. Other important considerations are the strength of the leadership team and the time actually available to implement the change.

Many physicians view organizational hierarchy with skepticism, regardless of practice type and structure. The level of physician interest and concern tends to rise when compensation is the issue under review. Practice leaders should announce the process, the committee members, and the timetable as early as possible. Additionally, a well-defined communication plan should accompany the announcement so that the member physicians may keep abreast of the process.

Select the Compensation Redesign Committee

The formation of the *compensation redesign committee* is a critical success factor for the compensation method redesign process. The committee members should represent the overall physician practice leadership in order to ensure alignment between the vision and the strategy.

One of the key decisions to be reached is the role of the practice manager or the practice management team. In many practices this team will drive the process in order to leverage team members' business and project management expertise and available time. In other practices team members will serve as support staff to a physician-driven process. In both scenarios the physicians will need to make the final decisions and lead the communication process with the member physicians.

As shown in Figure 13.2, the role of the committee members is to

- Create a common understanding of all the issues that need to be addressed
- Ensure there is agreement on the overall objectives
- Be objective and act for the good of the whole, not individuals, sites, or specialties
- Attend meetings, and actively participate in each step of the process by reviewing and commenting on findings and refining alternatives
- Generate input, commitment, and support for the resulting compensation plan by communicating progress to affected constituencies
- Act as plan “champions” in the rollout and implementation processes

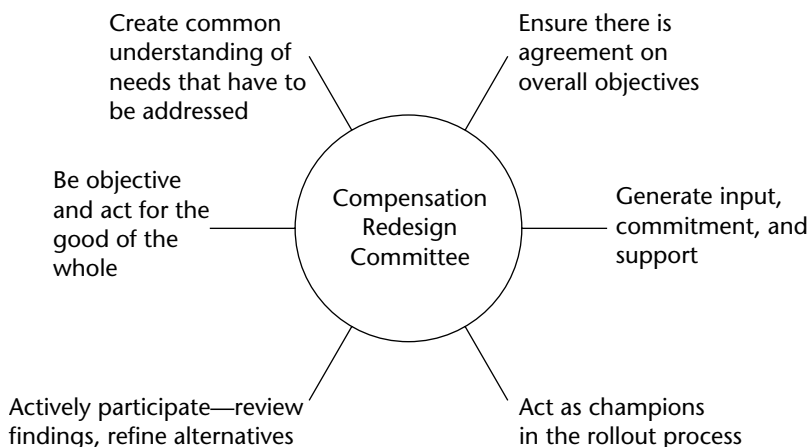
Determine Objectives and Principles

The first task of the committee is to set the objectives for the compensation plan and the underlying philosophy. The objectives for the compensation plan might state that it will

- Support the strategic plan
- Support the desired culture
- Provide a basis for physician recruitment and retention
- Reward physicians fairly
- Provide internal consistency

The committee needs to make several key decisions related to underlying principles early in the process. These decisions should evolve from the strategic plan and should receive approval from the board of directors, board of trustees, dean, or owners before the committee moves forward. Decisions to be addressed include

- Should the compensation method support a practice, specialty, or individual culture?
- What should be included in the compensation program?
- Should specialty differences be recognized?
- Should nonclinical performance be recognized?
- Should time spent in clinical and nonclinical performance be differentiated?
- Should differences in patient payments be differentiated in recognizing production?
- Should physician compensation be benchmarked against the marketplace?
- Should some portion of current earnings be retained for future investment?

FIGURE 13.2. ROLE OF THE COMPENSATION COMMITTEE.

Match Compensation to Strategy

The most significant compensation decision concerns the overall structure of the method. It will be practice, specialty, or individual based. In some instances physician practices develop a structure that is really a billing and payroll service or independent physician association (IPA) model. This is evidenced by the election to return all collected dollars to the individual physicians, sites, specialties, or other units. General billing costs may be charged to the IPA. However, few practice investment, general management, or operating costs are shared.

There are three steps to determining the framework for the practice's compensation formula.

Step 1: Consider the Following Design Characteristics

- How much weight should be placed on individual contributions? How much on performance of the department or practice as a whole?
- If compensation is to be based on practice performance, what should the team structure be (department, site, or some other grouping)?
- How should resources be split within each department or site?

Step 2: Determine the Allocation of Resources. The key question here is whether charges, cash, expected net revenue, or some other factor should be used to determine each physician's service. In the past many physician practices used approximate net rev-

enue for this purpose. One problem with this approach was that often the amounts actually realized for services were significantly less than estimates, resulting in a net shortfall in revenue available for payouts over the course of a year. This shortfall led some practices to bankruptcy or required practice subsidization by an affiliated hospital. As a result, physician practices now usually credit service based on cash received for services by the practice. This approach is very similar to that used by attorneys, accountants, and management consultants.

Step 3: Determine How and to What Extent Production Will Be Recognized.

The third key issue to be addressed is the definition of *production* to be used. Production is not limited to clinical services. For the purposes of the compensation formula, production, even though it can take various forms, should be measurable. Table 13.1 displays sample areas of performance and metrics recognized by physician practices.

The issue of recognizing clinical production related to indigent care has existed for decades, especially in academic medical centers. At the present time most practices—academic, hospital based, and freestanding—believe that services to all patients should be weighed evenly. Therefore they prefer to credit clinical production in terms of RVUs. If RVU information is not available, gross charges are used. When gross charges are used to recognize production, the leadership of the physician practice must ensure that the charge structure throughout the practice consistently reflects the work effort of the clinician. If market forces require inconsistencies, the differences must be adjusted when calculating relative production. In all methods where measures other than collections are used to recognize production, the value of the metric must be equated to the resources actually available to the physician practice, that is, collections.

Clinical production can also be recognized in managed care environments. Accomplishing higher production through managing larger patient panels (versus churning patients) is a very successful strategy. Effective utilization tracking and reporting programs are necessary.

Example. Hilton Head Specialty Practice is a twenty-five-physician multispecialty practice with three locations. Most of the physicians in the practice believe that compensation should be largely driven by the value of the contribution of the individual to the organization. However, they also believe it is important to recognize and reward contributions at the departmental level. Figure 13.3 summarizes the physicians' process for designing their compensation formula, applying the three steps just described.

Use of Benchmarking. Some physician practices use benchmarking to alleviate the need for time-consuming and complex physician compensation formulas. They believe that physician compensation should be completely reflective of the market, and therefore they select a marketplace level (the median or the seventy-fifth percentile, for

TABLE 13.1. PERFORMANCE AREAS AND METRICS FOR COMPENSATION FORMULAS.

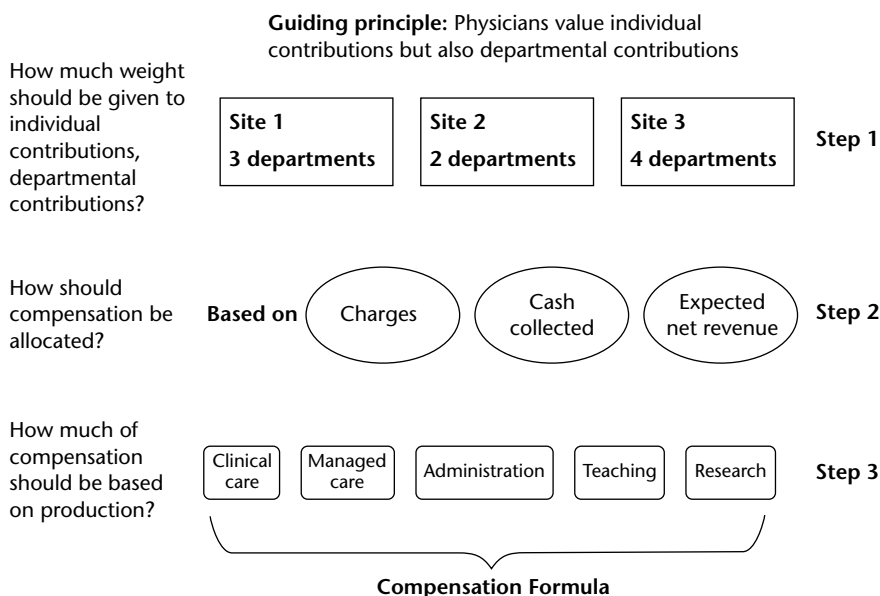
Service	Metric
Clinical service	<ul style="list-style-type: none"> • Collections • Charges • Net revenue • Relative value units (RVUs) • Blend of these metrics
Managed care	<ul style="list-style-type: none"> • Size of panel • Medical managed protocol compliance • Out-of-network control
Administration	<ul style="list-style-type: none"> • Departmental or site growth • Project performance • Departmental performance • Extent of programs
Teaching	<ul style="list-style-type: none"> • Number of residents • Resident RVUs • Publications • Resident surveys • Undergraduate performance
Research	<ul style="list-style-type: none"> • Total grants received • Total federal grants • Primary investigator dollars

example) and pay each specialty at that level. Overages and shortages are absorbed by the practice. Other physician practices believe that compensation should be completely reflective of clinical production. Therefore they compensate physicians at the market rate appropriate to each physician's level of production. Each of these approaches has potential shortcomings. When they are employed in a practice, practice leadership should have plans that address

- What to do when the practice's financial performance is below benchmark performance, and medical practice resources are not available to pay at the benchmark level
- How to handle necessary cross-subsidization
- How the practice will make practice investments
- How the practice will support nonclinical activities

Develop the Conceptual Design

Once the framework for the compensation formula is developed, a myriad of alternative individual components need to be considered. As illustrated in Figure 13.4, the process to build the conceptual design can be broken into five steps:

FIGURE 13.3. EXAMPLE OF COMPENSATION FORMULA DESIGN.

1. Develop a list of actions that should be supported.
2. Identify alternative components to support desired actions.
3. Evaluate the pros and cons of the alternatives.
4. Select components.
5. Use the components to build the conceptual design.

Just as strategy must be considered with an eye to the future, so must the compensation system. If the practice is going to expend the effort to redesign its formula, it should invest the necessary resources and effort to design one that will work well into the foreseeable future. A critical part of this effort is a discussion with employers and payers in the marketplace regarding potential payment systems and the likelihood of their adoption. In addition, if the physician practice works closely with an associated hospital, it needs to consider its responsibilities to its partner in the areas of DRGs (diagnosis related groups), per diems, medical necessity, and payment programs.

Figure 13.5 illustrates the overall compensation formula design. The amount available for clinical compensation (for physicians and midlevel providers) is the excess of revenues over expenses less the amount to be retained by the practice. The amount available for clinical compensation can then be allocated based on the components selected by the practice.

FIGURE 13.4. STEPS IN THE CONCEPTUAL DESIGN PROCESS.

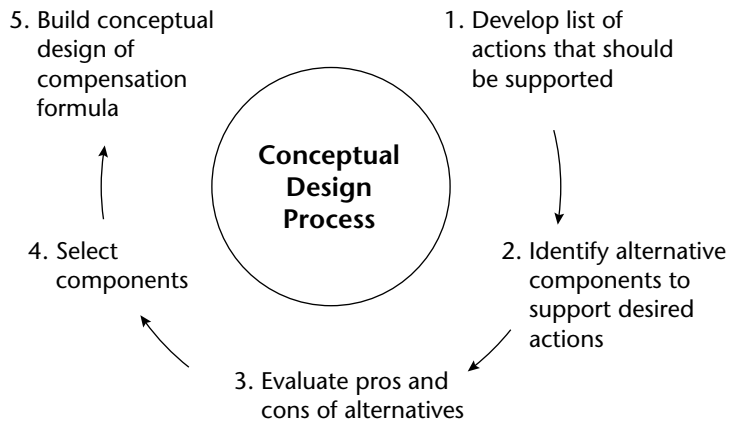
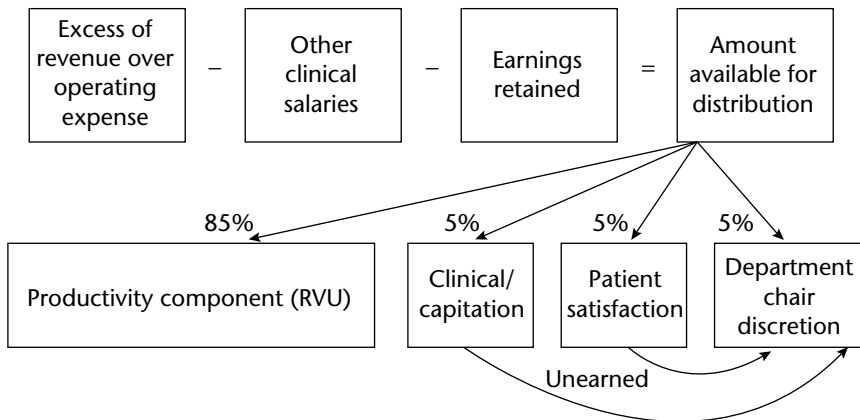


FIGURE 13.5. OVERALL COMPENSATION FORMULA DESIGN.

Overall pool is determined at practice level.



Compensation is allocated to individual physicians based on achievement of thresholds.

In addition to the core compensation model, several special circumstances need to be considered:

New physicians. They are normally paid salary for one to three years and after that are reimbursed according to the practice compensation formula. Sometimes they are allowed to elect into the formula early.

Senior physicians. Their compensation normally takes into consideration their administrative or academic role or their practice contribution or citizenship role.

Hospital-based physicians. They are normally provided for by the formula. Sometimes they are given a flat salary due to their lack of ability to affect production directly.

Payment for call. This payment is normally provided only for in-house services, at a percentage of production value. It results in dilution of produced dollars.

Part-time physicians. They are normally paid a flat salary. Sometimes they have the potential for a bonus based on production.

Midlevel providers. They are normally paid a flat salary. Sometimes they have the opportunity for a production bonus. Their production needs to be segregated from that of physicians.

Determining the productivity of each midlevel provider requires evaluation of all aspects of the provider and of the related physician(s). This is true for the physician whether or not he or she is compensated based on clinical productivity. If the physician is paid based on clinical production and the cost of the midlevel provider is not charged against the physician but the production of the midlevel provider is credited to the physician, then the physician may be overcompensated. When the physician is not compensated based upon productivity and the midlevel provider is not evaluated separately for incremental performance, the practice may be incurring two salaries when the physician alone could provide the necessary services to the current patients.

Many practices began to introduce quality factors into their physician compensation formula in the mid-nineties. Most of these practices were driven by the managed care realities of the time. Now, consumer-driven health care, professional liability risk, and governmental reporting compliance are pushing the inclusion of quality factors. Quality indicators may include

- Clinical factors, such as HEDIS (Health Plan Employer Data and Information Set) from the National Committee for Quality Assurance (NCQA) or Department of Health indicators
- Outcomes
- Access data
- Patient satisfaction quotients

Physician practices have elected varying approaches to including quality performance in compensation formulas. Most practices have allocated either portions of managed care contract proceeds or the overall practice resources into a *quality pool*, or *pools* if each quality component is considered a separate pool. Normally these pools represent 15 to 50 percent of the managed care or practice collections or revenues.

Payments from the quality pools are then earned through performance against norms, by patient survey scores, or through meeting other predetermined criteria. Some practices have a shared departmental or practice pool, so that the quality factors are part of the crediting process. In other practices, quality factors are intangible components in compensation-setting decisions. A few practices have used the quality portion of the compensation program as a device to take away dollars from underperforming physicians. Figure 13.6 illustrates how quality factors into the overall allocation.

The effort to determine the what and the how of resource allocations is difficult and time consuming. However, if the physician practice wants to compensate physicians according to their separate groups or specialty units, it is not finished with the process when revenues are allocated. The next step is to determine how costs will be allocated. Many physician practices that have spent a great deal of time allocating resources fall short when assigning the responsibility for cost management to the physicians, departments, or sites. Separate considerations exist for direct salary support, other direct costs (controllable and not), and administrative costs (see Chapter Three). In addition, when a practice allows staffing and other differences between departments, specialties, and physicians, these differences should be reflected in the cost allocations in the compensation formula. Table 13.2 summarizes the key cost categories and related allocation considerations. Tables 13.3 and 13.4 illustrate how revenue and cost might be allocated in a practice by specialty and by individual.

Model the Proposed Methodology

Once the proposed formula is developed it must be tested. A critical part of a successful model is the availability of necessary information. In addition, the committee must evaluate the confidence the physicians have in the information. Examples of this information include

Physician effort other than clinical productivity: make accurate measurements of the true time and intensity of effort expended by each physician in such roles as primary investigator or other researcher and in community involvement, in addition to measuring the revenue generated as a result of these activities.

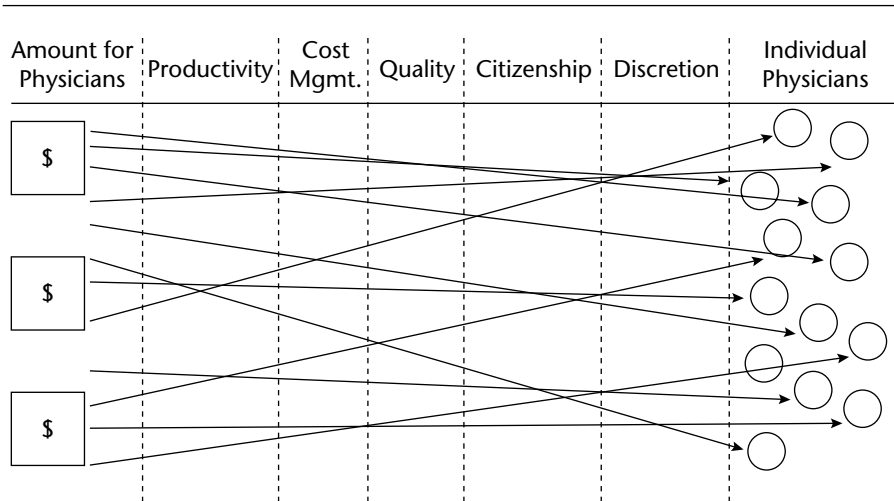
RVUs (relative value units) to allocate service credits: translate volume to RVUs.

Nursing costs: allocate shared nurse time.

Administrative contributions: track the time expended on and the incremental value of physicians' administrative activities.

Quality: establish metrics for quality and ways to measure specialty variation.

FIGURE 13.6. QUALITY AS AN ALLOCATION FACTOR FOR OVERALL PRACTICE PROFIT.



Quality factors can be used as an allocation factor for amounts available for distribution to physicians.

TABLE 13.2. COST ALLOCATION CONSIDERATIONS.

Cost	Allocation Considerations
Clinical salaries	<ul style="list-style-type: none"> • Set staffing patterns and do not charge • Charge for variations from staff mix models • Charge directly to physician, department, site
Nonchargeable medical supplies	<ul style="list-style-type: none"> • Charge when over set staffing patterns • Monitor but no direct charge • Charge to physician, department, site • Allocate excesses from budget norms
Other clinical costs	<ul style="list-style-type: none"> • Allocate specifics or overall
Space	<ul style="list-style-type: none"> • Allocate specifics or overall • Directly allocate if optional space allowed
Administrative	<ul style="list-style-type: none"> • Allocate actual (collections, number of physicians) • Allocate market norm only
Optional costs	
Dedicated admin. assistants	<ul style="list-style-type: none"> • Directly allocate to department or physicians
Grant pursuit support	<ul style="list-style-type: none"> • Directly allocate
Preferred office decorating	<ul style="list-style-type: none"> • Directly allocate

TABLE 13.3. ALLOCATION OF REVENUE AND COSTS BY SPECIALTY.

Physician	Collections	Operating Costs ^a	Admin. Costs	Available for Physicians ^b	Productivity 60% ^c	Quality 20% ^d	Teamwork 20% ^e	Total
A					\$180,000	\$40,000	\$40,000	\$260,000
B					108,000	40,000	40,000	188,000
C					72,000	20,000 ^f	40,000	132,000
TOTAL	\$2,000,000	\$1,000,000	\$400,000	\$600,000	\$360,000	\$100,000 of	\$120,000	\$580,000
							\$120,000	

^a Includes midlevel provider and nursing salaries, medical supplies, and other operating costs.

^b This example makes no provision for retained earnings. When some earnings are retained, less is available for physicians.

^c Allocated based on RVUs.

^d Allocated based on specialty or group indicators (chart completion, immunizations, and so forth).

^e Allocated based on chair or board discretion.

^f Physician C met one-half of the indicators. Unearned portion is retained in group or departmental fund.

TABLE 13.4. ALLOCATION OF REVENUE AND COSTS BY INDIVIDUAL.

Physician	Collections	Operating Costs ^a	Admin. Costs ^b	Available for Physicians	Productivity 60% ^c	Quality 20%	Teamwork 20% ^d	Total
A	\$1,000,000	\$500,000	\$134,000	\$366,000	\$219,600 ^e	\$73,200	\$73,200	\$366,000
B	600,000	300,000	133,000	167,000	80,000 ^f	33,400	33,400	146,800
C	400,000	200,000	133,000	67,000	40,000 ^g	7,000 ^e	13,400	60,400
TOTAL	\$2,000,000	\$1,000,000	\$400,000	\$600,000	\$339,600	\$113,600	\$120,000	\$573,200
					\$360,000 ^h	of	\$120,000 ^h	

^a Allocated based on collections.

^b Allocated evenly.

^c Earned the portion of the productivity factor based on specialty RVU target.

^d Earned if physician met guidelines.

^e Met or exceeded target.

^f Reached 80% of target.

^g Reached 60% of target.

^h Portion not earned is retained in group or departmental fund.

Once all this information is accumulated, the committee develops a decision tree in order to address questions that ask, In what order? and, Based on which allocation factor? Examples of in-what-order questions include the following:

- Should proceeds (cash, charges, grant proceeds, stipends, and so forth) be allocated first or should the total net amount available for physician distribution be allocated?
- Should general practice participation (such as participating in practice committees, attending staff or departmental meetings, doing community work, and submitting charges on time) be recognized as a factor in proceeds allocation?
- If proceeds are allocated, should operating costs be charged before or after direct costs? Should they be allocated at all?
- Should the quality factor be attributed directly against proceeds, before costs or after costs?
- How should unique service revenue (expert testimony, speeches, inventions, articles, books, and so forth) be handled?
- Should practice investment contributions (if desired) be allocated before proceeds allocation, as part of proceeds allocation, or after all proceeds and cost allocations?

In each case, an allocation order needs to be selected.

A critical success factor in any significant compensation model redesign is “with and without” (w/w) modeling, which stands for with the new plan and without the new plan. This means showing the committee and every specialty leader and individual physician the realities of the proposed compensation plan. The w/w model takes the actual physician practice performance for the last six months (if the necessary information has not been retained, estimates are developed) and projects what the compensation would be under the new formula for each physician and practice subcomponent.

The committee must review these results to see if any results appear out of line and require analysis. This is a critical step in the process. The committee members need to consider the original objectives and philosophy behind the compensation formula in their evaluation. Many practices have run into significant problems at this point. The two most common problems are that, first, members of the committee attempt to protect themselves or their friends, or, second, the committee tries to make numerous adjustments to accommodate too many constituencies. The result in the first case is a divisive program that causes rifts between specialties, between younger and older physicians, and between newer and more senior physicians. In the second case the numerous adjustments may make it difficult for physicians to understand the relationship between performance and compensation, and they will then become frustrated. In some cases the desire to please everyone prevents a new compensation program from ever being implemented.

Meet with Key Representatives

Once the design model has been developed and reviewed, it is time to meet with (1) key representatives or opinion leaders not on the committee and (2) physicians who will be negatively affected by the new compensation arrangement. Because this can be time consuming, it is important to limit the number of individuals who will review the draft compensation plan, yet still obtain input from all appropriate parties. It is important to ensure that meeting participants are clear about the purpose, which is to ensure that all significant issues or concerns have been addressed. The meetings are not for instituting dramatic changes in the overall methodology.

Issues that arise in these meetings need to be considered and evaluated. The committee needs to sort out the issues that are valid and consistent with the overall objectives and philosophy of the compensation program and those that are not. At this point a series of “sensitivity” calculations may be appropriate for the valid concerns identified to see what any proposed changes would do to the workings of the overall formula. Based on the results, adjustments to the formula or special cases may be made. It may be that some special circumstances may be warranted. However, it is important to balance the value of the overall compensation system against each individual case. It is important to remember that there is no magical pot of gold. If an individual or department is given special consideration, another individual or department has to give up something.

Determine Payout Schedule and Cash Flow

The next decision will be to determine how the actual payments will be made under the new compensation system. Normally, physician practices elect an annual draw and settlement approach or interim “true-up” approach.

Generally, physician practices that make changes to comprehensive compensation programs elect to make cash advances to physicians at some percentage of the expected annual amounts. This is done so that a physician will not have to make payments back to the practice if the expected results of operations do not materialize. Most practices set these advances at 80 to 90 percent of the projected annual compensation. The projected annual compensation usually relates to the performance of the physician during the period prior to start of the new compensation system. For certain physicians, such as those whose practices are growing or shrinking or whose roles are changing significantly, special adjustments may be included in the compensation projection. In other practices a percentage of the prior year’s compensation is used as to set the advance. In any case, performance related to each of the compensation formula factors should be monitored monthly or quarterly. If performance is significantly different from that projected, adjustments in cash advances should be made.

Alternatively, some physician practices elect to settle up every month, every quarter, or semiannually. Normally, physicians prefer this approach because it allows them to receive settlement payments on a timelier basis. However, this strategy has a number of costs and risks. The frequent settlement process requires a large amount of administrative time in each settlement period to accumulate and validate information. In addition, meetings need to be held periodically or as needed to address physician questions and concerns. Most important, this strategy brings into focus large monthly income fluctuations and carries the potential that short-term settlements will end up in paybacks even though the annual draw is appropriate.

Design Appeals Process

One of the largest concerns physicians voice when changing compensation programs based on formulas is that unintended consequences will arise from implementation. In addition, if chairperson, section director, or board discretion is involved in making decisions about intangible contributions and production sharing based on role designation, physicians become concerned about favoritism and seniority preferences. As a result the practice needs to develop an appeals process. In many practices the compensation redesign committee is retained to review monthly or quarterly results and fluctuations and hear all appeals. In other practices the finance committee of the board hears appeals.

Design Transition Plan

Depending on the extent of change from the current to new compensation program, different transition approaches may be applied. In any case the transition should begin at the start date. “Test periods” typically do not work. Some practices may need a transition period to develop information systems or other processes for accumulating necessary information, to work on any necessary cultural change, or to allow significant changes in certain physicians’ compensation to occur gradually. But in any event the new compensation system should be fully implemented within two years.

When certain physicians have large compensation reductions, some practices ease the transition by implementing plans that state that for each of the next two to four quarters, a physician’s compensation will not be reduced by more than some declining percentage (for example, 20 percent, 15 percent, 10 percent, 5 percent). The funding for this transition is normally created through a provision that increases cannot occur by more than the same percentages. Alternatively, the cost of the transition is pooled and charged to the other physicians either equally or pro rata, subject to their compensation or production level.

Roll Out the Methodology

When the complete compensation program is designed and tested it is time to roll it out to the physician membership. There are two schools of thought about this step. First, the practice can present an overview of the entire program to the entire physician membership. The benefit here is that everyone hears one message, and rumors and inaccurate interpretation are not spread through the hallways. Second, committee members and practice leaders can meet with each department or individual; the goal here is prevent the “mob” mentality and be free to address specific issues. Most physician practices currently use both approaches and hold an introductory staff meeting followed by individual or departmental meetings.



Equity of physician compensation is one of the most contentious issues that practices will face. The most successful compensation processes are driven by the strategic management process. Practice leadership should work to ensure that the compensation formula supports the vision of the medical practice and considers all aspects of physician contribution, including quality, productivity, cost management, and teamwork. Adequate communication about the process and consideration of input from physician-owners will help to increase buy-in to the changes and minimize divisiveness.

Discussion Questions

1. What is the foundation of a practice’s physician compensation program?
2. Who should drive the development of a physician compensation program?
3. Who should have input to the physician compensation program?
4. How long does it normally take to perform the complete process of developing a comprehensive compensation program? Why?
5. What is one potential problem with using expected net revenue to determine each physician’s compensation?
6. What are the key components of a compensation program?
7. Why do most physician practices prefer to credit clinical production in terms of RVUs?
8. How may benchmarks be used in the compensation calculation?
9. What is the w/w model, and why is it used?

Web Resources

- PowerPoint presentation
- Answers to discussion questions
- Case study

Recommended Reading

- Andreae, M. C., and Freed, G. L. "Using a Productivity-Based Physician Compensation Program at an Academic Health Center: A Case Study." *Academic Medicine*, 2002, 77(9), 894–899.
- Berkowitz, S. M. "The Development of a Successful Physician Compensation Plan." *Journal of Ambulatory Care Management*, 2002, 25(4), 10–25.
- Conrad, D. A., and others. "The Impact of Financial Incentives on Physician Productivity in Medical Groups." *Health Services Research*, 2002, 37(4), 885–906.
- Hunter, H. A. "Physician Compensation: Finding the Right Plan for Your Group." *Journal of Oncology Management*, 2003, 12(4), 7–11.
- "Managed Care: An Ever-Growing Part of Physician Income." *Compensation Monitor. Managed Care*, 2003, 12(1), 17.
- Moon, S. "Medical Group Management Compensation Trends, 1999–2001." *Modern Healthcare*, 2002, 32(43), 56.



CHAPTER FOURTEEN

THE ROLE OF NONPHYSICIAN CLINICIANS IN MEDICAL PRACTICE

Blair A. Keagy

Objectives

This chapter will help the reader to

- Become familiar with the types of nonphysician clinicians (NPCs).
- Understand NPC training and certification parameters.
- Understand how the use of NPCs affects billing practices.
- Appreciate the scope of practice of various NPCs.
- Recognize the best ways of integrating an NPC into a medical practice.

Cooper, Laud, and Dietrich describe ten types of nonphysician clinicians (NPCs):¹

- Nurse practitioners (NPs)
- Physician assistants (PAs)
- Nurse midwives
- Chiropractors
- Acupuncturists
- Naturopaths
- Optometrists
- Podiatrists
- Nurse anesthetists
- Clinical nurse specialists (CNSs)

Some estimate that by 2005, NPCs will account for more than half of the approximately 700,000 physicians involved in patient care.² Two noteworthy developing trends regarding NPCs are³

1. A substantial variation in the range of practice granted to NPCs by states
2. The development of a subset of services that may be provided by either a physician or an NPC

Four groups of NPCs are classified as traditional *midlevel providers*:⁴ nurse practitioners, clinical nurse specialists, certified nurse midwives, and physician assistants. These traditional NPCs, sometimes also referred to as *physician extenders*, have worked in association with physicians either because of their professional desire or because of state regulations. Other NPC groups often practice independently as primary contractors, providing care without the supervision of a medical doctor. They include optometrists, podiatrists, acupuncturists, and naturopaths. They are regulated by the state in which they practice and have varying prescriptive powers, depending on the state regulations.

The Growth in NPCs

The increasing numbers of the two largest NPC groups (NPs and PAs) will have the greatest impact on primary care physicians. Of the more than 800,000 physicians in the United States,⁵ approximately 80 percent are engaged in patient care,⁶ and 35 percent of these provide primary care. These physicians soon may be outnumbered by the total non-MD workforce (including alternative medicine providers), and the combined number of NPs and PAs will exceed the number of family practice physicians. This may affect the type of care that patients receive and have a negative effect on the incomes of primary care doctors and the demand for such doctors. Physicians may feel threatened by competitors who generally work for less compensation than they do.

The number of PAs and NPs entering the medical workforce has increased tremendously over the past ten years. The supply of NPs increased by more than 200 percent during the 1990s, and the number of PAs increased by 97 percent.⁷ By 2005, it is expected that more than 115,000 NPs will be in practice, a number similar to the family physician workforce, and the growth rate in NPs and PAs (approximately 45 percent) is estimated to be nearly double that of physicians (approximately 24 percent).⁸ Different sources offer varying estimates and statistics. A sampling of these are shown in Perspective 14.1. In addition to increases in the NP and PA workforce, other NPCs are also assuming greater roles in health care delivery.⁹

PERSPECTIVE 14.1. ADDITIONAL ESTIMATED NUMBERS OF NPCs.

- The number of nurse practitioners is projected to increase from 55,000 in 1995 to 106,000 in 2005.^a The number of primary care physicians is projected to increase by about 10 percent.
- In 2001, there were approximately 103,612 nurse practitioners and physician assistants in clinical practice in the United States.
- The combined annual number of PA and NP graduates in 2001 was 11,559, a 50 percent increase since 1996, with a trend toward more PA and fewer NP graduates.^b

^a F. Diamond, "Nurse Practitioners Inch onto the Field," *Managed Care*, Aug. 2000, [www.managedcaremag.com/archive/0008/0008.turf.html].

^b R. S. Hooker and L. E. Berlin, "Trends in the Supply of Physician Assistants and Nurse Practitioners in the United States," *Health Affairs*, 2002, 21(5), 174–181.

One reason for the increase in NPCs is that medical consumers are becoming more accepting of NPCs and are putting pressure on regulatory agencies and third-party carriers to pay for the services offered by these practitioners. Cooper, Laud, and Dietrich cite these major reasons for the expansion of the NPC workforce:¹⁰

- Changes in state laws and regulations resulting in enhanced practice prerogatives for NPCs
- New opportunities for NPCs to engage in practice
- The increased number of training programs for NPCs
- Acceptance of NPC services by many private carriers
- NPCs' ability to obtain reimbursement either independently or in conjunction with a physician employer

Credentialing, Certification, and Training

Providers are credentialed primarily to protect health care organizations and institutions from the legal liability that could result from the actions of unqualified providers. Two organizations—the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the National Committee for Quality Assurance (NCQA)—are responsible for the continuing quality of medical care. Credentialing

and certification are especially important when the NPC will spend some or all of her time in the hospital setting. In an office practice it is important to contact references and to verify claims made by the physician extender with regard to schooling and completion of licensure examinations. Many hospitals grant credentials to PAs and NPs in the same way as they do for physicians.

Nurse Practitioners

NP training programs were developed from the nursing model and emphasize wellness care and management of acute and chronic illness, with emphasis on case management, counseling, and patient education.¹¹ Originally, one goal of developing NP (and PA) programs was to provide care to patients in rural areas underserved by the medical community. Twenty-three percent of NPs and PAs work in rural areas, compared with only 13 percent of physicians.¹² Indeed, Medicare originally paid NPs only for practicing in rural areas; however, the law has recently been amended to allow Medicare payments to NPs in all areas.

Approximately 850 NP specialty tracks are offered at 300 institutions in the United States, and six entry-degree options are available. In a sense NPs are specialists. Educational tracks emphasize clinical experience in such specific areas as family practice, adult practice, geriatrics, pediatrics, women's health, neonatal medicine, and acute care.¹³

In the past no unifying body has established a basic curriculum for NPs or examined instructor background and qualifications. More recently, efforts have begun to formalize and standardize NP training programs. This has resulted in the formation of a national task force on quality NP education. Now candidates are required to spend twelve to twenty-four months of full-time study, with a minimum of 500 hours of clinical experience.¹⁴

In most cases the NP candidate has earned a bachelor of science in nursing degree before being admitted to an NP program. Some participants also have a master's degree in nursing. Occasionally, a three-year degree graduate may enter an NP program that leads to both a bachelor's degree and a master's degree upon completion of the prescribed courses. The majority of NP programs award a master's degree upon completion of the training. This will be a requirement for all NP training programs by 2007.¹⁵

Certification for NPs is somewhat fragmented. Currently, four organizations offer certification and each has its own certification examination:¹⁶ the American Academy of Nurse Practitioners (AANP), the American Nurses Credentialing Center (ANCC), the National Certification Board of Pediatric Nurse Practitioners and Nurses (NCBPNP/N), and the National Certification Corporation for Obstetric Gynecologic Neonatal Nursing Specialties (NCC).

Various groups are trying to standardize NP training programs and certifying examinations. As of 2003, an NP must meet state regulations, pass a national certification test, and have a master's degree.¹⁷

Clinical Nurse Specialists

Rutgers University established a master's program in psychiatric nursing in 1954. Now there are approximately 157 separate clinical nurse specialist (CNS) programs, representing 139 different schools. The specialty content for CNS programs is outlined in a statement on CNS education and practice published in 1998.¹⁸ Historically, the practice setting defined the major difference between CNSs and NPs. CNSs generally devote more time to education and research activities. In one study they identified consultation as their most important role. More recently, the roles of CNSs and NPs have become more aligned, but the two groups and separate degrees will probably continue to exist.¹⁹

Physician Assistants

Eugene Stead founded the first PA training program, at Duke University in 1965. The training curriculum was patterned after the traditional medical school curriculum, and PAs took many classes in conjunction with medical students. There are now 133 accredited PA schools in United States. Many are affiliated with universities; others are sponsored by community colleges. The period of training varies from twenty-four to twenty-six months, and some programs offer master's degrees. Approximately 5,200 new students were reported to have enrolled in these programs in 2002, and during the 1990s, PA training programs expanded by more than 50 percent. The number of PAs is expected to grow to 62,000 by 2005.²⁰

No standardized criteria exist for admission to a PA program, but a recent survey of new PAs²¹ found that 74 percent of the respondents had bachelor's degrees, 85 percent had worked in health care fields before enrolling in PA schools, and 79 percent indicated a willingness to practice in medically underserved areas. Some enrollees had earned RN degrees before admission.

PA programs are accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA).²² At the conclusion of their training, PAs are required to take the Physician Assistant National Certification Examination (PANCE). To maintain national certification, a PA must have one hundred hours of continuing medical education every two years and must sit for recertification every six years.

State medical boards license PAs, and board restrictions on PAs and the prescriptive authority granted to them vary from state to state. Graduating from an

accredited PA program and passing a national certifying examination are required for licensure in most states.²³

NP and PA Salaries

Salaries have been increasing for both NPs and PAs. With increasing public acceptance of these two groups, many practices believe that NPCs can assume much of the patient care activity and that compensation requirements will be less than those for hiring a new physician. The average annual salary is about \$66,000 for new NP and PA graduates and about \$72,000 for experienced NPs and PAs.²⁴ New graduates enjoyed a 3.9 percent increase in compensation between 2001 and 2002.²⁵

General Scope of Practice

State licensing bodies are responsible for defining the scope of practice allowed to NPCs. They grant varying degrees of prescriptive authority but are less likely to define diagnostic and therapeutic functions. If the midlevel provider is associated with a physician, that physician has a large amount of input into the NP's or PA's clinical activities. In the late 1990s, approximately 90 percent of all NP graduates (48,000) and 50 percent of all PA graduates (21,000) worked in primary care, which is defined as internal medicine, general and family practice, pediatrics, and obstetrics and gynecology. Approximately one-fourth of office-based primary care physicians employed PAs or NPs.²⁶

NPCs now perform independently many of the tasks once carried out by physicians.²⁷ Opinions differ regarding the number of patients who are seen by NPCs. Druss notes that between 1987 and 1997, the proportion of patients who saw NPCs rose from 30.6 percent to 36.1 percent. That increase seems to reflect an increase in the proportion of persons who saw both a physician and an NPC during the same visit.²⁸

NP Scope of Practice

Because of their nursing background and nursing influence during training, many NPs feel less kinship with physicians than do PAs, and NPs are advocating the concept of independent practice. They see themselves as collaborators with physicians.²⁹

The NP profession is state regulated, resulting in some variations in permitted functions, but those functions typically include history taking, physical assessment, ordering appropriate laboratory tests and procedures, outlining care, providing prescriptions (state regulated), and coordinating referrals and consultations. (A fuller list

appears later in the chapter.) Most states regulate NPs through boards of nursing, although some are regulated through combined boards of nursing and medicine.³⁰ It is important for a practice to have protocols or written guidelines in place establishing the extent of an NP's practice. The NP may need to attend a course to obtain training and some form of certification, as described earlier.

PA Scope of Practice

Various PAs have stated in interviews that their goal is to work in conjunction with physicians, and unlike NPs, PAs have not proposed independent practice.³¹

Although working under the supervision of a physician, PAs do have a great deal of autonomy, particularly in rural area clinics. A physician is not always present in the clinic setting, but PAs are reviewed with regard to compliance, and they have an MD available for consultation directly or by telephone at all times. Nearly 39 percent of clinically practicing PAs work in hospital settings.³²

Functions of the PA include performing physical examinations, diagnosing and treating minor illnesses, interpreting some test results, and assisting at surgery. In forty-seven states, PAs have prescriptive authority.³³ Medicare covers such PA services as physical examinations, minor surgical procedures, casting of simple fractures, X-ray interpretation, and some other activities. The service performed must be within the PA's state-licensed scope of practice.³⁴

Autonomous Practice

There is an increasing pressure by NPs to be allowed to establish independent practices. NPs believe that they provide an additional facet of patient care and say their relationship with physicians is "interdependent."³⁵ In twenty-two states, they do have the option of practicing without physician oversight, and they are accountable to boards of nursing.³⁶

Some studies have attempted to address this issue scientifically. One of the most widely referenced is a study by Mundinger³⁷ that compared outcomes for patients who were randomly assigned to NPs or MDs. Objective measurements were used to evaluate management of asthma, diabetes, and hypertension. Health services utilization and patient satisfaction were also examined. The study concluded that there were no significant differences in health status at six months, nor were any differences found in hospital admissions or referrals to specialty groups (approximately 5 percent in both). However, deficiencies have been noted in that study:³⁸

- The study lasted only six months.
- Difficult diagnoses and severe illnesses are likely to occur infrequently.

- There is no description of informal consultation.
- There is weak external validity.
- Providers were faculty from a university medical center, and findings may not be typical of nonacademic practice settings.

In response to NPs' and certain other NPCs' efforts to expand their scope of practice by introducing bills to that effect in state legislatures, physicians are becoming increasingly active in opposing this move toward independence.³⁹ In a policy statement the American Academy of Pediatrics (AAP) affirmed that optimal health care for pediatric patients depends on a team-based approach coordinated by a physician leader who is preferably a pediatrician. The AAP said that if NPCs choose to practice independently, they must assume exclusive professional responsibility for the care they provide. The NPCs must also have appropriate malpractice coverage.⁴⁰ Other physician groups are also concerned with this movement toward independence. A petition submitted by fifty physician organizations to the Centers for Medicare and Medicaid Services emphasized the need for stricter legal compliance in the distribution of billing numbers and for payments to NPs.⁴¹ The American Medical Association (AMA) has emphasized that the public and legislators should be informed about the differences in education and professional standards between physicians and NPCs.⁴²

In addition to their concerns about maintaining high-quality patient care, physicians perceive threats to their status and to their job and financial security.⁴³ They argue that the large number of midlevel trainees will create an overabundance of primary care providers. This would have an impact on the compensation received by both groups.⁴⁴

Billing and Other Economic Issues

Medicare considers the following providers to be nonphysician practitioners, who may obtain their own provider numbers:⁴⁵

- Physician assistants
- Nurse practitioners
- Clinical nurse specialists
- Certified nurse midwives
- Clinical psychologists
- Clinical social workers
- Physical therapists
- Occupational therapists
- Speech pathologists

These practitioners must have state licensure and are limited by their state's scope-of-practice regulations in the services they provide.⁴⁶

Two billing options are available to an NPC who is associated with a physician or group of physicians. The first is billing on an *incident-to* basis. In this case the reimbursement is 100 percent of the Medicare payment allowable, although certain parameters must be met if this route is chosen. The physician must see the patient for the initial visit, make the diagnosis, and institute a treatment plan. The physician must monitor the patient's condition on a continuing basis and is expected to personally evaluate the patient again if a new medical problem develops. The NPC's care is thus incident to—that is, connected with—this physician care.

Medicare has no absolute standards concerning the frequency of the physician's interaction with the patient during the course of treatment, but some local carriers have developed policies addressing this issue.⁴⁷ In a group practice, incident-to billing may be used even when the supervising physician is out of the office if a partner acts as supervisor. The Medicare manual says that the physician must render subsequent services showing his active participation, but there is no statement of frequency.⁴⁸ Consultation by telephone is not permissible when this type of billing is used.

The second option is direct billing, which is used when the NPC sees a patient independently during the first visit or when the physician is not physically present in the office suite during follow-up visits. In these instances the NPC receives compensation at approximately 85 percent of the Medicare allowable rate.⁴⁹ To avoid potential problems with Medicare and Medicaid, some practices find it easier always to bill at the lower rate, using the NPC's identification number, because the Office of Inspector General (OIG) in the U.S. Department of Health and Human Services is making a concerted effort to catch incident-to billing violators.⁵⁰

An NPC often spends more time with the patient and thus may bill overall at a higher level than the physician. The increased time results in a larger reimbursement. NPs and PAs can use the same evaluation and management codes that physicians use.

Midlevel providers no longer are required to be W-2 employees of a practice in order to bill incident to. They may be leased employees or independent contractors. This has the potential for problems with supervision and billing, because the practice has the obligation to integrate them into its organization with regard to patient-care activities.⁵¹

Some further specific elements of physician billing are the following:

- Midlevel providers may see patients postoperatively in the absence of a physician during the global payment period, that is, the period when no separate bill is submitted for postoperative visits.

- Incident-to billing cannot occur with hospital inpatients.
- For many operative procedures, authorized midlevel providers may charge for their activities as *first assistant*. Generally, the first assistant receives 16 percent of the operating surgeon's assigned payment, and the midlevel provider may generate 85 percent of that amount. (If the activity takes place in a setting where residents are available to act as first assistants, the midlevel provider may not receive payment.)

Private Carriers

Private insurance carriers are still debating their stance on medical services rendered by NPCs, primarily because of state insurance laws, NPC societies, and Medicare's increasingly liberal stance on NPC activities.⁵² Additionally, many states have enacted legislation forcing private health care plans to include reimbursement for some NPCs.⁵³ Because of the diversity of rulings and policies by payers, it is best to get instructions from each carrier before proceeding with claims submissions.

Malpractice

The National Physician Data Bank shows that malpractice payments for NPCs are much less than they are for physicians (especially specialists) because NPCs deal with problems of lower complexity. By becoming a supervising physician for a midlevel provider, the physician assumes some risk for her patient care activities. It is extremely important to have the individual carrier clarify the amount of malpractice coverage for the NPC, as well as the liability of the supervising physician and of the practice in which the NPC participates.

Duties of the Supervising Physician

The supervising physician monitors the midlevel provider on a regular basis. This involves chart review, discussion of cases, and a clear explanation of the duties of the NP or PA. If the practice is committed to using midlevel providers, the designated supervising physician should be compensated either monetarily or by decreased hours of active patient care. As the provider gains more experience, less supervision will be needed, although ongoing quality assurance is mandatory. A formal policy regarding chart review should be initiated, and the medical content of the chart narrative as well as coding parameters should be examined.⁵⁴

Integration into the Office

Many physicians believe that NPs and PAs add value to a practice. NPs tend to be better listeners than physicians, can spend more time with patients, and emphasize disease prevention.⁵⁵ For these and other reasons, physicians are employing more midlevel providers. In 1997, 53 percent of practices with three or more physicians employed midlevel providers; by 2001, 66 percent did so.⁵⁶ Some observers believe physician extenders can provide 80 to 90 percent of the services typically offered in a primary care practice,⁵⁷ thus giving the physician more time to devote to patients with more complex problems. Aquilino notes that physicians who work with NPs and PAs believe that NPCs can effectively:⁵⁸

- Attract new patients to a practice
- Prescribe commonly used drugs
- Gain patient acceptance
- Add a different yet positive dimension of care
- Free physicians' time to devote to activities other than patient care

It has also been suggested, however, that when a practice needs someone to help with administrative tasks, return phone calls, and participate in patient education, a registered nurse may be more suitable.⁵⁹

Attitudes

The practice must be careful to maintain a high level of patient satisfaction when a physician extender is employed. Patients must be assured that any decisions regarding treatment or dealing with postprocedural problems are made by the physician. It is helpful to develop a brochure or handout for patients so that they understand the level of training and experience of the non-MD provider and how the extender will participate in their care. It is also important to have the office staff treat the physician extender with respect.

Sheahan emphasizes that the physician's attitude toward the midlevel providers is extremely important.⁶⁰ Physicians want their NPs and PAs to be productive and independent, and they often fail to realize the extent to which the knowledge base and skills of NPs and PAs may be limited. For assistance, NPs and PAs tend to gravitate to the most approachable physicians in the group, thus placing an unfair burden on doctors who take the time to go over problems faced by the midlevel provider. One or two physicians should be assigned as resources for the NPs and PAs, and these physicians should be compensated financially or with decreased patient loads of their own.

An NP or PA should feel comfortable asking a physician to evaluate a patient with a difficult diagnosis or treatment plan.

PAs and NPs should be recognized as health care providers within the group, and their names should appear on business cards and letterheads. In addition they should be given time off for conferences and allowances for continuing medical education materials.⁶¹ Physicians should realize that some patients are uncomfortable consulting with midlevel providers, and the office staff should avoid scheduling these patients with them. Some patients who have expressed dissatisfaction with physician extenders have said they felt that they were forced to see an extender and perceived physician extenders as cheap substitutes for a physician.⁶² Most patients, however, believe they have easier access to health care with an individual who seems to have more time to listen to their problems and counsel them on their health care needs.

Costs

In addition to salary and benefits, there are support costs associated with adding an NPC to a medical practice. Because these practitioners will be seeing and evaluating patients, they will require nursing, scheduling, and check-in support, as well as office and clinic space. They also will render bills for their activities, so billing and coding costs will be incurred.⁶³ In general the revenue generated by a new NPC will be less than the NPC's cost to practice for the first year or two.

Duties

The physician extender can be used in many ways to facilitate the patient care activities of a medical practice. His duties can include⁶⁴

- Writing prescriptions
- Returning patient phone calls
- Increasing the effective flow of patients through the system
- Obtaining medical histories
- Performing physical examinations
- Treating minor acute problems
- Monitoring chronic diseases
- Providing prenatal care and family planning
- Providing well child care
- Providing health maintenance care for adults
- Making daily hospital rounds
- Writing daily care notes
- Managing lipid clinics

- Managing congestive heart failure clinics
- Managing device clinics
- Dictating operative reports
- Writing postoperative orders
- Inserting and removing IV lines
- Overseeing discharge planning
- Dictating discharge summaries
- Performing follow-up visits for services provided under global payments

The physician extender can also spend a considerable amount of time explaining a procedure or treatment plan to a patient and answering detailed questions, thus freeing the physician from this obligation. In addition, an NPC may supervise continuing follow-up visits.

Disease management programs are a new concept in medical practice. They denote a system of care for particular conditions and disorders such as asthma, diabetes, urinary tract infections, breast cancer, and lipid and hypertension screening abnormalities.⁶⁵ It is likely that NPCs will play a large part in the further development of these programs.

In general the addition of a midlevel provider to a medical group is a long-term commitment. When an NPC joins the group, the physicians should define that individual's role ahead of time. The NPCs should be considered part of the health care team, rather than doctors' helpers.⁶⁶

Specialty Care

Midlevel providers are capable of such minor procedures as suturing wounds, inserting chest tubes, and aspirating joints. They have the ability and knowledge to evaluate patients and obtain appropriate testing before discussing the case with the supervising physician. In addition they may serve as assistants during operative procedures. It is most likely that a PA, whose training more closely parallels that of a medical student, will align herself with specialty care providers.

Midlevel Providers as Replacements for Residents

MD residency training has been affected by new regulations that limit the resident to an eighty-hour workweek, and this has the potential to adversely affect the continuity of patient care. Many hospitals and program directors believe that this void can be filled by physician extenders. These individuals can write orders, admit patients, perform some procedures, and manage the discharge activities of the majority of patients.

Medicare and Medicaid supplements are paid to hospitals for resident staff but not for physician extenders. However, physician extenders can generate revenue in both the inpatient and outpatient settings and can receive remuneration as first assistants for many surgical procedures.

In a recent survey, 62 percent of responding medical directors said that substitution of PAs and NPs for resident physicians was already occurring.⁶⁷ Surgical specialties will be especially likely to make use of midlevel providers in the operating rooms, the inpatient wards, and the outpatient clinics. The percentage of PAs practicing in surgery was 20 percent in 2001.⁶⁸

PA or NP Residency Programs

Neither NPs nor PAs receive intensive training in specialty areas during their basic education. For this reason there is a growing interest in establishing specialty residencies for midlevel providers. If constructed properly, such programs could provide valuable experience for the NP or PA and supply additional manpower for the sponsoring practice. These midlevel providers generally are certified and licensed, and in many instances they can serve as sources of revenue during their postgraduate training.

A formal process for this didactic practical specialty education should be established and a formal review process for monitoring the trainee's progress put in place. Walgren has published a set of forms that are valuable to institutions and practices interested in establishing a postgraduate program for PAs.⁶⁹ The trainee is generally compensated at approximately one-half the level she would receive as a full-time practitioner.

It is important for one member of the specialty group to serve as program director and adviser to the trainee, but all members of the practice should be willing to participate in the educational process. Specialty residencies may also become more prevalent in university settings as decreasing resident workhours have an impact on MD residency training programs.

In May of 1998, a group representing postgraduate PA programs met to formalize a national organization whose purpose was to educate PAs in medical specialty training. It was suggested that these programs should last approximately twelve months. The Association of Postgraduate Physician Assistant Programs (APPAP) lists these program essentials:⁷⁰

- Sponsorship
- Human resources, including an administrative personnel program director, a medical director, and a faculty

- Physical resources, including equipment, supplies, and learning resources
- A formal document detailing admission policies and procedures

New programs can apply for APPAP membership on a rolling basis and are formally confirmed as members at the annual assembly meeting.

There are PA programs dedicated to advancing training in surgical specialties. The American Association of Surgical Physician Assistants (AASPA) states that PAs usually enter a surgical field by one of three routes:⁷¹ graduation from a surgically focused PA program, graduation from a PA surgical residency after PA school, or on-the-job training. The AASPA has identified the responsibilities of the surgical PA and says that these PAs may be trained to perform 80 percent of the tasks normally performed in the office of a surgical practice, including preoperative examinations, postoperative wound checks, removal of sutures, postoperative teaching, and obtaining operative permits.⁷²

In the hospital the PA can perform such valuable functions as

- Ordering laboratory studies and interpreting them
- Ordering radiological studies and reading the findings
- Ordering EKGs and interpreting the results
- Ordering angiograms
- Writing preoperative orders
- Ordering medications
- Acting as a first assistant during an operation
- Managing postoperative care
- Initiating discharge planning



The number of NPCs is increasing at a rate greater than that for the physician workforce. The reasons for this rise include more liberal government regulations, increasing acceptance by the public, and favorable payment policies by third-party payers. The major impact will be on primary care practices. The debate continues on the role of these midlevel providers, but integration into the health care delivery system is unavoidable and many of the NPCs are advocating independent practice.

Discussion Questions

1. What are the advantages of integrating an NPC into a medical practice?
2. Should NPs be allowed to practice independently?

3. Will patients accept NPs and PAs as primary caregivers in a medical practice?
4. Should incident-to billing be used for an NP or a PA?
5. Should alternative medicine options be integrated into a medical practice?

Web Resources

PowerPoint presentation

Answers to discussion questions

In-depth analysis of alternative care medicine

Training and credentialing of nurse practitioners

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CHAPTER FIFTEEN

IMPACT OF NURSING WORKFORCE ISSUES ON THE PHYSICIAN AND PRACTICE MANAGER

Elizabeth A. Arsenault

Objectives

This chapter will help the reader to

- Be more aware of nursing workforce issues that affect patient care.
- Identify the roles and responsibilities of registered nurses (RNs) and nursing-related personnel.
- Understand the development of the optimal office nursing staff mix.
- Recognize hospital operational issues, and learn how the physician can influence them to improve patient care.
- Appreciate the importance of nursing care and the value added by an optimal physician-nurse relationship.

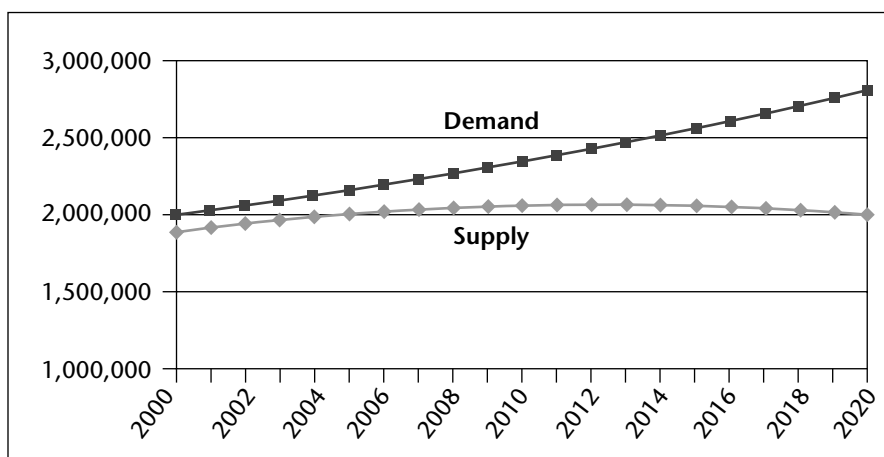
Dramatic changes in health care have gained momentum in the past two decades. Combined with the current economic instability, these forces create operating challenges for the physician and practice manager. Additionally, both are recognizing that nursing workforce issues are profoundly relevant to their business of caring for patients, both in the hospital and in the office and clinic. Awareness of these issues and the developments they forecast in care delivery, patient outcomes, and management decisions is essential. Furthermore, development of a loyal, successful clinical workforce in the office setting requires that the physician and practice manager share a unified vision for the professional culture they want to foster for the patient's benefit and for operational cohesiveness. Both must also have a thorough understanding of the financial landscape of the practice, because salary and benefit costs of RNs and other clinical support personnel must be competitive yet not have a crippling

affect on the practice bottom line. Finally, familiarity and involvement with unit-level hospital operations, specifically nursing care, allows the physician some measure of predictability and control over administrative and managerial decisions that influence patient outcomes.

The Nursing Shortage

More attention is being devoted to the current nursing shortage than was given to any similar staffing shortages in preceding decades. This increased concern is due primarily to the alarming statistics citing disparity in supply and demand, the disparity's widespread impact on every sector where nurses are needed, and the projections for long-term repercussions on health care delivery. According to the Department of Health and Human Services, demand for nurses exceeded supply by 6 percent in 2000, and that figure is expected to double in 2010 (Figure 15.1). Should this trend continue, anticipated demand and expected supply will result in a shortage of 20 percent by 2015 and 29 percent by 2020.¹

FIGURE 15.1. NATIONAL SUPPLY AND DEMAND PROJECTIONS FOR FTE REGISTERED NURSES, 2000–2020.



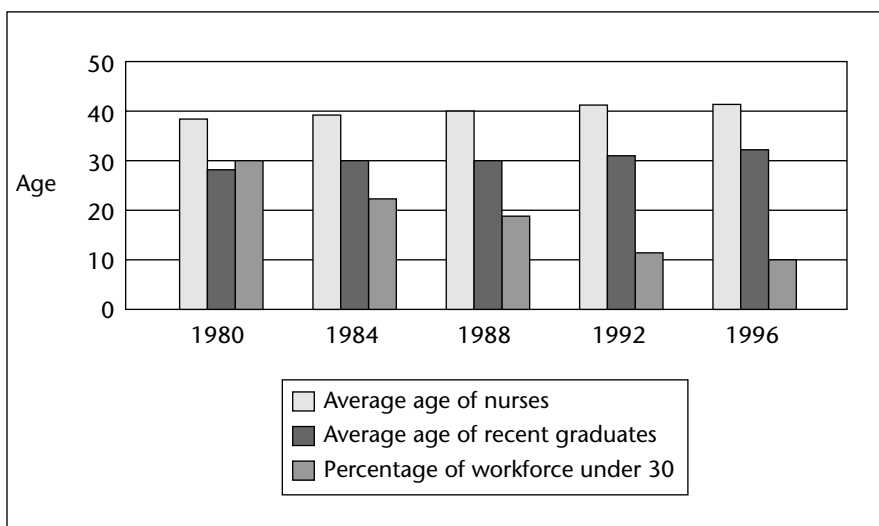
Source: U.S. Bureau of Health Professions, "Projected Supply, Demand, and Shortages of Registered Nurses: 2000–2020," 2002 [bhpr.hrsa.gov/healthworkforce/reports/rnproject/report.htm#chart1].

On the supply side several factors influence the declining numbers of nurses. Findings from a national survey showed an increase in the average age of employed RNs from 38.1 years in 1980 to 42.3 years in 1996 (Figure 15.2).² Another study forecasts that in the next ten years this average will increase to 45.4 years.³ This change is being compounded by a decreasing percentage of working nurses under the age of 30. This means that over the next fifteen years, about 50 percent of working nurses will be eligible for retirement. Additionally, as nurses age, they are more prone to injury in an already physically demanding job in an increasingly overweight society, causing further depletion of their numbers at a yet unstudied rate.⁴

Nursing was once a viable career choice for women, offering job security and higher salaries than other traditionally female fields. This has changed, however, and fewer women are choosing nursing as other career opportunities that were once available only to men now attract women.⁵ Furthermore, among those who do choose nursing as a career, many are having families first and entering the workforce later, shifting the average age of new nursing graduates in 1996 to 33.4 years⁶ (see Figure 15.2). Two-year programs are a relative fast track to a career in nursing, yet this increasing average age of entry into the profession translates into a shorter horizon of active work years. After a long decline, enrollment in nursing programs increased by 8 percent in the fall of 2001; however, projections for filling the increasing deficit with new graduates remain grim.⁷ Nurses are also leaving the profession at alarming rates. A 2001 study found that 21 percent, or one out of every five working RNs, stated an intention to leave the profession within the next five years for reasons other than retirement.⁸ Some of the reasons nurses have given for leaving the profession are⁹

- Salaries that are not competitive
- Dissatisfaction with benefits
- Limited advancement opportunities
- Inadequate staffing, leading to unsafe conditions for patients
- Disillusionment with work environment
- Lack of recognition; perception of not being valued by the institution
- Lack of institutional loyalty

Lack of competitive salaries has played a significant role in the shortage of nurses. Although salaries have increased, when adjusted for inflation nurses' "real" earnings show little improvement in purchasing power since 1991.¹⁰ Nurses are also extremely concerned about providing safe care. The onset of managed care and the decrease in reimbursement for care in the 1990s led to decreased hiring. What had come to be considered lavish staffing was sharply curtailed; many nurses lost their jobs and the

FIGURE 15.2. AGES OF REGISTERED NURSES, 1980–1996.

Source: Data from D. I. Auerbach, P. I. Buerhaus, and D. O. Staiger, "Associate Degree Graduates and the Rapidly Aging RN Workforce," *Nursing Economics*, 2000, 18(4), 178–184.

remaining struggled with the increased workload. Shorter patient lengths of stay, discharge teaching requirements, and increasing mandates for admission and discharge documentation now mean that nurses spend a larger percentage of their time on the work of admitting and discharging patients.¹¹

Patient acuity also competes with patient census when determining staffing needs; therefore ratios do not always accommodate the sicker patient.¹² A 2002 study supports the theory that an increase in nursing care hours per patient decreases occurrences of common complications such as urinary tract infections, pneumonia, and metabolic imbalances, as well as the number of the top five life-threatening complications classified as "failure to rescue" in cases of pneumonia, stroke and cardiac arrest, upper gastrointestinal bleeding, sepsis, and deep venous thrombosis.¹³ A study of postsurgical deaths in 168 hospitals from 1998 to 1999 found that increasing the average hospital nurse's workload by one patient increased the risk of death in surgical patients by 7 percent; adding four patients increased the risk to 31 percent.¹⁴ Clearly, higher levels of staffing correlate directly with early identification of ensuing complications and immediate intervention.

In an attempt to resolve problems associated with inadequate staffing ratios, the California legislature, working with the state Department of Health Services, was the first to propose staffing ratios, with an implementation date of summer 2003. The California Nurses Association applauded this decision. However, the California Healthcare Association, which represents the state's hospitals, expressed concern that if hospitals were unable to recruit the numbers of nurses needed, beds might close, and access to care might decrease.¹⁵ Like the trend toward unionization, legislation of this nature may increase. The federal Nurse Reinvestment Act of 2002 addresses the recruitment and retention issues in nursing by establishing grants, scholarships, loan repayment programs, loans designed to increase nursing faculty, and a commitment to allocate funds to a public service campaign that promotes the nursing profession.

The demand for nursing professionals has increased, further exacerbating the supply issues. Improved technology creates demand because it requires specialty-trained nurses while simultaneously creating a need in medical and surgical areas as nurses choose to specialize.¹⁶

Furthermore the projected 18 percent increase in the nation's overall population (an extra fifty million people between 2000 and 2020) and the aging of the population, particularly the baby boomer segment, means health care services will be used at a much higher rate than previously recorded.¹⁷ Hospital admissions increased from 3 percent to 5 percent in 2001, and the trend is expected to continue in 2002.¹⁸ A more recent report observed a decline in hospital admissions for the first quarter of 2003, with the same weak trend noted for the second quarter.¹⁹ Analysts attribute this largely to a mild flu season and severe weather and secondarily to concerns about the war in Iraq, the economy, and unemployment rates. The report further states that regardless of this recent decline, hospitals seem to anticipate an increase in admissions; the report cites increases in hospital construction and inpatient hospital bed capacity for the first time since 1983.

In the past two decades, many facilities found themselves employing initiatives that they expected to be short-term measures or quick fixes, thinking they were sound business decisions designed to get the institution over the hump. These quick fixes took the form of

- Expensive sign-on bonuses for new hires
- Premium pay for extra shifts scheduled in advance
- Mandatory overtime
- Mandatory on-call
- Closing beds (which resulted in lost revenue)
- Excessive or inappropriate use of traveling nurses and local registry personnel

- Increased patient to nurse ratios
- Floating RNs to areas in which they lacked the required competencies to provide safe care
- Aggressive recruitment of foreign-educated nurses

Because these remedies extended for longer periods than anticipated, they have taxed already beleaguered hospital systems and have translated into exorbitant labor costs, unsafe conditions for patients, and a resulting decline in morale among existing nursing staff.

A more comprehensive, data-driven approach toward solving the staffing shortages came in 1994 when the American Nurses Credentialing Center (ANCC) developed the Magnet Recognition Program.²⁰ The American Academy of Nursing coined the term *magnet hospital* in 1983 when citing forty-one hospitals that were consistently able to recruit nurses and retain them while the rest of the country labored under shortages.²¹ The ANCC has developed criteria and a rigorous application process that afford hospitals recognition for meeting the highest standards of nursing tradition and practice. At the same time, the ANCC makes available to other hospitals the strategies that have brought about these successes. The magnet hospital designation also tells the community that the facility is nationally recognized as a leader in quality nursing services. More than any other nurse-oriented initiative, the Magnet Recognition Program is becoming a benchmark, allowing nurses to select the most desirable hospitals in which to work. This credentialing is indeed a stamp of approval and should be considered when a physician is deciding which hospital to admit patients to, but many of the magnet concepts can also be appropriately applied to office or clinic settings to promote nursing excellence, improved patient outcomes, and patient satisfaction.

Hospitals feel the impact of the nursing shortage primarily at the organizational level. Because this shortage has proven chronic, vacancy and turnover rates are above the recommended benchmarks for most hospitals. The American Hospital Association (AHA) reports that in 2001, more than one in seven hospitals experienced RN vacancy rates ranging from an average of 13 percent to a high of 20 percent.²² The American Organization of Nurse Executives (AONE) reports the average RN turnover in acute care hospitals in 2000 at 21.3 percent.²³ Another industry survey shows that nursing turnover increased from 11.7 percent in 1998 to 26.2 percent in 2000.²⁴ Labor costs also have soared as hospitals try to satisfy the increasing demand for nurses, attempting to make their salary structure competitive while simultaneously dealing with the excessive expenditures on overtime and supplemental labor required in the interim. Hospitals face challenges in designing cost-effective staffing strategies amid growing inpatient utilization, rising health care costs, and a rapidly decreasing nursing workforce.

Nursing Classifications

An understanding of the education and training of the various types of nurses is essential to appropriate staffing for health care institutions and physician practices.

Registered Nurse

The registered nurse (RN) practicing today has been educated in one of three programs. The associate degree nurse (ADN) has completed a two-year curriculum in a community college. These programs provide clinical training at a local hospital and the required sciences for degree completion, including but not limited to anatomy and physiology, chemistry, and microbiology. The ADN program is attractive because of its relatively quick turnaround time from entry to graduation. It is particularly attractive to entrants who are changing careers and are older than the average recent high school graduate applying to a nursing program.²⁵

The diploma RN has attended a traditional three-year, hospital-affiliated school of nursing. Originally these programs were not affiliated with a community college or a university, and the students did not graduate with a college degree. The 1960s and 1970s saw these diploma programs develop liaisons with local community colleges so the students could receive academic credit for the science courses they took, but they still did not earn a recognized degree. Diploma curricula did not offer summers off, and the students schooled year round for three years. The often-heard bias toward graduates of diploma programs comes from the students having had a high level of clinical exposure, which translates into their having greater comfort than other beginning nurses in navigating the bedside when they start work.

The bachelor of science in nursing (BSN) degree RN has earned a four-year university degree. The first two years are devoted to the basic required undergraduate courses, and the final two years concentrate on nursing. These students, along with the ADN students, put in far less clinical time than students in a diploma program. The advantage of the BSN program, however, is that it provides a well-rounded academic experience as well as the required launchpad for advanced degrees.

Nurse educators and executives are coming to recognize not only that graduate RNs are getting insufficient clinical time during their training but also that their new job orientation does not provide adequate transition time from student to fully functioning RN. In 2000, one author found that half of all hospitals had chosen to reduce the orientation time of new graduate nurses. Five years earlier, new RNs had received approximately three months of orientation in contrast to the current one month of new employee precepting.²⁶ Most graduates feel ill equipped to perform such basic procedures as inserting Foley catheters, starting IVs, and passing nasogastric tubes.

Furthermore, their capacity for critical judgment is underdeveloped, and the ability to “pull it all together” necessary for taking sound clinical initiative is often lacking. The RN functions as coordinator of care for the hospitalized patient. The expectation is that the RN will come in as a professional who has the necessary clinical proficiency to expertly execute procedures with confidence, effectively prioritize critical issues of patient care, and supervise and delegate to subordinates. Through summer internships, mentoring programs, and trial residencies, nursing programs and their partner hospitals are currently addressing this issue. Unfortunately, at this writing these programs are not standardized or appropriately accredited.²⁷

Although there are inconsistencies in how RNs are educated, all RNs must pass a standardized licensing examination (NCLEX[®]). The National Council of State Boards of Nursing (NCSBN), developer of the licensing examination, maintains a Web site²⁸ that provides contact information for all state boards, statistics on volume and pass rates for RNs and licensed practical-vocational nurses (LPNs), candidate information, and information regarding licensure in more than one state. The NCSBN Web site also contains a concise list of regulations and scope of practice for RNs and LPNs and provides access to Nursys[™] Licensure QuickConfirm, a system that enables employers and the public to verify nurse licensure on-line. All states require license renewal either annually or every two years. Some states mandate continuing education as a condition of renewal.

Each state’s board of nursing Web site generally provides access to the state’s Nurse Practice Act, a statement of RN and LPN scope of practice and a list of standards that each RN and LPN must maintain. State boards typically maintain an inventory of standardized policies, protocols, and procedures and manage lists of licensure verification as well as a list of those licensees who are under disciplinary action. The physician and practice manager should visit both the NCSBN Web site and the appropriate state board of nursing Web site(s) to familiarize themselves with state requirements before developing office staff. This is particularly important for practices located near or on state lines, where staff may be drawn from more than one state.

Finally, many physicians have incorporated the advanced practice nurse (APN) as a clinical partner. This designation applies to RNs who have completed graduate-level curricula and have become nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and nurse midwives. For each specialty the education and scope of practice is quite different, and these nurses hold certifications in their specialties. Some practice restrictions apply, and most APNs still require physician supervision. However, because of the APN’s broader knowledge base and ability to manage more complex patients, physicians are finding collaboration with an APN to be a value-added proposition for their practice.

Licensed Practical-Vocational Nurse

The licensed practical-vocational nurse (LPN) has had one year of training in an accredited program and must practice under the direction of a licensed physician, advanced practice nurse, or RN. The LPN must also take the NCLEX-PN® licensing examination. The LPN is trained only in technical skills and manual procedures and generally does not have the necessary scientific background to function independently. Although LPNs are not licensed to make a nursing diagnosis or plan nursing interventions, they are valuable resources for data collection and basic patient assessments.

The percentage of LPNs in the hospital nursing workforce has decreased in recent years according to the U.S. Department of Labor.²⁹ This is due in part to the increased number of ADN programs and the growing tendency of candidates to choose to attend school for one more year and to achieve the degree with more earning power. The Department of Labor also reports that fewer hospital jobs now exist for the LPN, presumably because of technological advances that now require a more intense level of surveillance and treatment for the inpatient. However, these same advances in technology and sophisticated procedures extend to offices and outpatient facilities, improving job prospects for the LPN in these areas.

Unlicensed Assistive Personnel

Unlicensed assistive personnel (UAP) include those who, under a variety of titles, perform basic data collection and assist with the physical needs of the patient. They are often called certified nursing assistants (CNAs), nurse's aides, orderlies, or patient care technicians. Titles may reflect a specialty area: for example, certified psychiatric technician. CNA training may be provided in a hospital facility, at a community college, or through the Red Cross. Training may be taken from two weeks to three months with a clinical component of approximately one month to acquaint the student with the daily routines associated with patient care. Upon completion of classes the candidate is required to take a state-administered certification examination that includes a written test and clinical demonstration. CNAs have prolonged contact with the patient and engage in some of the more intimate duties of patient care such as bathing and toileting. Although always in the assistive role, CNAs are in a unique position to make valuable observations and alert the RN and MD to potential problems. In most states the Department of Health maintains a nursing assistant registry with a comprehensive list of allowable tasks. State boards of nursing may also note tasks the CNA may perform, as these tasks relate to the RN's professional judgment in deciding appropriate duties to delegate.

Salaries

When employing any nursing personnel, the physician and practice manager must make prudent decisions about salary ranges. Salaries must be competitive yet reasonable in light of practice profitability. Current ranges may be obtained from several locations, the best being the Staff Salary Survey compiled by The Health Care Group. In addition the U.S. Department of Labor tracks wage estimates by state.³⁰

The Office Support Team

High labor costs for RNs and the higher annual salaries that afford hospitals a competitive edge can restrict a practice's ability to attract RNs. However, office and clinic settings can offer the advantage of predictable schedules, that is, regular daytime hours, no weekends or holidays, and rare on-call hours. Most RNs understand that the comparatively lower practice salaries relate to the lower stress levels and these scheduling perquisites. One study has found that nursing turnover is most directly related to professional culture, quality of work life, and commitment to the organization.³¹ The cohort studied was limited to hospital nurses, but the concept of establishing a culture that fosters professional loyalty can be applied in any setting. The study authors particularly recommend that initiatives improving perceptions of quality of work life not be forfeited for cost-saving measures. Findings point to a balance of initiatives that support work life quality and cost-saving measures.

Another study evaluated the performances of fourteen executive-level teams, using four criteria: financial performance, team climate, customer satisfaction, and development of the team and each of its members. Because the study looked at teams in many types of organizations, the strategies that made these teams effective may be applied to any team:³²

- Articulate a clear, compelling direction.
- Set team size and boundaries to avoid competition.
- Select members for expertise and team-oriented behavior.
- Support team members with adequate rewards.
- Provide opportunity for development.

In the office or clinic setting the physician and practice manager must build a care delivery team that best reflects the work ethic and goals of the practice. Just as the practice manager directs the financial path of the practice and provides supervisory direction to the business staff, a leader is also needed to direct the clinical staff and to partner with the executive team in developing the practice's clinical profile. Most physicians

would agree that an RN is the natural and most suitable person to fill this role. As a clinical manager the RN offers many advantages in addition to performance of the patient-related duties that only licensed personnel can do. The RN can operate at the managerial level with the responsibilities and authority that reflect practice values. Managerial duties may include

- Hiring and terminating personnel and delivering performance appraisals
- Supervising patients throughout and ensuring patient satisfaction
- Establishing and enforcing professional behaviors and dress code
- Managing medical records
- Scheduling patients and staff

Clinical responsibilities may include

- Administering treatments and medications
- Establishing care guidelines for each patient or diagnosis
- Developing, documenting, and updating procedures, techniques, and protocols
- Managing emergency drugs, the crash cart, and controlled substances
- Educating and orienting new staff

Furthermore, the RN is well acquainted with issues relating to infection control, confidentiality, ethics, informed consent, patient complaints, and advance directives. The American Association of Office Nurses (AAON) has clearly established practice guidelines, policies, and procedures that can be applied to any office specialty and are fashioned to improve performance and operations in the physician practice.³³

Both the physician and practice manager should interview the clinical manager candidate. If this person is going to be responsible for hiring and supervising the remainder of the clinical staff, each applicant for this post must be carefully screened to ensure that the qualities valued by the practice are reflected in the clinical manager and therefore also seen in every individual this person hires. Buckingham and Coffman describe managers as catalysts. They have used Gallup Organization research to develop four “keys” that identify the “core activities of the catalyst role”:³⁴

1. Hiring is based primarily on talent, with experience, intelligence, and determination as secondary considerations.
2. Expectations are tied to outcomes, not to the steps for achieving those expectations.
3. Strengths are emphasized because an emphasis on strengths motivates; focusing on weaknesses defeats.

4. Mentoring is focused on finding the most suitable fit for the individual, not just moving people up to the next level.

The physician and practice manager therefore must define the criteria and expectations to each candidate. This is the time to state what the practice requires as well as what is absolutely necessary to avoid some of the pitfalls of personnel management. The physician and practice manager must emphasize three or four “absolute expectations” to every applicant: for example, punctuality, the importance of documentation, and professional attitudes and behaviors. Defining each expectation without ambiguity may prevent common personnel problems down the road. Points reiterated to the clinical manager candidate will usually find their way into the interviews that manager conducts with staff candidates.

The remainder of the clinical team and its composition must be determined based on the number of practice physicians, their expected duties and responsibilities, the design of the facility, and of course the budget. Recommendations for full-time equivalent (FTE) levels for physician practices can be obtained from the Medical Group Management Association Cost Survey.³⁵ Because allocation of labor dollars requires close scrutiny and continual monitoring, costing out skill-mix variations with the aid of a matrix allows the physician and practice manager to compare the labor costs resulting from different combinations of RN, LPN, and UAP personnel. The matrix is a visual tool that identifies opportunities for maximum resource utilization.³⁶

Another short-term strategy is to use temporary labor until a permanent position is filled or to take the place of employees who are ill or on leave. Developing clearly defined and mutually agreeable contracts with local registries cultivates partnerships and identifies the practice as a preferred client for those vendors. This in turn expedites filling of last-minute vacancies and secures long-term help as needed.

Finally, the cost to replace the valued RN must be considered when the physician and practice manager are building their practice environment. One report places the cost of turnover at 100 percent of the RN’s salary.³⁷ Alternatively, the Advisory Board offers an extremely comprehensive breakdown of likely out-of-pocket costs, including expenses for accrued vacation payout, use of temporary nurses, recruiting and hiring, and orientation. The worksheet includes calculations, admittedly difficult to quantify, for the costs of the lost productivity of the departing nurse and affected coworkers and the costs of the lower productivity of the new nurse until she becomes acclimated.³⁸ Other costs, although not monetary, are felt as staff and patients say good-bye to a popular colleague and caregiver, especially if during his tenure the RN established or enhanced goodwill between the practice and the community.

The Unit-Level Support Team

The current nursing shortage has an obvious impact at the care-unit level, yet there are many opportunities for the physician to directly influence the care given to her patients. The physician should become acquainted with certain key people once admission privileges are secured. Usually there is a medical director, although not every institution assigns one to each unit. This individual, always an MD, defines the patient population to be housed on the unit and represents the concerns of the physicians who admit patients to the unit. The medical director works closely with the *nurse manager* (previously called the *head nurse*) in defining the appropriate acuity for the level of care provided on the unit. The medical director and nurse manager may also establish patient-nurse ratios. Both also develop admission criteria as well as transfer criteria should a patient's condition change and require a higher or lower level of care. The medical director also anticipates the interventions the patients in that specific population may need, introduces new technology and procedures, and, together with the nurse manager, delineates the interventions that can be appropriately initiated and maintained for the level of care provided on that unit. The physician should cultivate a harmonious professional relationship with both the medical director and the nurse manager. This has far-reaching implications that may be favorable if and when the physician needs to introduce patient-related change at the unit level. If the facility does not provide medical directors for each unit, this is perhaps an opportunity for a new physician to initiate this role as a pilot project that will ultimately work in everyone's favor.

The nurse manager, who is also a key individual in representation of the nursing staff, directly supervises the RNs, LPNs, UAPs, and unit secretary. The nurse manager typically reports to a nursing director, who in turn oversees operations of many usually similar units within his "neighborhood."

Getting to know this individual offers numerous advantages. Approaching the nurse manager at the outset lets this person know that there is interest in establishing a collegial relationship with the nursing staff, furthering the physician's goals of providing the best patient care as she defines it. Together, the physician and nurse manager can identify existing knowledge deficits about a particular patient population, disease states, medical treatment, surgical interventions, new procedures, and medications. Often a nurse educator, assigned to one or more units, is charged with identifying the educational needs of the staff and developing the required classes to satisfy these needs. A physician can work in collaboration with both the manager and educator, providing periodic classes or teaching rounds to the nursing staff, with emphasis on nursing care, treatment, and what to watch for. This is also the perfect opportunity for the physician to instruct nurses on specific procedures and techniques

the physician wants used on his patients. Nurses will appreciate the education and demonstrations of technique and, in turn, take pride in performing accurately and teaching new staff the specifics of treatment. These small investments of time and energy offer huge paybacks and optimize unit encounters each time the physician makes rounds.

As discussed previously, the workload issues of high acuity, high census, and unsafe nurse-patient ratios will be evident on most patient care units. It is wise to remember that shortages are prevalent in all hospital departments, including physical therapy, pharmacy, respiratory therapy, and patient transportation. Because nurses are stationed at the point of care, it is their responsibility to ambulate the surgical patient, leave the unit to pick up immediately needed medications, deliver respiratory treatments, and transport the patient to a procedure when these departments cannot meet their commitments. For the RN, coordinating care often means delivering the care.

Discussion of what to expect at the unit level would be incomplete if mention were not made of alternative staffing strategies and their impact. Physicians will see traveling nurses, local registry nurses, and nurses floating from other units caring for their patients. In anticipation of these widely used and usually unavoidable alternatives, physicians can ensure that these nurses are also being educated to the previously established standards of care by working with the nurse manager to create an orientation protocol that acquaints temporary staff with the unit and its patients. A physician-specific handout, outlining procedures and techniques, may be all that is needed, or the unit's policy, protocol, and procedure manuals may serve as references for all staff.

One final word on unit encounters. Every day, for each shift a staff RN is designated as charge nurse. This role is defined differently in every institution in that some charge nurses have patient assignments and others do not. In addition, some have a higher clinical ranking or more education than others. However, in all cases the charge nurse's responsibility is defined as orchestrating operations for her shift. Charge nurses usually can tell the physician which nurse is assigned to which patient, where the nurse may be, and even where to find the patient. However, it should be understood that if the charge nurse also has a patient assignment, it will be difficult for her to keep track of the other staff and patients. Another advantage in identifying the charge nurse for that shift is that she is the physician's direct liaison should she be unable to locate the patient's own nurse or in cases where issues of care have arisen.



The physician-RN relationship at its best has perfect synchronicity in the planning and execution of patient care. For the physician, there is no substitute for the level of expertise found in this professional partner. Nurses are educated to gather patient data

and use critical thinking skills in putting together the information, allowing them to give the physician the clinical picture for the current condition and responses to treatment, as well as possible adverse affects or anticipated complications. Similar ethics and focus drive both the RN and the physician, and the educational level of the RN allows her to be in a supervisory role and therefore to set the standards of care and expectations of behavior among support personnel in both hospital and nonhospital settings. The current chronic nursing shortage has created competition among all areas that use nurses, but RNs remain unparalleled in the knowledge and the services they provide to their patients and the physicians they partner with.

Discussion Questions

1. What is the financial impact for institutions that employ any of the quick fix measures of dealing with the nursing shortage?
2. What are some of the risks other than the financial risks in applying some of the quick fix measures?
3. What are some of the adverse operational outcomes that hospitals experience as the nursing shortage decreases their capacity to treat patients?
4. What are the potential long-term results of the current nursing shortage?

Web Resources

Case studies
PowerPoint presentation
Answers to discussion questions

Notes

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PART FOUR

**STRATEGIC CONSIDERATIONS:
PLANNING, MARKETING,
AND MANAGEMENT**



CHAPTER SIXTEEN

DEVELOPING A BUSINESS PLAN

Lou Porn

Objectives

This chapter will help the reader to

- Develop an understanding of the value of a strategic plan for a physician group.
- Determine who should lead the planning process and who should provide input to it.
- Use a framework for conducting a structured planning process.
- Understand the process and concepts used in the creation and rollout of a well-considered strategic plan.

Today's physicians and their organizations face many challenges, including tightened incomes, increased competition, higher risks and costs of professional liability, and the need to use enhanced technology. As a result many physician practices are experiencing heightened pressure and internal strife. They regularly face a myriad of decisions related to recruiting, capital investment for equipment and buildings, contracts, affiliations, and individual members' futures. A strategic business plan will help them meet these challenges by providing guidance for both daily decisions and long-term direction. The plan can be used when evaluating an individual decision or weighing one decision against another. However, many practices have not invested the time and effort required to create a plan.

All physician practices, regardless of their size, complexity, or corporate structure, should have a strategic business plan. Most groups find that both the plan development process and the strategic plan itself are worthwhile. Table 16.1 displays some areas in which a strategic business plan may provide support to various practice structures. Some areas may apply to multiple practice styles.

TABLE 16.1. ISSUES A STRATEGIC PLAN MAY ADDRESS, BY TYPE OF PRACTICE.

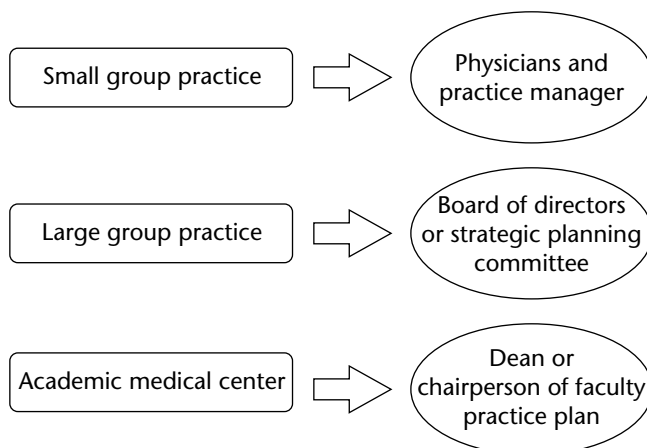
	Equipment	Technology	Compensation	Recruiting	Marketing	Financing
Small freestanding group	Office equipment	Billing system	Amounts available	New specialties	Yes or no	Bank loans
350-physician freestanding group	Ancillary, procedure centers, specialty hospitals	Call center, computer information systems (CIS)	Incentives and retained earnings	Expand specialties	Markets and products	Banks and investors
Faculty practice plan	Allocation of ancillary services	Stand-alone capability	Allocations and cross-support	Target departments or shared	Stand-alone capability	Bond issues
Hospital-based group	Separate or shared	Ambulatory and professional fee orientation	Program support	Program support	Physician focus	Program support

Strategic Business Plan Participants

Creating a successful business plan requires a process that encourages input from a range of constituents while guiding decision making so that it leads to a concise vision and direction. In smaller practices this process may be led by a physician and the practice manager. In larger practices the planning process is often directed by the board of directors. When board members don't have the interest, time, or energy to devote to appropriate participation in a strategic planning process, an alternative for larger practices is to assign a strategic planning committee—either an ongoing committee of the board or a special committee—to direct the strategy process on a periodic basis. In academic medical centers the process is usually driven by the dean or the board of the faculty practice plan. In an academic faculty or a hospital-based physician group the strategic process is typically performed as part of the larger enterprise's strategic planning process or as a postscript or add-on to that process. (Figure 16.1 summarizes process leadership.)

When a committee is formed, it should consist of six to nine people. Many more individuals can and should provide input; however, when the committee itself is too large, the result is likely to be never-ending discussion, conflict, and bias; a longer process time; and a watered-down plan. The resulting plan is typically much less useful than it should be in guiding decisions and defining direction.

FIGURE 16.1. PLANNING PROCESS LEADERSHIP.



Individuals leading a strategic planning process need to

- Be objective
- Represent the whole, not a subgroup
- Be credible to the group
- Be willing to spend at least two hours every two weeks at meetings, for three to six months
- Have strong business knowledge
- Have the ability to listen well to others and to engage in open-minded concept development

In larger groups, physicians who should be considered for membership on the committee include, as applicable, the dean, board chair, chair of family practice or internal medicine, chair of surgery, largest producer, director of off-site facilities, chair of the finance committee, hospital-based representative, largest primary care practice representative, OB representative, and other opinion leaders with good insight. Group practice managers and, where applicable, information technology representatives should also be a key part of the process.

Opinions vary whether hospital boards or administrations should be represented and whether medical schools or other parent or affiliated organizations should be represented. Here are two items to consider when debating their inclusion:

The individual personalities involved. Generally, the strategic plan is better when input is received directly from these parties, because they will ultimately need to buy in and assist in plan execution. However, some representatives may be so focused on their own organization's agenda that they cannot contribute effectively to the process itself; in this case it is better to assign someone from the committee to be a liaison to these individuals rather than to make them committee members.

The reliance of the physician practice upon a parent or affiliated organization. This evaluation must be made objectively and honestly. In some cases physicians or faculty take the position that they can do whatever they want, regardless of input from the parent or affiliate. Realistically, however, the more the practice receives from the parent or affiliated organization in terms of organizational, financial, information system, facility, or other support, the more buy-in from that organization the practice is likely to need. Typically, the parent or affiliate will be more prone to support the final plan when it has a representative directly involved in the planning process.

The final choice of participants in the vision and mission setting and strategic planning process should be based on the objective of building the best plan that is also

practicable. Although creating a great plan is a worthy goal, the group should include individuals in the process who will be realistic about the true opportunities and barriers that exist. It can be truly disappointing to complete a planning process (and build all the hope and excitement that comes with planning for the future) only to discover that the plan is, for some external reason, not implementable.

Strategic Business Plan Process

A full-blown strategic planning process as described in this chapter need not be performed annually. Most organizations execute a full planning process every three to five years. The need for a plan is generally driven by significant changes in the marketplace or by stages of internal evolution, or most typically, some elements of each.

The strategic planning process has nine steps:

1. Set your mission and vision
2. Evaluate your organization
3. Analyze your market
4. Analyze your physician gap
5. Summarize your current state
6. Project your future state
7. Consider scenarios
8. Refine and test your plan
9. Roll out your plan

These steps need not be performed sequentially. The first four can be, and whenever possible should be, performed simultaneously.

Preliminaries

Setting expectations for participants is critical to the success of the process. Key elements include an understanding that

- The process is not about pie-in-the-sky wishing; it is a pragmatic and objective business planning process.
- Creating an effective plan is time consuming.
- Some initiatives cannot be pursued.
- Conversely, some initiatives, however distasteful, should be pursued.
- Implementation of a plan does not occur overnight.

Obtaining timely input to questions that range from, What is good and bad in our group? to, Who do we want to be? can be a daunting task. Individuals leading the planning process should answer these questions at the outset: How can we provide the opportunity for input to the most people, accumulate and evaluate the information, and provide feedback? Will our physicians feel they are listened to if they do not receive direct feedback on each issue they raise?

Smaller groups will have a much easier time with this aspect of preparation for planning because their internal communications are typically frequent and informal. Larger groups often consider a variety of approaches to collecting input:

- *Member surveys* are an effective method of accumulating information from concerned parties. Some drawbacks to this approach are that
 - The survey response may be open to interpretation by the reader.
 - Some physicians won't feel they have received appropriate participation unless they have face-to-face communications.
 - Some physicians won't take time to complete the survey.
- *Departmental meetings* are a popular input mechanism because the time spent is not incremental to other physician duties. The risk here is that some participants may inadvertently or even purposely color or overshadow the independent thinking of others.
- *Focus groups* are helpful for small-scale face-to-face communications. Their drawback is that they are a time-consuming vehicle when a practice is seeking large-scale input.
- *Web surveys* are appropriate for some groups. People's response to this technique varies dramatically and depends, of course, on the degree of computer savvy of those being surveyed. Web surveys are usually designed and tested to take approximately fifteen minutes to complete.

Most large groups elect to use some combination of these methods.

The planning committee should remember that physicians are not the only members of the practice who may have valuable input about the practice's current and future states. Other clinical and administrative personnel may have a more accurate picture of the patients, the market, and the competition, for example, than some of the physicians do. Additionally, information technology (IT) and marketing support personnel may have a good perspective on what is feasible for the future.

Obtaining physicians' and other key individuals' input should begin early in the planning process. The input will need to be analyzed and summarized quickly once collected, because different aspects of it will be used in various steps of the planning process.

Set Your Mission and Vision

Who are we? And who do we want to be? Those seem like easy enough questions. However, defining a mission and a vision for some purpose other than adorning a wall plaque can be much harder than it first seems. Figure 16.2 summarizes what goes into mission and vision statements.

Mission. Consider the following examples of portions of missions:

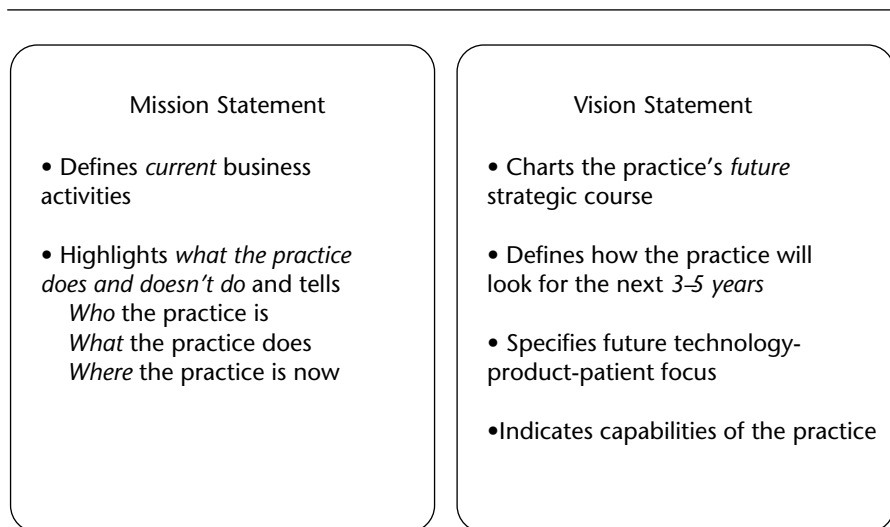
For a Freestanding Group

- “ . . . provide the highest-quality medicine possible to the region”
- “ . . . provide an environment that supports physicians in their effort to provide high-quality and cost-effective medicine”
- “ . . . support member physicians to provide high-quality medicine and earn above-average compensation”

For a Multispecialty Faculty Practice Plan

- “ . . . provide quality and compassionate care in an environment of academic excellence”

FIGURE 16.2. CHARACTERISTICS OF MISSION AND VISION STATEMENTS.



“ . . . be at the leading edge of development and application of medical knowledge in the region”

“ . . . lead the awareness of medical knowledge and provide high-quality medical care in a fiscally responsible manner”

The differences in these statements may seem small, but even small differences may result in quite different messages being heard by current physician members and future recruits and by potential partners or affiliates.

Many practices have a mission statement. For those who do, review and affirmation (or adjustment) of the statement is a key part of the planning process. For those without a mission statement, creation of this message regarding the practice's values is a key initial step. Development of a mission statement can range from a simple to a challenging process, depending on the homogeneity of thought and values in the group. A series (if necessary) of discussions should take place to consider the purpose of the group's existence. The mission statement should answer these questions, as applicable:

- What is the depth of our academic pursuit?
- Is our organization physician or enterprise driven?
- Is our market global, national, regional, or local?
- What are our quality goals?
- What is our understanding about fiscal responsibility?

Strong mission statements are minimalist—short, clear, and concise. A practice shouldn't try to be everything to everyone! The statement should be one that can be understood easily and embraced by practice members and employees alike.

Vision. Setting the vision of the physician group means answering the question, Who do we want to be? The vision expands the mission statement to provide a general description of the future state of the practice, in three to five years. The strategic plan then describes how to fulfill the vision. Specific questions that may be addressed, as appropriate, include

- What will our sphere or reference (global, national, regional, or local) be?
- To what extent will academics (bench research, publishing, didactics, undergraduate training, and clinical trials) be part of the practice?
- What specialties will we include in our group?
- Will we seek partners (other physician groups, hospitals, payers, developers)?
- Will we have residents or medical students at our sites? In our hospital setting?

- Will we own the facilities in which we practice?
- What level of technological support will we need?
- Will we compensate our physicians at or above the general marketplace?
- What will be our community role (community education, indigent services, and so forth)?
- How will we fit into the enterprise?

A preliminary vision should be established or reaffirmed at the beginning of the planning process and revisited during the step of projecting the future state.

Evaluate Your Organization

The seemingly easiest step, yet in actuality often the most difficult to perform, is the self-evaluation of the physician practice. The effort to determine the real strengths and weaknesses of the group is critical to determining its future direction. Some practices underestimate their value; some overstate it. The more objective the evaluation, the better the chances are for success.

The standard strengths, weaknesses, opportunities, and threats (SWOT) evaluation works well. The key to success is to use the process to perform a true “reality test” for the organization and its members. Many physician groups quickly respond to the opening question, What is your group’s greatest strength? by answering, “Our physicians.” Many groups also respond to the question, What is your group’s greatest weakness? with the answer, “Our hospital affiliation.” Those answers are sometimes true—but it’s rarely that simple. The SWOT analysis must consist of both physician perception (qualitative) and data evaluation (quantitative) components. The perception analysis gives member physicians an opportunity to provide input to the process and allows those leading the planning process to learn the benchmarks against which the physicians will evaluate the plan. The detailed evaluation of data provides an objective foundation for the plan. The committee might look at perceptions and data about the following practice issues:

- The strength and breadth of the practice’s referral network, and practice interdependence with affiliates
- The evidence of market differentiation and the existence of centers of excellence
- Halo effects from academic accomplishments (market differentiation in relation to grant revenue, endowments, payment rates, contacting, and so forth)
- The range and depth of services and facilities
- The relative market penetration in core (for example, representing 70+ percent of patients) and support markets

- PCP-specialist ratios
- The relative strength of revenue streams
- Physician performance in academic service and in clinical service
- Managed care penetration of the market and the membership of preferred employers
- Utilization rates
- Clinical cost competitiveness
- Operating cost structure
- Patient satisfaction survey results and trends
- Current technology, clinical data availability, and business processes effectiveness
- Relative physician compensation
- Ability to self-support physician compensation
- Debt capacity
- Credit rating

It is not unusual for those leading the planning process to uncover some surprises along the way. They may find, for example, that although physicians may research, teach, or practice in excess of the norm, there is minimal resulting market recognition or differentiation for the practice. Although some of the results of the SWOT analysis may be unpopular, it is important that the planners get a true picture of (and accept as fact) the group's strengths and weaknesses.

Analyze Your Market

How does our market compare to the national market leaders? What does it mean to us? What do local employers think of us? How do we compare to our competition related to quality and cost? These are questions few practice leaders ask routinely, yet the answers offer insights into the options and needs of the group in the future. For example, some current market buzzwords are *consumer-directed health*. This phrase reflects the concept that as more of the financial responsibility for health care is passed through to consumers, the consumers will become increasingly aware of providers' value quotients. Where consumer-directed health is an important market force, a physician organization might consider these market aspects:

- How might consumers rate the group's accessibility and location?
- How might consumers rate the group's pricing strategy?
- Which (if any) physician practices in the market are perceived as *the place* to go for health care?
- Which (if any) physicians or programs in the market are recognized as leading edge?

The evaluation of the marketplace itself results in a summary that addresses

- Local versus national market leaders
- Market segmentation, definition, size, and demographics
- Stage of market evolution (a mature, sophisticated market or a less informed market) and future outlook
- How fast the market is expected to evolve
- Key aspects of market competition, and drivers of change in the competitive landscape
- Major competitors and products
- Market penetration: the portion of the total market captured by each group
- Provider networks
- Consumer-driven products
- Employer coalitions and other types of managed care pressure
- Potential impact of state and federal reform initiatives
- Migration analysis (where individuals in various zip codes travel for medical services)
- Zip code analysis (the financial status of the residents in each zip code)

Market opportunity areas can be identified by analyzing the average household income, family size, population growth rates, migration patterns, and general supply of medical care in each market. For example, areas with patients who have higher incomes and travel significant distances for care could indicate significant market opportunities for a practice. The information to prepare many of the analyses just listed can be gathered from state and local agencies, local hospital planning departments, and practice registration records.

Another important aspect of understanding the market lies in answering the question, Who are the real purchasers of health care in this market and what they are thinking? If the larger businesses in town are contracting for employee health care through their corporate offices in New York or California (rather than through the local branch), significantly different purchasing philosophies, including levels of coverage and cost sharing by employees, may be expected. Additionally, if an insurer is a national payer it will likely have some degree of nationally standardized approaches. For national players, specific consideration of individual physicians in the market may be less likely. As a result, physician leadership would be wise to spend time with both the large employers and the large payers in the market to discuss their future vision of health care provision in the market, the direction in which the practice would like to move, and opportunities to work together.

An additional discussion point when meeting with large employers is the nature of their employees' current and future access needs. Plans for new physical plants and

summaries of employee complaints regarding access to primary care or specific services can provide significant insight for future facility planning and physician recruitment.

Analyze Your Physician Gap

The physician gap analysis builds on the market analysis. It examines the number and mix of physicians needed in each of the group's market(s) and site(s). Inadequate numbers or poor distribution or mix of physicians can lead to reduced access for patients, loss of patient volume, gaps in services, teaching shortcomings, and even quality weaknesses. Excess numbers of physicians lead to lower productivity and therefore lower per physician income.

The gap analysis targets those zip codes that the market analysis has identified as offering growth potential. The market information is then enhanced by the practice registration files to determine which markets the practice should target. The population size and data for each zip code are compared to standard physician specialty staffing models. The result is a list by zip code of the number of physicians needed and present numbers. Identification of shortfalls in number and mix of physicians can support a series of decisions related to group growth projections.

Summarize Your Current State

The vast amount of information accumulated from the organizational evaluation, market analysis, and physician gap analysis should next be evaluated, summarized, and presented in an objective manner. These questions may be addressed:

- Are employers satisfied with the quality, access, and cost of health care in the area?
- Are payers satisfied with the ability of their current provider panels to meet the needs of their target enrollees?
- What changes do employers and payers see in their approach to contracting for care in the near future?
- Do employer and payer expectations and strategies provide any opportunities or threats in the near future?
- What is employer and payer perception of the practice? Of affiliated hospitals?
- What growth opportunities and growth barriers does the group's SWOT evaluation find?

Marketplace characteristics can vary dramatically. Consider the three markets outlined in Table 16.2. These different markets would provide a variety of different incentives, challenges, and opportunities for a practice. Each practice must develop its own direction based on its current culture, vision, financial strength, and market realities.

TABLE 16.2. THREE MARKETS WITH DIFFERENT CHARACTERISTICS.

	Market A	Market B	Market C
Market type	Docile, localized marketplace	Some market competitiveness	Traditionally highly capitated market
Business coalition	Nonexistent	Meetings but no initiatives	Active
Employers	Under 100 employees and locally owned	Few employers over 500 employees	Twelve large employers represent over 65% of the population
Dominant hospital	None	Several large ones	Two major ones
Dominant physician group	None	Midsized specialty	450 physicians with widespread network

Project Your Future State

Projecting the future state of the practice relies on the physicians' and other individuals' input on this topic collected earlier. It also makes use of the summary of the current state of the practice created in the previous step.

The first activity in this step is to review the practice vision. In most cases it is as simple as having a discussion, supported by current and future state information, regarding the continued applicability of the vision. The discussion may result in reaffirmation of the vision or possibly minor modification to it in light of the data provided.

Next the real challenge begins. How does the practice get there? A comparison between the vision and the current state will support a series of discussions to identify initiatives that will lead to accomplishment of the vision. Figure 16.3 presents some sample initiatives.

Each potential initiative should be considered in light of predetermined evaluation criteria. These criteria might include

Compatibility with the mission: degree to which the initiative supports the mission and vision

Physician member support: level of physician support for the initiative

Influence over decision making: degree to which the initiative is within decision-making control

Payer mix improvement: extent to which the initiative positively affects payer mix

Physician integration: amount of increase the initiative may produce in physician referrals; degree to which the initiative may expand and improve physician mix or coverage

Service expansion: ability of the initiative to support additional services

Network growth: extent to which the initiative may support addition of sites perceived likely to improve market presence and payer mix

Market presence: ability of the initiative to enhance image and visibility, which may assist in improving payer mix and future contract negotiations

Medical school or hospital partnership: potential impact of the initiative (mends, develops, or leverages) on desired relationships

Level of risk: risk associated with the initiative

Likelihood of success: probability of positive initiative outcome

Timing: estimated time frame to implement the initiative

Financial investment: estimated level of capital required to support the initiative

Financial return: financial performance of the investment in the initiative

Long-term commitment: difficulty of exiting the initiative

FIGURE 16.3. EXAMPLES OF STRATEGY INITIATIVES.

Invest In	Defend
Secondary markets Ambulatory centers Oncology centers Oncology and cardiology recruiting Computer information systems (CIS) Retained earnings for growth	City sites Women's health practice Orthopedic practice GI practice Academic relationship
Grow	Exit
Customer relationship management Primary care practice Dermatology in secondary market Cardiology practice Hospital ventures Clinical research Physician performance incentives	Primary care practices over 200 miles Trauma practice Maxillofacial practice

The weighting of the criteria and the relative scoring will not be and are not intended to be perfect. Many of these items require subjective evaluation. However, the process of considering the initiatives against preset criteria and relative to one another provides great insight and will help the individuals leading the planning effort to prioritize initiatives for implementation. Figure 16.4 displays an example of a report on the ratings for one initiative in this step of the planning process.

Consider Scenarios

The process of developing an action plan *that can be implemented* will include at least one brainstorming session—a “what if” session that considers the potential effects of changes in key market variables. This process is often labeled *scenario planning*. A word of caution is in order here: although it is important to consider a wide range of market variables, some limitations on the exercise of participants’ imaginations will be necessary or this step may damage the group’s forward momentum and support of the planning process.

The practice might consider scenarios such as these:

- Significant reduction in government payments for research, teaching, or services
- Addition or departure of a major employee
- Acquisition of a competitor by a national chain
- Decision by an affiliated hospital or medical school to build a competing group
- New hospital built in growth area
- Major change in service payment structure
- Individual patient payment responsibility dramatically increased
- Direct service arrangement between business coalition members and competing physician group
- Change in local government support of indigent care
- Consolidation of local practices
- A shift in population growth to an area not currently serviced by the group

Most markets are quite docile today. However, the rise in the cost of health care is still above the overall rise in the cost of goods. The government and employers continue to search for ways to decrease the cost of care through managing utilization or rates. In the meantime the need to provide patients with access to information and services grows. Finally, the need to document and report against quality indicators is becoming a greater differentiator in the market each year. This is not the time for the leaders of physician practices to become complacent when attempting to project potential changes in their environments.

FIGURE 16.4. SAMPLE REPORT ON RATINGS FOR AN INITIATIVE OF IMPROVING AFFILIATE OPERATIONS.

Facts		Criteria	Rating
<ul style="list-style-type: none"> • Only a small percentage of physician survey respondents believe that management of clinics is satisfactory. • A majority of physician respondents believe that physicians are not as productive as possible in the clinics. • A vast majority of physician respondents believe that hospital inefficiencies negatively affect productivity. 		Compatibility with mission	Medium
		Physician member support	High
		Influence over decision making	Low
		Payer mix improvement	NA
		Physician integration	NA
		Service expansion	NA
		Network growth	NA
		Market presence	High
		Hospital partnership	Low
		Level of risk	Medium
		Likelihood of success	Medium
		Timing	Low
		Financial investment	Medium
		Financial return	Low
		Long-term commitment	Low

PROS	CONS
<ul style="list-style-type: none"> • Improved efficiencies in the hospital and clinics will improve physician productivity. • Improved physician productivity increases time available for additional patient volume (or other activities). • Potential for improved hospital relationship. • Increased patient and physician satisfaction. 	<ul style="list-style-type: none"> • The hospital does not necessarily believe that its operations need significant improvement. • The medical group does not control hospital or clinic operations. • Increased volume of same patient types (indigent, Medicaid) does not improve payer mix or financial performance.

Refine and Test Your Plan

Once the initiatives are developed and scenarios considered, a series of discussions should take place between planning leadership individuals and other physicians in the group who are opinion leaders, who may be able to contribute insights about particular scenarios, or who may be particularly affected by the initiatives. These discussions can occur as hallway or, as necessary, closed-door discussions or informal focus groups. Although there are some negatives associated with these discussions, such as time delays and exposure of plans before they are finalized, the overall benefit to be realized from this testing process is important. It is invaluable to receive early input from these

physicians on an informal basis and to make adjustments to the initiatives and scenarios before proceeding.

Next a draft plan begins to take shape. A preliminary task list and prioritization are prepared based on the revised initiatives and scenarios. Each initiative should have an initiative leader and timeline assigned, as shown in the example in Table 16.3. The result will be an overall timeline for implementing the strategic plan, as illustrated in Figure 16.5.

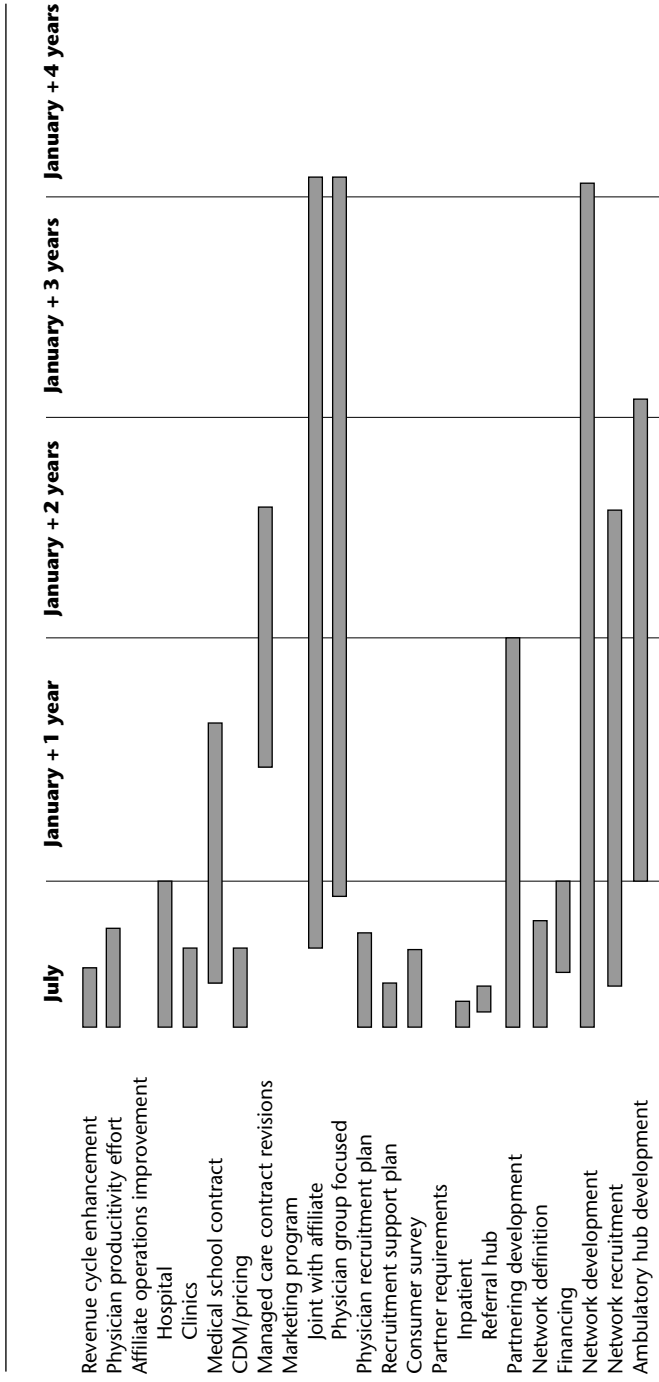
The final component of refining and testing the strategic business plan is consideration of the factors critical to the success of the plan. After these internal and external success factors are identified, they should be closely monitored over time. Changes in these factors may require a change in the direction or tactics identified in the original planning process.

However, do not delay completion of the planning process because of unknowns. A strategic planning process does not take place in a textbook. In real life the process often occurs in a dynamic market. It requires decision making in the presence of a number of unknowns. Although open issues need to be identified, completion of the plan usually *should not be postponed* until these factors are finalized. By the time current unknowns are resolved, others will arise—if you wait, market opportunities may no longer be available. Remember, your competition is also looking at the market for opportunities to improve their own strategic and financial position.

TABLE 16.3. SAMPLE PRELIMINARY TASK LIST AND TIMELINE FOR ONE INITIATIVE.

Initiative	Tasks	Person Responsible	Timing
Develop network sites	<ol style="list-style-type: none"> 1. Develop operations infrastructure 2. Define buildout requirements (number of exam rooms, physician offices, layout, and so forth) 3. Develop information systems requirements 4. Purchase ancillaries 5. Hire support staff: nurses, front-desk personnel, and technicians 6. Purchase supplies 7. Set up infrastructure (telecom, computers, and so forth) 8. Open pilot site(s) 	Operations manager	6–9 months; subject to financing and recruitment

FIGURE 16.5. SAMPLE TIMELINE FOR PLAN IMPLEMENTATION.



Roll Out Your Plan

Performing a strategic planning process normally generates a great level of interest and emotion. If properly handled it can be a rallying point for the practice, both culturally and strategically. The rollout of the final strategic business plan can be a gratifying experience if the process has been well managed. If input has been received from the majority of physicians and appropriately addressed, if decisions have been based on facts and if communication has occurred, most members of the group will be supportive. However, if the overall majority believes that the process was controlled by a few to achieve their own agendas and appropriate support does not exist, expect significant negative reaction to the plan.

Conversely, don't expect to please everyone! Each major change will affect individual physicians differently. It is likely that not all individuals will be satisfied. Some may feel slighted or may find that their area of focus does not fit well into the proposed overall direction.

Assuming that planning leadership has championed the plan throughout the process and that physician input and feedback have occurred, the introduction of the plan should be accomplished through one or more presentations—to board(s), sponsoring or related entities, and of course to the practice members and staff.



Development of a business or strategic plan is a necessity for physician practices in today's competitive environment. The plan provides a road map for the guidance of the practice in daily decisions as well as in long-term direction. Implementation of a successful plan requires a process that encourages input from a range of constituents. Without this input it may be difficult to “sell” the plan to the physician-owners. The plan should be revisited every three to five years, and more often if there are significant changes in the practice or the business environment. Communication of the process and the plan is very important to gain maximum support from the stakeholders.

Discussion Questions

1. Discuss the key topics that should be addressed in the mission statement.
2. What is typically the hardest step for physician practices to perform when developing a business plan?
3. Identify the primary issues addressed in the evaluation of the marketplace.
4. What are the two core components of the strategic plan?
5. Discuss the purpose of the physician gap analysis.
6. What is the final piece of the strategic business plan?

Web Resources

- Case study
- PowerPoint presentation
- Answers to discussion questions

Suggested Reading

- Foreman, M. S., and Draper, A. "Consumer Focus Can Spur Group Practice Turnaround." *Healthcare Financial Management*, 2001, 55(6), 79–82.
- Ginter, P. M., Swayne, L. E., and Duncan, W. J. *Strategic Management of Health Care Organizations*. Malden, Mass.: Blackwell, 2002.
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- Zelman, W. N., and McLaughlin, C. P. "Product Lines in a Complex Marketplace: Matching Organizational Strategy to Buyer Behavior." *Healthcare Management Review*, 1990, 15(2), 9–14.



CHAPTER SEVENTEEN

ADDING A NEW SERVICE OR PROGRAM TO A MEDICAL PRACTICE

Blair A. Keagy

Objectives

This chapter will help the reader to

- Understand the financial advantages of adding ancillary services to a practice.
- Evaluate the clinical impact of a new program.
- Identify available new program opportunities.
- Be aware of legal obstacles to adding ancillary services to a practice.
- Understand the costs of adding a new service.
- Evaluate joint ventures with hospitals.

Technological advances and the introduction of effective new products by industry have resulted in a rapid increase in the number of diagnostic and therapeutic options available to the practicing physician. However, competition and patient-care concerns require that practices should add new programs only when they will significantly benefit the culture and financial success of the practice.

It is important to examine the scope and make an in-depth analysis of the potential financial and patient-care benefits of any proposed program. A practice can more easily introduce relatively simple office-based undertakings—such as sclerotherapy for varicose veins or a prostate cancer screening program—than endeavors such as bariatric surgery for the morbidly obese, which would require in-depth preoperative testing, collaboration of multiple practitioners, and non-MD health care providers such as nurse practitioners, dietitians, social workers, psychiatric counselors, and financial consultants.

These parameters should be evaluated when considering a new procedure:

- Clinical success issues
- Professional satisfaction involved
- Existence of appropriate demographics
- Capital equipment requirements
- Human resource requirements
- Training requirements
- Marketing issues
- Credentialing parameters
- Effect on referral patterns
- Fair reimbursement value
- Necessity of partnerships with other groups
- Necessity of partnerships with community hospitals
- Government regulations
- Competition

Practices may significantly increase revenue through the appropriate use of ancillary services. As the scope of successful ancillary services in a practice rises, revenue increases at a faster rate than the associated overhead expenses do, resulting in higher physician compensation,¹ as shown in Figure 17.1.

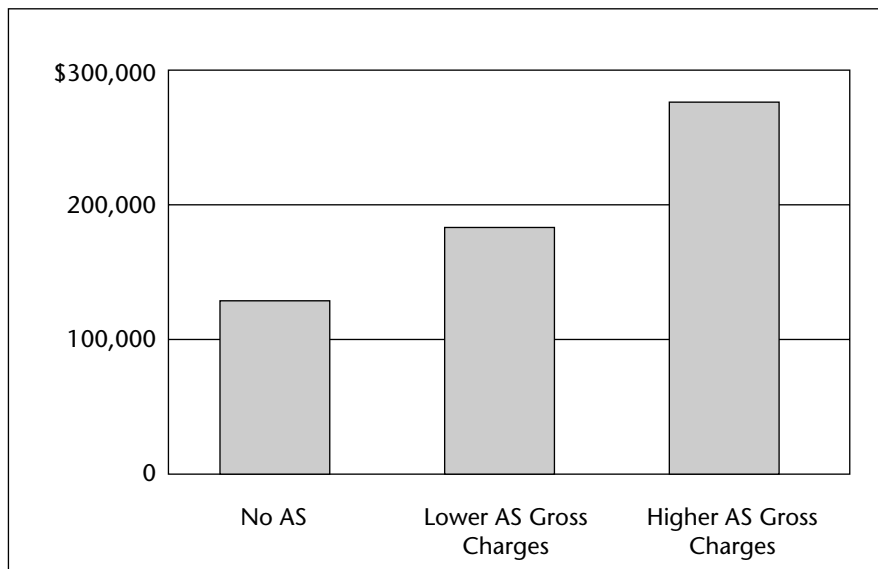
Not all endeavors will be profitable. Pretzer reports on some pitfalls that can hamper the successful implementation of a new service line:²

- Overestimating the number of patients who will use the new facility
- Miscalculating reimbursement potential
- Underestimating the amount of office space needed
- Underestimating the staffing requirements
- Failing to compare the pros and cons of leasing versus buying equipment accurately
- Failing to review government regulations with sufficient care
- Developing an adversarial relationship with a community hospital that provides a similar service

Opportunities

Ancillary service opportunities abound. Here is a brief survey of the broad areas to consider.

FIGURE 17.1. MEDIAN REVENUE PER FTE MD AFTER OPERATING COSTS.



Note: AS = ancillary service.

Source: Data from D. N. Gans, "Squeezed? Think Ancillary Services," *MGMA Connexion*, 2003, 3(2), 24–25.

Ancillary Services by Specialty

The selection of a proposed ancillary service will depend on the practice specialty.³ Primary care practices might consider such services as magnetic resonance imaging (MRI), computerized tomography (CT), echocardiography, bone density studies, physical therapy, occupational therapy, and urgent care. Cardiologists might develop nuclear medicine procedures and in-office catheterizations. Surgical and procedure specialties also might consider in-office imaging, other diagnostic services, and ambulatory surgical centers. Capko and Anwar suggest that orthopedic surgeons might develop a sports health and fitness area; family physicians, allergists, and rheumatologists might add alternative care components to their practice; and other specialists might employ nonphysician clinicians.⁴

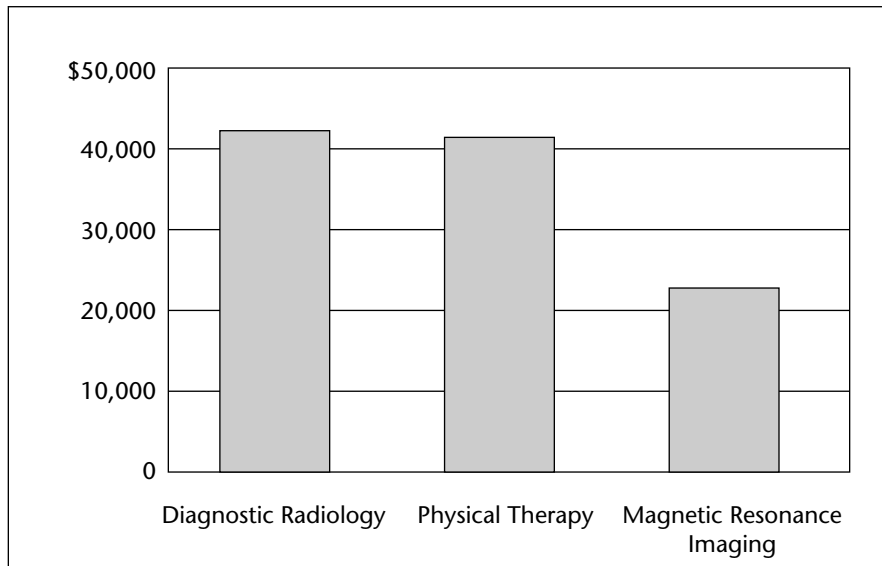
The highest levels of revenue (after deducting overhead costs) per full-time-equivalent (FTE) physician have come from diagnostic radiology, physical therapy, and MRI, according to one report (Figure 17.2). In addition, group size can affect

physician revenue from an ancillary service, and larger practices do not necessarily enjoy an advantage over their smaller counterparts. In fact median revenue after costs might tend to decrease as the size of the group increases.⁵

Expanded Office Hours

Another opportunity might be a convenience center within a practice, offering extended hours of service (see Perspective 17.1). If this succeeds, the practice could go on to develop an urgent care clinic. The major differences between the two are defined by the types of appointments offered. Urgent care centers generally are walk-in operations that see new patients, whereas extended hours services offer scheduled appointments for current patients.⁶

FIGURE 17.2. ANCILLARY SERVICES PRODUCING THE MOST PROFIT PER FTE MD.



Source: Data from R. Redling, "Crunching Numbers: Hospital-Owned Practices Fare Better, Costs Are Up for All Groups," *MGMA e-Connexion*, 2002, No. 19 [www.mgma.com].

PERSPECTIVE 17.1. EXTENDED HOURS FOR PATIENT CARE.

Two internists in San Francisco have scheduled appointments on Saturday mornings for the past year. They report high patient acceptance and increased physician satisfaction because of the opportunity to spend more time on the evaluation process. A large regional clinic in Texas successfully operates an after-hours urgent care clinic. The practice administrator cites some increased costs associated with the endeavor but stresses the high patient satisfaction achieved. A pediatric group in North Carolina offers scheduled appointments in the evenings and on weekends.^a

These examples of nontraditional appointment scheduling represent an adaptation on the part of medical practices in order to conform to the needs of their patients. A majority of households have two wage earners, and these individuals are not able to attend to their medical needs or those of their children conveniently during the nine-to-five business week. The availability of appointments on Saturdays, in the early morning, or after 6:00 P.M. may well result in increased volume for the practice as well as improved patient satisfaction.

Nontraditional office hours do result in increased office staff wages, but the overhead costs associated with the physical assets of the practice do not change. This type of practice flexibility is accomplished most easily in larger practices where the physicians who staff the after-hours appointments are able to take compensatory time off during traditional working hours.

^a J. A. Jacob, "Office Hours Don't Have to Be 9-5," *amednews.com*, Nov. 26, 2001.

Screening Programs

Screening programs offer another option for attracting patients to a practice. The practice usually is not reimbursed for the tests offered, but the goodwill created in the community, the increased disease awareness, and the potential for attracting new patients who might require procedures can make these programs beneficial and profitable. An example is the Legs for Life[®] program sponsored by the Society for Interventional Radiology. Such peripheral vascular disease screening programs can develop new patient markets, increase referrals, and boost direct, indirect, and downstream revenue.⁷

Boutique Medicine

Boutique medicine is consumer oriented and offers the public a service it wants. The procedures are often cosmetic, and in most cases are not covered by third-party carriers. Proponents of boutique medicine believe that consumers have the right to choose the goods and services they desire. They argue that if the patient wishes to see a certain provider in an expeditious fashion, he will be willing to pay more for that service.⁸ Those who oppose boutique medicine take the position that physicians have certain obligations that preclude limiting their practices to cosmetic procedures. These obligations arise from the benefits physicians have received from subsidies, education, and residencies funded by Medicare or Veterans Administration medical center dollars and from reimbursement from businesses and governments.⁹

The American Medical Association (AMA) House of Delegates recently approved an internal report supporting the physician's right to charge patients a premium for extra services. It qualified this position, however, by also stating that patients could not be abandoned and that all patients should receive the same diagnostic and therapeutic services, regardless of their ability to pay an added premium.¹⁰

The number of patients who want value-added services is increasing. These services range from cosmetic surgery to vitamin supplements, stress management, and membership in health clubs. Some physicians are opening kiosks to sell these products to the consumer.¹¹

Luxury Primary Care

One of the newer innovations in medical care delivery is luxury primary care (see Perspective 17.2). Patients pay an annual fee to a practice and are rewarded with physician coverage twenty-four hours a day, seven days a week, via cell phones and paging devices. Patient visits can last as long as one hour, and a physician may accompany such patients on specialty visits or during hospital admissions. This type of medicine caters to the wealthy and results from declining physician reimbursement and the need for physicians to see more patients to remain financially viable. The average physician in an evaluation and management practice now must see approximately 30 patients a day, and many physicians say that this volume compromises quality patient care. Annual fees charged to patients for entering a luxury practice range from \$1,000 to \$20,000. A physician might have 200 to 300 patients in this practice, compared with as many as 1,600 patients in a standard practice.¹²

More important, the practice relies on health insurance to cover the costs of hospitalization and specialty care to add some income to the practice. In a sense the premium paid is a copayment; however, certain insurance companies and Medicare could regard these premiums as balance billing, which is not allowed in most situations.

PERSPECTIVE 17.2. LUXURY PRIMARY CARE.

A physician in Seattle who had practiced emergency room medicine for more than ten years decided that he wanted a practice that offered a smaller patient volume and the opportunity to spend more time with individuals under his care. He accepted the concept of an increased charge for a greater range of services but was not interested in limiting his practice to the wealthy. For a fee of \$99 per month, he now offers patients such amenities as same-day appointments, extended visits, e-mail and phone access for advice concerning illnesses, a wellness program not generally covered by third-party carriers, and a monthly newsletter. He also offers home visits for an additional charge.^a

When luxury primary care practices were first developed, they were aimed at the wealthier patients, with fees in the \$10,000 to \$20,000 range. As evidenced by the practice described here, the amounts of these additional payments have decreased as more practices embrace the added amenities concept.

The success of these practices will depend on the stance Medicare, Medicaid, and private carriers take toward them. At the heart of the issue is whether or not the added payments are a form of *balance billing*, which violates patient rights. Bills have been introduced in both the U.S. House of Representatives and the Senate that would preclude this practice as it relates to Medicare patients. The American Medical Association supports the concept behind these practices, provided that the same level of care is given to traditional patients and that patients participating in these voluntary plans have the opportunity to terminate their contract without penalty.

^a M. Norbut, "Appeal of Retainer Practices: Boutique Care Goes Mainstream," *amednews.com*, Aug. 4, 2003.

Another problem with this type of care is that physicians must decrease their patient load to accommodate the high-paying individual. This may present problems in some practices. The final disposition of this type of practice has yet to be determined.¹³

Disease Management Programs

Disease management programs provide comprehensive treatment to a population of patients who all have the same illness. This integrated approach gives a wide range of health care providers common goals in patient care. In addition a practice with such

a program might anticipate financial savings from more cost-effective treatment regimens, thus appealing to third-party carriers.

Disease management programs rely on interdisciplinary clinical teams to monitor and optimize patient outcomes. Such programs offer potential for improved care because they¹⁴

- Decrease unnecessary hospitalizations
- Make more efficient use of diagnostics
- Support timely communication among nurses, patients, physicians, and staff
- Use the existing infrastructure of specialty societies
- Establish effective policies and procedures

Centers of Excellence

Centers of excellence in some ways resemble disease management programs. Their ultimate goal is to improve outcomes management, using statistical analysis to improve quality of life and decrease costs. In some cases this approach may truly lead to a higher quality of medical care, but at times the term *center of excellence* is mainly a marketing tool. The center of excellence must define its goals (which may be taken from basic marketing principles), including¹⁵

Market penetration: bringing existing products to existing markets

Product development: bringing new products to existing markets

Market development: bringing existing products to new markets

Diversification: bringing new products to new markets

These centers generally offer multiple specialties. Staff include both medical and surgical practitioners, and they provide the latest technology in both diagnosis and treatment. Because of the scope of the endeavor, community hospitals are often involved, and patients may be seen in hospital-based clinics.

Specialty Hospitals

Involvement with a specialty hospital is a major undertaking for practicing physicians. Because the Stark law that limits referrals does not yet apply in cases of whole hospital ownership, physicians can reap financial rewards for a successful venture of this nature. Specialty hospitals are increasing in number. Each hospital devotes itself to a particular disease process, such as heart disease or orthopedics.¹⁶ Proponents argue that specialty hospitals are able to provide a better quality of care and that efficiency

in diagnostic and therapeutic endeavors will increase with a concentrated volume. Specialty hospitals carve out lucrative services from full-service hospitals, and Friedman postulates that the following forces are driving the development of these hospitals:¹⁷

- Expansion of the scope of freestanding outpatient capabilities
- Relaxation of certificate of need restrictions
- Declines in physician incomes
- Physician concerns about lifestyle and call coverage
- Increased patient self-referral due to the decline of gatekeeper models
- Increased consumer cost sharing, resulting in a search for low-cost facilities

A report from the Center for Studying Health System Change suggests that these three factors have a role in specialty hospital development:¹⁸

- High reimbursements for certain procedures
- Physicians' desire for greater control over management decisions affecting productivity and quality
- Specialists' desire to increase their income in the face of reduced reimbursement for professional services

Quality of Care. Proponents say that specialty hospitals improve efficiency, reduce costs, and result in better outcomes. Eight MedCath cardiovascular specialty hospitals, when compared with a large number of community and teaching hospitals, had 12.1 percent lower in-hospital mortality and 17.4 percent shorter lengths of stay, and a greater proportion of MedCath patients were discharged to their homes.¹⁹ Supporters also counter arguments that physicians selectively admit patients to these facilities by citing a study that analyzed Medicare data and noted that MedCath hospitals' Medicare case mix is 20 to 25 percent higher than that of other hospitals in the community.²⁰

Physician Ownership. Currently, the Stark law, which prohibits physician referrals to an entity in which the physician or an immediate family member has a financial interest, does not apply to physician ownership of an entire hospital. However, government regulators periodically revisit this issue. In addition some states prohibit physician ownership of such a venture, and many states require a certificate of need before such an entity can be built. U.S. Representatives Stark and Kleczka cosponsored a bill in 2001 limiting physician investments in specialty hospitals to terms that are available to the general public.²¹ As of the end of 2003, this measure had not passed. Hospital administrators complain that physician participation in specialty

hospitals is inappropriate, but the actual number of physician owners in these ventures has been minimal.²²

Community Hospital Reaction. Administrators of community general hospitals generally oppose the development of specialty hospitals because they take the most profitable service lines away from the general hospital, thus reducing the general hospital's ability to provide such needed but unprofitable services as care of burn patients, trauma care, and social services.²³ Opponents of specialty hospitals also state that these limited-service hospitals do not provide comprehensive emergency services and appropriate physician care for problems unrelated to the specialty.

General hospitals are responding to specialty hospital development in a number of ways. The American Hospital Association has recommended supporting the Stark-Klecza amendment that would eliminate the whole hospital exemption in the current Medicare physician self-referral law.²⁴ Additional actions supported by community hospitals include²⁵

- Requiring public disclosure in the community of physicians' ownership interests.
- Setting comparable quality standards for comparable services.
- Mandating that every ambulatory surgery center develop a transfer agreement with the hospital on which it relies for emergency backup. For example, a community hospital should have the right to transfer a patient with an orthopedic problem to a specialty hospital if that service is not available at the former institution.

Finally, community hospitals are attempting to deter physicians from developing a relationship with specialty hospitals by²⁶

- Denying admitting privileges to physicians with ownership interests in competing specialty facilities
- Terminating contracts with health plans having arrangements with specialty hospitals

Some community hospitals have responded to this threat by building their own specialty hospitals. Although much of today's discussion portrays an adversarial relationship between general hospitals and doctors with an interest in specialty hospitals, many specialty facilities are being built by general hospitals, particularly the not-for-profit institutions.²⁷ Also, general hospitals are beginning to consider joint ventures with physicians. These joint ventures can be constructed in a variety of ways, but both groups must be sure they meet the regulations pertaining to the Stark law, anti-kickback law, and certificate of need requirements.

Ambulatory Care Centers

The number of procedures that no longer require hospitalization is increasing. In addition many procedures do not require the facilities found in a fully equipped operating room. The increasing number of semi-invasive diagnostic and therapeutic operations has contributed to this trend, as have third-party payers' limits on hospital stays. For these reasons, the number of ambulatory care centers has increased in recent years, from 2,425 in 1996 to 3,383 in 2000.²⁸ These centers provide appropriate facilities for performing numerous procedures and supplying high-quality anesthesia and recovery capabilities. Physicians have ownership in many of these endeavors, which may put them in competition with community hospitals. In other instances the community hospital is the driving force behind the development of an ambulatory care center. Corporations own half of ambulatory surgery centers, one-fourth are limited partnerships, and the remaining one-fourth are a combination of partnerships and sole proprietorships. Many of these centers accept only patients with commercial insurance.²⁹

Clinical Need

Before embarking on a new program, the practice group should ensure that this undertaking is important to the community, provides improved patient care, and is financially viable. Physicians have a moral commitment to their patients. Establishing a new program on purely monetary grounds is not advisable. Also, from a purely financial standpoint, a procedure that offers little or no patient benefit probably will not survive. The first step in program evaluation is an analysis of the benefits to the individual patient. Capko and Anwar suggest asking these questions:³⁰

- Is your practice referring patients to services outside that could be performed internally?
- Does it make sense for your practice to provide these services?
- Is anyone else in the community providing these services?
- Are competitors offering a broader array of services and encroaching on your practice's market share?
- Do nontraditional practices, such as complementary or alternative medicine entities, offer services your practice might consider offering?

Clinical Results

An objective assessment of the clinical outcome of a new service line is mandatory before a practice proceeds with a new venture because optimal patient care is the practice's first priority. Information about clinical results may be gathered in several ways.

Medline Searches. A Medline search is an excellent way to review information about a new procedure or service. Controlled randomized studies reported in high-quality, peer-reviewed journals provide the most objective and scientific evaluation of a new procedure. They provide valuable information about the quality of a proposed program and may generate a list of established authors or leaders in the field under consideration. It is important to talk with one or more of these individuals to better understand the complexities of the proposed practice addition. Most physicians enjoy discussing their work, and a phone call is invariably greeted in a positive fashion. Authors of peer-reviewed articles generally are good sources of information about results, complications, training costs, and difficulties encountered in establishing a program.

Discussions with Authorities. Before placing a phone call to a recognized authority, the inquiring physician should prepare a list of topics that he would like to discuss, such as

- Clinical results
- Frequency and nature of complications
- Patient satisfaction with the procedure
- Difficulties encountered in setting up the program
- The necessity of hospital support
- The attitude of the local hospital toward the proposed program
- Credentialing requirements
- Significant litigation problems associated with the procedure
- Human resource requirements
- Training requirements for physicians and non-MD providers
- Reimbursement problems from Medicare and third-party providers
- Population requirements for a successful program
- Potential growth rate of the program
- Positive or negative impact on referral patterns

Competition with Existing Programs

If a proposed program already exists in the community, development of the new venture will result in competition for patients and resources. If the existing program has quality-of-care issues or poor financial management, a new practice may have the opportunity to provide the service. If the existing program is successful, however, the practice that is considering a new venture must concern itself with such issues in the established group as patient loyalty, well-trained practitioners and existing investments in human resources, and complex technology. The competing practice might attempt

to prevent the credentials committee from granting privileges in the community hospital. If the program requires a joint venture with the local hospital, that hospital may resist supporting two groups with similar objectives.

Professional Satisfaction

The successful launch of a new clinical endeavor that benefits the community and improves the overall health of the patient population will provide a tremendous amount of satisfaction and enjoyment to the practicing physician. If a technical procedure is involved, it should be one that maintains the doctor's interest and uses her operative skills.

Program Economics

Overhead costs are more easily calculated when the program involves an office-based procedure. Self-contained programs generally are smaller in scope and require less in the way of human resources and capital equipment. More complex endeavors will require partnering with other groups or with a community hospital.

Creating a Business Plan

A business plan is mandatory, regardless of a program's complexity. It may be for internal use only, giving partners an idea of the costs and benefits associated with a new undertaking, or it may involve a more complex set of calculations for presentation to a hospital, surgical center, or another group of practitioners who may be interested in participating in the undertaking. The business plan should address demographics, reimbursement rates, marketing costs, training costs, and the need for supplies and human resources. Business plan preparation is discussed in detail in Chapter Sixteen.

Specific Costs

The following sections describe some of the costs associated with a new program.

Capital Equipment. Costs of acquiring new equipment may be significant and may constitute a major investment by the practice. One of the best, and often unsolicited, sources of information about new equipment is the sales representative. This biased individual certainly will extol the virtues of the device manufactured by his company. However, this representative can also supply you with objective information concerning the device if you ask for it. If possible, this information should be in the form of articles in peer-reviewed journals reporting controlled, randomized studies.

A practice can obtain the best advice about the quality and reliability of capital equipment from physicians who are already using that equipment on a regular basis. When two or more products are available to accomplish the same task, it is advisable to talk to a physician who is experienced with each of the products. Even more desirable is information from a randomized controlled study comparing the devices. When consulting with another physician who uses the product, ascertain whether or not that MD adviser has a financial interest in the success of the company making the product. The practice should also investigate the costs of disposables associated with any equipment, the terms of available service contracts, the availability of repair technicians, and the mandated safety regulations that must be met.

Such ancillary equipment as disposable catheters or probes may result in considerable expense. Whether third-party payers will assume these costs or whether they will be the responsibility of the practice should be established before equipment purchase. Many times the use of a new piece of equipment requires the purchase of another device that had not been anticipated. In some cases purchase of equipment is most cost effective, and in others a leasing arrangement may be more advantageous. Finally, general costs of such items as dressings, surgical instruments, and sutures must be included in the business analysis.

An association with the community hospital may be necessary if the capital equipment purchase, marketing and human resource costs, and complexity of the new program preclude program development in an office-based setting. This association could take the form of a purchase of capital equipment by the hospital, development of a hospital-based clinic, or a fee paid to a physician as medical consultant. In some cases the price of the equipment may be shared between the practice and the hospital as a joint venture. The hospital will require a detailed business plan before considering any joint venture proposal.

Satellite Office. On some occasions it might be beneficial to open a satellite office to accommodate the new program. This is a large undertaking, and physicians should be sure of the need for such a facility. Analysis of zip codes of existing patients will provide some indication of the volume that might be expected in a new office. Physicians should also determine the number of providers in their specialty area located close to the proposed building location.

Administrative functions should not be duplicated if they can be more easily performed centrally. Centralization may be appropriate for billing, credentialing, charge entry, payroll, accounts payable, and human resources. It may be beneficial to furnish only a portion of the new building at the outset, with additional furnishings added as the need arises. Finally, it is extremely important to be sure that present payers will continue reimbursing for patients in the new location. The payer may see no need

to support an office in the new area if an adequate number of physicians in that specialty already exist there.³¹

Training Requirements. It is often necessary for the physician most actively involved in the project to complete a training course that may range from weeks to months. Nonmedical personnel who will assist in the procedure may also be required to attend training seminars. In some cases the device manufacturer supplies training, but in others this remains the cost of the health care provider using the device. The practice should consider all expenses and hardships involved in training, such as

- Travel and lodging
- Tuition or fees required by the training institution
- Lost income while trainees are absent from the practice
- Licensure required by the training institution, if applicable
- Malpractice coverage for the trainee, if applicable
- Time away from family

Malpractice Costs. Physicians starting a new program must be cognizant of the impact it may have on their malpractice premiums. In the case of a new procedure, significant complications may be associated with its implementation. To gain a better understanding of the potential financial impact of the program, physicians should

- Check with their liability carrier.
- Review the literature to see what complications are associated with the proposed endeavor.
- Ask experts (during the initial phone calls) about potential malpractice risks.

Human Resources. The most expensive element of a new program may be the additional human resources that must be hired. A carefully defined job description for each new employee will allow the practice to decide what type of individual is appropriate and to determine the level of training and experience required. Projected revenues from some new programs will not be sufficient to cover the cost of an additional position. However, hiring a new employee may be advantageous if the program is complex and is expected to generate a large amount of income, require complex preoperative testing, involve a detailed procedure, and require frequent postoperative monitoring.

Non-MD Providers. A nurse practitioner (NP) or physician's assistant (PA) might generate revenue in addition to helping the practice establish and maintain the new program (see Chapter Fourteen). If a new program requires extensive laboratory

evaluation of patients before enrollment decisions are made, the physician extender could play an important role in the initial evaluation and data-gathering process. When it is time to make a final decision regarding a patient's participation in the new program, the physician then has all the necessary information.

When continuing follow-up is necessary, the physician extender may provide this service. The NP or PA generally will take a personal interest in the success of the program and have an in-depth knowledge of all aspects of the undertaking. She can teach others in the practice about such things as coding, billing, and equipment maintenance.

Nursing Support. A registered nurse (RN) adds professionalism to a medical practice. An RN's training and attitude toward patient-care responsibilities is an important factor in the success of any program. RNs may manage the clinical aspects of a new program, and in most cases they have the managerial skills to successfully supervise employees with less formal training. The integration of an RN into a practice setting is discussed in more detail in Chapter Fifteen.

Reimbursement Potential

One can estimate the number of patients who are potential candidates for the new program by reviewing the incidence of the problem addressed by the new venture and the number of individuals in the appropriate age group. A standard medical textbook will generally yield the degree to which each sex and age group is affected.

The U.S. Bureau of the Census Web site provides detailed information about demographics, and these data can be searched by city, state, and county. As a first step, the practice should obtain data concerning the area it presently serves. If it is offering a new procedure, however, the practice may also be able to capture patients from surrounding counties in which the proposed procedure is not yet offered. By excluding locations with existing programs providing a similar service, a practice can obtain a reasonable estimate of populations in geographic proximity that could use the services of the new program. When cosmetic or other self-pay procedures are involved, knowledge of median household income is also necessary. This information is also available from the Bureau of the Census Web site.

Setting a Fee

Setting a fee for a new operation or procedure is a complex process that reflects three components: the work of the physician, the overhead costs incurred in rendering the service, and the associated malpractice risk. For an established procedure with an

existing CPT (Current Procedural Terminology) code, physicians planning a new program can obtain a relative value unit (RVU) figure from the Web site of the Centers for Medicare and Medicaid Services (CMS) and ascertain the Medicare reimbursement amount by using the appropriate multiplier.

Antitrust laws prohibit physicians from sharing data about their own fee schedules and allowables relative to any of their contracts. Some sources of information, however, can serve as guidelines for setting fees. The *Physicians Fee Reference*, for example, published annually, provides RVU values for procedures, as well as the fiftieth, seventy-fifth, and ninetieth percentile fees gathered by nationwide surveys. Fee schedules obtained by a practice must comply with requirements set forth in the “Statement of Antitrust Enforcement Policies in Health Care,” published by the U.S. Department of Justice and the Federal Trade Commission.³²

- The data collection must be managed by a third party.
- Shared information must be more than three months old.
- At least five providers must report data, and no individual provider’s information may represent more than 25 percent of those data.
- Disseminated information must be aggregated so that individual providers cannot be identified.

Setting a fee, anticipating the reimbursement amount, and ensuring payment by third-party payers is more difficult when the procedure is new and a CPT code has not been assigned. If the new procedure replaces an existing one, the fee for the older procedure provides some guidance as to what the new charge might be. However, the physician will ultimately need to contact the medical directors of the Medicare provider in his area as well as the medical directors of the managed care organizations in which the physician participates. In some cases physicians who are at the forefront of a new procedure or technique may want to take an active role in the approval process conducted by Medicare, Medicaid, and private third-party carriers. The rest of this section is a brief description of CPT codes and the way in which a new code is established.³³

The American Medical Association developed CPT codes in 1966. Initially the codes covered primarily surgical procedures, but over time they have come to represent a more comprehensive analysis of medical practice. There are three categories of codes:

Categories of CPT Codes

Category I. These are five-digit codes describing procedures and services consistent with contemporary medical practice; the procedure or service must have received approval from the FDA. A Category I code indicates that a procedure or service is performed across the country in multiple locations, that many

physicians or other health care professionals perform it, and that its clinical efficacy has been well established.

Category II. These codes facilitate data collection by coding certain services or test results that contribute to positive health outcomes and quality care. They decrease the need for record abstraction and chart review and may minimize administrative burdens on physicians. They are assigned an alphanumeric identifier. The use of these codes is optional.

Category III. These codes facilitate data collection on new services and procedures. The data can reveal whether service usage is widespread, and are used in the FDA approval process. These codes have an alphanumeric identifier with a letter in the last field. A Category III code is eliminated after five years if it has not been accepted for placement in Category I by that time.

Individuals interested in establishing a new CPT code must address these issues:

- Is the suggestion a fragmentation of an existing procedure or service?
- Can the suggested procedure or service be reported by using two or more existing codes?
- Do many physicians or practitioners across the United States perform the procedure or service?
- Does the procedure or service represent a distinct physician service?

After the individuals have reviewed these criteria, a proposal can be submitted by completing a coding change request form, which will require this information:

- A complete description of the procedure (in the case of a surgical procedure, an operative note should be included)
- A clinical vignette describing the typical patient to whom the service will be provided
- The diagnosis of patients on whom this procedure or service would be performed
- Copies of peer-reviewed articles that indicate the safety and effectiveness of the procedure
- Evidence of FDA approval of a drug or device

Billing Issues

The first step in estimating reimbursement revenue from a procedure new to the practice is to see whether a CPT code exists. One may easily obtain this information from *Current Procedural Terminology*.³⁴ If a CPT code exists, the Medicare reimbursement

rate should be determined. This information is available in the *Physicians' Fee Reference*³⁵ and on the CMS Web site. Many third-party payers base their fees on Medicare reimbursement rates, but obtaining accurate information will necessitate a call to the specific carrier.

The practice is in a more difficult position when a proposed procedure is not covered by third-party payers. One possible solution is to use a miscellaneous code in the appropriate area (37799, for example, might be used by vascular specialists for a new or unusual procedure that has not been assigned a separate CPT code) and attach appropriate documentation. If the proposed procedure is new and complex, it is worthwhile to meet with the medical directors of the insurance carriers, separately or in a group setting. If partnering with a hospital is a part of the proposed program, a joint meeting is more easily arranged. The medical director generally will review the information presented and refer it to an appropriate committee to see whether coverage will be initiated.

Joint Ventures

Joint ventures may be arranged with a hospital or with another specialty practice.

With Hospitals

If partnering with a hospital is required, the negotiations will be complex and may require purchase of capital equipment, assignment of space, development of a hospital-based clinic, payment of a medical directorship fee, and use of other ancillary services such as physical therapy, social work, or financial counseling.

Hospitals want to be at the forefront of medical care. Instituting progressive programs furthers a hospital's image as a quality provider and enhances its programs in other areas. Both community hospitals and group practices recognize the importance of offering the latest diagnostic and therapeutic options to their patients. This is important medically and also an important marketing tool in establishing a reputation as a modern, up-to-date medical care system. An additional benefit is that state-of-the-art medical care can attract a new population of patients, ones who presently do not use the hospital's services. If the proposed program is not offered in surrounding communities, an influx of new patients from a broad geographic area may result.

Hospitals also benefit from spin-offs associated with a new program. For example, an endovascular aneurysm repair program will result in an increased number of CT scans and arteriograms and in many instances greater use of operating room facilities. More difficult to quantify but also important are other services these patients will

require, including electrocardiograms, pulmonary function tests, and cardiology consultations. It is important to try to document decreases in lengths of hospital stay, even though this statistic is difficult to calculate.

If the practice decides that partnership with a community hospital is required, physicians must decide what type of arrangement is optimal. Interactions with community hospitals are complex and take many forms. A detailed account of possible relationships appears in Chapter Twenty.

Finally, regulatory constraints must be considered carefully before entering into any relationship with a community hospital or with another practice (see Chapters Eight and Nine). Briefly, the practice must consider

The Anti-Kickback Act. It is illegal to receive financial remuneration or gifts of substance from another practitioner, service line, or hospital in return for referring patients to that entity.

The Stark law. Referral to an ancillary service in which the physician or an immediate member of his family has a financial interest is prohibited.

The Civil Monetary Penalties Act. A hospital may not pay physicians directly or indirectly for reducing or limiting services to Medicare and Medicaid patients.

The Antitrust Acts. Antitrust laws restrict physicians from collectively negotiating with third-party carriers.

Certificate of need requirements. In some cases, a certificate of need is required before an ancillary service line can be established.

Purchased diagnostic test rule. In the case of a laboratory test performed outside the practice, the physician cannot receive Medicare reimbursement for more than the amount the supplier charged.

With Other Groups

In some instances expertise from two different specialties is needed to establish a program. A joint proposal is often viewed more favorably by hospital administrators than a single practice's proposal would be. The question of who will be responsible for various aspects of a program should be decided during the initial planning meeting. In addition, the two practices must decide how start-up costs for such needs as personnel training, physician training, capital equipment, and space will be shared. Methods of revenue splitting must be clearly defined. All this information should be included in the business plan to avoid future disagreements about financial arrangements and time commitments.

Credentialing

The hospital is responsible for verifying the qualifications of physicians who perform clinical activities in its facilities. However, the credentialing process varies tremendously among hospitals. The goals of the credentials committee are

- To ensure that high-quality care is provided
- To ensure that malpractice risk is minimized
- To oversee compliance with standards set by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- To oversee compliance with guidelines set by the National Committee for Quality Assurance (NCQA)

The granting of basic privileges requires verification of medical school and specialty training and recent clinical activity; a criminal background check, and analysis of reports from the National Practitioner Data Bank and other agencies. It is worth noting that board certification has assumed increasing importance with hospital credentials committees because third-party payers now specify this certification in many of their contracts.

Consistency in written credentials requirements for various hospital-based clinical activities is extremely important and is required by JCAHO. Such written guidelines improve quality care and minimize disputes between practice groups performing similar procedures.

In some cases, national guidelines, published by various specialty boards, detail the minimum suggested requirements for performing a procedure in a hospital. Many hospitals have adopted these guidelines. Difficulties may arise when specialists with different training perform the same procedure. Each specialty board may have published competency requirements, and the standards set forth by these boards may differ. In general, if the practitioner satisfies the requirements set forth by her own specialty, she will receive a favorable response from the credentials committee.

When a new program is launched, complex technology or other needs may mandate hospital participation in a procedure that has not previously been performed in that hospital and for which no written credentialing criteria exist. In these cases the committee may solicit credentials criteria from other hospitals that perform the procedure. In addition the physician(s) proposing the program should submit to the committee any national guidelines that may exist.

To make things more complex, industries are now setting their own standards for the use of highly technical equipment. For example, the various companies that manufacture devices for the endovascular repair of aneurysms require providers to participate in didactic courses and to possess a certificate from a certified MD course director. In addition they require that a proctor with experience in the field observes and advises a physician for a specified number of the procedures involving this device carried out at that physician's hospital. The hospital must choose whether or not to accept the industry criteria before allowing the clinician to perform that procedure.

Physicians contemplating a program should contact the head of the credentials committee. They should supply a detailed plan of the proposed program, documenting any available national criteria as well as a demonstration of their competency in the field or plans to receive comprehensive training at a remote site.

The Council for Affordable Quality Healthcare (CAQH) is attempting to make the credentialing process easier by means of a universal credentialing data source.³⁶ Physicians submit credentialing information to the data source system, which is then made available to organizations authorized to receive it. Information about this program is available at www.caqh.org.

Marketing the Program

When a practice group proposes to institute a program that is not available in the medical community, the reaction generally is positive. Confirmation of this may be obtained by informal discussions with colleagues at staff meetings and local medical societies. If the proposed program offers a new and potentially better way of treating a disease process that has previously been treated by more traditional means, established groups with extensive experience in the older method may feel threatened by the probable loss of patients. Education of the medical community about the benefits of the new undertaking is necessary. This may take place at hospital staff meetings or in a grand rounds setting.

A new program must be marketed to patients as well as potential referring physicians. Marketing efforts should highlight the clinical success of the venture, any cost reduction that may be involved, and the indications of safety and decreased morbidity. Marketing is discussed in detail in Chapter Eighteen.



Addition of new programs to a medical practice can improve patient care and have a positive impact on the financial health of the practice. Before embarking on a new venture, the physician-owners of the practice must perform an in-depth analysis of the clinical value of the undertaking in addition to investigating all the costs and potential reimbursement associated with its incorporation into the group. They must also thoroughly research pertinent government regulations to avoid possible violation of criminal and civil statutes.

Discussion Questions

1. What are the advantages to a medical practice of adding a new service line?
2. Are there ethical issues with physician involvement with boutique medicine and specialty hospitals?
3. Are government regulations on ancillary services too restrictive?
4. What are the optimal methods of participating with a community hospital in a joint venture?
5. Will the addition of an ancillary service to a practice improve patient care?

Web Resources

- PowerPoint presentation
- Answers to discussion questions

Notes

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CHAPTER EIGHTEEN

MARKETING A PRACTICE

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Objectives

This chapter will help the reader to

- Create an actionable, strategic marketing plan for the practice.
- Conduct grassroots market research for the practice.
- Recognize the most effective and appropriate media choices.
- Motivate practice employees as marketers.
- Project marketing expenses.
- View a practice as patients see it.

Marketing is little more than the art of storytelling and is more effective when it can be easily and painlessly executed (Perspective 18.1). What is the story that a physician and her employees tell about their practice? Is it consistent? Is it rehearsed? Is it positive, and does it reflect well upon the practice? Together, the physician and her employees are the primary ambassadors of their *brand*. It lives in the minds of the patients, staff, vendors, pharmaceutical representatives, and anyone else who carries around a perception of that practice.

The physician should think of herself as the chief storyteller for the practice. In the tradition of storytelling, she should expect and encourage others to go forth and repeat what they have heard. A physician's employees are her lead disciples in the storytelling business. Yet they are often oblivious to the impact they have on the physician's brand when they are, for example, in line at the grocery store and a friend asks them how things are going at work. The physician should help them understand that it is exactly those kinds of moments that represent opportunities for them to tell the positive brand story about the practice.

PERSPECTIVE 18.1. MARKETING QUICK TIPS.

- Secretly shop your practice. Call in on the main line posing as a new patient scheduling a first appointment.
- Visit your Web site with the eyes of a patient. Does it contain the information a patient needs? Is the information easy to access?
- Enter your practice through the front door. Do this once a week. Is your signage visible and easy to read? Does the entrance to the practice feel welcoming?
- Ask your patients how long they waited before seeing you.
- Ask your patients if there is anything you can do to make their visits easier.
- Listen to how your staff speak with patients. Then give them helpful feedback.
- Get to know the neighborhoods surrounding your practice. Get in your car and drive through these neighborhoods to get a feel for your market.

The Health Care Environment: Recent Trends

Today patients are better informed, more assertive, and willing to make demands. They also want to be an integral part of their health care team, seeking both inclusion and information. They want health care to be convenient. This truly is becoming a market-driven environment, a market where the focus is turning from illness, medicine, and hospitals to exercise, vitality, and holistic therapies.

Internet-empowered consumers. Consumers today have convenient Internet access, which means they also enjoy easy access to health care information. Web sites such as healthgrades.com give consumers instant access to information about health care organizations. As a result of this access to information, patients see themselves playing a much larger role as a part of the care team. It is not unusual for a physician to see a patient marching into his office armed with a stack of information printed off the Internet. The patient may even suggest a possible drug for treating his ailment, basing his choice on information gathered from pharmaceutical advertising. What is frightening about the Internet as a health care information source is the lack of control over content quality. In this environment, providing quality information to consumers is not just an obligation of health professionals and organizations but also a marketing opportunity. The Internet is one of the best methods for connecting with a concerned consumer.

The first step toward loyalty can be found in providing the consumer with a much-needed source of quality information. An individual physician practice can be an active player in this arena

The consumer reaction to the “business of health care.” Consumers have become disenchanted with medicine because of the rise of managed care, escalating health care costs, and the failure of the industry to embrace alternative therapies and patient- and family-centered care. This disenchantment has led to a strong aversion toward words or actions that suggest business decisions take priority over quality-of-care decisions.

Increased out-of-pocket expenditures for consumers. With the dramatically increasing costs of health insurance, individual employees must now carry a larger share of the load. Employers are passing along the rising costs by asking employees to pay a higher percentage of the premium and to accept higher deductibles and increased copayments. This also leads to consumer skepticism about the business of health care. Because consumers are paying a larger portion of their medical expenses, they are now more engaged decision makers.

Increased consumer interest in alternative medicine and therapies. The increased interest in alternative medicine is part of a larger self-care movement in the United States. It is also an integral component of the new trend toward consumerism in health care. The Internet is giving consumers access to information about a broader range of health care options and treatments.

The move to more patient-centered and family-centered care. Today, many health care providers are moving toward a more patient-centered and family-centered philosophy of care. Through fundamental changes in philosophy, adaptations in facilities design, and new service models, hospitals across the country are beginning to integrate the patient and family into the care team, working more thoughtfully to accommodate their needs as customers.

The growing importance of patient satisfaction. In a consumer-driven market, customer satisfaction and positive word of mouth are essential for the growth and vitality of a practice. For years the general attitude in health care minimized the importance of the patient as a *customer*. When an individual became ill, where else was she going to go? Today the patient is aware of her options and will take advantage of them with only minor provocation. The patient has truly become a customer, and *customer care* is now an essential marketing function of the practice.

Increased pressure from clinical advances and technology. Recent developments in the field of genomics promise to revolutionize health care. The potential for new medical treatments and pharmaceutical and biotechnology developments is unlimited. Researchers are developing new cell-based therapies to treat life-threatening illnesses, foods are being genetically engineered to increase crop yields and to decrease health

risks among consumers, and pharmaceutical firms are developing and marketing lifestyle drugs designed to improve self-image and combat the by-products of aging (baldness, obesity, and impotence, for example). At the same time, the potential costs of these new developments are astronomical.

Population expansion and the aging baby boomer generation. The aging baby boomer population is already placing an increased demand on health care organizations in the United States. How health care organizations respond to this demand is a significant issue for the future, and how health care professionals respond to the boomer generation's more aggressive posture toward health care is another important issue. Empowered by unparalleled access to health care information, boomers are much more likely than previous generations to demand an active role on the care team.

The Implications for a Practice

No marketing program can remain stagnant, and the marketer must be vigilant. Consumer habits and trends will change; the market will change; the health care industry will change. Therefore, as marketers, physicians must continually look to the future and adjust their brand positioning and marketing strategy to maintain and enhance the relevance of the practice in the marketplace. The biggest threat to brands in this rapidly changing environment is the risk of becoming irrelevant. It is a challenge to continually push to increase a brand's relevance in the marketplace compared with the relevance of competing brands. Increasing practice relevance requires a clear understanding that health care today exists in a market-driven environment characterized by empowered and informed consumers.

Identifying an Audience: Marketing Audit

Keeping in mind that simplicity is critical to a successful marketing program, the next step in this process is to identify the target audience or audiences. Given an established practice, the physician can take a look at his base of patients and develop a profile of the most loyal patients:

Ideal Patient Profile

- Psychographic information
- Average household income
- Average patient age
- Geographic drawing area

There are likely to be psychographic commonalities among the practice's most loyal patients. Once the physician has developed his ideal patient profile, he owns the information he needs to begin targeting individuals and families who match those criteria. It is reasonable to assume that people who match the criteria are more likely than others to visit the physician's practice, given the successes the practice has experienced with patients of this profile.

When a physician is starting a new practice, she should know intimately the area within a five-mile radius of her practice. As she drives about, the physician should ask herself where her patients will come from, and she should think about the makeup of the community. This is basic geodemographic research.

There are significant differences between marketing a specialty practice and marketing a family practice. If most of a physician's patients come from referring physicians, he should develop a referring physician strategy. He should get to know the referring physicians along with the people working in their practices. Some may be uncomfortable with this *outreach*. Physicians need to understand that other physicians want to be courted. This is a ritual that physicians must go through in order to win other physicians' trust and confidence. The elements of a referring physician marketing strategy may include lunch-and-learns, social events such as dinners or parties, and mailings (such as a letter with a Rolodex card insert). Do not underestimate the importance of the practice manager and the reception staff. The physician should be sure to treat others' staff with kindness and respect.

What's Your Story?

As the lead storyteller for her practice, the physician needs to decide exactly what story she wants told. A good place to start is by listening to practice staff and patients. The physician should ask her staff why they enjoy working at this practice. Is there anything special about it? What sets it apart? How would they describe the practice to their spouse or friends? This should give the physician some valuable information to build on.

The physician must also try to tap into her patients' perceptions of the practice. Why do they choose this practice over others? It might simply be convenience, but even that information gives one something to work with. With the complexity of consumers' lives today, a practice that offers convenience and that makes visits easy for its patients is in a very strong position. If the physician treats her patients well, she has a powerful story to tell in this age of consumerism.

It is appropriate to discuss one's track record of positive patient outcomes. Ultimately, people want to know that they are dealing with high-quality professionals who have a positive impact on the lives of their patients. Consumers want to deal with

a physician who is going to have a positive impact on their health, even if it is through a commitment to wellness and patient education.

Once the physician has crafted her brand story, she should shorten it so it can be told in thirty seconds. It is not advisable to try to be all things to all people. She should test her message with trusted people. Once they have heard the story the physician should seek feedback. Does the story sound right? Is it believable? Is it accurate insofar as the listener has knowledge of the practice? Can the physician live up to the expectations the story will create? Next, the physician should share the story with her staff and make sure it rings true to them. The physician should practice the story with them and have it become part of her organization's culture (see the example in Perspective 18.2).

PERSPECTIVE 18.2. STORYTELLING.

Dr. Smith had been in business for four years and his practice had experienced steady growth. In his fourth year in practice he became concerned when a new urgent care center moved in down the street. His concern over the new competition led him to decide that he needed to market his practice. To get some perspective, he asked his patients why they came to his office. They told him that he always took plenty of time with them and treated them as if they mattered; they didn't feel like just another patient when visiting Dr. Smith and his staff. He also talked to his employees, asking their perspective on the practice. They said they liked to work in a practice where they knew the patients. Suddenly, Dr. Smith knew how to market his practice: by providing great care and taking the time to get to know the patients.

Dr. Smith then called a staff meeting and shared his findings with his employees. Most of the information came as no surprise because each employee had been asked for input only days earlier. The idea that this was a practice that took the time to get to know each patient rang true with them. And they were excited by the idea that Dr. Smith was going to begin actively marketing the practice in response to the threat posed by the urgent care center down the street. Each employee understood that it was now more important than ever to live up to this promise of treating each patient like an individual and taking the time necessary to get to know each patient. Their interaction with patients was the practice's most important marketing activity. They also understood that they were to play an important role as official storytellers for the practice when they interacted with the general public.

The marketing activities pursued by one doctor, we'll call him Dr. Brown, included a series of patient education seminars that reinforced his caring, patient-centered approach. He promoted the seminars with signage in the practice and through postcard mailers to his patients. The postcards were also mailed to households within a three-mile radius of his practice. Dr. Brown also posted a list of recommended books on health and wellness where patients to the practice would see it, and duplicated the list on his Web site for easy reference. Dr. Brown also regularly asked patients how they were treated when they called in to make an appointment and whether the practice could be doing anything better. When patients made reasonable suggestions, he took their advice. He also made a point of shopping his practice on a regular basis. Just walking through the front door, rather than through the side entrance he normally used, gave him a whole new insight into the patient's experience. He noticed that the waiting area was unnecessarily clinical and that its décor did not match the caring and warm image he and the staff were working to build and maintain. This was easily remedied with a few decorative touches.

Spreading the News: Communication Vehicles

When it comes to marketing a practice in a cost-effective and targeted manner, the two most important communication vehicles will most likely be positive word of mouth (generated by positive patient experiences) and direct mail.

The greatest concern and most common error found in the selection of media is fragmentation of an already insufficient media budget, spreading it among such outlets as sports programs, local shopping guides, community radio stations, community television stations, local newspapers, telephone books, and high school yearbooks. Taken individually, none of these seems like a budget buster, but collectively they fragment a budget and prevent a physician from making an impact with the advertising dollars available. It is unwise to try to be everywhere at the cost of not making an impact anywhere. A physician should advertise only in a manner (place, size, or frequency) that allows her to be well seen or heard. The truth is, many small advertising opportunities (such as the local high school yearbook) are actually community relations opportunities. They are likely to generate goodwill, but they are not going to pull new patients into the practice.

Here are some of the potentially profitable communication vehicles a practice might consider: a Web site, a newspaper, radio, television, outdoor advertising, direct mail (newsletter), the Yellow Pages, a practice brochure, Rolodex cards, and helpful signage.

Web site. This vehicle allows the physician to tell a fairly complete story while educating patients. It can make a new patient's visit to the practice less stressful by providing a detailed map and written directions. The Web site can also tell new patients what they should bring with them to the first appointment and how early they should arrive to complete paperwork.

Newspaper. A newspaper advertisement is a difficult platform through which to tell a compelling story about a practice. If affordable, it may be an appropriate vehicle for listing coming patient education events or practice participation in health fairs.

Radio. This medium is most accessible when there is a community radio station in the vicinity of the practice. In most major markets the cost of using the large FM stations is prohibitive. With radio, the physician can select stations that appeal to his target audience. Underwriting programming on National Public Radio (NPR) is an interesting and often effective vehicle for promoting a business in a noncommercial manner.

Television. Television is not typically cost effective for most small businesses. In some markets, however, cable television is a viable option and can be geographically targeted. On cable television a physician can also buy the specific programming most likely to be viewed by her target audience.

Outdoor advertising. Although outdoor advertising (billboards) is highly visible and can reach a large audience, it is fairly costly and is not targeted. It is also limited in the amount of information that it can communicate to potential patients. At best it can be used to direct patients to the practice Web site for more information.

Direct mail (newsletter). Direct mail, second only to direct patient contact, is the most targeted and cost-effective marketing vehicle available to a physician. If a physician is presenting a patient education seminar, she should send out a postcard announcing the event. If she is doing a free cholesterol-screening event, she should send out a mailer to current patients and people living in neighborhoods near her practice. A local mail house will charge a small fee to develop an electronic mailing list of area homes that meet the physician's criteria (for example, households with \$70,000+ household income and within a five-mile radius of the practice). The mail house can provide the physician with mailing labels and an electronic copy of the database or can print the addresses directly on her mailing piece.

Yellow Pages. This vehicle has become extremely fragmented and difficult to handle. Today people may choose to use any of a number of telephone books, and it is a challenge to discern which, if any, are of value. Certainly, a physician

needs to be listed in the telephone book, but he doesn't need to have a large ad. The physician should make sure that he is listed and that a potential patient can find his listing if she tries.

Practice brochure. The physician may want to put a practice brochure low on the priority list. It is not at all mandatory. Certainly a Web site and proper signage should come first. Physicians should think of the practice brochure as a luxury that would be great to have, time and money permitting.

Rolodex cards. When marketing to referring physicians, it is wise to keep things simple for them. The physician should include, along with a letter of introduction, a preprinted Rolodex card that gives all the contact information a referring physician may need.

Helpful signage. The physician should make sure that the practice is identified by signage that is easy to read. He should also be sure that the main entrance to the practice is clearly marked.

Public (Media) Relations and Community Relations

One should think of media relations as seeking an opportunity to have the practice's story told in the local news media for free. For most practices, media relations will be handled by office staff or the physician, not by a PR firm. This is principally because PR firms tend to charge large monthly retainers, sums not usually justified by the relatively small amount of media relations work generated by a physician's practice.

A physician has expertise that he can offer the local radio station—particularly a news or talk station—or newspaper. Occasionally a local radio station will welcome a physician from the community who can produce brief health information segments. This is a chance to get the physician's name out in the community with only the commitment of his time. Similarly, local newspapers often invite local physicians to write a regular biweekly or monthly column on various health topics.

Another way to get publicity for a practice is to send information to community newsletters. If the practice is conducting a special health education seminar, a community newsletter is an ideal place to spread the word. Physicians can also use these newsletters to promote back-to-school flu shots, camp physicals, or child safety seminars. A physician should make contact with the people who produce those publications. They will quickly let her know how she can get involved.

Community relations are equally important. Sponsoring and participating in community activities establishes the physician's practice as a good corporate citizen. More important, it builds up goodwill toward the business. If the practice is ever faced

with a public relations crisis, the physician will be able to cash in on the goodwill he has built up over the years. People in the community, particularly government and business leaders, will be quick to attribute good qualities both to the practice that is a good corporate citizen and to the physicians in that practice.

The Brand Experience: The Patient's Experience

Of all the marketing efforts a physician undertakes, nothing is more important than ensuring that the patient has a good experience when visiting and making contact with the physician's office. The physician's brand takes life when a patient visits her office, interacts with her staff, and navigates her Web site. This is called the *brand experience*. If the physician makes the experience easy and comfortable, that personifies the physician's brand for the patient. It becomes part of the physician's story as it is told by advocates of her brand. Of course a negative experience will lead to negative word of mouth and a negative perception of the brand. The physician needs to manage and monitor her patients' experiences with her practice carefully, periodically putting herself in the shoes of the consumer.

The physician should call her office using the main phone number and try to make an appointment, checking on these elements of the experience:

- How was she greeted on the phone?
- Was it easy to make an appointment?
- How long did she have to wait for an appointment?
- Was she put on hold?
- Was she advised what to bring to the first appointment?
- Was she made to feel important?

Every so often the physician should park where patients park:

- Is the signage easy to read?
- Is the entrance to the practice clearly designated?
- Is the parking lot clean?

The physician should walk into the practice through the front door:

- Is the entrance clearly marked?
- Is the entrance inviting?
- Is the waiting room pleasant and comfortable?

It is wise for the physician to take a moment to ask his patients some good questions. They will appreciate being asked. It will convey to them that these details are important to the physicians and that their satisfaction is important as well.

- How was the patient treated when she called in to make the appointment?
- Did she visit the Web site? Did she find it helpful? If not, what can be done to improve it?

The physician should think about his interactions with patients:

- Does he leave a patient feeling as though she is important to him as a human being and as a customer?
- Does he take the time to treat her as an individual, rather than as just another patient?

Patient Education as a Marketing Opportunity

Patient education is a tactic for growing the practice and increasing patient loyalty. Although physicians and practice managers complain about the lack of turnout for this type of activity, the physician should suspend disbelief and take on patient education activities as a positioning strategy. When people in the community think of the physician's practice, ideally the image that comes to mind will be of a practice dedicated to sharing knowledge with its patients in order to keep them well.

A commitment to patient education starts with the patient's brand experience when interacting with the practice—in person, on the telephone, or via the Internet. Does the physician spend time with the patient to make sure that the patient understands his health condition and treatment regimen? Are the staff helpful in directing patients to useful information? Does the practice Web site contain helpful information or direct patients to such information? The Internet is well populated with health care information, and consumers are quick to make use of it. However, there is no sure way for them to evaluate the quality of that information. Although it may be impractical for a practice Web site to contain all the health information needed by practice patients or potential patients, the physician can use the Web site to direct patients to the sources she considers reliable.

The Marketing Plan and Budget

The overwhelming thought of writing a marketing plan should not be allowed to get in the way of actual market planning. More important, planning should not get in the way of actually taking action. One useful method is to set a goal of taking one

significant action each month to improve practice marketing (Perspective 18.3 offers a sample list of actions). It is helpful to map out marketing activities on an annual calendar. It is much easier to follow a calendar than it is to refer to a thick marketing plan. The physician should make it simple for himself and for his staff to follow the plan and should avoid making the calendar so ambitious that members of the practice can't possibly get it all done. The physician should be realistic.

If you do take the step of writing a short marketing plan, focus on these elements:

Situation analysis. What is happening in the market? From a marketing perspective, what are the physician's strengths, weaknesses, opportunities, and threats?

Business objective. What is the practice's growth or revenue goal?

Marketing objective. What is the practice's marketing goal (for example, achieving greater awareness or addressing people's perceptions)?

Target audience. To whom does the physician want to market the practice?

Media and communications vehicles. How is the physician going to reach the target audience (by direct tactics or through the use of local news media)?

PERSPECTIVE 18.3. MAPPING MARKETING ACTIVITIES FOR THE YEAR.

- Month 1.* Develop a two-page marketing to-do list for the year.
- Month 2.* Improve practice signage (inside and out).
- Month 3.* Enhance the Web site; add patient education links and directions to practice.
- Month 4.* Hold customer service training for staff on how to be a brand ambassador.
- Month 5.* Hold a patient education event.
- Month 6.* Contact local reporters; offer the physician as a source for medical or health stories.
- Month 7.* Send out a direct mail piece to potential patients in proximity of the practice.
- Month 8.* Improve waiting room décor; install computer for patient use.
- Month 9.* Participate in local health fair.
- Month 10.* Contact local civic organizations for speaking opportunities.
- Month 11.* Sponsor a community health-related event.
- Month 12.* Place an ad in a newcomer publication.

Key messages. What does the physician want people to know about the practice? How does the physician want them to perceive the practice?

Core message. What is the single theme that defines the practice from a marketing perspective? What does the physician want people to remember about the practice? (This message should be boiled down to one sentence.)

Personality and tone. What is the appropriate tone for the physician's marketing communications? What is the personality of the brand? What image does the physician wish to convey?

Perspective 18.4 displays a basic marketing plan outline.

Measuring the Effectiveness of Advertising

Once the physician has invested in advertising, she should do her best to measure its effectiveness. The best way to do this is to ask new patients how they learned of the practice. Staff can ask this question when new patients call in or make their first visit, or new patients can complete a short survey in the office. The key to getting

PERSPECTIVE 18.4. BASIC MARKETING PLAN OUTLINE.

Mission and goals
Executive summary and recommendations
Epidemiology
 National, regional, and local statistics
 Industry trends
SWOT analysis
 Internal position
 Demographic analysis
 Market share
 Competitive analysis
Organizational structure
Outcomes reporting
Financial schedules: five-year projection
Appendix: job descriptions, capital expenditures

reliable data from the survey is to ask more than the obvious questions. For example, many people will say they found a practice in the Yellow Pages, because that is where they went to find the phone number. The follow-up question to ask is why did they select this practice over all the other practices listed by the source they were using. This might lead them to reveal that they had heard good things about this practice from friends and neighbors. If so, word of mouth is what brought them to the practice, not the Yellow Pages.

When putting this simple survey together, it is wise to throw in some items that test response accuracy. For example, when patients are given a list of advertising options and asked to indicate where they may have heard about the practice, the list might offer an option or two that the practice doesn't use, such as TV commercials or a symphony program. This will help the physician discern the quality of the data he receives from his new patients. Here are some good questions to ask new patients:

- What, if anything, have you heard about this practice from friends, neighbors, or colleagues?
- Did you visit our Web site at any point before your first visit to this office? What, if anything, did you find helpful? What information did you hope to find on our Web site that was not included?
- How were you treated by the staff when you called to make your appointment?



Creating a brand for a practice is the physician's single most effective marketing objective. It defines the practice's purpose, improves quality of care, and increases patient satisfaction. Promoting the practice may be done in various ways including advertising, maintaining a pleasant environment, and listening to the patients' perception of their care.

Discussion Questions

1. What external market trends are fueling consumerism in health care?
2. Why are employees a practice's most effective marketers?
3. Why must a target audience be identified to create an effective media plan?
4. How can the brand experience of a practice be tested?

Web Resources

PowerPoint presentation

Answers to discussion questions

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CHAPTER NINETEEN

INTEGRATING A CLINICAL RESEARCH PROGRAM INTO A MEDICAL PRACTICE

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Objectives

This chapter will help the reader to

- Understand the process of new drug and device development through clinical trials.
- Recognize the importance of a specific business plan in developing a clinical trial program.
- Determine the personnel and facilities needed to perform a clinical trial.
- Identify resources for the development of a clinical research program.

As economic pressure continues to mount on medical practices, many physicians have looked outside the traditional clinical arena for opportunities to augment their financial status. An increasing number of physicians, particularly those in private practice, have been attracted to participation in sponsored clinical trials. Table 19.1 compares the typical revenues from standard clinical practice with the payments received from the sponsors in a representative clinical study. It is clear that the reimbursement derived from clinical trials can be substantially higher than that from standard clinical practice. Enhanced reimbursement should not be the only reason to participate in clinical trials; intellectual interest and practice enhancement are also important reasons. However, the potential investigator must understand that there are significant organizational demands and financial risks associated with initiating a program in clinical research. This chapter outlines the requirements of a successful program in clinical research to give the physician a framework for determining the potential utility of this often exciting and rewarding area of medicine in a practice situation.

TABLE 19.1. TYPICAL COMPENSATION FROM A PHASE III TRIAL OF AN INVESTIGATIONAL COMPOUND FOR HEALING DIABETIC FOOT ULCERS (DFUs) VERSUS CLINICAL REVENUE GENERATED FROM DFU TREATMENT (MEDICARE ALLOWABLE).

Clinical Revenue		
Initial visit		
E&M	Code 99204	\$124.58
Surgical debridement of wound skin, subcutaneous tissue	Code 11042	75.15
Doppler ultrasound reading fee	Code 93923	22.41
Cost of wound dressing	Average	(11.00)
Allowable reimbursement	1 visit	211.14
Subsequent visits		
E&M, not billable with procedure code unless new patient problem		
Surgical debridement of wound	Code 11042	75.15
Cost of wound dressing	Average	(11.00)
Allowable reimbursement	13 visits	<u>833.95</u>
TOTAL REIMBURSEMENT		\$1,045.09
Clinical Trial Revenue		
Initial screening visit		
Clinic visit		150.00
Medical history		50.00
Physical exam		100.00
12-lead EKG		100.00
Wound planimetry and photography		50.00
Blood sample (draw and packaging)		50.00
Review of entry criteria and informed consent		100.00
Wound debridement		200.00
Follow-up visits		
Clinic visit	13 @ \$150 ea.	1,950.00
Wound evaluation	13 @ \$50 ea.	650.00
Planimetry and photography	13 @ \$50 ea.	650.00
Debridement	4 @ \$100 ea.	<u>400.00</u>
TOTAL REVENUE		\$4,450.00
Summary		
Total clinical revenue for 10 patients		10,450.90
Total trial revenue for 10 patients		<u>44,500.00</u>
NET INCREASE FROM CLINICAL TRIAL		\$34,049.10

Note: This example considers a twelve-week trial active phase with ten patients, weekly visits, and a two-week run-in period, for a total of fourteen visits per patient.

Private Practice Versus Academic Practice as a Trial Site

Years ago the vast majority of clinical research was performed at academic medical centers, but in the past ten years the percentage of clinical trial funding awarded to nonacademic practices has increased so dramatically that the majority of clinical trials are now conducted by private medical practices or at full-time research sites.¹ Several factors are responsible for this change. At most academic medical centers, participation in company-sponsored clinical trials does not afford the investigator the same academic credit that studies funded by the National Institutes of Health (NIH) provide. Therefore investigators looking to establish research careers leading to advancement must spend most of their research time competing for NIH grants, with clinical trial involvement a distant second in time and effort.² Second, academic faculty are facing pressure to take on higher patient volumes, limiting their time for involvement in clinical research. Third, academic centers typically see a higher volume of referral patients with serious medical problems than private practices do, and these patients cannot meet the enrollment criteria for many clinical trials.³ Study sponsors frequently find a larger percentage of enrollable subjects in community practice environments.

In addition sponsors previously sought to sign up influential academic thought leaders as principal investigators to lend credibility to their trials, and they sought endorsement from the academic physician if the trial experience was good. However, this consideration has become less important because most sponsors have found that the individual investigators were less important than the quality of the data generated. If the data do not justify the use of a drug, the reputation of the investigators will not change those facts. Finally, sponsors are acutely aware that trials that do not meet enrollment goals typically result in major cost overruns. Therefore sponsors have focused on rapid, clean recruitment of patients and collection of data. Sponsors place a high value on sites with experienced trial coordinators who can enroll large numbers of patients. These sites are frequently developed by private medical practices with a dedicated interest in clinical trials.

Despite the large numbers of physician practices that have incorporated clinical trials over the last ten years, many analysts believe there is still a critical lack of trained clinical investigators to perform translational research and clinical trials.⁴ It is clear that there is potential for new investigators to succeed in this arena, but only if they are committed, well prepared, and supported well enough to manage a dedicated clinical research program.

Potential Benefits from Clinical Trial Involvement

Aside from the potential financial gains, clinical research offers intellectual stimulation from involvement with a new and potentially medically important drug or procedure. Most physicians retain their scientific interest in new therapies even years after completion of training, and the excitement derived from testing a product or procedure that may lead to significant improvement in patient treatment should not be underestimated. For this reason, investigators should look beyond financial potential and seek studies that are aligned with their research or clinical interests.

The investigator may also become involved in the publication process, an opportunity often offered to sites with high enrollment in the trial. This may enhance the investigator's reputation as an expert in her field, which may improve development of her clinical practice or lead to further consulting or trial opportunities. A practice may also be enhanced by the perception that it is on the leading edge of medical practice in its field, receiving referrals for patients outside of the trial as well as patients for study consideration. Both the investigator and the practice may gain satisfaction by offering patients the latest in pharmacological or medical device technology.

Organization of the Trial Process

In general there are two types of clinical trials. The first involves the development of new medications by the pharmaceutical industry and the initial evaluations of these drugs in clinical trials; the second involves the evaluation of new medical devices. In many ways the process for each type is similar, but the number of patients required in a study of a new pharmacological compound typically is much larger than the number required for a device study. The average number of patients required for Food and Drug Administration (FDA) approval of a new drug was nearly four thousand in 2001.⁵ Conversely, many devices require no more than several hundred patients for approval. Both types of studies typically proceed through the trial process outlined in this chapter.

The company developing the pharmacological compound or device under study is termed the *study sponsor*. The sponsor may elect to administer the study itself, or it may employ a contract research organization (CRO) to manage the study. In the latter situation the sponsor is involved in developing the protocol, the study budget, and enrollment parameters, but the CRO is responsible for conducting the trial, including site monitoring, coordination of centralized data collection and analysis,

query resolution, and preparation of materials for submission to the FDA. The sponsor may select the trial sites, or it may leave this choice to the CRO. In most studies each study site is assigned a monitor, who is responsible for seeing that data is collected in a proper fashion and with no irregularities. The monitor may train site personnel and assist with questions or problems uncovered as the trial progresses. The monitor typically visits the site at routine intervals throughout the trial to examine the data collection process.

Clinical trials may not be started until they have been reviewed and approved by an institutional review board (IRB). The IRB's central goal is to protect the rights of human subjects in clinical studies. The IRB typically reviews the protocol to determine whether the risk-benefit profile is acceptable and to suggest protocol alterations if necessary. Specific attention is devoted to the consent process to ensure that adequate information is conveyed to each potential subject in lay terms so that subject can make an informed decision on participation. Many hospitals and health care systems mandate use of their own IRBs. In other situations a central IRB may be used; the process may be speeded up when multiple sites use the same IRB.

The Clinical Trial Process

Pharmaceutical compounds or medical devices undergo a rigorous preclinical process during which more than 80 percent fail to proceed to the arena of clinical trials.⁶ Those that appear to have adequate efficacy in animal studies, combined with an acceptable therapeutic window and toxicity profile, may proceed to clinical evaluation. The sponsoring company then files an *investigational new drug* (IND) application with the FDA. If no objections are raised, the company can begin the clinical trial process.

Most new compounds are studied initially in a Phase I study. This involves a small number of subjects, who may be healthy volunteers, and aims to determine the drug absorption, pharmacokinetic, and safety profile of the new compound. On the medical device side, Phase I typically is modified into a pilot study involving a limited number of patients with the condition requiring the device, in order to evaluate safety parameters. These studies are typically rigorous and carefully controlled, given the potential of unexpected side effects in a “first-in-humans” trial.

Phase II studies typically involve a randomized comparison between the drug and a placebo in patients with the disease the drug is designed to treat. These studies provide further safety data and an initial determination of efficacy. It is unusual for a drug to receive approval for marketing based on a Phase II study, because these studies are rarely powered adequately to determine efficacy.

Drugs completing Phase I and II with promising medical and economic results proceed to Phase III trials. This usually is the pivotal trial for a new compound, and the trial is designed with adequate power to determine whether the drug will provide a significant benefit to patients. These studies often are large, with hundreds to thousands of patients involved. Drugs completing this pivotal trial with results that support a benefit to patients and an acceptable safety profile are brought to the FDA by filing a *new drug application* (NDA). It is crucial that a sufficient volume of experience be generated to provide adequate safety data to support this NDA. If approval is received for marketing the drug, some pharmaceutical companies will perform Phase IV post-marketing trials. These are often less rigorous studies requiring less investigator time, and they typically are performed to gather information on unusual side effects and cost efficacy. A second goal of Phase IV studies is to develop data that may support a second indication for use, separate from the drug's initial FDA approval.

Knowledge and Organization Requirements

How, then, should a practice evaluate its ability to participate in clinical trials? Clearly the place to start is with a review of the drug approval process or the medical device approval process, depending on the type of trial a practice wishes to consider. Primary care and other less procedure-oriented practices generally will find the most relevant options in pharmaceutical trials. Surgical and other procedure-oriented specialties may find device trials most relevant to their practice areas.⁷

It is important to perform an honest evaluation of a practice's areas of expertise and areas in which it has large patient volumes from which to recruit trial subjects. It is also possible to recruit patients from other practices to enroll in a trial; however, this would not be the optimal choice for an initial study experience because the success of such an effort is more difficult to predict.

It is also important to develop familiarity with federal regulations concerning the clinical trial process.⁸ Justifiably, the interest in protecting the rights and safety of subjects in clinical trials is intense, leading to a specific process that must be followed. Here is a sampling of the federally mandated commitments of a principal investigator conducting a clinical trial of an unapproved drug or device, as outlined on FDA Form 1572:

- I agree to conduct the study in accordance with the protocol.
- I agree to personally conduct or supervise the described investigations.
- I agree to inform any patients that the drugs are being used for investigational purposes, and I will ensure that federal requirements relating to informed consent and institutional review board (IRB) review and approval are met.
- I agree to report all adverse events that occur during the investigation to the sponsor.

- I have read and understand the information in the investigator's brochure including the potential risks and side effects of the drug.
- I agree to ensure that all associates assisting in the conduct of the study are informed about their obligations in meeting the above commitments.
- I agree to maintain adequate and concise records and make those records available for inspection.
- I will ensure that an IRB will be responsible for the initial and continuing review and approval of the clinical investigation. I will report to the IRB all changes in the research activity and all unanticipated problems involving risks to subjects or others.

Severe penalties have been delivered to investigators who failed to follow and document the mandated process.

New clinical investigators should consider attending a course that reviews key aspects of setting up and running trials. Several groups, including the Association of Clinical Research Professionals (ACRP) and the Pharmaceutical Research and Manufacturers of America (PhRMA), offer this material at national and regional venues. These courses and accompanying materials can be helpful in determining whether clinical trials would benefit a specific practice and in establishing good parameters that will assist the practice to develop ethical patient recruitment and retention programs.

Personnel Requirements

The primary requirement is a physician or physicians with an interest in clinical research who can be designated to develop the site and be the principal investigator (PI). Just as important is the agreement of the entire practice to support the time and monetary requirements of developing the program. The investigator time requirement depends on the type and number of studies enacted, but to expect the PI to keep track of the patients and to assist the coordinator adequately without time specifically allocated to the trial program is unrealistic and potentially dangerous. Other practice partners must understand that some reduction in clinical productivity must be expected and supported so the investigating physician can devote sufficient energy to study recruitment and conduct (Table 19.2).

After an interested principal investigator, the most important person for an effective clinical trial site is a capable trial coordinator. It is crucial that the coordinator be a meticulous individual with excellent organizational and communication skills. The PI should plan to spend as little time as possible on the trial once the medical aspects of the patient visits and any specific trial-dictated investigator duties are completed. Therefore the coordinator will perform most of the patient contact, data collection, and data submission. An effective coordinator can increase the productivity of the site and the site's value to sponsors by delivering clean data. It has been

**TABLE 19.2. PERSONNEL AND TIME REQUIREMENTS
FOR A TYPICAL TRIAL.**

Start-Up Requirements	
Principal investigator (PI)	
Recruitment of clinical trial	Variable, typically 5–10 hrs.
Review protocol; suggest changes	3 hrs.
Review, negotiate budget	2 hrs.
Investigator meeting	1–2 days
Review IRB submission	1 hr.
Respond to IRB questions	1 hr.
Review amendments	2 hrs.
TOTAL	25–35 hrs.
Coordinator	
Develop budget	3 hrs.
Investigator meeting	2 days
Prepare IRB submission, consent	8 hrs.
Revise after IRB review	3 hrs.
Submit amendments to IRB	4 hrs.
TOTAL	34 hrs.
Ongoing Time Requirements per Patient	
Principal investigator	
Screen, consent patient	1 hr.
History and physical exam	30 min.
Study-related procedures at screen	30 min.
Enrollment procedures	30 min.
Follow-up visits (15 min. × 15 visits)	3 hr. 45 min.
Query resolution; data review	1 hr.
TOTAL	7 hrs. 15 min.
Coordinator	
Screening day	2 hrs.
Enrollment day	3 hrs.
Follow-up visits (45 min. × 15 visits)	11 hrs. 15 min.
Data recording, submission	6 hrs.
Query resolution	4 hrs.
TOTAL	26 hrs. 15 min.
Approximate Time Requirements per Patient Enrolled	
1 patient	
PI	36 hrs.
Coordinator	60 hrs.
10 patients	
PI	11 hrs.
Coordinator	29 hrs.
30 patients	
PI	9 hrs.
Coordinator	27 hrs.
If profit level after expenses = \$3,000 per patient	
	30 hrs. × 25/hr. for coordinator = \$750
	Reimbursement = \$2,250 for 9 hrs. of investigator time

Increasing patient numbers maximizes efficiency.

estimated that each inconsistency that generates a data query that the coordinator or investigator must resolve costs the sponsor \$75 to \$100.⁹ With the average study generating thousands of queries, the sponsor's interest in minimizing data inconsistencies can be understood. Sponsors that frequently perform clinical trials keep track of the query rates of each site and may use this information when selecting sites for future studies. Additionally, a PI paired with a coordinator who is sloppy or disorganized will quickly find clinical trials to be burdensome and tedious as he struggles to correct the coordinator's mistakes.

The study coordinator typically

- Prepares the documents required for submission of a trial to an IRB
- Prepares study budgets
- Prepares the site for the study by obtaining equipment, supplies, and subcontractors (for shipping, laboratory services, and the like)
- Develops patient recruitment strategies
- Screens and schedules patients
- Reviews consent information with patients
- Documents patient visits on case forms
- Reports adverse events
- Resolves data queries
- Interacts with the study monitor and sponsor personnel

This diverse list of responsibilities makes it clear that what is desired is a versatile, personable individual with the ability to solve problems without assistance. For most clinical trials, it is helpful for the coordinator to have some medical experience, but this is not an absolute necessity. In some studies the ability to perform phlebotomy, intravenous line insertion, electrocardiograms, or other routine procedures is beneficial. Registered nurses or physician assistants often are excellent candidates, particularly if they are seeking part-time or flexible employment conditions. Typical salaries for full-time trial coordinators range from \$40,000 to \$80,000 or more, depending on the number of trials under supervision and years of experience.¹⁰ The higher end of the salary range is typically for supervisory positions in which an experienced coordinator supervises several other coordinators at a busy clinical trial center.

Facility Requirements

Facility requirements vary widely by study. The requirements for a Phase IV antihypertensive trial may be only a clinic room, EKG equipment, and the ability to send blood samples packaged appropriately for overnight mail. Conversely, a Phase I

study of a new drug may require patients to remain in a clinical research facility for several days at a time for pharmacokinetics, frequent monitoring, and observation. On the device side, requirements will be specific to the device under study: for example, a trial of a coronary stent implant will require the use of a cardiac catheterization facility.

Sponsors typically provide most equipment for the trial that is not routinely available in a medical office or clinic, for example, temperature-controlled refrigerators, centrifuges, and water baths. Evaluation of all the equipment and supplies required to complete the study is important to the budgeting process. The investigator must ensure that these are provided by the sponsor or see that appropriate reimbursement is added to the budget. "Hidden costs," for items such as blood drawing equipment, scalpels, intravenous catheters and sets, and normal saline, can eat significantly into the profits of a study if not accounted for in the budgeting process.

When studies involve outpatient clinic populations, study visits may be performed concurrently in the same facility with regular patient visits. This allows the PI to see regular patients while the coordinator performs most trial functions. Other PIs may prefer to have office time set aside for visits with study patients alone. It is important to remember that the time requirements of clinical trial visits are often far greater than those for standard clinic visits. It is not unusual for a visit for initial trial enrollment to require two to four hours to complete all the procedures and screening tests dictated by the protocol. The coordinator must carefully manage room time to avoid patient flow problems. The investigator must remember that the subject involved in the clinical trial process is doing so in part for altruistic reasons. Patients who experience long waits for their clinical trial visits are more likely than others to drop out of studies and will be reluctant to participate in future studies at that center and possibly at other centers as well.

How to Get Started in a Trial

A new investigator must confront a crowded field, as increasing numbers of practices have developed involvement in clinical trials. It is estimated that more than 50,000 investigators participated in clinical trials in 2001.¹¹ Sponsors and CROs typically prefer experienced sites that have proven their ability to recruit patients and provide clean data with few mistakes. How, then, can a new investigator become involved in clinical trials?

The first option is for a new investigator to demonstrate academic interest in an area within her specialty by writing an article that is published in a journal. This may be a review article or case report or a series published in a peer-reviewed journal.

Sponsors looking for potential sites often search the literature looking for articles relating to the disease to be treated by their new drug. For example, a peer-reviewed article on the management of hypoglycemia can establish that the physician has significant experience and expertise in that particular area. Therefore, her practice might be a logical place for a sponsor or CRO to consider as a trial site.

Obviously, a physician cannot write articles in every area in which the practice might be able to support clinical trials. Therefore a concerted program of recruiting trials is usually necessary. A good place to start is with Internet sites listing current clinical trials and sites, such as the following:

- acurian.com
- cancerconsultants.com
- cancer.net.nci.nih.gov
- centerwatch.com
- clinicalstudies.com
- clinicaltrials.gov
- healthexchange.org
- nih.gov
- pharma.com
- veritasmedicine.com

Listing the potential investigator's site, identifying trials in his areas of expertise, and making contact with sponsors and CROs are all important initial steps. An active trial might not need new sites for its current phase, but sponsors developing the next trial phase often will require a number of new trial sites. It is important to make contact with a sponsor's research department rather than with its local sales representative or marketing personnel. Although sales and marketing personnel may be involved in the recruitment of sites for Phase IV trials, they are not involved in earlier studies, which are generally more intellectually stimulating.

However, physicians at a new study site should strongly consider involvement in a Phase IV study, which can demonstrate an investigator's ability to recruit patients and comply with good clinical practices. Because the drug in a Phase IV study is already approved for marketing by the FDA, sponsors are more likely to be willing to work with inexperienced sites. Sponsors are also interested in having a variety of physicians gain a comfort level with the new drug, and a Phase IV trial can allow this to occur. To gain access to Phase IV trials, it is important to talk to local company representatives, who often submit names of potential Phase IV trial sites for consideration.

A practice can also generate trials by attending prominent medical meetings to network with colleagues and pharmaceutical representatives. Joining clinical trial

organizations such as PhRMA and attending their meetings may be fruitful, because many CROs and sponsors attend these meetings specifically to look for trial sites.

It is important for the investigator to have a mechanism in place to conduct trials when attempting to recruit studies. The first thing the sponsor or CRO asks is the name of the site coordinator and the facility where the study will be conducted. It is unusual for a sponsor to pick a site without a coordinator already in place. For this reason the practice must expect to make a significant initial investment that may not result in income generation for a year or longer because of the slow start-up and payment process in clinical trials.

Budgeting and Estimation of Recruitment Potential

When evaluating a potential trial, it is important for the investigator to evaluate the budget and the number of patients that may be recruited at the site.¹² The budget process may occur in several ways. The sponsor might offer the study with a set budget per patient, in which case the investigator must agree to perform the study at that price or decline to participate. This requires the investigator to determine whether the budget offered will cover all expenses and allow a profit margin that makes the study worthwhile. New investigators rarely spend sufficient time detailing each expense and its effect on their profit. Attending a symposium on clinical trial budgeting will provide valuable assistance in this process.

Another common method of budgeting involves a negotiation between the investigator and sponsor. In this system the sponsor asks the site to prepare a budget based on the trial requirements. The investigator must calculate fees for each clinic visit, the procedures, and the studies and supplies not covered by the sponsor. The investigator then submits a fee per patient completing the trial, with an awareness that the sponsor may give preference to sites submitting lower budgets, if the experience level and potential recruitment are similar. Here are the typical expenses associated with clinical trials. They are typically accounted for in the sponsor's study budget but may not be and can be costly for the practice in that case.

- IRB fee for study review
- Advertising costs for patient recruitment
- Ancillary procedures (EKG, radiographs, blood work, and so forth) required for enrollment, if not medically necessary
- Reimbursement for screen failures (the PI may screen several patients for each patient enrolled)
- Cost of supplies (for example, gauze, needles, IV catheters and tubing, phlebotomy tubes, and so forth) used for study procedures

- Postage
- Patient transportation costs for frequent study-related visits
- Telephone contacts with patient if required by protocol
- Additional requirements caused by protocol amendments after the budget has been determined

When submitting a budget for a potential study, it is worthwhile to consider benefits beyond financial profit that may be gained by study participation. Studies involving new medications or devices that are not available to other physicians may enhance the reputation of the PI and recruit patients to her practice outside of the study. Some studies certainly are more intellectually interesting than others, and the investigator may have an interest in a particular compound or device that is satisfying apart from the financial benefits of the study. In Phase I and II studies, involvement with the sponsor in the clinical development of a compound may result in consulting or lecturing fees for the investigator who is willing to develop these relationships. These considerations will help determine the amount of profit necessary to make the trial worthwhile.

If financial profit is the only reason the PI is considering participation in a given study, the study must be very profitable, as the work involved will be particularly tedious. At the center where my colleagues and I practice, when there is little interest in a study other than profit, we typically submit a budget that is 30 to 50 percent higher than we think is needed for the study. The budget might be accepted; but if it is not we pursue other more interesting options. We commonly prepare bargain rate budgets for studies involving early phase trials and studies with completely novel therapies; although these studies are often sponsored by start-up companies with limited resources, they sometimes offer significant other benefits to our practice.

Accurately determining the potential for recruitment to a particular study is crucial to the long-term success of a clinical research program. To be awarded the study the PI must of course convince the sponsor that the site will be able to enroll a sufficient number of patients, and the investigator's reputation can be damaged by failure to deliver on those projected numbers. One of the most difficult tasks in the development of a clinical trial is tailoring the inclusion-exclusion criteria to produce a trial that can be performed in a reasonable time period with a sufficient number of patients to answer the study hypotheses. Extensive discussion is typically required concerning these criteria and how they will affect enrollment. The research departments of most sponsors want to develop a clean study with standard patients that will stand up to statistical comparisons. However, the sponsor's management wants the study to be performed as rapidly as possible—and on budget. These two groups often are at odds in the development of the protocol.¹³

The investigator must carefully evaluate the inclusion and exclusion criteria and determine the potential to recruit patients using the methods described in the next section. If the assessment indicates that the site would have difficulty recruiting patients who fit the criteria for a specific trial, the investigator should decline to participate. When this occurs, it presents an excellent opportunity to speak in detail to the sponsor's research department about the trial. Sponsors generally will be interested in the reasons that you think trial enrollment would be difficult and will appreciate your honesty. This may assist in further collaboration with the sponsor in future trials.

Recruitment of Trial Subjects

The two broad concerns in recruitment are ensuring informed consent and selecting appropriate methods of recruitment.

Informed Consent

A clinical trial site must recruit patients effectively to satisfy the sponsor's need to complete the study on time and budget, but the PI must also fully inform each potential subject to ensure the ethical integrity of the trial process. Recently, the lay press has focused on the clinical trial process, asking questions about the exploitation of research subjects for financial gain. For example, *Time* magazine highlighted several patients with reported injuries stemming from their participation in clinical trials. The article, titled "How Medical Testing Has Turned Millions of Us into Human Guinea Pigs," was featured on the cover and illustrated with a patient in a guinea pig cage.¹⁴ Examples of blatant misconduct by investigators relating to improper patient consent have been reported. This misconduct has usually surfaced after a significant complication occurs due to an unanticipated side effect.

The best way for a PI to conceptualize the consent process is to expect that if the site participates in a significant number of clinical trials, it will encounter a serious, unexpected adverse event at some time. This event may or may not be due to the trial drug or device, but regardless of the cause, the patient may perceive the study to be associated with the adverse event.

Obviously, all patients must be fully informed before enrolling in the study. The fact that the site has performed this step well becomes particularly important when an adverse event does occur. An example of an adverse event that might occur during the course of a clinical trial is presented in Perspective 19.1. The investigator must be certain that each patient is enrolled with full knowledge of the potential for unanticipated

side effects and the range of clinical effects the patient might experience.¹⁵ Inadequate informed consent is the most common cause of FDA discipline of investigators; therefore this process must be careful, complete, and well documented.¹⁶

Properly informing patients inevitably results in some of them declining to participate in clinical trials. The investigator must accept this and not attempt to coerce patients into participating. Patients must understand that their options include the standard existing treatment, given either by the investigator (if the trial is taking place in a physician practice) or at another physician's practice.

The investigator who wishes to maximize enrollment might also be tempted to offer enrollment to marginal candidates. Many studies allow significant latitude for investigator judgment in patient enrollment, especially in relation to other medical problems and patient compliance. If enrollment is not going well, the investigator may be tempted to consider candidates who have other medical problems that place them at higher risk for complications during the trial or who have a history of noncompliance. The best way to avoid this problem is to develop a healthy population of referrals. This allows the investigator to be selective, enrolling only those candidates who properly fit the inclusion criteria and are likely to be retained throughout the study. If enrollment is slow, the investigator should discuss this problem frankly with the sponsor, identifying causes and potential solutions. Perhaps the inclusion-exclusion criteria should be modified to improve enrollment, or perhaps additional advertising would be helpful. Frequently the problem with enrollment occurs at numerous sites, and the sponsor will be searching for methods to improve the situation. Addressing systems issues is clearly the preferred method, rather than compromising the safety of the study or the integrity of the investigator.

Despite glaring examples of investigator misconduct and the surrounding publicity, many patients are highly motivated to find and enroll in clinical trials. Use of the Internet to locate clinical trials and potential sites has increased dramatically, as many patients consider new agents and devices an important source of improved treatment of their conditions.¹⁷ It is also impressive that many patients, particularly those with serious debilitating conditions such as diabetes mellitus and rheumatoid arthritis, are willing to participate in studies that offer no personal benefit but will potentially improve treatment in the future for patients with the same disease. These patients place a tremendous faith in the integrity of the clinical investigator. Such selfless participation should be rewarded with the respect of the entire clinical trial industry.

Methods of Patient Recruitment

How can the PI determine the best method of recruitment for a given trial? If the investigator has a clinical practice relevant to the study, that will be the easiest venue for recruitment. However, most investigators attempt to increase site enrollment by re-

PERSPECTIVE 19.1. EXAMPLE OF AN ADVERSE EVENT DURING A CLINICAL TRIAL.

During the clinical trials of thrombolytic agents for acute myocardial infarction, the clinical investigators knew that the thrombolytic agents, such as tissue plasminogen activators, were associated with a significant side risk of bleeding complications. These were most often minor complications, such as bleeding at an IV site or mild hematuria. But all studies with these agents have been associated with a small, but not rare, risk of intracranial bleeding, with the possibility of severe long-term deficits or death. The risk of this complication in various studies and at various doses ranged from 0.1 percent to more than 1 percent.

Situations can occur where, in an attempt to prevent major morbidity, the investigator administers a trial drug that may cause a severe iatrogenic complication that significantly harms the patient. An investigator who does not fully explain these types of risks when attempting to enroll patients in the trial is not only ethically at fault but also at higher risk of legal action.

It is clear that patients enrolling in such a trial must know about the potential for risk. They can then make an informed decision on whether to participate. Also, every new drug or device being tested has the potential for unanticipated side effects. This must also be discussed carefully with each patient in accordance with good clinical practice. The investigator cannot push patients into enrollment by representing the new treatment as better than standard therapy, because this has not yet been established and the risks of treatment are not yet known. It is often helpful to have a third party with no financial interest in patient enrollment participate in the consent process.

cruiting in a variety of ways. One fundamental question is whether to recruit from other physicians or directly from the public. The decision depends on the type of study and the recruitment budget allowed. Subjects for a study involving the treatment of hypertension, arthritis, or other common medical problems are generally best recruited directly from the patient population. However, a study involving a less common or silent problem, such as the treatment of cardiac arrhythmia or abdominal aortic aneurysm, will usually require recruitment from the physicians who are diagnosing these conditions.

Recruiting from Other Physicians. Lecturing to physician groups is an important method of publicizing clinical trials. This can be accomplished in numerous ways: during grand rounds to academic departments; in lectures to groups of residents, who

often are the primary practitioners for large groups of patients; and in dinner lectures at county or other regional medical societies. These are excellent forums for lecturing on a medical topic, and a review of potential future treatment modalities presents an opportunity to introduce the compound or device under study, generating interest in the trial. Many physicians are happy to refer patients for clinical trials if they are assured that the patient will return to them after completion of the trial.

Mailings to physicians yield mixed results. Most practitioners receive so much mail that many will not take the time to read a letter concerning a clinical trial unless there is something novel about the agent being evaluated. Targeted mailings may be beneficial if clinicians likely to be particularly interested in the study can be identified. Perspective 19.2 presents an example of a clinical trial that required recruiting from other physicians.

Direct Patient Recruitment. Most studies will require direct patient recruitment, through such media as newspapers, radio, television, the Internet, or mailings or through the use of second-party recruitment firms. Media options for patient recruitment and typical costs are listed in Table 19.3. Most newspapers in metropolitan areas contain numerous advertisements for clinical studies. An increasing amount of recruiting is now done on the Internet. It is important to have your trial site listed on CenterWatch and the other Internet trial listing sites mentioned earlier. It has been estimated that 10 to 20 percent of patients now learn of clinical trials through Internet listings. This percentage is likely to increase as Internet-savvy individuals age.¹⁸ Internet recruitment is also the most cost-effective form of recruitment, incurring per patient costs that are typically less than half the cost of recruitment using other media.

Newspaper, radio, and television advertising is costly, but a trial site may find this necessary to improve enrollment to acceptable levels. If this form of advertising is being considered, it is important to evaluate it during the budgeting process. This will allow the investigator to determine the amount of advertising cost the sponsor is willing to support and help the investigator achieve a true picture of the potential profitability of the trial. The high advertising costs of the major media can absorb a significant portion of a study's profit, particularly if the advertising does not result in significant enrollment gains.

If media advertising is to be used, the investigator must develop a plan for its form. Haphazard media use will usually result in wasted time and money. Some sponsors will develop national marketing plans, and these certainly should be used. Typically the sponsor or a contract group will screen patient calls in response to advertisements and will refer candidates who seem to fit the inclusion criteria to the closest participating study center. In studies that do not have a national plan

PERSPECTIVE 19.2. A CLINICAL TRIAL REQUIRING RECRUITMENT FROM OTHER PHYSICIANS.

Our center participated in a study involving a trial of a stent-graft for repair of abdominal aortic aneurysms. This minimally invasive technique was not available outside of clinical trials at that time, and the primary benefit was expected to be in patients at high risk for standard repair of their aneurysm. Because the yield from direct advertisement to patients with this problem would be very low, it was determined that the optimal method of recruitment would be to go directly to the surgeons evaluating the patients once an abdominal aortic aneurysm was discovered. Mailings to these practitioners outlined the potential benefits of this new technique for a group of patients who often did poorly with standard surgery. In this situation the surgeons were often happy to refer their higher-risk patients for consideration for inclusion in the trial, resulting in excellent study enrollment.

the investigator may wish to consult the sponsor's marketing department—if there is one—for assistance in drafting a plan. Finally, options may be chosen based primarily on cost. Newspaper advertising is least costly per unit but most costly per audience reached (see Table 19.3).

Once the method of advertising has been chosen, the site must have a mechanism in place to handle the calls generated by the advertising piece. It is unwise to expect

**TABLE 19.3. MEDIA OPTIONS FOR RECRUITMENT
AND RELATIVE COSTS.**

Market (rank)	TV Cost (50 TRP)	Radio Cost (50 TRP)	Sunday Newspaper Ad (7" × 7")
New York	\$22,775	\$30,100	\$14,762
Los Angeles	24,200	37,900	16,065
Seattle	8,550	11,150	6,173
Birmingham	2,363	3,250	4,865
Tulsa	2,000	2,150	2,436

Note: TRP = target rating points.

Source: Data from D. L. Anderson (ed.), *A Guide to Patient Recruitment: Today's Best Practices and Proven Strategies* (Boston: CenterWatch, 2001), p. 83.

the study coordinator to respond to all the calls, given the coordinator's other study-related duties. It is more efficient and speedy to have someone else screen callers, reviewing basic trial information with each caller and asking preliminary inclusion questions. In most studies the majority of calls will not result in trial candidates. The coordinator can then focus time on those with a real possibility of enrollment. Excellent resources are available that offer detailed assistance in patient recruitment.¹⁹

Study Subject Retention

The investigative site cannot be content simply with robust patient recruitment. The patients enrolled are not useful to the sponsor unless they complete the trial. Therefore the site should also focus attention on patient retention. Reasons that patients cite for discontinuing clinical trials include medication or device side effects and unrelated adverse events that make continued participation difficult (Table 19.4). These reasons may be difficult for the site to counter, but more common and more easily correctable reasons include long waits for clinic visits, travel time required for repeated clinic visits, concern over possibly being in the placebo group, and an excessive number of visits required.²⁰

The site should make every attempt to treat patients enrolled in clinical trials as preferred clients. These patients often will be required to make multiple visits beyond the usual requirement for treatment of their condition, and these visits often require extended time for documentation or for studies that are not medically necessary. Site administrators should strive to schedule the subjects' visits so that patient waiting time is minimal. If possible, the site should provide a separate waiting area with reading material or computer access, particularly if the subjects are required to wait for studies or procedures involved in the study protocol. These recommendations may sound ridiculous to investigators with busy clinical sites and limited facility space, but the patient who is treated well will be more likely to enroll in another future trial at the same facility and often will make referrals to others with the same medical problem. Conversely, the patient who is frustrated by excessive wasted time and little personal consideration is unlikely to consider enrollment in subsequent trials.

Patients who must travel long distances often respond well to reimbursement for travel expenses. This generally is not a great expense, and if it is anticipated, it can frequently be negotiated in the study budget. A study coordinator who is personable and who communicates frequently with patients to optimize their experience is indispensable. No matter how organized a site attempts to be, there will always be some unanticipated delays, long waits, and extra requirements asked of the study subjects.

TABLE 19.4. REASONS FOR PATIENT DROPOUT.

Administrative termination	22%
Treatment noncompliance	17
Treatment adverse effect	17
Treatment lack of benefit	12
Other medical condition	11
Moved out of area	4
Other	17

Note: Data are for an asthma study with twelve-month follow-up (24 percent of enrolled patients).

Source: Data from B. G. Bender, D. N. Ikle, T. DuHamel, and D. Tinkelman, "Retention of Asthmatic Patients in a Longitudinal Clinical Trial," *Journal of Allergy and Clinical Immunology*, 1997, 99, 197–203.

Appropriate communication from the coordinator is crucial to the patients' perception of the site and the study. Patients who receive clear and honest communication generally are willing to continue to work with a study, despite added time commitments and other unanticipated requirements. Finally, some patients simply become tired of involvement in a study that may last several years. However, if they have a good relationship with the coordinator or investigator, they typically will come to required visits simply to see the team members.

If a patient decides to withdraw from a study, the coordinator or investigator should determine the reasons and discuss them in detail with the patient. Addressing concerns and attempting to minimize difficulties in continued participation may result in patient retention. Often the investigator can be influential in this situation. However, if the patient's concerns are related to adverse effects or other study-related risks, the investigator should review the risks of the study and the initial consent form to refresh the patient's memory. If the patient remains determined to withdraw, the investigator must be careful not to coerce the patient into continuing.

Ethical Issues

When a physician or practice is contemplating the development of a clinical trial program, it is essential to gain an understanding of the regulatory process involved in these studies.²¹ PIs are monitored closely by the sponsor or by the CRO, and many studies are subject to FDA audit. The penalties for improper conduct of clinical studies can

be severe. Naiveté regarding the federal regulations governing proper conduct of trials is not a defense for failure to provide informed consent and enroll patients properly or to conduct the trial and report adverse events properly. Investigators not complying with these regulations are subject to criminal prosecution, and their sites may be banned from further participation in clinical trials. It is strongly recommended that new investigators attend a symposium on good clinical practices and conduct of clinical trials so they can learn the expectations at the outset and ensure that their site can meet these expectations. Completion of such a course of study will likely also prove beneficial in the competition for participation in trials.



A healthy clinical trial program can generate a significant stream of income for practices. However, the site that wishes to develop a program must expect a significant outlay of time and money to develop the knowledge and structure to compete in garnering studies and to successfully complete them. A solid business plan, a sound infrastructure, and thoughtful marketing are all essential keys to financial success.

Secondary enhancements to the practice include the perception of the practice as a thought leader in its field involved in the development of new treatments, and the generation of new patients who elect to stay in the practice after trial completion. The enthusiastic researcher who is provided adequate time and resources will usually be able to develop a successful program that will enhance the practice both medically and financially.

Discussion Questions

1. What are the potential advantages of developing a clinical trial program as part of a clinical practice?
2. What are the important qualities to search for in a clinical research coordinator?
3. What are the responsibilities of the clinical research coordinator?
4. What form of advertising reaches the largest number of potential research subjects at the lowest cost?
5. Who is responsible for obtaining proper informed consent in any clinical trial?

Web Resources

PowerPoint presentation

Answers to discussion questions

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CHAPTER TWENTY

RELATIONSHIPS BETWEEN MEDICAL PRACTICES AND COMMUNITY HOSPITALS

Blair A. Keagy

Objectives

This chapter will help the reader to

- Understand the complexities of vertical integration.
- Recognize the types of joint ventures possible between physician practices and community hospitals.
- Comprehend the legal requirements for medical directorships and hospital-based clinics.
- Understand the recent financial and organizational changes in community hospitals.

Before the Medicare amendment to the Social Security Act was enacted, medical practices consisted primarily of solo practitioners and or small groups of physicians. This new government program introduced new complexities for providers. At about the same time, many new diagnostic and therapeutic modalities became available, particularly in radiology and minimally invasive surgery. They were expensive and beyond the financial abilities of a physician-owned group practice. These challenges to independent practice can be classified into four broad areas:

- Advances in information technology
- New diagnostic and therapeutic technologies
- Complexities in coding and billing procedures
- Increasing number of government regulations

Medical practices were forced to look for new sources of capital to maintain high-quality patient care. The logical partner in any sort of endeavor was the community hospital. Physicians had long relied on these hospitals for treatment of inpatients and for their laboratory facilities. General hospitals were a mainstay of the community and had long enjoyed a congenial relationship with staff physicians, who supported them with patients, used their ancillary facilities, and served on various institutional committees. The hospital-physician relationship became even more important as health maintenance organizations (HMOs) assumed a greater role in health care. This chapter discusses the many changes that are encouraging hospitals and physicians to engage in joint ventures and then looks at the various forms these ventures can take.

General Facts

Approximately 5,800 hospitals are registered in the United States, with a total of 987,440 beds and 35.64 million admissions each year.¹ Occupancy rates vary by region and institution, but the overall figure has remained relatively stable in recent years at 64 percent.²

In the past, community hospitals were locally managed, and physicians had an active role in their governance. Recently, however, there has been a trend toward hospital mergers, with an emphasis on the development of hospital systems. More than 700 such unions occurred between 1996 and 2001. A larger hospital system has greater influence with managed care organizations and the potential for increased reimbursement. When a hospital system controls a large share of the resources for meeting the community's medical needs, managed care organizations may be forced to accept contracts more favorable to that hospital because patients are averse to traveling long distances to receive care at other institutions. Hospital administrators maintain that they need this added revenue to support the expansion of programs and to offset increases in human resource costs. Unfortunately, the increased cost to managed care organizations is passed along to employers and subsequently to employees as increased deductibles, higher premiums, and larger copayments. Many low-income citizens are unable to accept this added financial burden and discontinue their health insurance coverage. Approximately 15 percent of the population is without coverage, and hospitals and physicians must treat an increasing number of "self-pay" patients. Private carriers are quick to point out to the public that increasing hospital costs are the primary reason insurance rates are increasing.

As large hospital systems increase their number and scope, their influence on reimbursement rates also increases. This has caused the Federal Trade Commission to

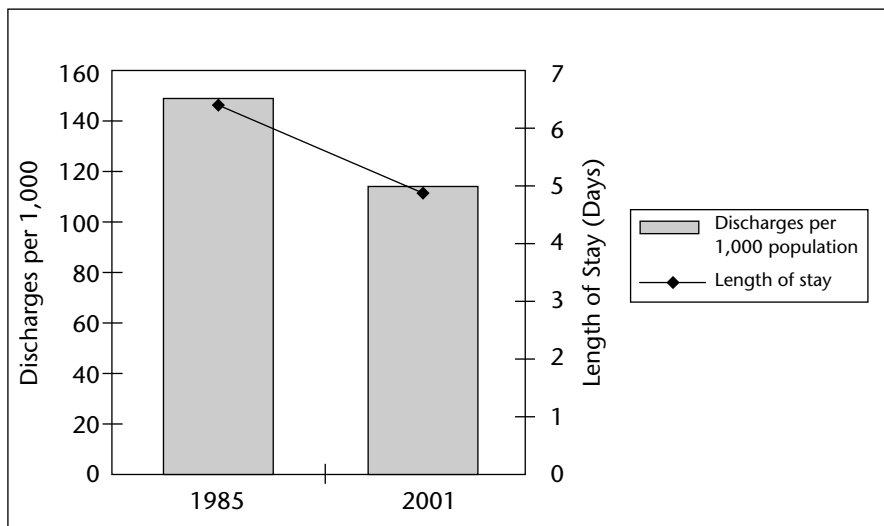
scrutinize these mergers more closely to see whether they increase costs or reduce competition.³ Physicians do not benefit directly from hospitals' managed care negotiations. However, when a hospital has more capital to invest in new programs and new equipment, physicians receive indirect advantages.

Decreased Inpatient Utilization

The role of the community hospital and the services it provides are in the process of evolution. Despite an increase in the U.S. population, the number of hospitalizations has decreased substantially as has the number of days of hospital confinement (Figure 20.1). Elderly patients have demonstrated the most dramatic reduction in length of hospital stay, from 12.8 days in 1970 to 5.8 days in 2001.⁴

Many minor procedures and diagnostic tests previously associated with a hospital admission are now performed in an outpatient setting. In addition many operative procedures no longer require hospital admission. Sixteen percent of operations were performed on outpatients in 1980, 51 percent in 1990, and 63 percent in 2001.⁵

FIGURE 20.1. DECREASING DISCHARGE RATES AND LENGTHS OF HOSPITAL STAY.



Source: Data drawn from National Center for Health Statistics, *2001 National Hospital Discharge Survey* (Hyattsville, Md.: National Center for Health Statistics, 2003).

And patients whose operations result in postoperative confinement are being discharged more quickly than in the past. In 2001, only 16 percent of patients were hospitalized for longer than one week.⁶ As a result, hospitals are devoting more human resources, space allocation, and equipment purchases to outpatient areas.

Hospital Finances

Hospital costs represented 32 percent of all health care spending in 2001, and they are the largest single factor in health care expenditures. Overall growth in health care spending approximated the consumer price index throughout the 1990s, as the evolution in managed care reduced the reimbursement excesses that preceded President Bill Clinton's efforts to enact a national health care system. Recently the growth in spending on health care needs has been accelerating. Spending for a privately insured individual increased 10 percent in 2001 and 9.6 percent in 2002. In earlier years, increases in drug costs were the major factor in price inflation, but now hospital spending has become the major stimulus, with about 51 percent of the overall increase caused by spending on hospital inpatient and outpatient care.⁷

Multiple factors are contributing to the growth in hospital spending, including the use of new and expensive technologies (for example, the use of MRI and CAT scans increased more than 160 percent between 1992 and 2001⁸) and the increases in labor costs—the latter account for about half of a hospital's operating costs.⁹

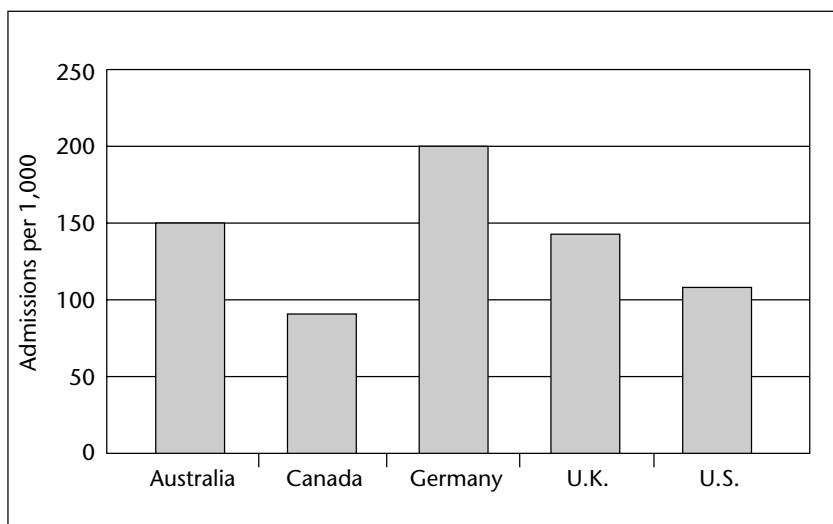
In addition to revenue from inpatient and outpatient services, hospitals have income streams from such product lines as skilled nursing facilities, home health services, medical equipment sales, rural clinics, office rental fees (paid by physicians), gift shops, and parking garages.¹⁰ The average hospital profit margin ranges from 3 to 5 percent, although approximately one-third of U.S. hospitals are operating in the red. The three largest payers of hospital care are private insurance (\$152 billion per year), Medicare (\$135 billion per year), and Medicaid (\$77 billion per year). This profit margin is difficult to maintain under the prospective payment system (PPS) that was implemented by the Medicare and Medicaid Services in 1984. Medicare pays hospitals a fixed amount for inpatient services, based on the diagnosis related groups (DRGs) to which the patients are assigned. This amount is updated annually. There are provisions for unusually high-cost outlier cases. However, abuse of the outlier payment formula in recent years by some hospitals has exacerbated the difficulty of obtaining these funds.¹¹

The financial health of hospitals is reflected in the ratings given to these institutions by such firms as Moody's and Standard & Poor's. During 2002, Moody's downgraded forty-one not-for-profit hospitals and upgraded twenty-two, a ratio of 1.9 to 1. This is actually an improvement over past years; the ratio was 2.5 to 1 in 2001, 4.7 to 1 in 2000, and 4.6 to 1 in 1999.¹²

Impact of Medicare Reimbursement. The aging population of the United States will have a tremendous impact on the Medicare program and ultimately on hospital reimbursement. At present, Medicare funds approximately 30 percent of hospital care; but more than 70 percent of citizens under age sixty-five have private health insurance, the majority of which is funded through the workplace. These demographics are changing as more of the baby boomers become eligible for Medicare. In 1950, only 8 percent of Americans were sixty-five years old or older. By 2000, that figure had grown to 12 percent, and it is now projected that one in five Americans will be sixty-five years old or older by the year 2050.¹³

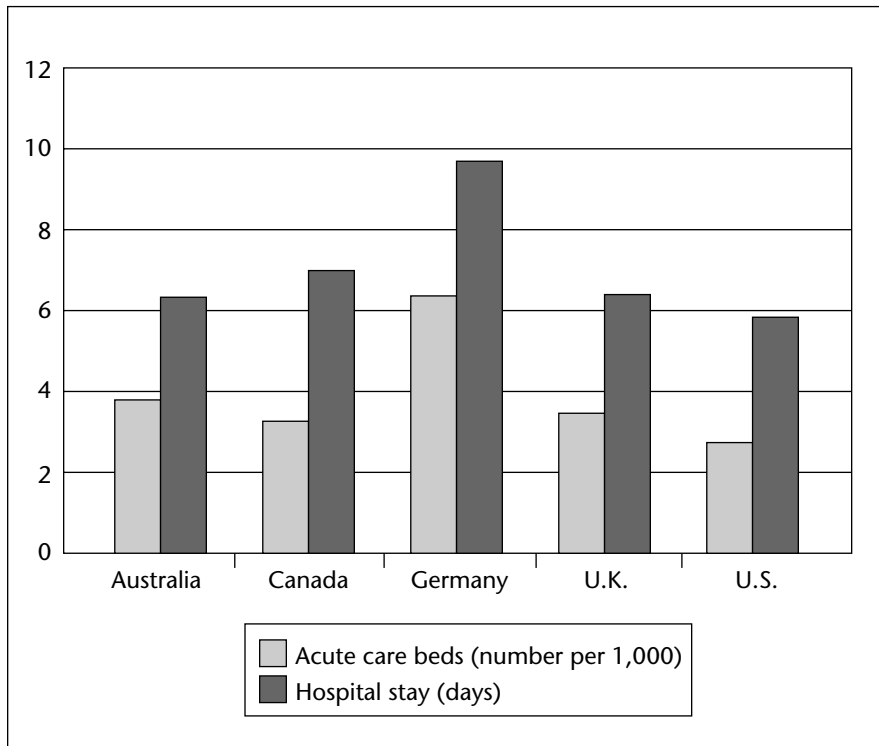
Comparison with Other Countries. The United States spends a larger proportion of its gross domestic product on health care than any other nation does. However, neither an excessive number of hospital admissions nor long inpatient stays are responsible for this phenomenon. In fact the United States has fewer admissions per 1,000 population than many other industrialized countries do (Figure 20.2). In addition, the number of acute care beds and the average length of hospital stay are comparatively low (Figure 20.3).

FIGURE 20.2. HOSPITAL ADMISSIONS PER 1,000 POPULATION IN SELECTED INDUSTRIALIZED NATIONS, 2000.



Source: Data drawn from G. F. Anderson, U. E. Reinhardt, P. S. Hussey, and V. Petrosyan, "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs*, 2003, 22(3), 89–105.

FIGURE 20.3. ACUTE CARE BEDS PER 1,000 POPULATION AND AVERAGE LENGTH OF STAY IN SELECTED INDUSTRIALIZED NATIONS, 2000.



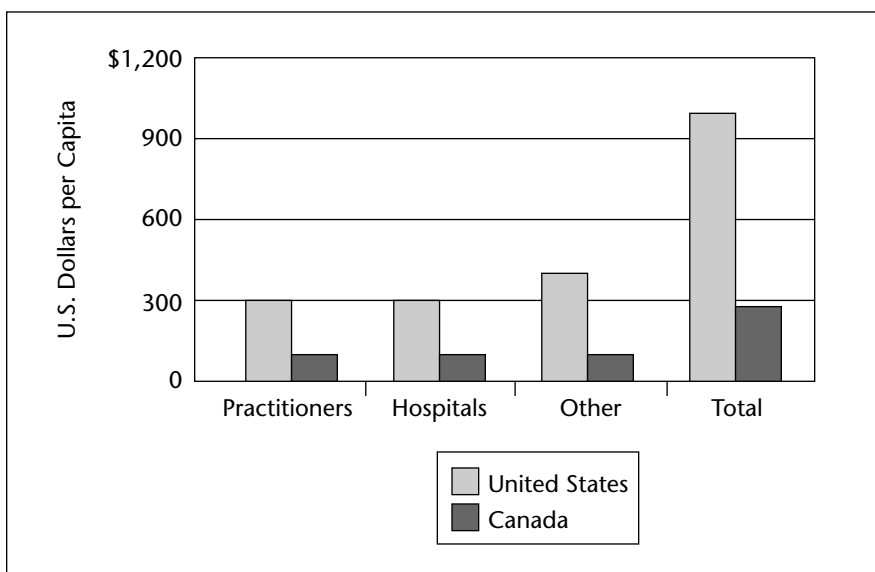
Source: Data drawn from G. F. Anderson, U. E. Reinhardt, P. S. Hussey, and V. Petrosyan, "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs*, 2003, 22(3), 89–105.

Conversely, administrative costs are responsible for a larger proportion of health care spending in the United States than in countries with some form of national health insurance. For example, administration accounts for approximately 31 percent of overall health care expenditures in United States, compared with 16.7 percent in Canada. U.S. hospitals devote about 24.3 percent of spending to administration, compared with 12.9 percent in Canada (Figure 20.4).¹⁴

Hospital Credentialing

The mechanics of hospital credentialing are covered in more detail in Chapter Seventeen, but one final factor affecting relationships between physicians and hospitals is that increasing numbers of specialists are seeking credentialing from hospitals to perform new diagnostic and therapeutic procedures. From 1965 to 1992, the number of specialists increased by 121 percent, compared with a 13 percent increase in the number of generalist physicians.¹⁵ The Accreditation Council for Graduate Medical Education (ACGME) accredits nearly 7,700 residency programs in 103 specialties and subspecialties.¹⁶ The American Board of Medical Specialties has twenty-four members, the most recent addition being the American Board of Medical Genetics, in 1991. These boards generally provide certification, and this certification is assuming increasing importance as more hospitals are requiring board certification as a condition of hospital appointment. Somewhat problematic are the 137 self-designated boards.¹⁷ These organizations are less well regulated, and hospitals have difficulty deciding how much importance to attach to their certificates.

FIGURE 20.4. COMPARISON OF ADMINISTRATIVE COSTS IN HEALTH CARE IN THE UNITED STATES AND CANADA, 1999.



Source: Data drawn from S. Woolhandler, T. Campbell, and D. U. Himmelstein, "Costs of Health Care Administration in the United States and Canada," *New England Journal of Medicine*, 2003, 349(8), 768–775.

Vertical Integration

Vertical integration is one form of physician-hospital relationship that was popular in the 1990s. Hospitals purchased physician practices, and their assets became hospital assets and their physicians became salaried employees. Hospitals saw this as a way to maintain or increase market share and enhance physician loyalty with regard to hospital admissions and ancillary service referrals. Because the physician was an employee of a parent organization, these arrangements avoided violation of many of the government antitrust and anti-kickback regulations (discussed in Chapter Eight).

Why Some MDs Sold Their Practices

At this time the complexities of running a medical practice were increasing, and physicians often lacked the capital to deal with the new challenges associated with health care delivery. So some physicians sold their practices to avoid having to deal with

- The increasingly regulatory environment
- The complexities and computerization of billing systems
- The complexities of computerized patient record and information systems
- The multitude of new compliance regulations

They felt that the sale of their practices to hospitals would give them¹⁸

- Access to capital
- Decreased overhead through economies of scale
- An opportunity to improve the quality of care
- Access to management expertise

Financial Impact of Vertical Integration

In general, however, these arrangements proved unsatisfactory. Physicians found they resented loss of control over their practices, and hospital administrators maintained that the arrangements were unprofitable. Some purchased practices were losing anywhere from \$50,000 to \$150,000 per physician annually.¹⁹ Hospital administrators attributed these continuing losses to decreased physician productivity and the administrators' own failure to anticipate how much capital would be needed to modernize purchased practices. Physicians believed that administrative costs were unfairly attributed to the practice cost center and that hospital management was inefficient.

Bohlmann summarizes the various reasons for the poor financial performance of acquired practices as hospital cost centers:²⁰

Expansion. Start-up costs for network expansion were often charged to the practice entity.

Productivity. Physician productivity decreased as much as 25 percent after the practice was acquired.

Collections. Centralization of billing resulted in decreased receipts while computer conversions were carried out.

Contract negotiation. Managed care contracts were negotiated on a favorable basis for the hospital but on a less favorable basis for the physicians.

Ancillary department revenue. Although physicians generated ancillary revenue, this revenue was seldom attributed back to the practice. In addition, central laboratory charges were higher than those that could have been found in the open market.

New costs. Costs for such equipment upgrades as computer systems were attributed to the acquired practice.

Wage scales. Salaries for employees were increased above the amounts originally paid by the practice.

Transitional problems. General costs for integration were attributed to the practice.

Support staff. The support personnel in the acquired practice and their associated expenses were attributed to the practice at costs often higher than those generally found in a private practice.

Occupancy space. Upgrades in allotted space increased practice expenses for space well above the amounts paid by the privately owned practice.

Supply costs. Improper control of supplies adversely affected the practice's operating costs.

Physician compensation. Physicians were paid in excess of the amounts they received in their private practices.

Finally, the total overhead reduction anticipated by the purchased practice was not realized. A recent MGMA review noted an approximately 80 percent increase in overhead expenses for hospital-owned practices compared with about a 60 percent increase for independent practices.²¹

Loss of Physician Control

Loss of physician control of practice governance was a major reason the vertical integration model failed. Many experts believe that the level of physician ownership and control of the health care delivery system plays a major role in the success or failure of a practice.²² Tallia and others have noted that hospital systems have a hierarchical

management structure that inhibits response to changes in local markets.²³ In contrast, autonomy in physician decision making results in a rapid response to changes in community patterns. Primary care practices are complex and have organizational structures that differ from hospital management structures. Hospital systems often fail to account for this when using traditional management techniques.

When physician employees lack incentives and a voice in governance, their dissatisfaction is a continuing problem. Thus many hospitals have divested themselves of physician practices. They recognize the necessity of hospital-physician partnering but believe that new methods of cooperation should be developed. Physicians must participate in governance and must have an incentive for their services.

Future of Vertical Integration

There is some indication that vertical integration models can succeed when modified so that better cost controls are in place and physician compensation is productivity based.²⁴ Increased physician governance also adds to the overall efficiency of the group. For example, one analysis showed that losses in practices owned by hospitals and other entities decreased substantially per FTE physician between 2000 and 2001, from \$89,480 to \$75,219.²⁵

Administrators of many larger entities, such as academic medical centers, still believe that a primary care network is of benefit to the institution. Reedy analyzed the value of a primary care network to one academic medical center. As a stand-alone operation the enterprise was not financially viable. However, both physicians and hospital administrators recognized the advantages of some form of association. A number of alternatives were considered, and it was finally established that the best way to compute the value of the network was to factor in the number of ancillary services used by the practice. Initially, the accounting methods were difficult to implement, but all parties agreed that this was the fairest approach.²⁶

Increasingly, hospitals and physicians are developing joint ventures that allow physicians to participate in the overall financial success of a product line. These cooperative relationships must be scrutinized closely so that federal and state regulations are not violated. These regulations include the Stark laws, anti-kickback laws, civil monetary penalty (CMP) regulations, certificate of need requirements, and restrictions on billing patients for laboratory services performed elsewhere. (These regulations are discussed in detail in Chapters Eight and Nine.) Thus it may be that vertical integration of specialty services may succeed when each cost center receives credit for the ancillary revenue it generates.

Other Forms of Integration

In addition to vertical integration, other arrangements have developed between physicians and community hospitals. A number of these arrangements are discussed in the following sections.

Independent Practice Associations

Independent practice associations (IPAs), sometimes also called independent physician associations, generally are loosely knit groups of self-employed physicians. As such, they may obtain contracts with HMOs without making substantial changes in their practices. Some hospitals look favorably on these groups and provide management expertise or some degree of funding.²⁷ Bodenheimer summarizes some of the unique aspects of IPAs.²⁸ Governance of the IPA is variable. In geographic areas where capitation is prevalent, IPAs may have the responsibility of conducting utilization reviews, credentialing physicians, monitoring quality improvement, and deciding on physician compensation. In other areas, IPAs may consist of panels of physicians that contract with HMOs. Physicians maintain practice autonomy while participating with other practices in obtaining managed care contracts. An IPA reduces the need for each individual practice to negotiate with a third-party carrier. These entities have been effective tools in negotiations with health care payers, although antitrust regulations (discussed in Chapter Eight) may apply to fee negotiations by IPAs (see the example in Perspective 20.1). Physicians contend that these are unfair restrictions, especially in view of the fact that insurance carriers enjoy a more liberal atmosphere when setting reimbursement.

Physician Hospital Organizations

A physician hospital organization (PHO) is a contractual relationship between a hospital and its medical staff. It allows physicians and hospitals to coordinate care delivery through a management arrangement that they both control. This tends to develop a close relationship between the hospital and its physicians, and both parties share in profit and loss incentives.²⁹ These joint ventures may be marketed as cost-control strategies to contractors. Contractors may feel that PHO physicians will take a proactive approach to utilization management and development of standards of care.³⁰ A PHO allows collective negotiation with third-party payers, although legal challenges may obviate its effectiveness (see Perspective 20.2).

PERSPECTIVE 20.1. ANTITRUST ISSUES FOR AN IPA.

An administrative complaint was recently filed by the Federal Trade Commission against an independent practice association (IPA) in Texas, accusing the organization of price-fixing during contract negotiations. The complaint alleged that the IPA canvassed its members concerning minimum acceptable fees and discouraged physicians in the organization from direct negotiation with payers.^a

This conflict points out the increasing turmoil in the health care industry with regard to contract negotiation. Managed care organizations (MCOs) try to obtain the lowest possible rates for their organization from hospitals and physicians. In the past, dominant carriers in a particular region had the upper hand if they represented a large percentage of covered lives in that area. Through mergers, hospitals have formed health care systems that meet the health care needs of the large percentage of patients in a geographic area. This gives them added leverage and the ability to demand higher rates from third-party carriers. Similarly, independent practice associations are attempting to improve their negotiating position by representing an increasing number of physicians. It is difficult to say at what point the size of the organization results in anticompetitive behavior.

^a S. M. Harris, "Look for Signs of Price-Fixing Potholes," Jan. 5, 2004 [www.amednews.com].

These relationships have not enjoyed a great deal of success. Because a PHO's board of directors is usually composed of both physicians and hospital administrators, who will have different incentives in managed care negotiations, this model is difficult to maintain in a capitation situation.³¹

Management Services Organizations

In some instances IPAs and hospitals have developed a management services organization (MSO) as a joint equity venture. This may serve to facilitate, coordinate, and administratively support contracts with various carriers. Physicians may have a majority of the equity interest and appoint a majority of the MSO's board, thus allowing more active MD participation in governance.³² Contento describes the regulatory considerations involved in developing such a union:³³

Antitrust laws. The physicians and hospital cannot create an anticompetitive environment.

PERSPECTIVE 20.2. ANTITRUST ISSUES FOR A PHO.

Blue Cross Blue Shield of Illinois recently filed a lawsuit that challenged the legality of a physician hospital organization's negotiating rates for some of the physicians in its group. The large third-party carrier argues that antitrust laws are violated when reimbursement rates for physicians are negotiated by physician hospital organizations (PHOs).^a

Physicians are faced with increasing government regulations, expenses for installing new technology in their offices, and rising human resource costs. They are joining with community hospitals in an effort to gain access to needed capital and management expertise. These joint relationships have taken many forms including vertical integration, gain sharing, joint equity ventures, management service organizations, and PHOs. PHOs are difficult to institute because of the government regulations that hinder their success. At the heart of the lawsuit described here is the issue of whether a PHO can negotiate rates from a third-party carrier for both the hospital and the physician. The result of this legal action may have a serious impact on future joint endeavors between community hospitals and practicing physicians.

^a J. Jacob, "Illinois Blues Disputes PHO Role in Rate Talks," *amednews.com*, Oct. 21, 2002.

Nonprofit status. If the hospital is a nonprofit institution, the hospital's funding in support of the MSO cannot result in any hospital financial resources benefiting the MSO's stockholders.

Anti-kickback statute. Criminal penalties result when a business that is reimbursed under Medicare or a state health care program offers some form of remuneration to induce business.

Stark law. The Stark legislation must be reviewed to ensure that physicians are not penalized for making referrals to health care services in which they have a financial interest.

501(a) Medical Foundation

A Section 501(a) medical foundation has a contracted counterpart, the physician-owned entity. Most medical foundations are not-for-profit and are tax exempt. They exist as subsidiaries or affiliates of a hospital. A foundation could be considered an MSO in reverse. Physicians contract with MSOs for management services, and medical foundations contract with physicians for medical services. The foundation supplies administrative functions, nonphysician personnel, and clinical space.³⁴

Gain Sharing

Gain sharing is an incentive arrangement between the hospital and its physicians.³⁵ The physicians receive a share of any hospital savings resulting from the development of new systems and protocols that result in more effective patient care management. Gain sharing focuses on quality of care. It encourages development of clinical pathways and other evidence-based clinical tools that reduce variability in clinical care. It also encourages the physician to consider the entire health care delivery system, rather than focusing completely on MD compensation. The problem with gain sharing is that the Medicare and Medicaid regulations of the Social Security Act prohibit any hospital from knowingly making a payment to a physician that induces him or her to reduce or limit services to Medicare or Medicaid beneficiaries.

Recently the Health and Human Services arm of the Office of Inspector General reconsidered the status of properly structured gain-sharing arrangements as a means of reducing hospital costs. Savings could be used to fund equipment purchases, expand or renovate facilities, develop new service lines, and recruit or retain key clinicians.³⁶ Reynolds summarized the guidelines that were suggested as a means of avoiding penalties under the CMP law:³⁷

Transparency. The cost-saving initiatives should be clearly defined so that identified actions result in actual cost savings.

Documented medical propriety. It must be demonstrated that the cost-saving initiatives will not adversely affect patient care.

Ongoing medical review of outcomes. Hospitals must monitor clinical outcomes on a regular basis to ensure that initiatives are not negatively affecting patient care.

Analysis of cost reductions. The hospital should use objective measures to establish a distinct baseline beyond which no cost savings would result.

Avoidance of patient steering. There must be documented assurances that physicians are not selectively sending patients to a hospital to maximize the physicians' gain-sharing profits.

Avoidance of overutilization. There may not be a disproportionate number of procedures performed on Medicare or Medicaid beneficiaries.

Valuation of cost savings. Cost savings should be calculated as the actual out-of-pocket expenses avoided by the hospital.

Use of fair market value. Hospitals should obtain an independent assessment of the fair market value of cost reductions.

Distribution of payments. Payments should be distributed equally to participating physicians.

Documentation. Cost savings should be documented and made available to government auditors upon request.

Disclosure. Patients should have the opportunity to review gain-sharing arrangements before their hospital admissions.

Term. An established term for the gain-sharing arrangement (usually one year) must be in place.

Satisfaction of these recommendations does not absolutely protect the physician and the hospital from penalties associated with violations of the Stark law or the anti-kickback statute. In addition it is important that gain-sharing arrangements be offered to all physicians at the hospital who furnish the items or services upon which cost reductions are calculated. Use of legal counsel is essential if one is to avoid all penalties associated with violations of government regulations.

Equity Relationships

In equity relationships both physicians and the hospital profit from expanding patient volume and improving the efficiency of a specialty service line. Physicians have a financial incentive to establish and maintain a quality program, and they participate with the hospital in the governance of the endeavor. They also assume some of the financial risk inherent in establishing a new service line, in contrast to gain sharing, where they are improving general quality of care. The joint equity venture is a means of allowing physicians to participate in the financial profits of ancillary services.³⁸ This is one of the most difficult ways of establishing physician participation in ancillary services because numerous regulatory parameters that must be considered (see Chapter Eight).

Special Bond Issues

The issuance of preferred bonds is an innovative method of allowing physicians to participate in the profitability of new service lines. Capital is required when a complex program is being developed, and hospital administrators may choose to obtain these funds by selling bonds to physicians. The bond return is tied to the success of the venture. If performance is poor, participating bondholders receive no interest, but if the center is profitable, bondholders can anticipate interest income in the 12 to 15 percent range. In many cases this approach will also allow more physician participation in the governance of the endeavor.³⁹ Advocates of this bond strategy say that selling bonds to physicians involves fewer legal and regulatory risks than other forms of joint ventures do.⁴⁰ Other consultants caution that regulatory constraints on issuing these bonds have yet to be fully determined, and that these special bonds must be designed to comply with

safe harbor and other federal laws. For example, physicians should own no more than 40 percent of any class of investment in a health care facility, and similar types of bonds must be issued to nonphysician investors.⁴¹ Lafayette General Medical Center was one of the earliest hospitals to consider participation in a plan like this. Recently, however, officials at this institution have said they will probably not finance the center's new heart hospital in this way because of concerns about physicians referring patients to a hospital in which they had equity.⁴²

Hospital-Based Clinics

In the case of a hospital-based clinic, the hospital assumes all costs associated with the clinic and charges payers a facility fee based on the clinical and nursing services provided. For example, nursing time required for a complex dressing change in a wound-care clinic would generate a certain level of reimbursement for the facility. The physicians serving in a clinic may also charge for professional services, although the compensation received in the case of Medicare and Medicaid is 85 percent of the amount received in a private office-based setting. Payers generally receive two bills, one for professional services and the other for the facility fee. Medicare and Medicaid recognize the facility fee, as do many third-party carriers. To qualify as a hospital-based clinic, the clinic must demonstrate that its service provides value to the patient that could not be received in the general community setting. Some criteria that must be satisfied when establishing a hospital-based clinic are⁴³

- Proper licensure
- Hospital ownership and control
- Hospital administration and supervision
- Financial integration with the hospital
- Public awareness of the relationship
- Location of the practice close to the hospital
- Utilization of hospital information systems
- The offering of unique services, as in a multidisciplinary clinic, for example

Medical Directorships

Medical directorships reimburse physicians for establishing or improving clinical programs in the community hospital. In addition some hospitals and systems sell or contract selected outpatient services to entrepreneurial physicians.⁴⁴ In the past these positions lacked job descriptions and clear parameters for the compensation provided. They also had the potential for creating dissension among the medical staff when similar opportunities were not offered to other physicians. Finally, many poorly defined

directorships had the potential to violate anti-kickback laws and the CMP section of the Social Security Act. For this reason an increasing number of hospitals now refer to these arrangements as *consultation contracts*.

A consultation contract must be structured so that it is of sufficient duration to allow program development. In addition it must be demonstrated that the physician is supplying a real and needed service to the hospital at a fair price. It is important to have a written document specifying the consulting services that are expected and the number of hours that will be devoted to the endeavor; and reimbursement should be in line with the fair market value of such services, as determined by an outside consultant.⁴⁵

Quality Incentive Programs

In a quality incentive program, physicians are compensated for improving patient outcomes. Compensation is established at fair market value rates, determined by a third-party consultant. To institute a program of this nature, the hospital must be able to track specific quality-of-care indicators, and the parameters monitored must be indicative of quality of care and cannot include such indirect indicators as length of stay. When these programs are structured properly, they give physicians an added incentive to improve patient care.⁴⁶

Payer Contracting

In some areas, physicians and hospitals can participate in joint arrangements with regard to Medicare and Medicaid risk contracting. Global contracts with commercial payers may also be established. The important factor in this type of arrangement is that it cannot encourage physicians to withhold medically necessary patient care, which would violate the CMP provision of the Social Security Act. These arrangements must be clearly established with government carriers or private insurers before they are implemented.⁴⁷

Hospital Within a Hospital

Administrators of community hospitals are responding to the threat of specialty hospital construction by developing facilities within the community hospital that cater to specialty physicians. They realize that a large portion of the revenue required for hospital operations comes from specialists, as illustrated in Figure 20.5. The hospital develops all aspects of a specialty line, including ancillary services and inpatient facilities, and it retains ownership of the service line and receives ancillary revenue. However, management is a joint undertaking between hospital administrators and physician specialists. Medical directors or consultants are compensated for their time.

Comanagement

In the comanagement model, physicians participate in the management of a clinical service line. Physicians are compensated for taking an active role in service management, including clinical outcomes, customer service evaluations, and direct staff supervision. Physicians are paid for their services and may receive a bonus based on clinical quality and clinical results.⁴⁸

Hospital Support of Medical Practices

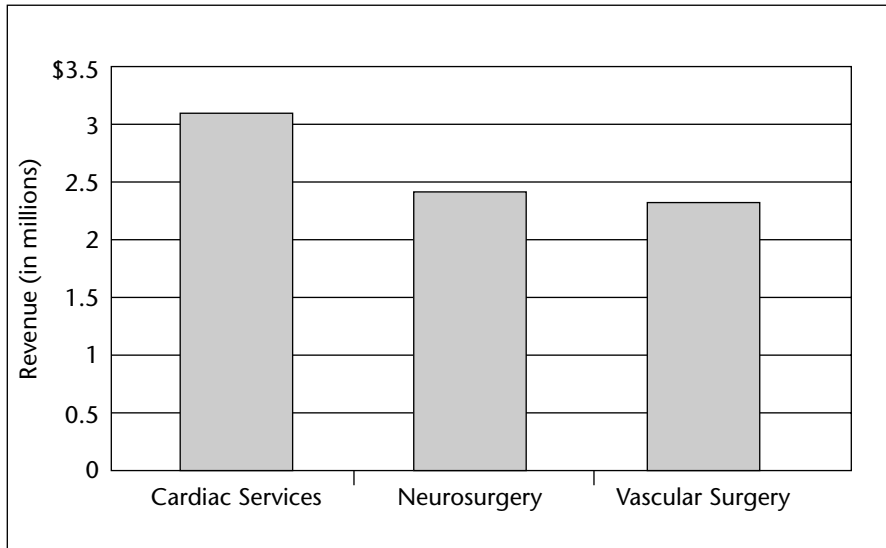
Physicians who frequently refer patients to a community hospital may feel that the hospital should be a source of needed funds to offset losses in their practices. Unfortunately, hospitals are facing the same financial adversity as the rest of the health care system. At many hospitals, operating margins are less than 3 percent. This is below the median margin of 5.7 percent required to obtain an A bond rating from Standard and Poor's, and below the generally accepted margin of 5 percent required to fund capital reinvestment.⁴⁹ Of equal concern is the fact that 39 percent of academic medical centers finished 1998 in the red.⁵⁰ Nevertheless, hospitals are adversely effected when physicians relocate their practices to other communities.

The tremendous increase in malpractice premiums is among the primary factors that cause an exodus of physicians. Some states have attempted to control jury awards. Other states, however, have a practice environment that precludes financial viability. This is particularly true for obstetricians and neurosurgeons. As these doctors leave their communities, the ability of the hospital to provide needed services is severely affected. For this reason, hospitals have begun to help independent physicians pay their rapidly increasing liability insurance premiums. This kind of hospital-physician arrangement can present legal problems if it violates the Stark and anti-kickback statutes. To avoid such problems, some hospitals have created nonprofit boards that give physicians monetary grants unrelated to the volume of patients a physician admits to the hospital or sends for ancillary services. In one situation, for example, qualifications for aid required a physician to have an active practice at the hospital and to stay in the community for two years.⁵¹



The relationships between physicians and hospitals have become more complex as financial adversity and onerous government regulatory constraints affect both groups. This chapter has discussed the types of relationships that exist between physicians and hospitals, along with their advantages and disadvantages. It is clear that a closer working relationship between these two groups is essential to maintaining high-quality medical care.

FIGURE 20.5. THE TOP THREE HOSPITAL REVENUE GENERATORS PER FTE PHYSICIAN.



Source: Data drawn from C. Jackson, "Survey Puts a Price Tag on Doctors' Value to Hospitals," *amednews.com*, Apr. 15, 2002.

Discussion Questions

1. Why are practicing physicians developing closer relationships with community hospitals?
2. What types of joint relationships are most advantageous to community hospitals?
3. What types of joint relationships are most advantageous to practicing physicians?
4. Why have hospital admissions and lengths of stay decreased in recent years?
5. How do hospitals decide what physicians are permitted to do in the hospital setting?
6. How do government regulations affect joint relationships between physicians and community hospitals?

Web Resources

- PowerPoint presentation
- Answers to discussion questions

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CHAPTER TWENTY-ONE

ACADEMIC MEDICAL CENTERS

Mary Jane Kagarise
Anthony A. Meyer

Objectives

This chapter will help the reader to

- Appreciate the differences between an *academic medical center* and an *academic health center*.
- Understand how teaching hospitals relate to academic medical centers.
- Appreciate the differences between a *teaching hospital* and a *major teaching hospital*.
- Understand the organization of academic medical centers.
- Understand the administrative and legal structures common to academic medical centers.

Academic medical centers (AMCs) are integral components of major research universities. Within the teaching and research functions of their medical schools, AMCs provide complex clinical services, introduce and evaluate sophisticated technologies, and maintain critical clinical services that require the immediate availability of physicians with highly specialized training in such areas as critical care, trauma, and transplantation. Academic medical centers provide state-of-the-art medical technology and make available last-resort medical resources, including investigational protocols to find new treatments and cures. When a medical center is associated

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TABLE 21.1. AFFILIATED HEALTH SCHOOLS.

Type of School	% of AHCs with This School	Number of Schools
Allied health	49.2%	60
Dentistry	41.0	50
Graduate studies	45.9	56
Health administration	9.0	11
Nursing	70.5	86
Optometry	1.6	2
Pharmacy	31.1	38
Public health	27.0	33
Veterinary medicine	10.7	13

Source: Data from Association of American Medical Colleges, *Organizational Characteristics Database* (Washington, D.C.: Association of American Medical Colleges, 2003).

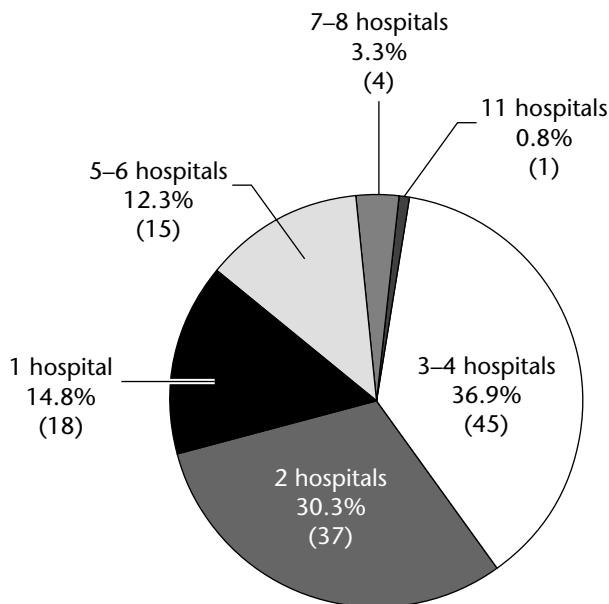
with other university health sciences schools, offering such disciplines as nursing, public health, allied health, pharmacy, or dentistry, the configuration is called an *academic health center* (AHC) (see Table 21.1). In common parlance AHC is often used interchangeably with AMC.

Description

Academic medical centers are heterogeneous and defy generalization. They may be public (60 percent) or private, urban or rural, research intensive or community based, multihospital (84 percent) or singular (Figure 21.1); and they vary with regard to their relationship to the parent university (Figure 21.2), type of faculty practice plan (Figure 21.3), legal and corporate structures, operational management, and academic and service priorities. AMCs are composed of a medical school accredited by the Liaison Committee on Medical Education (LCME) and at least one affiliated teaching hospital. The majority are located in the South and the Northeast. Due to the lower population density in the West, only 13 percent are located there (Figure 21.4). The affiliated teaching hospital(s) may or may not be owned by the university. An AMC is defined by three entities: a medical school, teaching hospital(s), and a physician base that includes educators, scientists, and clinicians.

About 400 of the approximately 6,200 hospitals in the United States are designated *teaching hospitals* by the Association of American Medical Colleges (AAMC) and the American Hospital Association (AHA). Most teaching hospitals are members of the Council of Teaching Hospitals (COTH) of the AAMC. *Major teaching hospitals*

FIGURE 21.1. BREAKDOWN OF MEDICAL SCHOOL AFFILIATIONS WITH AAMC COTH (COUNCIL OF TEACHING HOSPITALS) AND HEALTH SYSTEM HOSPITALS.

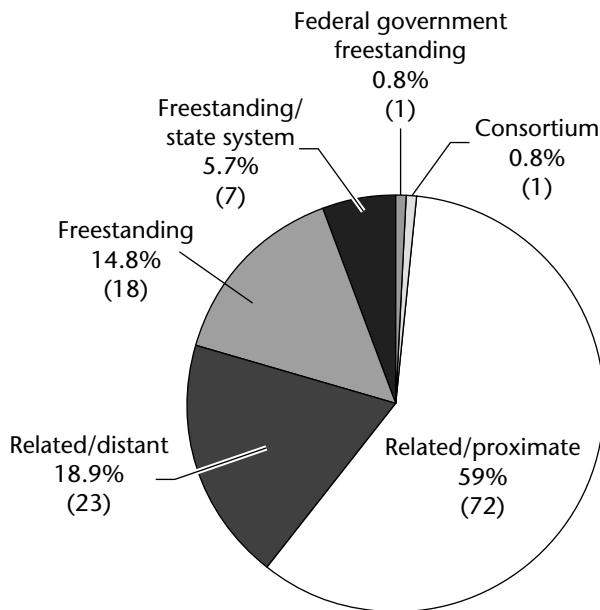


Source: Data from Association of American Medical Colleges, *Organizational Characteristics Database* (Washington, D.C.: Association of American Medical Colleges, 2003).

(about 280 in the United States) are a COTH subset characterized by their emphasis on short-term, nonfederal, general, acute care services. Major teaching hospitals are reputed for their technology-intensive clinical services that require expensive special equipment (> \$500,000), specialty trained physicians, and fully equipped intensive care units.

To fulfill their role in educating graduate and postgraduate students and conducting research, the medical school's physician faculty regularly provide inpatient and outpatient care in the affiliated teaching hospital(s). The full-time faculty's direct role in hands-on patient care in the university setting is uniquely characteristic of AMCs. The faculty of most professional schools—for example, business, engineering, and law—do not typically continue to practice their professional discipline as a component of their academic careers.

FIGURE 21.2. RELATIONSHIP OF MEDICAL SCHOOLS TO THEIR PARENT UNIVERSITIES.

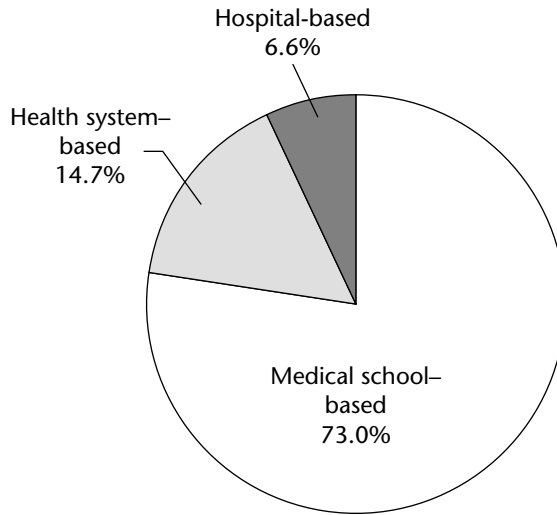


Note: AAMC definitions: *related/proximate*: the medical school is part of a public or private university and is located in the same city as the parent university; *related/distant*: the medical school is part of a public or private university but is not located in the same city as the parent university (includes urban-suburban relationships); *freestanding*: the medical school is part of a freestanding entity (either public or private) that does not have any affiliation with a parent university; *freestanding/state system*: the medical school is a freestanding entity and affiliated with a state system of higher education; *federal government freestanding*: the public medical school is sponsored by the federal government—the Uniformed University of the Health Sciences is the only school in this category; *consortium*: the medical school maintains cooperative relationships with other universities—Northeastern Ohio Universities College of Medicine, a community-based state medical school, is the only school in this category.

Source: Data from Association of American Medical Colleges, *Organizational Characteristics Database* (Washington, D.C.: Association of American Medical Colleges, 2003).

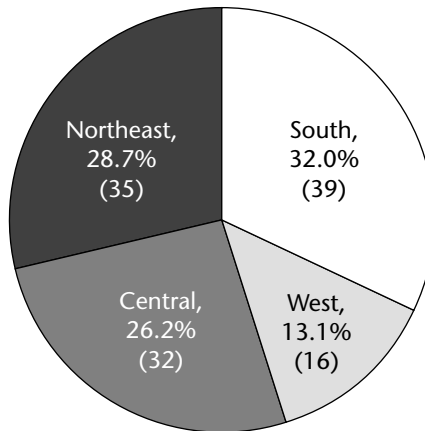
Partnerships between medical schools and their affiliated hospitals foster outreach, health education, illness prevention, and diagnostic and therapeutic care for potentially underserved populations that extend beyond those services that either institution could provide alone. Among the wide array of vitally needed community services, some AMCs sponsor walk-in neighborhood clinics, health education in the schools

FIGURE 21.3. STRUCTURE OF THE FACULTY PRACTICE PLAN.



Source: Data from Association of American Medical Colleges, "2000–2001 Financial Tables on U.S. Medical Schools," 2003 [www.aamc.org/data/finance/2001tables/start.htm].

FIGURE 21.4. MEDICAL SCHOOLS BY GEOGRAPHIC REGION.



Source: Data from Association of American Medical Colleges, *Organizational Characteristics Database* (Washington, D.C.: Association of American Medical Colleges, 2003).

and community, health advocacy, health screening, health fairs, and career exhibits. Voluntary activities by faculty, residents, and health affairs students complement the more formally sponsored programs. Altogether these outreach efforts result in high-quality health care in medically underserved areas and provide services that would otherwise be difficult or impossible for low-income residents, individuals who lack health insurance, and non-English speaking minorities to access. To extend their availability, AMCs also have introduced the latest innovations in telemedicine, establishing new access for remote areas and offering opportunities for patients to have a greater involvement in their health care through telecasts, educational Web sites, newsletters, and e-mail. Likewise, AMCs provide regional physicians with a ready source of specialty consultation and extensive access to health science libraries.

Most AMCs serve as safety nets for the medically indigent, provide significantly more unremunerated care (charity care plus bad debt) than other hospitals, and accept a disproportionate number of patients transferred from other hospitals. Transfer patients tend to be severely ill, require highly concentrated resources, and often have limited medical insurance.

AMCs dominate the field in four areas of technology-intensive services: (1) traumas and other emergencies (for example, vehicular injury, burns, and neonatal and pediatric critical illness); (2) new technologies with limited applications (for example, positron-emission tomography [PET] scans); (3) patient care that requires extensive resources from multiple services (for example, organ transplantation); and (4) extensive and complex procedures (for example, endovascular repair of aortic aneurysms). Although these unique abilities contribute significantly to the reputation for excellence that distinguishes most AMCs, the necessity to maintain such services substantially compromises their operational efficiency, because technology-intensive services involve costly standby capacity and are associated with a disproportionate amount of capital investment and uncompensated care.

Complex procedures are performed more frequently at AMCs, attaining an elevated level of safety largely due to repetitive practice, systematic peer review, and the concentration of highly skilled, multidisciplinary teams. Most faculty and staff at major teaching hospitals consider the quality of care they provide to be state of the art because academic physicians are more likely to be aware of the latest techniques and standards of medical practice. Findings from multiple analyses of national data confirm this relationship between high volumes and improved outcomes for rare procedures and complex care. Similar findings also have been reported for more common procedures, such as coronary bypass surgery. Larger volumes predict both lowered mortality and less cost per unit of service. AMCs provide most of the care that patients with complex and rare diseases receive, but the AMCs' overall service mix is still usually dominated by more common conditions.

Genesis

Before World War II, medical schools in the United States could be characterized as circumscribed programs of two or four years' duration. Their medical research programs depended on philanthropy for funding. World War II led to new insights about how acutely American medical care needed to be improved. New perceptions soon followed about the role medical schools could fulfill toward this end, along with new expectations that they would do so. This groundswell of expectations brought about the creation of modern-day academic medical centers.

After World War II, the National Institutes of Health (NIH) made available huge increases in funding for research and education. With this rapid growth in departmental faculties and budgets, the organizational structure of medical schools became increasingly decentralized, a trend that was reinforced by the advent of specialization. Specialty sections in departments began to develop in the 1950s, proliferated, and increasingly gained autonomy and independence throughout the next decades. Specialties matured into power bases of clinical expertise, assuming distinct academic roles in training and research.

The formulation of large, powerful specialties was driven by

- The NIH, which favored investigators who were organ-based specialists
- Fee-for-service third-party payers, whose reimbursement for high-cost, technologically intensive services encouraged the development of more new subspecialty techniques and provided financial incentives for hospitals to support them
- The introduction in 1965 of Medicare, which profoundly changed the size and complexity of medical school departments and greatly stimulated the growth of hospital programs
- Concentrated media coverage and intense marketing, which led people to expect medical care provided by a specialist

This rapid growth in the size and prestige of the specialties resulted in a disenfranchisement of generalists. In 1969, general practitioners pushed for separate specialty recognition as a primary care discipline, and out of this movement the American Board of Family Practice was founded.

Spurred by the upheaval in health care economics, a more market-driven clinical enterprise began to dictate medical practice. New service alliances formed, violating traditional departmental boundaries. These departmental boundaries had once been firmly entrenched, following established lines of medical school funding and space. The specialty service transformation accelerated in the 1970s and 1980s as the unfolding of medical school departments into loose confederations of quasi-independent

specialty sections spread and took root. The relative size and power of different specialties was determined largely by institution-specific academic and financial clout.

Once firmly constituted, specialty subsections began to realign among themselves. Specialties linked along academic and clinical lines with their counterparts in other clinical departments whose expertise they shared or complemented. *Centers* or *institutes* originated when these newly aligned, cross-departmental specialties developed a track record of productive interaction and achieved sufficient academic focus and clinical depth. Evolving innovations in informatics and increasing participation of PhD scientists in biomedical research dramatically accelerated the already rapid development of new centers through the 1980s and 1990s.

Centers continue today to team multidisciplinary clinicians with biomedical scientists to pursue clinical investigations and to develop centers for defining clinical care. However, toward the end of the twentieth century, at the same time these institutes and centers were proliferating, new pressures imposed on physicians from the patient service sector began to substantially erode their time to explore, initiate, cross-collaborate, and become immersed in interdisciplinary research and teaching. The most successful academic clinical departments at the close of the twentieth century were those sufficiently flexible to accommodate realignments and build productive interactions in all three missions: clinical service, research, and teaching.

The challenge for AMCs, and for the departments within them, has been to forge strong alliances based on mutual interdependencies. The pendulum has swung from an era when faculty practices were largely consulting and limited in volume to a new era that demands a faculty physician's full attention on clinical practice to achieve clinical excellence and meet economic demands. As advances in cellular and molecular biology move the leading edge of biomedical science from the bedside to the laboratory, and as MD investigators working side by side with clinical scientists begin to drift back to an immersion in clinical practice, individuals engaged in basic science risk losing important personal connections with the clinical relevance of their work, and their physician counterparts risk losing personal connections with the scientific basis for their medical practice.

Challenges

Many AMCs believe the triple-threat academic MD—physician, scientist, and educator—is an endangered species. This belief is placing AMCs in a position of responding to controversial, multifaceted questions regarding the parent university's tenure requirements for its physician tenure-track faculty. Should compensation be different for teaching, research, and patient care? What about term-limited contracts? In

some settings, university factions are questioning the pay differentials between general university and AMC faculty. As pace, complexity, and the bureaucratic pressures of patient care leave physicians with less time, some AMC universities voice concerns regarding the potential intellectual disintegration of the research, teaching, and even clinical components of academic medicine. The central requirements for a physician to attain tenure, and indeed the definition of physician tenure itself, are crucially important both to the medical school and its faculty and to the university and teaching hospital. Addressing these requirements can be politically sensitive in an AMC environment that has traditionally emphasized length of service, tenure, and physician entitlements.

In today's health care environment, AMCs are subject to many stressors in the areas of money, control, competition, and personnel:

Money

- Multiple missions burden AMCs with inherently higher costs.
- AMC efficiency is limited by educational setting.
- AMC financial vulnerability is rising due to heavy dependency on public support and investment.
- AMC funding sources are diffuse.
- Traditional sources of AMC funding have shown a significant decline.
- AMCs are relying more on clinical income from patient services to operate medical schools.
- Reimbursement dollars for equal units of patient service rendered are declining.
- The market is price conscious and price sensitive.
- Non-AMC competitors are engaging in ruthless pricing for market niches.
- The growing number of uninsured is straining capacity to provide indigent care.
- Educational missions mean AMCs must sustain a certain service mix.
- Efficiency is overshadowing growth as a primary AMC objective.
- AMCs are being taken over by for-profit systems.

Control

- Federal reimbursement and cost-containment policies are taking ever-increasing control over the operation of the teaching hospital and, ultimately, the clinical faculty.
- Rigid regulations from all third-party payers govern reimbursement.
- Federal activities against fraud and abuse are increasing oversight and regulatory burdens.

- Federal review of MD billing and collection practices and clinical care delivery, by multiple auditing authorities, has increased dramatically.
- Consumerism and new market forces must be considered.
- Pressure is increasing from cultural discords.
- Control is spread among diffuse power bases.

Competition

- There is increased competition for highly skilled clinicians.
- There is increased peer competition for the paying patients.
- Referrals to AMCs for care of indigent patients are increasing, but fewer dollars are allocated for that care.
- Competition between teaching and community hospitals is increasing due to narrowing of the technological gap.
- For-profit, well-advertised, freestanding focal sites for specific services are undercutting AMCs' specialty markets.

Human Resources

- There are nationwide health care worker shortages at a time when the workforce generates the profitability and has an impact on the sustainability of evolution and growth.
- The cost of living is increasing faster than AMC physicians' incomes.
- Faculty have less and less time to commit to explore, initiate, and become immersed in new interdisciplinary research and clinical initiatives.
- Time and travel demands of new primary and ambulatory care markets must be met as the AMC continues to meet existing obligations for tertiary care.
- The interdependence of AMC missions is becoming tenuous.
- The triple-threat doctor, scientist, and teacher is becoming obsolete.
- Increasingly, MD faculty are leaving due to dissatisfaction with the AMC environment.

Given the multiplicity of their missions, AMCs are vulnerable to difficulties in balancing goals, setting priorities, and developing consensus on purpose and direction. Cultural discords are inevitable between faculty and the teaching hospital because the collegial and entrepreneurial aspects of academic medicine often conflict with the increased bureaucracy necessary to run a financially constrained hospital. Deans have been compelled to recognize the importance of medical care, although academic accolades tend to reside in teaching and research.

Because it is driven by acquiring reimbursement and must conduct business in precise ways, the infrastructure of the teaching hospital usually is hierarchical and

bureaucratic, tending to resemble a corporate organization with a bottom-line focus. AMC-affiliated hospitals, by their nature, focus more on streamlining patient-care services than on supporting scholarly academic missions. Increasingly, the federal reimbursement and cost-containment requirements being imposed on all hospitals exert more and more external control over how teaching hospitals can function. This constrains revenue and reduces flexibility at a time when overall hospital resources to maintain the safety net for the uninsured have eroded and pressures to fund facility, capital, and operational demands have escalated. As American health care shifts from predominantly inpatient to a balance of inpatient and outpatient sites of care, teaching hospitals are being forced to build new ambulatory care facilities and create more costly intensive care beds.

The shift to ambulatory care is fueled by

- Third-party payers confining insurance coverage to an ambulatory setting for many procedures that they formerly covered when performed in a hospital
- The reduction in length of stay for patients who require inpatient care
- An increased emphasis on primary care, leading to more patients entering the health care system through outpatient clinics rather than going directly into a hospital
- New technologies and techniques permitting procedures to be performed in an ambulatory setting rather than requiring hospitalization
- The development and popularity of ambulatory care outpatient surgical centers

The need for AMCs to accumulate large amounts of capital and to cover the cost of uncompensated patient care has led to an environment in which patients are expected to pay for a larger portion of their insurance premiums while employers continue to restrict insurance options. Insurance products with low premiums and high out-of-pocket costs may become even more popular as the costs of health coverage plans shift to the individual and family and eventually to the AMC via uncompensated care. The escalating pressure to reduce health care costs while providing indigent and unremunerated care, improving outcomes, and paying very high medical liability premiums creates dilemmas for AMCs.

The medical school's academic enterprise is less democratic than the teaching hospital's and is more difficult to quantify and run strictly as a business. Faculty productivity measures related to teaching are more elusive on the university campus because so much of medical teaching is performed in tutorials, small groups at the bedside, or in a conference setting. Measures of physician research output, when limited to papers published, research awards granted, and national offices held, have been a chronic source of contention during university tenure reviews.

Shrinking incomes have reduced the medical schools' resources for delivering care, developing programs, and compensating faculty. Since the late 1990s, growth in physician incomes has not kept pace with the increase in the cost of living. Along with the erosion of their income potential, physicians perceive their professional image and autonomy to be diminishing. They are subject to extensive federal and state regulations that at times run at cross purposes. Factors taking their toll come both from outside the AMC (for example, cost containment, regulatory rules, and accreditation requirements) and from inside (for example, MD "report cards," clinical outcome measurements, clinical practice guidelines, and revenue productivity expectations). Time-consuming requirements for physicians to document their clinical and scholarly activities have contributed to a reduction in faculty autonomy.

Additionally, the lack of reliable data on outcomes has led payers to authorize the least costly approach to care. This in turn has diminished physician autonomy, raised professional liability costs, and negatively affected services rendered. The increased demand by payers for proof of quality and accountability has led to expanded charting requirements, tedious hospital privileging, lengthy professional credentialing, and new certification requirements for physicians performing specialized procedures. Additionally, increased visibility in the media and the intense pressure invoked by national rankings designed and performed by lay magazines have contributed to pressures on AMC physicians.

Some of the biggest challenges facing AMCs, then, are to find ways to minimize the fissures between hospital and school, to acknowledge and repair the alienation that is growing out of them, and to formulate a corporate vision for fiscal integrity. Shrinking physician reimbursement and escalating liability premiums likely will continue to pressure faculty to maximize clinical receipts. The inherent difficulties a physician faces in fulfilling academic goals while ensuring fiscal viability are challenges that AMCs are addressing by exploring new ways to align clinical and academic missions. Defining values and working jointly on strategic mission development are challenges the medical school, university, and hospital face together in every AMC.

Medical schools supply their services at less than cost to students and must cross-subsidize these efforts through competitive awards from government, philanthropy, and clinical service reimbursement. Changes in the amounts, sources, and routing of funding for graduate medical education (GME, for resident physicians) have converted GME from a profit center to a financial liability. Because reimbursement is insufficient to cover actual costs, AMCs are struggling to identify external sources of funding to support GME. The situation is so serious that some residency programs have been forced to close. Strategic planners and educators worry that if the trend continues, the

educational pipeline of physicians in training will be breached, and that may threaten the accessibility of medical care for future generations.

The national implementation of new GME regulations is also a recent destabilizing influence on AMCs. These regulations limit AMCs' ability to employ residents as an inexpensive form of highly skilled labor. They are an effort to swing the emphasis in resident activity back toward education and away from service that does not promote educational objectives. AMCs are busily defining their legitimate workforce needs in order to identify alternate, affordable ways to extend the reach of faculty and supplement hospital staffing without routinely leaning on resident physicians for convenient labor and excessive overtime spent in noneducational work.

The number of nonphysician providers is growing at a rapid pace, and their scope of practice is expanding. This is one result of the mandated workhour limits placed on resident physicians. Paradoxically, this has increased the time demands on physicians because they need to manage the nonphysician providers. It also increases paperwork because payers are increasingly requiring proof that services provided by physicians are more cost effective and of higher quality than the alternative services being provided by the nonphysician providers.

Disputes about the scope of practice among disciplines and across specialties are increasing as medical practice becomes more competitive and medical technology advances. For example, pharmacists are petitioning to be disease-state managers for certain chronic illnesses and to play a larger role in overseeing the hospital's formulary. Vascular surgeons, radiologists, and cardiologists overlap in abilities to perform some invasive interventional radiology procedures, and the use of MD hospitalists and MD admitting officers is on the rise as teaching hospitals struggle with how best to affiliate with academic physicians while meeting hospital staffing requirements.

AMCs face workforce shortages of qualified personnel in nearly every specialty, including radiology, pharmacy, respiratory therapy, laboratories, operating rooms, information technology, medical record management, coding, and registered nursing. Some of these professions require baccalaureate preparation, whereas others can be filled by technical degree or associate degree graduates, but the national educational infrastructure required to recruit and train is not in place. Several factors hinder its development. The U.S. health care system has few role models in the public eye to attract this generation or the next one to careers that would fill the AMCs' current and projected staffing shortages. AMC staff characteristically experience the high turnover rates and attrition that come from work-life trade-offs and from jobs characterized by intense workloads, poor working hours, tedious duties, and low pay. Alternative career options contribute to the widening wage gap that

exists between new employment opportunities and traditional health care roles. The challenge of staffing AMCs is daunting because it requires hard work and personal sacrifice.

Just as AMCs no longer are shielded from external market forces, they no longer enjoy unconditional public confidence. External oversight is no longer addressed with a light hand. Reports of scientific and clinical misconduct have eroded public trust in the inherent integrity of AMCs. New consumer movements, patient safety concerns, and disappointment with clinical outcomes and with how the United States ranks internationally in the well-being of its population all threaten to weaken the foundation of public support on which AMCs depend.

Academic medical centers in pursuit of the three missions of clinical services, teaching, and research use large amounts of public funds and must account for them through diverse audit processes. Reimbursement for many clinical and research services is based on costs that need to be computed by allocation formulas to each payer. Characteristics inherent to AMCs, such as multidisciplinary teams and leading-edge technology, lead to considerable problems with cost allocation and outcome measurement. The faculty generate quantifiable clinical income, but they also “produce” educated students, new understandings of human behavior, new knowledge of pathophysiology, and published investigations of the most sophisticated dimensions of medical care. The faculty’s quality product is people—people who have been educated to provide exemplary medical care; people who have the ability and motivation to become teachers, investigators, and leaders in medicine; and people who can bring the benefits of scientific achievements to all citizens. Tracking these factors would challenge any system, but unfortunately, the capability of most AMC information management systems has lagged behind the dramatic evolution of health services and the complexities of multimission tracking and clinical cost accounting.

Ethnically diverse populations of patients, students, and employees are placing new and unprecedented multicultural and multilingual demands on AMCs. The rise of consumerism in health care has likewise had an impact on AMC priorities and approaches. The public is increasingly accepting alternative medicine options, and more payers are willing to cover formerly unconventional approaches. The Internet has played a role in facilitating patients’ access to health care information, not all of which is accurate. Patients can research their symptoms and conditions independently through the Web and then demand specific services. Physicians are increasingly being challenged to justify their diagnoses and treatments and to deal with the growing mass of clinical information now readily available to the public.

At the same time, research alliances with major manufacturers provide AMCs with a first-entry technology advantage, and brand imaging helps AMCs attract

qualified candidates for staff positions in spite of severe and widespread shortages in many health care fields. Competitors cannot reproduce the advantages AMC's enjoy with regard to academic reputation, opportunities for brand imaging, access to new technology and investigational protocols, and proximity to prominent educational programs and opportunities to learn.

To facilitate all their missions, given the diffuseness of AMC power bases and income sources, AMC's have developed strong programs for attracting flexible funds through philanthropy. Flexible money can be used to move toward more coherent program planning, to support allied missions, and to bolster the educational mission to protect it from being subordinated to the business drivers of patient care and funded research. Sometimes a suggestion is made to preserve some AMC missions at the expense of others. Although straightforward and superficially simple, this strategy is not an option AMC's can afford. Service, education, and research are interdependent in AMC's. High-quality education requires high-quality patient care. Innovation and quality improvement take root in environments continually challenged by new knowledge and its applications. The ability to provide safety net and standby services depends on dedication to public service and maintenance of a network of coordinated resources. Teaching hospitals must prioritize the clinical mission, yet it stands to reason that all inpatient and outpatient facilities and all systems for organizing and delivering care must be designed to operate efficiently and accommodate changing needs, both for the sake of patient care and also for students, teachers, and clinical investigators to achieve their academic missions.

Opportunities

Mission-based budgeting has been gaining momentum among AMC's. This strategy, introduced by the American Association of Medical Colleges, creates separate budget lines for education, research, and patient care, then identifies separate sources of funding for each mission. In this way specific priorities are targeted and linked to resource allocation in an environment that is oriented toward institutional goals and away from disjointed emphases on clinical departments or disciplines. This approach requires substantial investment in updated information infrastructures to track and coordinate activities and fiscal data from all spheres. Expensive systems and sophisticated processes are necessary to provide accurate and timely analyses and dissemination of service benchmarks, clinical outcomes, and cost accounting uniformly across the teaching hospital, the physician practice plan, and the school of medicine.

AMC's also have begun to rethink the feasibility of offering broad program diversity in all their academic missions and a fully comprehensive scope of services in

their affiliated hospitals. Conventionally, AMCs have been similar to one another, competing for common goals and aspiring to excellence across a full menu of programs. That pattern may not be sustainable in an era of resource constraints. Consequently, some AMCs are considering fashioning clinical, research, and educational programs that reflect the AMC's uniqueness and capitalize on its special abilities. Building clinical niches could help AMCs promote themselves during contract negotiations to payers who are assessing the value AMCs add through reputation-specific scientific and technological capabilities. This strategy is colloquially referred to as *not being all things to all people* or value-added *weeding and feeding*. It requires a delicate balance, though, and could endanger AMC core values unless care is applied and the outcomes are systematically evaluated. This strategy could have a negative impact on medical education and reduce access to medically necessary care for the underinsured population.

The fiscal strategies of the AMCs' business components work to maintain solvency, and AMC leaders work to streamline and reengineer processes to make them more efficient in all three missions. Still, AMCs realize that the fragile interdependence of their missions ultimately will require stable, ongoing funding sources for their academic components, which cannot be supported indefinitely by receipts from the clinical delivery system. As some AMCs pull away from trying to compete in all areas in order to capitalize locally on existing and unique strengths, they are having to set goals for financial success that are compatible with their goals for patient-care quality and academic productivity, reach a general identification with the goals of faculty and staff, and stay focused as financial pressures collide with efforts to achieve missions.

With shrinking clinical service budgets forced to underwrite the growth and development of academic medicine, the decision by many AMCs to review their conventional financial anatomy has been inevitable. AMCs are generating *fund flow analyses*, and they are making difficult judgments about the value and cost effectiveness of teaching and research programs. These assessments force AMCs to reevaluate their academic programs for their economic as well as academic value. AMCs are developing cost-accounting capabilities to track the costs behind their revenues. Former assumptions are being challenged as controversial efforts to reengineer AMC academics venture into the mainstream. These analyses, like mission-based budgeting and funds flow analysis, are information intensive and are profoundly affected by the decisions AMCs make in purchasing and programming information systems.

AMCs lead the way in developing systems that provide accessible, timely, and reliable information to wide varieties of internal and external users. This information is a tool for the critical analyses necessary to make informed decisions about resources, operational performance, and strategic priorities. AMCs reevaluate clinical programs

using such indicators as resource consumption tied to program profit or loss, operational efficiency, contribution to margin, return on investment, utilization, and cost. Increasingly, this information is being regularly communicated to all program faculty and staff so they can assess their own results continually and work systematically to improve the standing of their program component.

The imperative to have ready access to correct information and to communicate it clearly to patients, referring physicians, and others has never been greater for AMCs. AMCs strive for a service orientation that recognizes the importance of being consistent, compassionate, and appropriate and of communicating in well-organized, accessible, timely, and comprehensible ways. Patients now exert greater power over physician careers through patient satisfaction surveys, and interpersonal skills are an increasingly important factor in determining the physician's ability to practice medicine successfully. Similarly, at the institutional level AMCs have nurtured organizational relationships. In some cases this approach has resulted in deferring the acquisition of MD practices in favor of developing mutually satisfactory relationships and community associations.

External regulatory demands for documentation mean that AMCs now maintain longitudinal, clinical databases that cover multiple settings: for example, hospital, clinic, home, and agency caretaker. This clinical database is but one component of the integrated information network that AMCs are developing and must struggle to fund. AMCs depend on their information systems to provide performance benchmarks, evaluate teaching goals, and provide information for clinical research, billing, and accreditation. These same data sets, if developed appropriately, can be used effectively for scholarly research. High on the list of AMC objectives and activities—and expense—are strategic initiatives to improve efficiency in the capture, collection, computation, formatting, and dissemination of information on all missions to a broad spectrum of internal and external users.

AMCs across the country are actively addressing the danger of long-term medical workforce shortages while confronting current shortages in sometimes novel ways. To build the numbers and types of human resources needed, some AMCs offer educational stipends to students in such short-staffed categories as registered nurses or technicians in radiology, respiratory therapy, and surgery. Stipend recipients usually sign contracts agreeing to repay the loan value after their successful completion of the training program. In addition some universities and AMCs fund tuition reimbursement for job-related degree studies. With an eye to the long term, AMCs are becoming more actively involved in the political arena, where education resource allocation decisions are made. Only in that way can they ensure that the needs identified to deal with shortages in the health care workforce are being addressed in high-level policy and budget debates. Thanks to the efforts of many AMCs, health care workforce

development is increasingly recognized as an important component of state and national budget decisions.

Simultaneously, AMCs are shoring up their employee retention strategies by creating incentives for their overall workforce, giving staff more personal motivation to work toward and achieve AMC goals. New compensation models aimed at making AMCs unique in the compensation market have been implemented along with financial bonus programs. AMCs are working to build up adequate and proportionate staffing in job classifications with chronic shortages and are working with their education partners in promoting health care careers.

AMCs struggle with the challenges and complexities of attracting, nurturing, and sustaining the interest of talented academic physicians, with the expectation that they will stay and pursue scholarly careers, creating new medical knowledge and teaching the next generation. Conventionally, the academic environment has attracted physician faculty who relish autonomy and freedom and who have relinquished the income of the practice setting in exchange for greater control over their time, interests, and activities. As fiscal and performance pressures intensify, AMC physicians increasingly are experiencing a free-floating anxiety about change. The culture of academic physician practices varies from place to place, but some general dissatisfaction is developing from the overall pressures on MDs to provide a quota of clinical volume, certified service skills, patient satisfaction, and chart documentation and to meet billing thresholds. AMC physicians are being held accountable for the quality and efficiency of their clinical practice as well as their scholarship production in research and education. Many are concerned about the environment of academic medical practice. Faculty members are increasingly leaving academic practice for other opportunities or taking early retirement because of dissatisfaction with the climate in which they work and the future they foresee for themselves in academic medicine. They explain that their responsibilities in fulfilling the educational and research missions have not been adjusted for the hardships being imposed on them by the patient service sector. As a result, they leave academia entirely or choose to forgo achieving tenure. AMCs are realizing and pursuing the need to carry these messages to the public and to the marketplace and more conventionally to state and national governments. At a minimum, all three will be needed for a productive discussion.

AMCs are assuming a market orientation that efficiently targets services to the needs and demands of the market and embraces third-party payers and referral sources as well as patients and families. AMCs are reexamining strategies for linking insurance mechanisms to the formation of new patient-care delivery systems. For example, one strategy might be to merge the hospital, physician practice plan, major support services, home health care, and long-term care facilities into an integrated delivery

system. The business side of health care is encouraging system interdependencies and developing the ability to influence and negotiate with other providers. Joint endeavors differ widely, and it is not unusual for provider networks to include international partners and holistic care.



AMCs are uniquely positioned to offer highly specialized services, treat rare diseases, perform complicated diagnostic and surgical procedures, and reach potentially neglected populations. They provide a unique constellation of ancillary, diagnostic, and community services. Unfortunately AMCs are challenged to develop the ability to compete fiscally with nonteaching community hospitals and private physician practices that have the built-in advantages of a more focused clinical mission and a greater ability to control costs. The price-sensitive market and growing amount of uncompensated care stress the capacities of AMCs because their multiple missions burden them with higher costs. The ability of AMCs to sustain their service and mission equilibrium will depend on the extent to which they can improve efficiency while optimizing value and preserving their three primary missions.

Discussion Questions

1. What differentiates an academic medical practice from a private practice group?
2. How did academic medical centers develop?
3. What are the responsibilities of an academic medical center toward the indigent patient?
4. What is the future of the academic medical center?
5. What are the advantages to the community of an academic medical center?

Web Resources

PowerPoint presentation

Answers to discussion questions

Development of medical centers in North Carolina

Suggested Reading

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PART FIVE

INFORMATION MANAGEMENT



CHAPTER TWENTY-TWO

INFORMATION SYSTEMS

David D. Potenziani

Objectives

This chapter will help the reader to

- Understand the challenges of integrating information technology (IT) into the practice's strategic plan.
- Assess practice information needs.
- Determine when to obtain IT help from outside the practice.
- Choose between best-in-class and full-suite information system (IS) approaches.
- Balance the costs and the benefits of IS alternatives.
- Understand the IS implementation steps required, whether the practice builds, buys, or adapts.
- Identify regulatory requirements.

One of the largest capital investments a physician practice will make is in its information systems. Managing the large amount of data produced in the course of patient services is a major concern of the practice manager. It goes without saying that it is much easier to monitor a practice's financial performance when financial data can be extracted from a database and placed in reports that provide the practice manager with information by site, by physician, by payer, and by contract. In addition, clinical information is more accurate and more easily retrieved when it is stored online. In complex systems, the scheduling, physician order, and chart documentation systems generate the information necessary to bill payers and record revenue. Reminders can be sent to patients when clinical and administrative data are integrated. Until recently, physician practices were not in a position to make significant use of information technology (IT) for anything more than billing functions because of the cost.

Now, even smaller practices can achieve benefits from IT that will help them improve quality and enhance patient care. Vendors are creating products that are

affordable for the 35 percent of active physicians in the United States who work in smaller practices. Some of the advances in technology available to these smaller practices are the following:¹

- Web-based technology enables vendors to host applications so providers do not have to invest in expensive hardware.
- The application service provider (ASP) model gives providers a pay-as-you-go option. This method eliminates not only the high initial cost of complex applications but the cost of upgrades as well.
- Handheld computing devices can be purchased and used on a stand-alone basis. They save the physician time, decrease the likelihood of medical errors, and eliminate the need to invest in hardwiring each exam room and office with a personal computer (PC).²

Table 22.1 illustrates how vendors have responded to the need of physician practices for more advanced technology in the areas of charge capture and coding, prescription writing, and documentation, beginning at a basic level and progressing through a higher level where the functions are integrated with electronic medical records (also see Perspectives 22.1 and 22.2).

The first activity in the information systems decision is to determine how much the practice wants to invest in technology. The practice manager wants to find the point at which the benefits of technology—improved data collection and analysis—outweigh the cost.³ Although the cost of basic information system components has declined over the years, numerous additional applications are now available that

TABLE 22.1. ELECTRONIC PRODUCTS FOR THE PHYSICIAN PRACTICE.

	Charge Capture and Coding	Writing Prescriptions	Documentation
Stand-alone products	Electronic assistance with coding	Electronic drug reference	Document scanning
Partial integration	Electronic charge capture	Electronic prescribing with drug interaction alerts	Voice recognition and transcription with standard documentation
Advanced integration	Integration with medical record; electronic transmission to payer	Integration with medical record; electronic transmission to payer	Integration of elements into medical record

provide more functionality and better decision-making capabilities. Figures 22.1 and 22.2 illustrate some of the practice challenges that can be handled by investments in technology.

PERSPECTIVE 22.1. ELECTRONIC MEDICAL RECORD SOFTWARE.

One of the most rapidly growing areas of medical informatics is the advent of electronic medical records (EMRs). The intent of the developers of these systems is to replace the megatons of paper records with megabytes of electronic records chronicling every encounter with a patient and storing a comprehensive record of all laboratory, demographic, scheduling, medication, and billing information—all Health Insurance Portability and Accountability Act (HIPAA) compliant. With such a wide array of requirements, finding any system that meets all of them can be difficult and expensive. As is typical in the development and deployment of software systems, the early adopters have to invest substantial amounts of money and time, but they also take advantage of the productivity gains these packages provide. The general guidelines outlined elsewhere in this chapter for choosing software apply in this arena.

EMR systems started as locally installed database systems, but with the rise of the Internet some systems are now available from application service providers (ASPs). In the latter case, the practice uses a system residing on the ASP server and essentially rents the service, without the expense and bother of maintaining the hardware and software locally. Generally, ASPs work well for smaller practices, but they may not provide the pathways for growth needed as the use of EMR software evolves.

Aside from the steep initial investment, another factor preventing widespread adoption of EMR technology is the lack of common data standards. Many practices are waiting for a shakeout in the market before adopting a system because they fear being caught short if their vendor goes out of business. Those taking the plunge early may face an expensive data transfer process if their vendor fails. Data standards are the best defense in an unstable market, and although many groups are pushing related standards (HL/7, ICD-9, and ICD-10 among others), the jury is still out on robust EMR standards that will make data transfer feasible.^a A final barrier to widespread adoption is the perception by physicians that such systems will require them to spend more time updating entries on patients.

^a David W. Bates and others, "A Proposal for Electronic Medical Records in U.S. Primary Care," *Journal of the American Medical Informatics Association*, Jan.–Feb. 2003, 10(1), 1–10, provide a list of commonly used systems and advocate adoption of a national standard for medical record systems.

PERSPECTIVE 22.2. INNOVATIVE TECHNOLOGY STRATEGY IMPROVES COMMUNICATION WITH PATIENTS AND GENERATES EFFICIENCIES AND REVENUE.

When Brett Smith, the practice administrator for Sandy Springs Internal Medicine in Atlanta, Georgia, decided to explore adding interactive communications to the practice Web site, he did not know that over 200 patients would register the moment this feature became available. Commenting on the most beneficial function, Smith said, "We have already seen a jump in the number of on-line appointment requests and prescription refill requests, thus reducing staff telephone time and costs. The on-line symptom assessment and preregistration capability are phenomenal tools which further reduce staff time while providing excellent diagnostic information for the physicians before the patients even arrive for their appointments."

In addition, Sandy Springs has installed an interface between its practice management information system and an automated telephone calling system. When a patient makes an appointment, the system calls to remind him or her forty-eight hours before the appointment. Patients are also encouraged to save time in the office by going to the Web site to preregister and provide symptom-specific history. With appointment reminders and preregistration, the patient no-show rate has dropped by 40 percent, creating an additional revenue stream.

At the same time, the Web site allows patients to request administrative or clinical assistance with appointment requests and changes, pay bills online, and renew prescriptions. When patients enter the data and the system appropriately routes requests, the staff time required to handle these issues drops significantly. In the future Sandy Springs will evaluate charging patients for on-line prescription renewals.

Providing patients with the ability to communicate securely via the practice Web site has also resulted in important improvements in patient satisfaction. Patient feedback has been tremendously positive. Sandy Springs Internal Medicine has stretched the bounds of the capabilities of two primary IT systems, practice management and medical records, by focusing on using the technology to improve patient communications. In the process the practice has generated benefits that give it a significant strategic advantage.

Source: Steve Malik, founder and CEO of Medfusion, Inc., a health care-focused Web site development and secure communications provider in Raleigh, North Carolina.

Before making an investment in new technology the practice will want to consider both the cost and the benefit of an investment in system upgrades, replacements,

FIGURE 22.1. COMMON PRACTICE APPLICATIONS AND FUNCTIONS.

	Application	Function	Improve Revenue	Improve Quality	Improve Workflow	Can Stand Alone
Financial focus	Coding tool	Guides physician to correct code	✓			✓
	Electronic charge capture	Records E&M and CTP codes	✓		✓	✓
	Claims transmission	Transmits information to insurers	✓		✓	
Clinical focus	Transcription, voice recognition	Translates physician's spoken dictation on patient to written text		✓	✓	✓
	Document scanning, imaging	Scans paper records into database or for other purposes for future retrieval			✓	
	Electronic documentation	Captures discrete data elements of patient visit into database for future retrieval	✓	✓	✓	
	Electronic lab order entry	Used to order labs and other tests; has reminders to guide ordering		✓		
	Drug references, alerts, formulary checking	Used to order labs and other tests; has reminders to guide ordering		✓		✓
	Electronic prescribing	Generates refill for patients; transmits to pharmacy from system or by fax		✓	✓	

Source: Adapted from K. MacDonald and J. Metzger, *Achieving Tangible IT Benefits in Small Physician Practices*, prepared by First Consulting Group for the California HealthCare Foundation (Oakland: California HealthCare Foundation, 2002).

and interfaces (Perspective 22.3 offers the example of the handheld computer). As discussed in Chapter Sixteen, the practice should consider its strategic plan and be aware of and address a variety of regulatory concerns, such as HIPAA, before selecting or upgrading its information technology.

Strategic Considerations

During strategic planning the leaders of the practice discuss practice goals and the ways they can be achieved. In this process, they may view IT as a set of tools that can help them achieve a goal. However, the pace of change in the IT industry has often frustrated well thought out strategic plans. Quite often the technological means to the strategic goals end up costing more time and money than anyone, including the IT professionals, predicted.

FIGURE 22.2. COMMON APPLICATIONS WITH A PATIENT FOCUS.

Application	Function	Improve Patient Satisfaction	Improve Workflow
Call routing and management	Electronic triage of calls	☑	☑
Delivery of test results	Notifies patients of test results	☑	☑
Patient reminders	Notifies patients of appointments and follow-up visits	☑	☑
Patient messaging	Documents communication with patients	☑	☑

Patient focus

Source: Adapted from K. MacDonald and J. Metzger, *Achieving Tangible IT Benefits in Small Physician Practices*, prepared by First Consulting Group for the California HealthCare Foundation (Oakland: California HealthCare Foundation, 2002).

PERSPECTIVE 22.3. PHYSICIAN USE OF PDAs IN CLINICAL PRACTICE.

An increasing number of clinicians are using personal digital assistants (PDAs), a handheld computer, in clinical practice as a new information technology option. Surveys of physicians have reported that over one-quarter of U.S. physicians used PDAs in 2002, with use predicted to expand to over half of physicians by 2005.^a Devices are widely available and are considered fairly inexpensive investments, with prices starting as low as \$100. Both anecdotal and research evidence is showing that these mobile devices can accommodate much of the information needs of providers in clinical practice.^b

Physicians have a broad range of opportunities to use PDAs in clinical practice. In addition to taking advantage of such basic organizing functions as electronic calendars, address books, and memos, physicians can use PDAs to keep track of such information as drug formularies, call schedules, pharmacy addresses and phone numbers, and contact information for consultant physicians and house staff. In addition, physicians can use PDAs at the point of care to perform medical calculations, reference clinical information, and review clinical guidelines to improve both quality of care and

service to patients. Patient data applications are available that enable physicians to track patients and monitor clinical results. Further, PDAs are being used to facilitate research data collection, document residency training experiences, and provide appropriate education to patients in different clinical settings.^c Various health care organizations are beginning to make clinical information system data accessible to physicians in a PDA format,^d and some are considering permitting mobile computer order entry via PDAs.^e Administrative applications including electronic prescribing, charge capture, and coding are also attracting attention because of their potential to help physicians increase productivity and better manage their practices.

^a Harris Interactive, "Physicians' Use of Handheld Personal Computing Devices Increases from 15% in 1999 to 26% in 2001," Aug. 15, 2001 [www.harrisinteractive.com/news/allnewsbydate.asp?NewsID=345].

^b K. McKnight and others, "Perceived Information Needs and Communication Difficulties of Inpatient Physicians and Nurses," *Journal of the American Medical Informatics Association*, 2002, 9, S64–S69.

^c S. Fischer and others, "Handheld Computing in Medicine," *Journal of the American Medical Informatics Association*, 2003, 10, 139–149; R. Garvin, F. Otto, and D. McRae, "Using Handheld Computers to Document Family Practice Resident Procedure Experience," *Family Medicine*, 2000, 32, 115–118; S. Bird, R. Zarum, and F. Renzi, "Emergency Medicine Resident Patient Care Documentation Using a Hand-Held Computerized Device," *Academic Emergency Medicine*, 2001, 8, 1200–1203; S. Miller, M. Beattie, and A. Butt, "Personal Digital Assistant Infectious Diseases Applications for Health Care Professionals," *Clinical Infectious Diseases*, 2003, 36, 1018–1029.

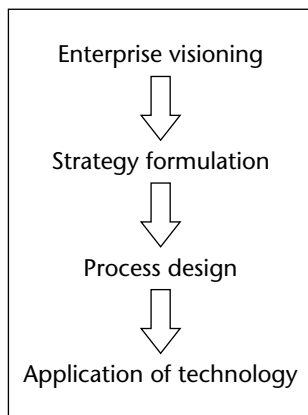
^d A. S. McAlearney, S. B. Schweikhart, and M. A. Medow, "Physicians' Experience Using Handheld Computers in Clinical Practice: A Qualitative Study," *British Medical Journal*, forthcoming, 2004.

^e A. Ying, "Mobile Physician Order Entry," *Journal of Healthcare Information Management*, 2003, 17, 58–63.

Source: Ann Scheck McAlearney, assistant professor of health services management and policy at Ohio State University, principal investigator of a study investigating strategies for leadership development in health care, and coprincipal investigator on a project designed to investigate the use of handheld computers (PDAs) by physicians in clinical practice.

Aligning an organization's information systems (IS) strategy and overall group strategy requires including the IT professional in the process from the beginning. An IT person with a solid appreciation of the business goals and financial strength of the organization can inform other leaders of the opportunities and dangers presented by the technologies they are considering and can discuss other approaches that are available.

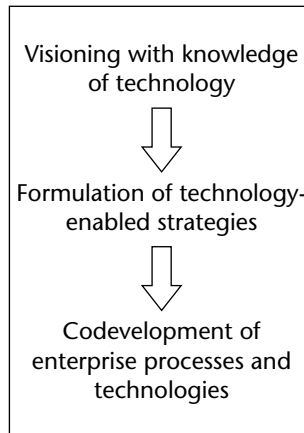
In the traditional approach to strategic planning the practice leaders follow a series of development steps, usually without the IT professional (Figure 22.3). Once they

FIGURE 22.3. TRADITIONAL APPROACH TO STRATEGIC PLANNING.

have invested time envisioning the future, identifying goals, and forming a strategy for reaching those goals, they bring in the technologists to make the plan a reality. At this point, because the leaders have made an emotional and political investment in their strategy, the IT person has little hope of changing it, even when there are technical limitations or potentially better approaches.

The rapid pace of recent technological change has forced leaders in dynamic industries to adjust their approaches to planning substantially. Because IT is such an integral part of a health care organization, it is critical to envision the future with technology-enabled strategies in mind. A new paradigm is emerging of a more integrated approach to strategy (Figure 22.4). Some organizations have rejected the idea of *strategic planning* in favor of *strategic thinking*. Here, the IT professional is a member of the leadership team, so that the practice conducts its visioning informed by the power, possibilities, and limitations of IT. For this approach to be effective, the physicians and the practice manager generally need to learn more about IT.

Physician group practices are being challenged to do as much as they now do, or more, with declining resources. As practice leaders acknowledge and deal with the fact that health care continues to become more and more complex, reimbursement for services continues to decline, and regulatory requirements continue to grow, they often look to IT to help provide solutions to these issues. The purpose of the strategy sessions is to change how practice leaders think about their goals in light of an environment that is continually changing. In many practices IT will become a major contributor to the success of the organization.

FIGURE 22.4. EMERGING APPROACH TO STRATEGIC PLANNING.

It should be noted that practices with less than fifty physicians generally do not have a person dedicated solely to IT, and the practice manager is expected to fill that role. Practice managers are usually generalists who know a little about all of the activities of a practice and who are not experienced in the complexities of IT. Therefore they either implement a system that the physicians or practice manager know has worked well for a similar size group or they seek the help of an IT consultant or vendor. Vendors will believe that the technology offered by their company is the best. Although some IT consultants may have relationships with vendors that make them biased, they are generally able to provide a more balanced view. For smaller practices, employing an IT consultant is a good alternative to having a designated IT professional on staff. The consultant provides a depth of knowledge and an understanding of marketplace trends that a physician or practice manager typically does not have. In addition he or she can participate in planning, system selection, and system implementation.

Choosing a New System

A needs assessment is only the first step in selecting an appropriate system. Other key steps are determining information architecture; identifying the best vendor; and deciding whether to build, buy, or adapt.

Needs Assessment

Prior to choosing a new information system or making modifications to the current system, the practice manager and leaders, possibly including an IT professional, should identify and assess the organization's needs. Their goal is to

- Understand and map the current system flows (who does what to data).
- Learn about the technologies available for entering, manipulating, and storing data.
- Understand the readiness of the practice to automate data functions.

In addition practice management should consider surveying the stakeholders, or users, of the current IS to determine what in their view is positive about it and what is not.

All practices collect data, store them in some form, and later retrieve that information for use. Parts of the system may be electronic; other parts may be manual. To understand and map the current system flows, an entry should be recorded in a flowchart of the specific action performed each time a person touches the data. For example, the medical record is the heart of the clinical information for a practice. Medical records may be paper in some practices and electronic in others, but all the activities that touch the medical record are part of the information system. Diagrammed system flows should reflect the standard routines of the workplace.

The particular technology employed for every part of the system flow should be considered and documented on the flowchart, or process map. Beyond the issue of the central data repository and technology used to house, index, and retrieve data, the practice should be able to answer the following questions about its specific needs:

- How would the practice like to enter information (keyboard, voice recognition, optical scanning, importation from other systems)?
- Who has responsibility for data entry and reliability?
- What error checking can be automated to reduce human mistakes?
- How will data be indexed for later retrieval (by record number, patient ID, patient name, provider name)?
- How will data be checked and updated in the future?
- How does the office layout affect the use of IT?
- Are the display, keyboard, mouse, and peripherals at each station suitable for the person using them?
- What capabilities could handheld computers provide?

Part of the process of identifying the components desired in new technology should involve identification of the weak links in the current chain of data. Data management takes time to perform properly, so IS planners should consider the workload of each person. In addition, an evaluation should be made of the capabilities of each person in the practice, including the physicians. Busy practitioners need to integrate the technology into their regular routines to speed processing and minimize errors. This will happen only when practice leaders are willing to require the use of new technology and to commit the resources to encourage and train staff in that use. As more fully discussed in Chapter Five, practice leadership should also consider the payback on its investment in information technology. This could take the form of time savings for medical practice staff as well as quantifiable financial returns as a result of, for example, faster billing and collections. If the payback is not sufficient, practice staff using the system may return to the manual process and management support will wane. Change management is a large component of any system implementation. It is important to remember that a solution that automates a manual process and requires a significant shift of effort from established norms will be harder to implement.

One product resulting from the needs assessment should be a detailed statement, in the form of lists and process flow diagrams, of the practice's needs for entering, updating, storing, and reporting data. These documents will become quite useful in the later stages of IT development and implementation. Another product of the assessment should be a diagram that shows data relationships. This is not necessarily a dictionary of all the specific elements of the data but rather an illustration of the way types of data electronically link to one another. For example, how do name and address data in the billing system relate to demographic and medical data in a patient record system? However it is displayed, the end result of the assessment process should be a prioritized list of practice needs that can be used to evaluate possible new technologies.

If the needs assessment appears overwhelming to the practice manager, an IT consultant can be called on to perform this task. However the assessment is performed, the effort put forth in identifying the needs of the practice will pay dividends later because the choice of information systems will be easier and the implementation will be more likely to succeed.

Information Architecture

Practices often rush to choose a technology immediately after conducting the needs assessment. The leaders of a practice should take the time to evaluate and understand their needs before rushing to choose a technological solution. The issues involved

may require a technology response, but technology should address the larger issues of work flow, need for information access, and efficiency. Once those architectural issues are understood, then the practice should consider what information technology may help. For example, a practice may be interested in a linkage between an electronic medical record system and an administrative and billing system. If a stated goal of having this linkage is to send out reminder messages to certain patients to get a specific screening test because of their age, gender, or other demographic factors, the practice will want to know:

- What items of data are needed to produce these defined patient lists?
- How do those items of data relate to one another and can they be easily linked for searching and output?

Another part of information architecture is to map out those data relationships in a diagram similar to that produced in outlining the flow of data throughout the practice. Again, the diagram need not be a true data dictionary of all the specific data elements, but it should illustrate how types of data relate to one another and what the products of those relationships are in action: lists of names and addresses? personalized letters reminding patients of recommended procedures? chart prompts to encourage a smoker to stop? All these uses and objects should reflect the thinking and goals established at an earlier stage of development.

The resulting information architecture establishes the desired relationships between data repositories and charts the flow of data—both results are prerequisites for implementing an effective information technology solution. Too many managers (and information technologists) want to skip the architectural step to leap forward to building the system. Taking the time to map out the relationships among types of data, understanding how the organization wants to use its data, and determining where to store and retrieve these data are all necessary steps before constructing or buying a system.

Getting Expert Help

As the leaders of the practice consider its IT needs, they may feel overwhelmed by the size, power, and costs of the technology available today. Prepackaged information systems can require a significant financial investment and vast quantities of learning time, so choosing the right one is important. Even a practice that knows its goals and has an idea of how to reach them can benefit from an outsider's informed perspective. An IT consultant is the ideal party to provide a fresh look at the practice's IT needs, although the quality of the help the consultant can offer will be affected by how well or poorly the practice has done its homework.

Outside experts can become part of the process at any point and, as noted earlier, may serve as facilitators of the needs assessment process. Once the needs assessment has been performed and an understanding of the current process and data relationships has been achieved, the practice is ready to take the next step.

If a practice is ready to acquire a technology solution from a value-added reseller or to develop a custom system, it must choose a vendor. Often that process involves a request for proposal. Although writing an RFP can be a time-consuming process, the more specific the practice is about its current process as well as what it wants and needs, the more likely it is that the vendor will be able to address those needs. IT is one of the most significant purchases a practice will make, and the care exercised in the selection of products and vendors should reflect that.

The RFP should discuss practice goals and objectives. The more information the practice provides the vendor, the more likely the vendor is to propose a solution that meets practice needs. For example, a practice that is seeking proposals for a voice recognition transcription system might have the following goals:

- Reduce dictation time.
- Eliminate transcription costs.
- Retain accuracy of dictation.
- Comply with HIPAA and other standards.
- Decrease turnaround time for dictated summaries.

The practice should also discuss what it believes are the critical success factors for the project and how they will be measured. For example, if one of the goals of the voice recognition system is to decrease turnaround time for dictated summaries, the practice might specify that the time from dictation to authentication should be no longer than four minutes.

The RFP should describe the current system and the number of people that the practice expects to be using the system. The purpose is to let the vendor see (1) what the old process looks like and (2) with what technology the new system or component should interface. The RFP should list the functional specifications desired in the new system. For example, for a voice transcription system, some of the desired capabilities might be

- Minimal voice training time
- Support for multiple languages, with English and Spanish the minimum
- Support for multiple users
- Electronic signature function
- Electronic transmission of completed notes or letters to referral specialists

Hardware, software, training, and support requirements and specifications might be put in checklist form, making it easier to compare competing proposals.

It is best to include information on the selection criteria in the RFP. The more a vendor understands about how an organization will make its decision, the better prepared the vendor will be if selected. Depending on the organization's business practices, the RFP process may include a period of questions and answers with prospective vendors that can be made available to all participating firms. Organizations can also invite vendors to interact with the organization to explain or amplify parts of their proposal and to clarify points at issue. Often these exercises can provide important clues about how a vendor approaches a project.

The practice should understand what it is buying. Some vendors will sell an IT package to a client and then charge by the hour to integrate that system into the organization. The RFP should ask the vendor for a breakdown of costs for hardware, software, maintenance, and support and ask whether the fees are one time or ongoing.

Choosing the best firm from the proposals submitted calls on analysis, judgment, and—when it comes down to it—gut feeling. The analytical part of the process should include scoring the proposals on established criteria. Sometimes more than one firm may have a suitable product and score well on the proposal evaluation criteria. At this point practice leadership will need to make the choice on gut instinct, and the deciding question may be, Do we want to work with this firm? Decision makers for the practice should recognize that it is important to meet the people who will be involved with the implementation because they are the vendor representatives the practice will ultimately have to deal with when the salespeople are off to new opportunities.

Integrated Solutions Versus Component Approaches

Selection of IT might be compared to selection of an audio system. The customer may ask: "Is it better to buy a system that has all the components (preamplifier, amplifier, tuner, CD player, and so forth) integrated in a single box or should I buy the components separately (because each has higher performance ratings) and connect them myself?" There is no easy answer to this question. Some factors weigh in favor of and some weigh against each approach.

Integrated solutions usually do not experience problems with compatibility between system functions. Having the data universally available throughout the system without worries that one type of data (for example, clinical) will fail to mesh seamlessly with another (for example, billing) is a worthy consideration. Unfortunately, integrated solutions can be very expensive and require significant investment in

hardware to support them. Another consideration is that they may not have all the features and flexibility required to conform to an organization's assessed needs.

Knitting together best-in-class technology components that meet all the assessed needs can offer the advantages of flexibility and power, but those advantages come with a price. Often the initial cost of components may be lower than the initial cost of an integrated system, but the expense of using staff or consultants to integrate and maintain the components may offset those initial savings. Moreover, data storage and retrieval technologies may not integrate easily across dissimilar components. The advent of standards for information exchange (for example, structured query language [SQL]) has eased these considerations, but one firm's SQL may not match another's perfectly. Most practices already have a very large investment in a practice management system so if the practice does not have an experienced IT professional on staff or the vendor cannot offer a solution for integration, best in class may not be a viable option.

Build, Buy, or Adapt

A related concern is whether to build a system from scratch or buy a prefabricated system. Quite often that decision is driven by the size of the organization, with only the largest physician practices, typically associated with academic medical centers or large hospital systems, preferring to build. Although the build or buy choice may seem at first to be a case of selecting between two clearly different roads, it is actually a spectrum of choices, with a middle ground where the vendor can adapt an existing product for the customer. The cost of the changes is generally paid by the customer. Occasionally, they will be borne by the vendor if the vendor can retain ownership of these solutions and enhance its base product.

As the IT needs of the health care industry mature with emerging standards for exchanging data and the growth of more generalized applications, the preference for buying an established solution is becoming stronger. The benefits include being part of a large community that uses and supports the solution so that development and maintenance costs of system technology are widely spread and thereby contained. The downside, or limitation, is that one solution must serve all. Building a custom system permits an organization to get a perfect fit in the selection of features, functions, and integration.

The one thing to remember in considering which road to take is that there is no road without significant effort and cost. A saying in software development is, "Your choices are cheap, fast, or good. Pick two." Very often leaders and managers focus on the technology and the path to its deployment and forget that what they are really discussing is improving practice business processes.

Whether a practice builds, buys, or adapts, it is important to understand what it hopes to gain by changing the way it conducts its business. Even with the best technology and brightest technologists and business analysts, the practice needs to be aware that the technology has limitations. The best approach to maximizing the capabilities of the new system within the constraints of the practice is to consider the endeavor as reengineering the business functions with the help of information systems.

After completing its needs assessment the practice should

- Scan the environment to see how others have met similar needs.
- Survey the technology offerings available.
- Talk to experts about technology innovations that will be available in the near future.
- Make a choice and stick to it.

Implementing the System

It may seem as though all the work in adopting or changing a technological solution is at the front end. Although it is true that the greatest effort should be in planning the project, the implementation requires a major amount of labor. Again, adequate planning and preparation will serve the organization well in reducing the labor at the back end.

Whether the organization is buying an off-the-shelf technology solution, adapting an existing system, or building from scratch, the general steps of the implementation process are similar. Table 22.2 displays the steps for each approach. Although adapting or building requires more project steps than buying, all these approaches are roughly similar in complexity and effort. Each path involves changing business practices as well. Entities that fail to modify their business practices in step with IT changes are less likely to achieve optimal results.

Financing the System

There are several means that a practice can use to pay for its technology. Many vendors will provide partial financing. Other sources of financing are

- Pharmaceutical companies
- Grants from organizations such as the Tides Foundation
- Health plans that sponsor technology solutions for disease management
- Bank loans, with the practice as collateral
- Lease buy-back programs offered by vendors

TABLE 22.2 INFORMATION TECHNOLOGY IMPLEMENTATION STEPS.

Buy	Adapt	Build
<ul style="list-style-type: none"> • Identify training requirements • Prepare training materials • Brief the organization • Install the system • Field-test the system • Evaluate the test • Adjust the system or training • Conduct training • Launch the system • Evaluate system success • Adjust system or training 	<ul style="list-style-type: none"> • Determine modifications • Develop test criteria • Develop modifications • Test modifications • Identify training requirements • Prepare training materials • Brief the organization • Install the system • Field-test the system • Evaluate the test • Adjust the system or training • Conduct training • Launch the system • Evaluate success • Adjust the system or training 	<ul style="list-style-type: none"> • Develop specifications • Develop test criteria • Program the application • Test the application • Identify training requirements • Prepare training materials • Brief the organization • Install the system • Field-test the system • Evaluate the test • Adjust the system or training • Conduct training • Launch the system • Evaluate success • Adjust the system or training

System Evaluation

Measuring the success of the system and making changes as problems arise requires almost as much work as the preparation stage does. Adjusting the IT system in response to problems is often a critical factor in ensuring that people in the practice perceive the system as effective and worthwhile. Finally, evaluation should be an ongoing process so that the practice knows when its system is again becoming outdated.

Security, Privacy, and Regulatory Requirements

No discussion of IT in health care administration is complete without a consideration of privacy issues and regulatory requirements. The legal context of these issues is addressed in Chapter Eight. IT professionals generally agree that adopting a strong set of security and privacy practices will fulfill all legal requirements in this area. Laws and regulations tend to lag behind the inventiveness of the hackers trying to crack

into others' systems. An adequate security response to put a stop to these creative individuals will always be beyond the current legal requirements.

The consequences of a security lapse in IT are almost immediate in any business, but in health care, due to the patient information contained in the systems, the consequences are magnified. Hackers and the so-called viruses and worms wreak havoc on computer systems. They can destroy data, and they can stop a practice in its tracks. Applications called *intelligent agents* roam the Internet constantly looking for weaknesses in information systems. IT professionals spend much of their time responding to the trouble hackers and their software cause. The damage and lost productivity caused by this activity is significant.

Following are the steps that every practice on a network needs to take. Even though some of these steps may seem excessive and overly cautious, they are important. Intelligent agents are computer programs and therefore never rest. Almost any system will eventually fall prey to them unless a practice takes the proper precautions.

1. *Physical security.* The most basic threat to an IT system's security is an untended machine that's connected to a network. The steps to take to prevent an attack are very simple:

- Lock the door to the room.
- Lock the system.
- Memorize the password.

An unattended office with a computer logged onto a medical record database or logged onto systems in an open area with no one monitoring it is an open invitation to invasion. The consequences include unauthorized access to financial, administrative, and clinical data. Passwords written on a Post-It note or a piece of paper taped to the bottom of the keyboard are similar invitations to unauthorized access. Passwords should be changed every ninety days and should be difficult enough that unauthorized users won't guess them. They should, however, be easy enough for authorized users to remember.

2. *Electronic security at the desktop.* Computer viruses are very common, and running antivirus software with current definitions is essential for information security. Viruses come in several forms:

- Boot sector viruses
- File viruses, usually executable files, with an *.exe* or *.com* file extension
- Macro viruses, which might be found in MS Word documents or MS Excel spreadsheets, for example
- Trojan horses, viruses that lie in wait until some specific event triggers their damage

Using the global Internet, these infections can spread worldwide in literally twenty minutes. The virus definitions used by the system's antivirus software should be updated at least weekly, preferably by an automated process. Moreover, the software should be scanning incoming documents and files for all the types of infections in circulation.

3. *Network security.* All users on a network have a user identity. That identity determines what each user can and cannot do or access. Role-based security is essential, both to protect practice data systems and to let each person function efficiently. Networks feature a hierarchy of power, with the system administrator having the greatest access and the user having the lowest level of access. A network administrator can peer into almost every corner of a set of systems. The only exceptions are defined folders; users have rights to such folders and the administrator is prohibited from opening the files. The administrator can, however, always view directory information (filenames, access times, file types, and the like). The reason for allowing defined folders is that managers are reluctant to put financial, personnel, and other sensitive data where someone with no official need for these data can see them.

If a nonuser is able to assume the identity of a user, that person can see anything that the user can see or do anything that the user can do. That is why administrator passwords must be the most carefully guarded of all. A practice should keep administrator passwords locked in a vault.

4. *Server security.* Network administrators control the access rights of groups by specifying them as types of user. Administrators can also create access control lists (ACLs), which are essentially small databases of users with access rights to various areas, detailed by their type and by specific folders or directories.

Firewalls are barriers that can exist in either hardware or software. They sit between a network and the Internet and protect the network from outside attack. A firewall examines data coming in and going out and filters these data in both directions, stopping packets of data when they do not meet the particular rule configured for the system.

Computer security requires knowledge of the types of threats and how to counter them. It also requires planning and forethought. The plan should identify possible security risks, including those unique to the situation, and outline the methods needed to minimize those risks. For example, if the biggest problem on the network is that users are inadvertently destroying important files, the plan needs to lean toward user education. If the practice has highly sensitive data on its network, such as patient

medical records, it may face attacks from people (even employees) who want to gain unauthorized access to those data. The practice should create a security strategy that guards against both internal and external threats. Most practices face resource limitations, but having an information security plan will protect the practice's investment and aid in compliance with security and privacy regulations. A security plan may also make it easier to justify the purchase of expensive pieces of equipment such as firewalls and to devote staff time to education and prevention.

Today all medical information is subject to the Health Insurance Portability and Accountability Act (HIPAA), which mandates minimum security requirements. HIPAA protects any record of health care treatment or condition that discloses the identity of the person being treated. This includes name and address information as well as location and career-specific or other information that could identify an individual. Protected health information is information either created or received by a health care provider, health plan, employer, or health care clearinghouse that relates to the past, present, or future

- Physical or mental health or condition of an individual
- Provision of health care to an individual
- Payment for the provision of health care to an individual

Health information is protected whether it is in paper or electronic form. Education and employment records are not protected information.

HIPAA is still in process of being fleshed out in terms of detailed rules and guidelines for health care organizations to follow, but the main points are now clear. Organizations need to have a security plan in place and in writing that specifies the steps they will take to protect protected health information. The plan's implementation is the responsibility of an internal HIPAA officer, who must be separate from the information management person or group. That separation ensures that all requirements are enforced by a person who did not implement the requirements. However, the practical implementation requires the active participation and input of IT professionals to succeed.



Information systems in health care have placed a new burden on physician practices. In addition to their understanding of medicine and of business management, health care organization leaders must understand the promise, uses, limitations, and obligations of IT. IT professionals can inform and guide a practice, but only to the extent that they are brought into the process of developing strategic goals for that practice.

Conversely, practice physicians and managers need to understand the role IT can play in bringing about more robust and accountable delivery of services. Neither group working alone can make a practice reach its goals; only through a true cooperation can a practice fulfill its potential.

Discussion Questions

1. Identify and discuss three reasons why technologists should be brought into strategic planning at the beginning of the process.
2. What are the key steps in assessing IT needs?
3. Discuss the key products resulting from the needs assessment.
4. Discuss the purpose of developing an information architecture.
5. What are the primary purposes of an RFP?
6. Discuss the benefits and drawbacks of integrated IT solutions.
7. What are some safeguards physician practices should adopt to ensure information security?

Web Resources

Case studies

PowerPoint presentation

Answers to discussion questions

Checklist for clarifying practice goals

Checklist for hardware and software specifications

Proposal scoring criteria

Antivirus resources

Network security resources

Notes

1. K. MacDonald and J. Metzger, *Achieving Tangible IT Benefits in Small Physicians Practices*, prepared by First Consulting Group for the California HealthCare Foundation (Oakland: California HealthCare Foundation, 2002).
2. S. Moretz, "Five Easy Pieces," *Physicians Practice*, 2002 [www.physicianspractice.com/index.dfm?method=paretnt&sumethod=details&artic].
3. T. Chin, "Running the Numbers: Making Sure Your Spending Pays Off," *amednews.com*, Dec. 16, 2002.

Suggested Reading

- Carter, J. *Electronic Medical Records: A Guide for Clinicians and Administrators*. Philadelphia, Pa.: American College of Physicians, 2001.
- Cox, J. *Executive's Guide to Information Technology: Shrinking the IT Gap*. New York: Wiley, 1999.
- Shortliffe, E., and Perreault, L. E. (eds.). *Medical Informatics: Computer Applications in Health Care and Biomedicine*. New York: Springer-Verlag, 2000.
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CHAPTER TWENTY-THREE

PERFORMANCE IMPROVEMENT, TEAM-WORK, AND MONITORING OUTCOMES

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Objectives

This chapter will help the reader to

- Recognize the synergy of teamwork in identifying, prioritizing, and resolving practice systems issues.
- Use performance improvement tools and techniques to monitor and improve clinical and nonclinical outcomes.
- Understand the physician's role as an effective leader of the office practice team.
- Adopt a data-driven approach to measuring customer needs in the areas of service (satisfaction), outcome, and cost.
- Understand rapid cycle performance improvement methodology.

The process of monitoring and improving health care quality in both the acute care setting and the physician office practice setting has evolved over time, as has the related terminology, reflecting the advances in process improvement. The term *quality assurance* (QA) was popular in the 1970s and 1980s. QA usually involved one or two people who reviewed charts retrospectively looking for potential quality problems. The quality staff were often the last to know about an adverse outcome that had occurred in the hospital or in the office practice setting.

Medical professionals realized, however, that quality could never be “assured,” and so during the 1990s, the name for the process shifted to *quality improvement* (QI) or *Total Quality Management* (TQM). Concurrent review of records became more

popular, and follow-up action was timely. Although the *QI* or *TQM* buzzwords for improving outcomes are still widely used in some health care organizations, *performance improvement (PI)* is now the most up-to-date term for the processes involved in improving service, outcome, and cost in the health care industry.

The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) defines PI as “the continuous study and adaptation of a health care organization’s functions and processes to increase the probability of achieving desired outcomes and to better meet the needs of individuals and other users of services.”¹ A proactive approach is used so that the focus is on improving processes and systems instead of on the person (or persons) making an error. Successful PI activities have these features:

- Indicators of quality are identified, and data are collected on each indicator.
- Staff (employees), not just practice managers or physicians, decide what is important to measure, because they know where the margin for error is in the work being done every day.
- Well-defined processes are developed to address indicators with unfavorable trends, in order of priority.
- Statistical tools are used to analyze data.
- Frontline staff are involved and teamwork is important; a consensus-building approach is used.
- Physicians are members of teams where appropriate.

JCAHO defines *quality control (QC)* as “the performance of processes through which actual performance is measured and compared with goals, and the difference is acted on.”² A good example of QC is equipment calibration or compliance with point-of-care testing.

The Physician as Leader of Performance Improvement

Providing excellent patient care in a physician practice requires an effective physician leader who works together with office staff to plan, direct, coordinate, provide, and improve patient services. The physician needs to establish expectations, work with the office team to establish priorities, and help manage the PI process. Effective leadership has these characteristics:

- It is inclusive, not exclusive.
- It encourages staff participation in determining PI indicators, getting to the root cause(s) of problems, and developing action plans.

- It develops leaders at every level who will help the practice meet its PI goals.
- It develops a culture in the office setting that focuses on continuously improving performance to meet the needs of patients and other internal and external customers. This culture also focuses on system and process improvement.

A physician leader needs group facilitation skills, process analysis skills, and quantitative analysis skills.

Using Data

Data constitute a powerful tool for identifying opportunities for improvement, driving clinical and operational change, and ensuring that gains are being maintained. For data to be used effectively, however, they must be presented in an easily understood format, explained clearly, and updated and communicated regularly. Data should be presented in both numeric and graphic formats. A numeric (or tabular) presentation is the traditional way in which data are recorded and reported. A graphic display provides less detail but easier identification of trends or patterns.

Using Benchmarks and Comparative Data

Benchmarks and other comparison information are crucial to the effective use of data. Data in a vacuum have no value. We may intrinsically know when a data value is “within acceptable limits” or “needs improvement,” but comparing practice data with historical values or data from other practices is critical to validate performance. For example, the significance of a 5 percent patient *no-show* rate is difficult to interpret without a comparison to *best practice* data or historical data from the same practice. The best way to communicate performance over time is with a graph with at least twelve to eighteen data points. That is generally enough to provide historical context and display the presence of trends. Comparing only two numbers, rather than looking for trends over time, can present problems and result in erroneous conclusions. For example, if the patient no-show rate is 6 percent in May and twelve months later it is 4 percent, the practice cannot accurately conclude that performance has improved. The two data points chosen may not be representative of the no-show rate during the past year. Tracking data over time to determine a trend line is the best way to document the fact that improvement has (or has not) occurred. A trend is not statistically significant until it continues for six consecutive months.³

Comparative data can come from many sources: from the history of the practice, from peer practices, or even from professional organizations, such as the Medical Group Management Association (MGMA). The term *benchmarking* refers to comparing data for a specific process in an organization to the data for the same process in

those organizations that demonstrate best practice performance. Benchmarking involves both data analysis and drilling down to understand the underlying internal processes that are resulting in the better performance. Both comparative data and benchmarking can highlight areas for improvement, help set performance targets, and provide the impetus to drive change.

Keeping It Simple

Data collection, analysis, storage, and reporting should be a simple process. A complex data management system is tedious to initiate, inconsistent in data quality, cumbersome to maintain, and difficult to analyze.

Organizing Data

A variety of tools and formats exists to manage data in the practice setting. The simplest, but least flexible and expandable, are paper-based systems, which can be cumbersome when the practice wants to aggregate data over time. This kind of system makes it difficult to identify trends, and reports may be hard to interpret.

Using Spreadsheets

Computer-based tools such as spreadsheets and databases offer a wide array of features that simplify data collection, analysis, management, storage, and report writing. IMPACT CARE is a straightforward, data-driven PI and management accounting system program that can easily be implemented on a spreadsheet. It is described later in this chapter.

Using Databases

A database is a computer program specifically designed to store, manage, and report larger amounts of data than is possible or feasible with a spreadsheet. A database can easily store millions of data items. In addition to its increased storage capacity, a database allows the operator to *query* or retrieve information in virtually any format, as well as perform such calculations as summing, counting, and averaging. The operator can generate a variety of displays and reports, grouping and counting complaints by type, time of day, day, or week, for example.

It may be faster and easier to purchase an existing database program than to build one. A computerized scheduling program is an example of a specialized database. It manages patient names, phone numbers, and reasons for visits and maintains

physician schedules. Developing a database to meet specific needs provides virtually unlimited customization and enhancement opportunities, but it also requires someone to build the database and maintain it.

Protecting Data

The federal Health Insurance Portability and Accountability Act (HIPAA) has underscored the importance of keeping patient data secure and confidential. HIPAA, which became law in April 2003, identifies security requirements; standardizes electronic formats for patient, administrative, and financial data; and protects the confidentiality and integrity of individually identifiable health information, such as a patient's name, medical record number, and date of birth. This law gives patients access to their medical records and the right to know who else has had access to them. In an office practice, the law restricts how data are stored, shared, and transmitted to other locations. More information on the HIPAA guidelines is available at various Web sites.⁴

The IMPACT CARE Performance Improvement System

A computer spreadsheet is a powerful tool for managing, analyzing, and reporting outcome data. It can be used in a system that sets priorities based on the needs of practice customers, with input from all staff members. One such system that uses a spreadsheet is IMPACT CARE, a performance assessment and improvement system developed at a health care system in Florida in the mid-1990s.⁵ Several large integrated health care systems across the country now use IMPACT CARE. It is based on principles of

- Customer service
- Process, not people
- Continuous improvement

The IMPACT CARE methodology begins by involving all staff in identifying indicators and monitoring data. This staff involvement is crucial to avoid the view that the process is just another “improvement program of the month” initiated by office management.

A PI system such as IMPACT CARE depends on staff willingness to look for, count, and report errors. This is sometimes a cultural adjustment for an organization, because it can be uncomfortable for staff to identify and display information and data that show what is not working. Everyone in the practice has to believe that

management is intent on improving processes and not placing blame. If the staff believe management is going to focus on people rather than process, data will not be reported truthfully.

IMPACT CARE is an acronym. Each letter stands for a step in the improvement process, and each step is described in this chapter. The first six steps are

Identifying customers and their needs

Monitoring data to identify problems that need to be fixed

Prioritizing key problems to address

Action plan creation to address problems

Checking to be sure the actions taken worked

Transforming or institutionalizing actions that solved the problems.

These steps are designed to improve

Customer satisfaction

Achieved outcomes

Reduced cost

Employee ownership

Implementing IMPACT CARE

The following sections discuss each step in the IMPACT CARE process.

Identify

In the first step the entire staff works to identify (and place in lists):

- The key customers served, including external customers (such as patients, family members, insurance companies) and internal customers (such as physicians, nurses, and staff).
- All the services the practice provides for these customers, such as scheduling appointments, collecting blood samples, and submitting insurance claims.
- All the services the practice provides that are high volume, high risk or problem prone (a subset of the list of all services). These *key activities* should be the initial

focus of the data collection because they represent areas where the practice is most vulnerable.

- A list of indicators (or metrics) that can be used to measure the key activities identified previously. These indicators are then assigned to one of three categories: service, outcome, or cost (the three basic needs of all customers). When an indicator fits into more than one category, the best fit is selected.

A hypothetical IMPACT CARE report created from an Excel spreadsheet is shown in Table 23.1. The spreadsheet columns store the names of the indicators the practice has defined, practice goals (discussed later in this chapter), and data for each month monitored.

Well-written indicators are specific, measurable, and when possible, written in negative terms. They are written in terms of undesirable events because their purpose is to enable the counting of errors that need to be reduced. Directly measurable parameters include such things as average waiting room time and number of no-shows, whereas information such as patient satisfaction is more difficult to quantify without a survey tool. (Two sample patient satisfaction surveys are shown in Appendix 23.1, at the end of this chapter.) Focusing as precisely as possible on an issue makes data collection easier and more meaningful. For example, an indicator expressed as “wait time” is not as specific as one expressed as “average wait time from patient arrival until called to an examining room” or “average wait time in the examining room before the provider enters.”

Indicators are written about negative events to focus attention on what is not working, thus making it easier to identify the root cause of a problem. For example, learning that 70 percent of appointments started on time focuses less attention on a problem than learning that 30 percent of appointments started late. Data for indicators should be updated on a monthly basis when possible, although only quarterly information will be available in many instances.

Effective indicators typically begin with “number of” or “percentage of,” unless that formulation does not make sense in the context. For example, one indicator might be “percentage of times that a patient waited more than thirty minutes in the waiting room before entering an examining room.” Here are additional indicators that might be useful:

Service

- Percentage of time patients not satisfied with promptness of returning phone calls
- Percentage of time patients not satisfied with courtesy of front-desk staff

TABLE 23.1. GOALS TO MONITOR FOR SUCCESS OF PRACTICE CHANGES.

Category	Indicator	Goal		Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03
		From	To							
Customer satisfaction										
Patient satisfaction: promptness	% of time patient not satisfied with promptness of returning phone calls	17.8%	5.9%			17.0%			14.1%	
Patient satisfaction: courtesy	% of time patient not satisfied with courtesy of front-desk staff	19.7%	5.8%			18.7%			21.7%	
Access to care	% of time patients have to wait more than two weeks to see their physician	11.1%	5.6%			11.4%			14.8%	
Patient no-show rate	% of patients who are no-shows			7.2%	9.6%	8.5%	12.1%	5.7%	8.6%	7.9%
Physician reschedule rate	% of appointments rescheduled due to physician request			2.5%	3.8%	1.3%	2.6%	1.4%	3.4%	2.7%
Outcome										
Immunizations	% of children not receiving immunizations in scheduled months			7.8%	6.9%	8.4%	10.2%	5.4%	7.8%	4.3%
Chart audits	% of time patient education markers not documented on high-risk charts	20.9%	0.8%	20.4%		17.5%		22.9%		14.0%
Cost										
Cash collections	% of copayments and coinsurance not collected at time of service	10.3%	3.7%	10.7%	9.3%	10.4%	8.8%	11.5%	7.2%	6.2%
Overtime	Overtime (\$\$)			\$1,159.00	\$1,372.00	\$1,291.00	\$1,416.00	\$1,088.00	\$1,447.00	\$1,195.00

- Number of times patients have to wait more than two weeks to see their physician
- Percentage of patients who do not show for their appointments
- Number of reports of overall dissatisfaction with clinic visit
- Number of reports of lack of staff courtesy or helpfulness
- Number of delays in answering telephone
- Waiting room wait time greater than twenty minutes
- Examining room wait time greater than twenty minutes
- Cancellation rates
- Number of days to wait for next available appointment slot
- Total of rescheduled appointments
- Total of canceled appointments
- Percentage of appointments rescheduled due to physician request
- Number of referring MD letters sent later than two weeks after requested

Outcome

- Percentage of children not receiving immunizations in scheduled month
- Percentage of patients sixty-five years old or older not receiving flu shots
- Percentage of time patient education markers not documented on high-risk charts
- Percentage of eligible women not receiving mammographies
- Percentage of eligible women not receiving Pap smears
- Percentage of eligible adults not receiving cholesterol screening

Cost

- Percentage of copayments and coinsurance not collected at time of service
- Dollar value of copayments and coinsurance not collected at time of service
- Dollar value of overtime.
- Percentage of new patient appointments
- Percent of work day each exam room is in use
- Number of patients per MD per hour
- Number of visits per MD full-time equivalent (FTE)
- Total FTEs per 1,000 visits

Monitor

Using existing data from office reports allows a rapid analysis of problems. When the data for the selected indicators are not available, it will be necessary to prioritize collection of new information, although this may extend the length of the project.

IMPACT CARE is about using existing data and keeping things simple when possible, rather than creating more work.

As described earlier, an indicator should be assigned to one of three categories—service, outcome, or cost—wherever it fits best. For example, the indicator “waiting room time” might be placed in either the satisfaction or the outcome category. The indicator “number of denied claims” might be placed in the outcome category but probably fits better in the cost category. As shown on Table 23.1, each month’s data total for each indicator is entered in a new column to the right of the previous month’s data. If an indicator is expressed in terms of a percentage, some indication of sample size should be given in a note on the spreadsheet. Spreadsheet cells should be formatted appropriately. For example, if the cell contains a percentage, it should be displayed as such (for instance, 45.2, not 0.452). Generally, no more than two decimal places are needed. When items are counted, the number of items should be displayed without any decimal places. Any convenient time period can be used for recording data, but shorter periods supply more meaningful information because over time they provide more data points. Spreadsheets should be updated on a monthly or quarterly basis.

Displaying Data in Graphs. Once data have been entered into the spreadsheet, charts and graphs may be created, and if the analyst has a statistical background, control charts can be developed.

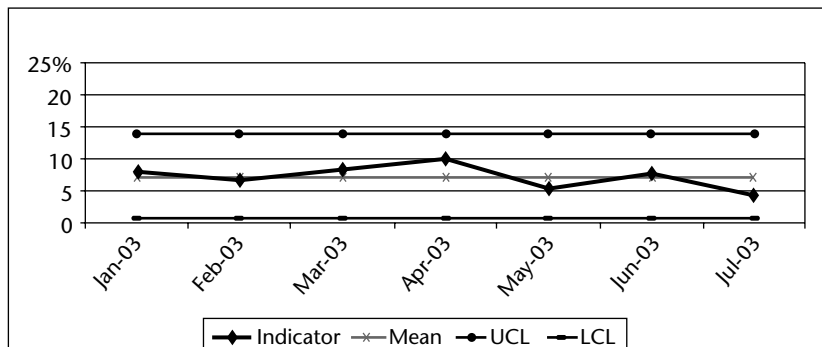
Variation Control Charts. When something is measured repeatedly over time, the results will vary. Therefore, if the average time that a patient spends in the waiting room is recorded as exactly thirteen minutes for every month measured, a defect in the data collection process is probable. The variation associated with random changes in data from measurement to measurement is called *common cause* variation. A common cause variation is repeatable and is generated at multiple locations in the process. Variation in patient wait time is caused by variations in the number of patients in the waiting room, variations in patient acuity, and variations in the number and the approaches of the physicians in the practice on a particular day.

Special cause variation usually originates outside the process, is unpredictable, and can cause a much larger variation in the data than normally expected. For example, if there is an epidemic of pink eye in the local elementary school, pediatric and family medicine practices will likely experience a much higher number of emergency sick calls than usual, resulting in longer wait times for all patients during the period of the epidemic.

Creating a Control Chart. Control charts are powerful tools for differentiating between common and special cause variation. The simple run-line charts created by Excel do not allow differentiation between these types of variation. To create a control chart (Figure 23.1), create a run-line chart and add three additional elements: the mean (or average) of the data, the upper control limit (UCL), and the lower control limit (LCL). The lines representing the upper and lower control limits run parallel to each other above and below the line indicating the mean value of the data. These two lines, whose values are determined by the typical variation in the data points, define the range of values containing 99 percent of the data. Also called the *expected range*, this range represents common cause variation. The UCL and LCL values can be obtained by calculating the standard deviation (SD) of the data and then using these formulas: $UCL = \text{Mean} + 3 \times SD$ and $LCL = \text{Mean} - 3 \times SD$.

Interpreting a Control Chart. The probability that a data point will appear above the UCL or below the LCL is less than 1 percent. A point that exceeds these lines is called an *outlier* and should be investigated as a possible special cause variation.

FIGURE 23.1 SAMPLE CONTROL CHART: PERCENTAGE OF CHILDREN NOT RECEIVING IMMUNIZATIONS DURING A SEVEN-MONTH PERIOD.



Prioritize

Once a sufficient amount of data has been accumulated, indicators that show an opportunity for improvement can be identified. These should be prioritized, and goals for these indicators should be entered in the “From” and “To” columns in the IMPACT CARE spreadsheet. The “From” column contains the current or average indicator value, and the “To” column contains the target value.

Continuous improvement, one of the principles of IMPACT CARE, emphasizes selecting ambitious yet realistic goals and achieving them. Once these goals are attained, new goals can be established. Perfection (zero errors) should not be the goal for every indicator. A zero-error goal may be unrealistic and result in frustration for the staff. And even when a zero-error goal is attainable, it may come at a high price in terms of time and cost. Setting realistic, attainable goals provides opportunities to celebrate successes along the way. It also provides opportunities to add goals, reprioritize goals, and set new, more aggressive goals for existing indicators. Consider a goal to reduce waiting room time from an average of twenty-eight minutes to an average of fifteen minutes per patient. Once the fifteen-minute average has been achieved, the practice has the opportunity to set a new goal of a ten-minute wait time or to move on and begin addressing another indicator.

Goals should not be established for all indicators at once. Selecting one or two problems or indicators at a time permits staff to focus on a problem. Additionally, every indicator for which goals are established requires the creation of an action plan. Creating and carrying out more than two or three action plans at once is time consuming and dilutes focus and resources. When too many action plans exist, it is unlikely that all of them will be achieved.

Action

According to Davis’s Dictum (often associated with Murphy’s Law), “Problems that tend to go away on their own tend to come back on their own.”⁶ In order to address an issue effectively, a practice must develop a methodology to convert goals into action. This is the purpose of the IMPACT CARE action plan. An action plan is a simple, straightforward, and complete description of the problem and an outline of the what, who, how, and when required to solve it. (A sample completed action plan is shown in Figure 23.2.)

An action plan should be developed for every indicator that has been assigned a “From” and a “To” goal. Just as goals should be selected and prioritized at a meeting of the practice office staff, action plans should be created by the same group. This takes advantage of everyone’s process knowledge and ideas for improvement, and it encourages people to buy into the solutions. Without this consensus-based approach to

FIGURE 23.2. SAMPLE COMPLETED ACTION PLAN.

ACTION PLAN				
TEAM/PROJECT: <i>Piedmont Family Practice</i>				
DATE: <i>September 3, 2003</i>				
INDICATOR (IMPACT CARE) and/or ROOT CAUSE (AIDE): <i>Nurses are not available to "room" patients</i>				
Conclusion (Why is an action plan needed?)				
Nurses have their own appointments (primarily flu shots and blood draws) first thing each morning and are not available to take patients to exam rooms at that time. This contributes to the first patients each day being seen late, which causes delays all day long.				
Action (What)	Responsible Party (Who)	Method (How)	Date of Completion (When)	Comments
Change the scheduling template so that nurse appointments are not scheduled between 7:45 and 8:15 a.m.	Clinic manager	1. Eliminate the 7:45 and 8:00 nurse appointment slots in the computer 2. Alert the appointment schedulers to the change	9/15/03	
Decide whether to reschedule patients with future 7:45 and 8:15 a.m. nurse appointments	Dr. Davis	1. Print report of future nurse appointments 2. Decide whether to reschedule patients 3. If decision is to reschedule, request front-desk staff to call the patients	9/08/03	

action planning, some staff—especially those to whom activities have been assigned—will likely view the plan as just another project they have to complete. The “E” in IMPACT CARE, employee ownership, is key to successful completion of the action plan.

The first step in creating an action plan is to gain consensus on the problem’s source (or sources), also called the *root cause*. This problem source and the rationale for solving the problem should be written at the top of the action plan form. Once everyone agrees on the problem, a discussion about potential actions ensues. These actions are listed in the first column of the action plan. The group then defines, in some detail, the method of completing each action and lists that method on the

action plan. For example, if the action is “Implement multicolored flags to improve communications about patient status in the examining rooms,” the method might be stated this way:

1. Purchase multicolored plastic flags for each exam room.
2. Define the function of each color (to be performed by a team of physicians and nurses).
3. Type the functions and the instructions for using the flags and distribute to all staff.
4. Attach the flags near the top of the doorway outside each examining room.
5. Laminate instructions and post throughout the practice.

Once the actions and their methods are defined, the individual responsible for each action is assigned. This individual is not expected to do all the work to complete the action, but he or she is responsible for ensuring that the work is completed. This individual will also report progress on the action to the group at subsequent meetings.

The last step in preparing an IMPACT CARE action plan is to assign a target date for the completion of each action.

Check

The progress toward completing each action plan should be discussed at practice meetings. As actions are implemented, the plan may be modified as needed. Even after goals have been attained for a certain indicator, monitoring is still necessary to ensure that the practice maintains the improvement. If the results show deterioration in a goal that was previously achieved, the action plan should be examined and reinforced or amended as needed.

Transform

Once a goal has been achieved and maintained, the actions that initiated the change should be transformed into a standard operating procedure. Existing policies and procedures should be modified to include the methods from the action items, and employee orientation materials should be revised so that new staff will learn the changed and improved methods.

AIDE Approach: Rapid Cycle Process Improvement

When the IMPACT CARE report shows an opportunity for improvement, creating an action plan may be more difficult than anticipated. Today's fast-paced environment and increasing demands on time require fast solutions to problems, and it may seem faster and easier to jump immediately to solutions when a problem is presented than to analyze the root causes first. A quick solution is often easy to identify and even implement, but it is often either the wrong solution or the solution to a different problem.

The remainder of this chapter presents a rapid cycle, team-based approach to problem solving. This four-step process, called AIDE, fills in the gaps that are often present in the typical problem-solving process. AIDE is an acronym:

Assess the current situation

Identify root causes

Develop solutions

Evaluate

The AIDE process is not limited to problem solving in a group. It is an approach that can and should be applied to any problem. It works equally well for individuals and for the entire clinic staff. Table 23.2 provides a general overview of the key aspects of each step in the AIDE process.

Assess the Current Situation

The first step in any problem-solving process is the establishment of a common understanding of the problem. This is best accomplished by writing a problem statement describing the situation. Problem statements should be specific and subject to objective measurement in a reasonable time period. The use of data removes the subjectivity that often is present when problems are raised. As W. Edwards Deming, one of the best-known quality improvement advocates, said, "In God we trust. All others must bring data."⁷ Data are necessary for comparison purposes after changes have been made to a process. Remember, if a process can't be measured, one can't say it has been improved.

One of the best sources of data is the IMPACT CARE report, which should display indicators measuring key aspects of a practice's processes in both spreadsheet and graphic formats. Run-line charts or control charts provide an additional perspective. Staff should have data in both spreadsheet and graphic formats in time to prepare for an AIDE meeting (Figure 23.3). As mentioned previously, it is easier to see the presence, or absence, of positive or negative trends when data are presented in the form of graphs.

TABLE 23.2. STEPS IN THE AIDE PROCESS.

	Phase	Outcome of the Phase	PI Tools
A	<u>A</u> ssess the situation	Problem statement that is measurable, specific, and shows pain	Process flow diagram, control charts, brainstorming, multivoting, selection matrix, Pareto chart (applies the 80/20 principle), check-sheets, other
I	<u>I</u> dentify root causes	Verified <i>root causes</i> of the problem	Cause-effect diagram, Pareto chart, graphs, selection matrix, other
D	<u>D</u> evelop a plan	Creation and implementation of an action plan to address each root cause	Action plan, cost-benefit analysis, force-field analysis, selection matrix, other
E	<u>E</u> valuate	An indicator related to the problem statement, looking for improvement; determine if follow-up actions are needed	Graphs, Pareto chart, control chart, other

The definition for the Pareto chart can be found at www.isixsigma.com/library/content/c010527a.asp.

It is also important for the problem statement to show pain. Although negative aspects of a practice are difficult to face, this pain can increase the impetus to drive change to improve the situation. The problem statement describes the impact of the current situation, providing a common focus for all individuals involved in working to fix the problem. Perspective 23.1 displays some examples of well-written problem statements.

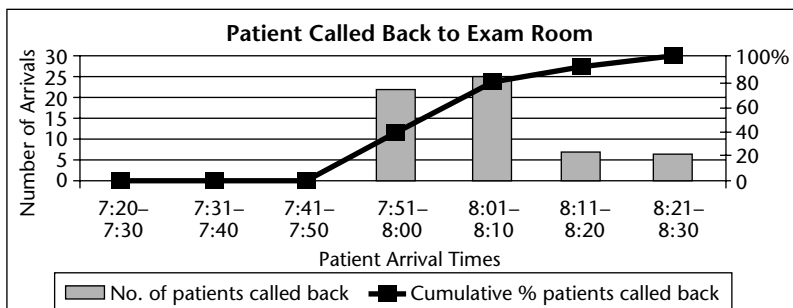
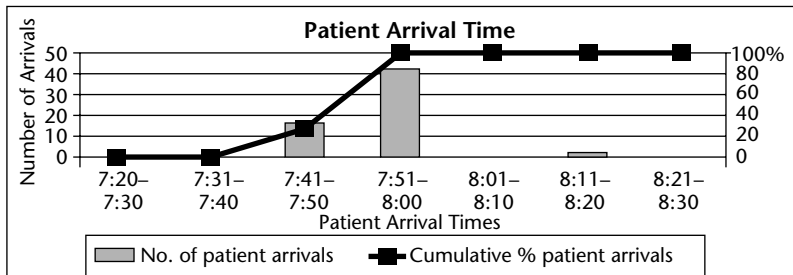
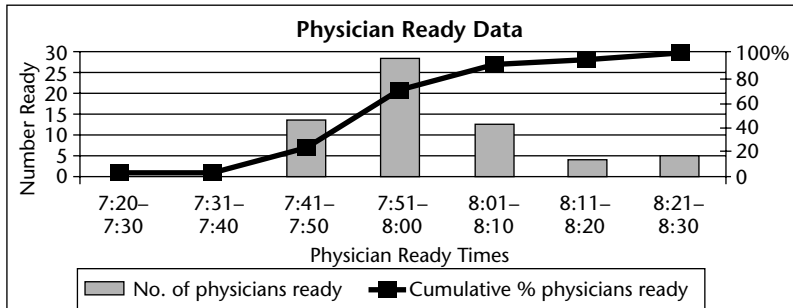
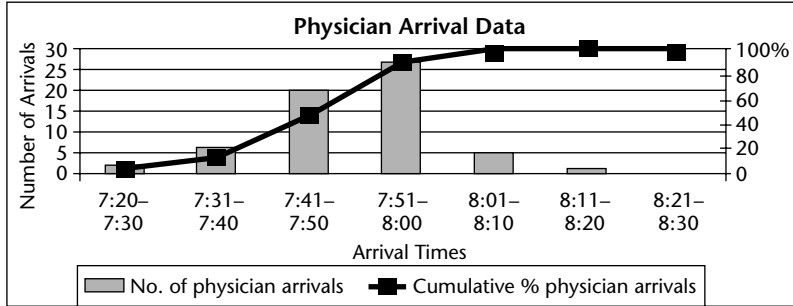
Consistent with the IMPACT CARE principle of focusing on the process, it is useful before writing a problem statement to create a flowchart of the process needing improvement. A flowchart also gives a common understanding of the process to all parties involved and focuses the problem solving on the process, rather than on the activities of one or more individuals. A flowchart may also uncover process steps or issues that previously were not considered by or known to the group.

Once a problem statement has been created that is specific, measurable, and shows pain, the second step in the AIDE process—identification of root causes—is instituted.

Identify Root Causes

An action plan to address a problem cannot be established until the root causes of the problem have been identified. Otherwise, suggested solutions may simply be treating a symptom or addressing a surface problem. Young children use one of the best

FIGURE 23.3. SAMPLE OF DATA COLLECTED, ANALYZED, AND GRAPHED IN PREPARATION FOR A ONE-HOUR AIDE TEAM MEETING.



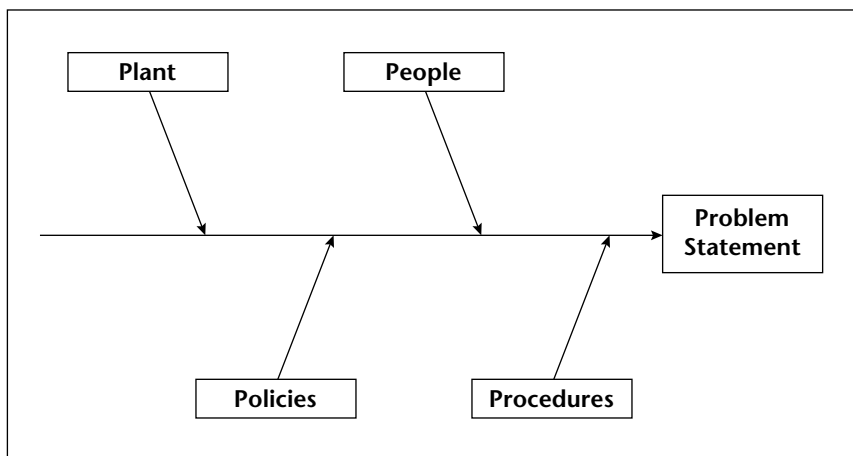
PERSPECTIVE 23.1. SAMPLE PROBLEM STATEMENTS.

- During the month of June, 38 percent of patients with the first appointment of the day stayed at least twenty minutes in the waiting room before being called back to the examining room. This situation has resulted in patient, staff, and physician dissatisfaction; longer delays for patients with later appointments; and increased overtime because nursing and front-desk staff and physicians regularly have to stay beyond 5:30 P.M.
- During the first two weeks of February, the average turnaround time for urine tests was fifteen minutes. Forty-five percent of tests took more than twenty minutes. These long turnaround times are creating a backup in the examining rooms, increased waiting room time, and patient frustration. The physicians and staff are also frustrated with this situation.
- During September, the average telephone call rang seven times before it was answered. Eighteen percent of calls rang more than twelve times and were automatically sent to voice mail. These delays are creating extra work and cost because calls must be returned to patients and it takes an average of three calls before finding the patient at home. This situation is resulting in decreased staff and patient satisfaction and is a potential safety concern because urgent calls are sometimes going unanswered.

techniques for identifying root causes. When facing an unknown situation, children often ask why, as in “Why is the sky blue?” or “Why is the grass green?” After receiving an answer from an adult, the child generally asks why again, this time seeking a deeper understanding of the first answer. The child will often continue to do this until the adult becomes tired or irritated and answers the next question, “That’s just how it is, that’s why!” This is the key to the identification of root causes, asking why until the process is exhausted.

A cause-and-effect diagram, also called a fishbone diagram or an Ishikawa diagram, is a powerful tool for organizing and communicating the results of a root cause analysis. The first step in creating a cause-and-effect diagram is to draw a horizontal line (the spine of the fish) and write the problem statement at the right-hand end of it (the head of the fish) (Figure 23.4). Four smaller, angled lines (ribs) are then drawn and labeled, using standard categories such as plant, people, policies, and procedures, or man, method, material, and machine. A list of all of the potential causes of the

FIGURE 23.4. SAMPLE CAUSE-AND-EFFECT (FISHBONE OR ISHIKAWA) DIAGRAM.

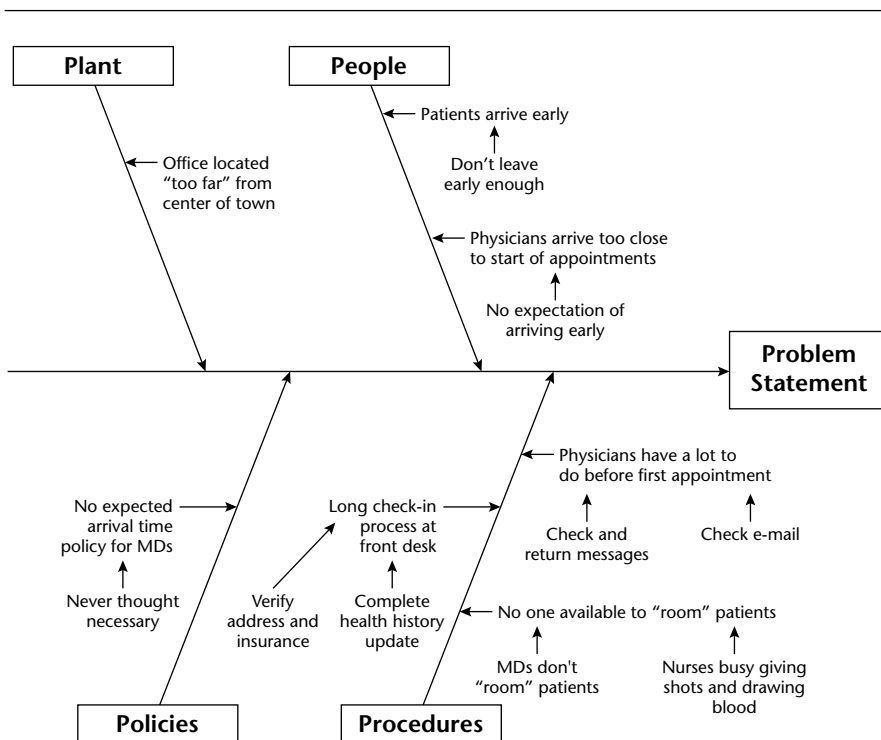


problem is then generated. An easy way to accomplish this is to distribute three-by-five-inch Post-It notes to each team member, asking each one to write a possible reason for the problem. The first reason is placed next to the main spine on the fish bone diagram, near the most appropriate rib. The question “Why did this occur?” is asked of the first reason, and the cause is written on a second Post-It and placed on the fish bone diagram further out on the appropriate rib. The process is repeated until no further reasons can be given, and the last note then becomes the root cause. The process is repeated with the other reasons first identified until no more root causes are forthcoming (Figure 23.5).

If data exist relative to any of the root causes, they should be added to the fishbone diagram. Data help staff to prioritize root causes for the next step in the process, and root causes supported by data provide a stronger impetus for change than root causes supported only by opinion.

When the fishbone diagram has been completed, the most significant root causes are circled. These are the root causes for which action plans will be developed. The circled root causes should be listed on another sheet of paper. Root causes on this list may be combined, as long as important details are not lost. This completes the “I” step of the AIDE process.

FIGURE 23.5. SAMPLE CAUSE-AND-EFFECT DIAGRAM IDENTIFYING ROOT CAUSES OF PROBLEMS.



Develop Solutions

Once the problem has been clearly defined and root causes have been established, solutions are considered. The AIDE methodology requires the creation of an action plan that clearly defines the what, who, how, and when necessary to address the root cause. A separate action plan is created for each root cause. Each solution is documented on an AIDE action plan form (using the format shown in Figure 23.2). A brainstorming session results in potential actions that address the root causes.

The detailed steps needed to complete the action must also be determined. Some actions may be self-explanatory, but others will benefit from having their steps clearly outlined. If an action requires staff to call twenty patients who did not come to their clinic appointments and to ask them why, it may include the individual steps of

- Creating a simple data collection form with a list of potential reasons for patients missing their appointment
- Randomly selecting twenty patients
- Assigning each staff member a number of these patients to call
- Combining all the results into a single report

An individual is assigned to follow the solution through to its successful completion. In the case of the calls to twenty patients, the responsible party does not necessarily need to make the phone calls but does need to follow up with the front-desk staff or the clinic manager to be certain that the calls are made. Finally, the action plan specifies the time frame in which the action should be completed. A target date that is reasonable but that communicates the appropriate urgency should be selected. The action plan also provides a column for notes or comments. A common use for this column is to display the status of the action (in progress, complete, and so forth).

Evaluate

The final step in the AIDE process is to identify one or more appropriate indicators to track over time to verify the impact of any actions that have been taken. This ongoing evaluation closes the loop on the original problem statement. The best tool for monitoring indicators is the IMPACT CARE report. As explained earlier in the chapter, this tool provides an organized and structured approach to performance assessment and improvement.

The One-Hour AIDE Team

The AIDE process typically is completed in four to six one-hour meetings, but with appropriate preparation and facilitation, a shortened version can be completed in an hour.



As health care and office practice expenditures continue to rise and reimbursement from governmental and third-party payers continues to decrease, physicians and their practice managers are learning that they need performance improvement knowledge and skills to improve internal systems and quality of patient care. As clinical and operational outcomes improve, costs to operate the practice should decrease and the quality of the practice should increase, thus making it more attractive to patients.

APPENDIX 23.1. TWO PATIENT SURVEYS.

PATIENT SATISFACTION SURVEY

Please rate us in the following areas:

	Excellent	Very Good	Good	Fair	Poor
Courtesy of our staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of time in the waiting room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of time in the exam room before the physician arrived	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Care provided by the nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Care provided by the physician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Checkout process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ONE-QUESTION SURVEY

If there were one thing that we could do to improve our service to you, what would it be?

Discussion Questions

1. What are the differences between IMPACT CARE and the AIDE process?
2. Who should participate in the IMPACT CARE and the AIDE activities?
3. How can all members of the practice be motivated to develop action plans?
4. What are the desirable qualities of an action plan?
5. How and why should IMPACT CARE goals be written?
6. Who should preside over systems improvement projects?
7. Why are employee ownership and teamwork important?

Web Resources

- Case study
- PowerPoint presentation
- Answers to discussion questions

Notes

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2. Joint Commission on Accreditation of Healthcare Organizations, *Accreditation Manual for Hospitals*.
3. M. Brassard and D. Ritter, *The Memory Jogger II* (Salem, N.H.: GOAL/QPC, 1994).
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5. B. G. Brotherton and J. C. Babka, "IMPACT CARE: A Quality Assessment Tool That Works," *Journal for Healthcare Quality*, 1995, 17(2), 11–16.
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CHAPTER TWENTY-FOUR

THE TWENTY-FIRST-CENTURY MEDICAL ENVIRONMENT

George F. Sheldon

Objectives

This chapter will help the reader to

- Understand the evolution of societies in an era of rapid technological advance.
- Appreciate the effect of changing demographics on health care needs.
- Compare the approaches to health care taken by different countries.
- Identify emerging issues faced by private health care providers.
- Understand the characteristics of the *knowledge society*.
- Understand the role of government in health care.

Peter Drucker, the economic futurist, labeled the late nineteenth and early twentieth centuries as periods of *epochal transformation*, times when the changes are so great that no one living can imagine the world in which their grandparents lived or their parents were born. Previous periods of epochal transformation cited by Drucker include the eleventh century, when people began to live in towns; the Renaissance and Reformation; and the eighteenth-century period known as the Enlightenment, the period that gave birth to modern society. The Enlightenment saw America's declaration of independence from England in 1776 and the introduction of the first workable steam engine. In addition to the political system established by the American Revolution, other political systems were evolving, including socialism and communism.¹

Drucker has labeled the current epochal transformation period the *knowledge society*. Ray Kurzweil, named 1988 inventor of the year by the Massachusetts Institute of Technology, has noted that the exponential growth of technology in the first two decades of the twentieth century matched the technological growth of the entire

nineteenth century.² He contends that the growth of technology in the first five years of the twenty-first century will match that in the entire twentieth century, a century in which electronic computers and atomic power were discovered.

Population Demographics

The twenty-first century will be a period of radical alteration in population demographics. The world will be divided between the developed countries with low birth rates and aging populations and the emerging nations with high birth rates and a young citizenry. Another demographic change—this one specific to the United States—is that 78 million baby boomers, the largest number of people within a narrow age range ever to populate the world, are now past fifty and rapidly looking forward to retirement. Their offspring, the members of the baby boomlet, make up another large population bolus.

Europe will have less population in 2020 than in 2000. The dearth of younger people will cause a great upheaval in many developed countries, including China and Brazil, where the birth rate now is below the replacement rate of 2.2 live births per woman of reproductive age. By 2030, for example, people over age sixty-five in Germany, which is the world's third-largest economy, will make up half the adult population, compared with one-fifth of the population today. Germany's current birth rate of 1.3 per woman is well below the replacement numbers. The number of people of working age will be 25 percent less than the current number, dropping from 40 million to 30 million.

In Japan, the world's second-largest economy, the population will peak in 2005 at 125 million. By 2050, Japan's population will be down to 95 million. The birth rate per woman, as in Germany, is 1.3. The figures are approximately the same for most developed countries. The impact on pension and health care systems is potentially staggering.

The United States, which, like Europe, has an aging population and low birth rate, will not have the same degree of population profile problems as Europe because of its history of immigration. The United States has the advantage of being culturally attuned to immigration. Moreover, the U.S. tradition of the "melting pot" continues. For example, approximately one-fifth of recent Hispanic immigrants are marrying non-Hispanics. The integration of recent immigrants into America is facilitated by the public school system. Projected immigration to the United States will be mostly from Latin America and Asia, altering the population's ethnic distribution. The population profile will be much like that in California and Florida today—in California the traditional minorities are now the majority and in Florida an aged population outnumbers younger individuals.

In a similar fashion, foreign-born or first-generation citizens of the United States are at their highest level in history—56 million in 2000 as opposed to 34 million in 1970, according to the U.S. Bureau of the Census.³ One in ten residents and one in five live births will come from this segment of the population. Twenty-one percent of the people aged twenty-five or younger will be foreign born, and 90 percent of that group will be from Latin America and Asia. Only Australia and Canada have a tradition of immigration similar to that of the United States. Japan has resisted foreigner integration for many years, resulting in a homogeneous society.

The impact of an aging population and a shrinking of the number of younger citizens almost ensures that in another twenty-five years people will work well into their seventies. Drucker notes, however, that most of the work done by older Americans will be knowledge based and will differ from that of traditional, full-time employees.⁴ It is quite possible that a large portion of the people working in corporations will be part-timers or consultants or will be assigned to special projects. The working population likely will form two distinct groups, unlike the largely full-time workforce of today.

The life expectancy of a modern person, averaging twenty-five to thirty years for most of the last 175,000 years, evolved to a life expectancy of forty-five in the year 1900, to the Medicare target age of sixty-five at midcentury, and to approximately eighty in the first part of the twenty-first century (Table 24.1).⁵

The Knowledge Society

In 1900, farming was the mode of economic life for most Americans. By midcentury the industrial revolution had taken hold, and industrial labor was more prominent than farming. In today's knowledge society the *knowledge worker* is the key resource.⁶ Many of today's health care workers fall into this category.

TABLE 24.1. THE GREATEST DECLINE IN MORTALITY IN THE HISTORY OF THE WORLD OCCURRED BETWEEN 1900 AND 2000.

Key Indicator	1900	Circa Midcentury	2000
Life expectancy	45 yrs.	65 yrs.	78 yrs.
Primary occupation	Farming	Industrial	Information
Health economy	Small	\$12.7 billion	\$4 trillion
World economy	\$1 trillion		\$50 trillion

Source: G. F. Sheldon, "Great Expectations: The 21st Century Health Workforce," *American Journal of Surgery*, 2000, 185(1), 35–41.

Drucker identifies three main characteristics of the knowledge society: (1) it is borderless, because knowledge travels more effortlessly than money; (2) it makes upward mobility available to everyone, through easily acquired formal education; and (3) it contains the potential for failure because anyone can acquire the knowledge for a job but not everyone can be successful.⁷ The knowledge society will be highly competitive, both for organizations and for individuals. Information technology allows knowledge to spread instantly, making it accessible to everyone. Today's knowledge workers are people with theoretical knowledge and learning, such as doctors, lawyers, teachers, accountants, and chemical engineers. The future knowledge workers will include knowledge technologists, computer technicians, software designers, and analysts in clinical labs.

Impact of Health on Cost

Over the past one hundred years a number of therapeutic, preventive, and public health interventions have resulted in the greatest decline in mortality in the history of the world. The most common causes of death per 100,000 people today are the same as those of the last fifty years, that is, cardiovascular disease, cancer, accident, suicide, and homicide. However, the positive impact of a variety of medical interventions has been nothing short of miraculous. Deaths from heart disease per 100,000 are 50 percent less today than in 1950. Deaths from cancer, predictably the most common cause of death in an aged population, have begun to see a downturn as many breakthroughs have been forthcoming. Even deaths from accidents and suicides are fewer, owing to improved treatment for trauma, use of seat belts, protected vehicle travel, and some limitation on the availability of guns. The most common cause of accidental death is the motor vehicle accident, which occurs across all ages. Deaths from violence are a factor of a youthful population, and as the population ages, deaths from trauma, assaults, and homicides should lessen.

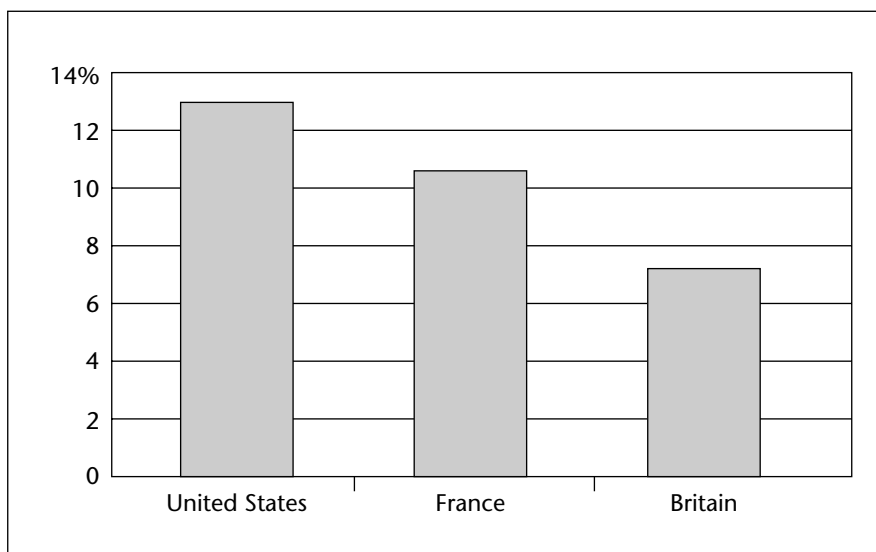
In an editorial written in 2000, Carl Becker, Nobel laureate in economics at the University of Chicago, claimed that the twentieth century's greatest gift was longer life.⁸ The impact of this increased life expectancy on society is unclear.

The interventions that produced the remarkable increase in life expectancy have become a costly industry. Health care in 2000 is a \$4 trillion industry, four times the economy of the entire world in 1900. Health care cost inflation and per capita expenditures have risen 4 to 5 percent annually for a half century. Health care costs constituted 5 percent of the gross domestic product (GDP) in the 1950s but increased to 13.2 percent of GDP by 1993 and are projected to reach 15.5 percent of GDP by 2010.⁹

The cost of health care is a worldwide concern. Most developed, industrialized countries have universal health insurance that is a government responsibility, financed through different mechanisms. The most recent countries to establish government-managed, national health insurance are Taiwan and South Korea. In Germany's social security system, founded in the late nineteenth century by Otto von Bismarck, citizens pay into the system during working years and may choose an increased level of amenities by paying more into their account. This system will be under stress in the twenty-first century because in Germany the population over age sixty-five is increasing.

The National Health System (NHS) in the United Kingdom is the most popular legislation of the past fifty years with the British public. It is a gatekeeper primary care-based system, similar to a staff-model health maintenance organization (HMO). It is tax supported and is operated with the lowest percentage of GDP of any Western country's health system (Figure 24.1).¹⁰ As technology-based interventions become the standard of care worldwide, the funding level of the NHS has fallen short of

FIGURE 24.1. HEALTH CARE SPENDING AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT.



Source: Data from G. F. Anderson, U. E. Reinhardt, and P. S. Hussey, "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs*, 2003, 22(3), 89–105.

providing optimal care, and Prime Minister Tony Blair's administration has pledged to invest more in facilities and providers to bring health care up to European standards and to diminish waiting lists.

The Canadian system was a favored model of the Clinton administration for the failed U.S. Health Security Act of 1993. It was a tax-supported, single-payer system, which has now been decentralized to the provinces. In the mid-1990s, the Canadian system featured control of the numbers of specialists and immigrant doctors and that has become problematic. Canada has now liberalized physician immigration to meet workforce needs but faces a shortage of specialists.

Since 1900, the U.S. Congress has undertaken several political initiatives designed to establish universal health insurance. In 1965, Medicare became law, as part of President Lyndon Johnson's Great Society program. It provided health care for the Social Security population (people older than sixty-five) and for people with select diseases such as chronic renal failure. The state-coordinated program, Medicaid, provides a younger, indigent population with health insurance and covers some of the costs of nursing home care.

Health insurance in the United States is still largely employer based. This system is a product of World War II, when wage and price controls in the war economy fixed wages. In response, employers and unions began providing forms of indirect compensation, such as health insurance, as a benefit. As the cost of health care and health insurance increased, corporate managers, concerned about cost, began to negotiate contracts with hospitals and providers. The managed care movement evolved, and initially it slowed the increases in the cost of health care.

Managed care's major focus on cost has been unsatisfactory in the context of the economics of health care. More recently, the emphasis has begun shifting to quality and outcome. With frequent biotechnological breakthroughs and novel therapeutics, the basic question now should be, Is value being returned for cost?

Value of Health

Murphy and Topel have published economic projections on the value of human life by age.¹¹ They find that the cost of uncured disease has an annual economic cost that is greater than the national debt. Heart disease, for example, affecting 56 million people, has an annual economic cost of \$128 billion. Cancer, not far behind, with 10 million individuals suffering each year, has an annual economic cost of \$104 billion, and so on.¹² As the population ages, diseases common in an older population will increase, and so will the cost of care. However, medical research that maintains older people as productive members of society adds positive economic value to that society. An example of technology adding quality of life and work potential is cataract surgery,

which allows the worker to drive a car, read, and operate a computer. Another example is hip replacement, which can give mobility to some individuals with arthritis, projected to be one in four of the elderly in the twenty-first century.

If it is accepted that a longer, healthier life is a reality of the twenty-first century, the related question is, Will a society of healthier older people have a positive economic effect? The answer is unknown, but it is clear that an unhealthy society is an unstable society. Between 1988 and 1993, life expectancy changes in the Union of Soviet Socialist Republics (USSR) caused a demographic crisis, with a 33 percent decrease in male life expectancy, from 63.8 years in 1990 to 57.7 years in 1994. This trend was followed shortly thereafter by a falling life expectancy for women and teenagers.¹³ As this decline was occurring, the USSR was experiencing political instability and eventual dissolution. It is tempting to conclude that an unhealthy society is an unstable society.

Workforce

Drucker labels the knowledge worker the *new capitalist*.¹⁴ The physician as an educated professional is suited to that role.

George Bernard Shaw observed in the “Preface on Doctors” to his play *The Doctor’s Dilemma*, “Make up your mind how many doctors the community needs to keep it well. Do not register more or less than this number.” Today’s health workforce has been studied extensively, using a variety of methods designed to estimate how many physicians are required per unit of population. Yet the changing nature of the workforce, technology, and even diseases confounds these efforts.

Women, relatively new in the modern medical workforce, now constitute 50 percent of medical students. Women make up more than 50 percent of the class in ten U.S. medical schools. The members of the current generation of medical women are more likely than medical men to share a salaried or shift position (and with other women rather than with men), more likely to work in contract positions, and more likely to choose specialties perceived as compatible with reproductive life. Consequently, women are less productive economically: that is, they see fewer patients per unit of time than men do. Some of the lifestyle-attributed characteristics of women are generational and not attributable to gender. Most medical students today expect a lifestyle that is more controllable than that expected by earlier generations of physicians.

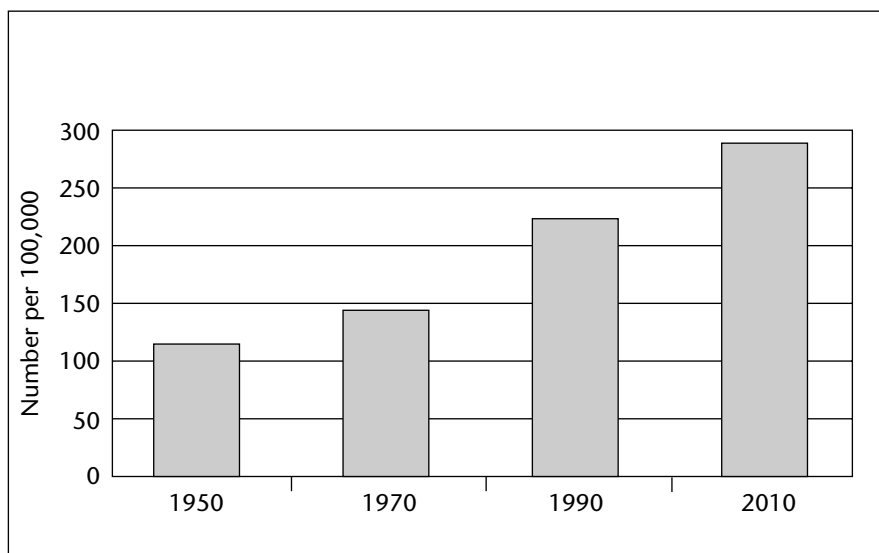
Modern knowledge jobs are unisex, and most modern families have two working adults sharing traditional burdens and family configurations. For example, teaching as a profession was invented in 1794 (with the founding of the *École Normale Supérieure* in Paris) and was traditionally viewed as a man’s job. Florence Nightingale founded

nursing as a profession in 1855, an innovation that spread rapidly to Europe and to the United States and made modern medicine possible. Medicine had been a largely gender-specific profession since its founding, with male doctors and female nurses, but has become a unisex occupation, with many female doctors and with men now making up 15 to 20 percent of the evolving nursing workforce.¹⁵

Nonphysician practitioners (NPPs) are a rapidly growing category of health providers. Some NPPs provide care similar to that provided by physicians, and nurse clinicians may eventually displace primary care physicians.

The number of U.S. physicians per 100,000 population increased decidedly during the latter part of the twentieth century (Figure 24.2).¹⁶ However, this number has remained comparable to that in other developed countries (Figure 24.3).¹⁷ Whether this number represents an excess of physicians is still a matter of debate in most developed countries.

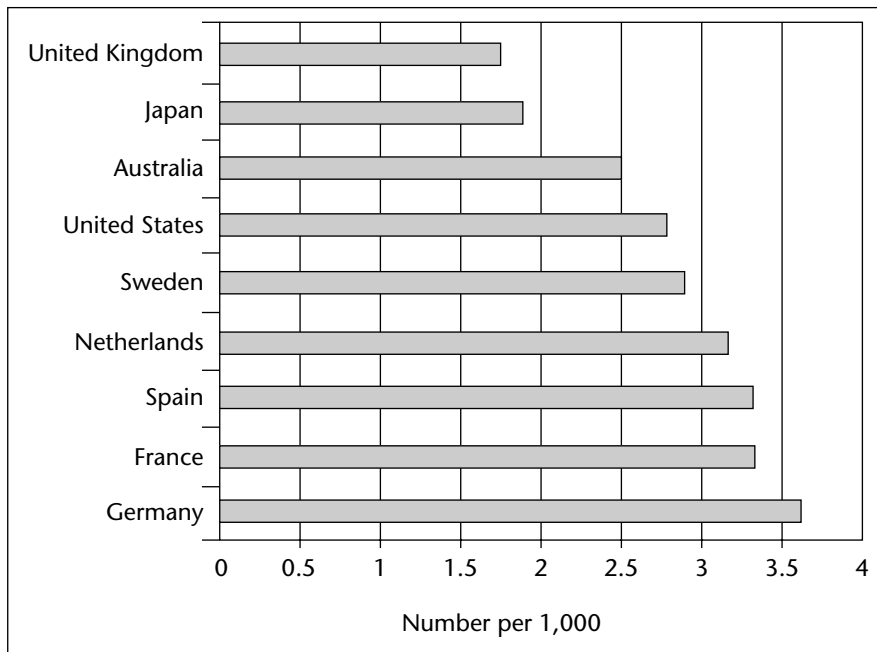
FIGURE 24.2. ACTUAL AND PROJECTED NUMBERS OF ACTIVE MDs AND DOs PER 100,000 POPULATION IN THE UNITED STATES.



Note: DO = doctor of osteopathy.

Source: Data from G. F. Sheldon, "Great Expectations: The 21st Century Health Workforce," *American Journal of Surgery*, 2000, 185(1), 35–41.

FIGURE 24.3. NUMBERS OF PHYSICIANS PER 1,000 POPULATION IN SELECTED DEVELOPED COUNTRIES.



Source: Data from G. F. Anderson, U. E. Reinhardt, and P. S. Hussey, "It's the Prices, Stupid: Why the United States Is So Different from Other Countries," *Health Affairs*, 2003, 22(3), 89–105.

Health Systems

Access to and cost of health care are significant societal and system challenges. The United States is the only industrialized nation without a universal health service. The Institute of Medicine of the National Academy of Science has outlined the problems of the uninsured, whose numbers hover around 40 million out of a population of 320 million. Approximately 12 percent of the uninsured are individuals who are self-insured, but most of the uninsured are the working poor. The federal government indirectly controls health care reimbursement through Medicare, which is a reference point for reimbursement for most private insurers. In the United States, employer benefit health insurance is the historical pattern. The increased cost of health care and

corporations' competitive approach to health care contract negotiations have inserted into this benefit a choice based on cost. Employers are providing progressively less funding for insured employees, who are absorbing more personal cost for their insurance benefit. The result is an underfunded health system for a public with high expectations.

In the early twentieth century, health care was conducted on a self-pay basis. Physicians and hospitals donated time and resources to the care of individuals who lacked the capacity to pay for health care. Meanwhile, some countries in western Europe developed social security programs that provided health insurance; Germany under Bismarck was a successful example. The Communist revolution of 1918 in Russia, however, frightened Americans, who came to associate universal health insurance with an undemocratic form of government.

President Franklin Delano Roosevelt's New Deal initially included universal health service as a program, but the American Medical Association opposed it. Universal health insurance was lost in the multiplicity of other New Deal programs and then in the national focus on World War II. After World War II, when health care accounted for only 5 percent of the GDP, President Harry Truman proposed legislation to establish national health insurance. It was defeated in Congress. In 1964 came Medicare and Medicaid, as described earlier. In 1993, President Bill Clinton's Health Security Act proposed a universal health system based on the pattern of a staff-model health maintenance organization. Although this legislation was defeated, health care reform became a cost containment-focused effort labeled managed care.

No country has been able to find an ideal solution to the challenge of health care cost and coverage. Tax-supported, universal coverage, such as that in Canada and the United Kingdom, has resulted in underfunded systems that are unable to keep up with technology and to provide for an aging population.

Health care in the United States is ambulatory care based and decentralized. Hospitals provide the focus which, like spokes of a wheel, reaches out into counties, states, and regions. The U.S. government operates with checks and balances, and division of labor is an outgrowth.¹⁸ It is likely that our health care financing will continue to be multidimensional. Predictably, the number of lives covered by government programs will expand, in part because our age-eligible population increases daily and therefore Medicare will expand. Employer benefit health insurance will continue but will be supplemented by insurance paid for by employees. This evolving pattern is problematic for the approximately 40 million people who are the working poor. Efforts to cover the marginally insured are in progress.

The key question for the future is, What investment will society make in increasingly expensive, technologically oriented health care for an aging population?¹⁹ What is required is a paradigm shift that will change the focus on cost to a focus on value. Evaluation and funding should focus on whether value is returned in terms of

increased quality of a longer life expectancy, allowing individuals to offer greater and longer work and economic productivity.

Discussion Questions

1. How will changing demographics affect health care needs?
2. Could the United States adapt to a national health insurance program?
3. How should the health care needs of the uninsured be met?
4. How much of the health care dollar should be spent on care of the elderly?
5. What health care system is best for the United States?

Web Resources

PowerPoint presentation
 Answers to discussion questions
 Discussion of national health care insurance program
 Overview of the health care dilemma
 Discussion of health care rationing

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Index

A

- AAMC (Association of American Medical Colleges), 456
- AANP (American Academy of Nurse Practitioners), 314
- AAP (American Academy of Pediatrics), 318
- AAPP (American Academy on Physician and Patient), 226
- AASPA (American Association of Surgical Physician Assistants), 325
- ABC (activity based costing), advantages of using, 11
- Abnormal lab results, 222
- Academic medical centers (AMCs): challenges facing, 462–469; described, 456–460; fund flow analyses generated by, 470; medical schools by geographic region, 459*fig.*; mission-based budgeting movement among, 469–470; opportunities being created by, 470–473; origins and development of, 461–462; relationship of medical schools to parent universities, 458*fig.*; structure of faculty practice plan, 459*fig.* *See also* Hospitals; Teaching hospitals
- Academic medical practices: balancing mission/margin in, 26–27; clinical trials in private vs., 412
- Academic Practice Compensation and Production Surveys (MGMA), 46
- Accrual accounting method, 11–12
- ACGME (Accreditation Council for Graduate Medical Education), 439
- ACOs (ambulatory care organizations), 218–219, 379
- ACRP (Association of Clinical Research Professionals), 416
- Activity based costing, 67–68
- ADA (Americans with Disabilities Act): described, 184; human management application of, 281–282; interviewing job candidates and, 274
- ADGR (average daily gross revenue), 46
- Administrative denials, 48–49
- Adverse events: ACO high risk areas for, 219; example during clinical trial, 425; explaining to patients, 226; increasing workload of nursing staff and, 333
- Advertising: for clinical test subjects, 426–427; marketing using different types of, 400–402; measuring effectiveness of, 406–407
- Age Discrimination in Employment Act (1967), 284
- Agency for Healthcare Research and Quality, 218–219
- Aging baby boomer generation patients, 397
- AHA (American Hospital Association), 335, 456

- AHRQ (Agency for Healthcare Research and Quality), 223
- AIDE approach: assessing current situation using, 515–516; develop solutions using, 520–521; evaluate action outcomes, 521; identify root causes using, 516–520*fig*; one-hour team meeting using, 517*fig*, 521; steps in, 515, 516*t*
- Allcorn, S., 259
- Allocation. *See* Cost allocation
- Alternative medicine/therapies, 396
- AMA (American Medical Association): regarding differences between physicians and NPCs, 318; supporting physician's billings for extra services, 374
- AMA (American Medical Association) RBRBS survey (2001), 6–7
- AMCs. *See* Academic medical centers (AMCs)
- American Academy of Nursing, 335
- American Academy of Pediatrics, 7
- American Board of Medical Specialties, 439
- American Hospital Association, 378
- ANCC (American Nurses Credentialing Center), 314, 335
- Ancillary services, 242
- Anthem, 138
- Anti-Kickback Act: joint ventures under, 388; MSOs (management services organization) and, 445; overview of, 198–199, 243; safe harbors to the, 199–200
- Antiharassment laws, described, 184
- Antitrust issues: for an IPA, 444; for a PHO, 445
- Antitrust laws, 187–191, 243, 388
- AONE (American Organization of Nurse Executives), 335
- APN (advanced practice nurse), 337
- APPAP (Association of Postgraduate Physician Assistant Programs), 324, 325
- AR (accounts receivable), 46
- ARC-PA (Accreditation Review Commission on Education for the Physician Assistant), 315
- Arsenault, E. A., 330
- Avoidable costs, 79
- ## B
- Bad debt, 47–48
- Bad debt recovery rate, 48
- BARS (behavioral anchored rating scale), 279, 280*fig*
- Bates, D. W., 481
- Becker, C., 527
- Benchmarking: compensation formula and use of, 297–298; data used in performance improvement, 503–504; steps in the process of, 126, 127*fig*
- Bennett, T., 251
- Berlin, L. E., 313
- Billing and collections: adjustments of, 227–228; allocating indirect cost of, 63; challenges of, 44–45; measurement of patient charges, 130–131; for new services/programs, 386–387; for NPC services, 318–320; patient receipts factors affecting, 136–137; as process performance indicator, 52–53; during revenue cycle, 39*fig*–40
- Billing inquiry, 53–54
- Blair, T., 529
- Boutique medicine, 374
- Bradford, V., 256
- Breakeven analysis: calculating, 69*fig*; calculation including profitability/overhead, 70*fig*; of mammography screenings, 69*fig*, 70*fig*, 73*t*; overview of, 68–69; simplified breakeven formula, 68*fig*; special considerations for, 71–79
- Breakeven analysis special considerations: adjusting reimbursement rates/payer types, 71*t*–73*t*; breakeven and capitation, 73–76; expected average rate of reimbursement, 72*fig*; new patients vs. existing patients, 77; sunk costs, avoidable costs, 79; use rate sensitivity, 76*t*; variable cost calculation for more diverse service mix, 77–79*fig*
- Brotherton, B. G., 501
- Buckingham, M., 340
- Budget: comparing actual financial performance to, 135–137; marketing, 404–406; mission-based, 469–470; as monitoring/managing mechanism, 3–4; in relations to planning/control cycle, 4*fig*; strategies for setting, 19; volume adjustment of, 82
- Budget process: balancing mission/margin in academic medical practice, 26–27; creating expense budget, 22–30, 31*t*; creating revenue budget, 18–22*t*; creating statistics budget, 14–18*t*; eight steps in, 30; overview of the, 12–13*fig*
- Budgeting methods: ABC (activity based costing), 11; cash vs. accrual, 11–12; incremental vs. zero-based, 9–11; level of detail, 6–7; level of participation, 5; relationship between level of effort and precision, 10*fig*; variety in, 5
- Business plan initiatives: examples of strategy, 362*fig*; sample preliminary tasks/timeline for, 365*t*; sample report on ratings for proposed, 364*fig*; sample timeline for implementation of, 366*fig*
- Business plan process: analyze your market, 358–360; analyze your physician gap, 360; consider scenarios, 363; examples of strategy initiatives,

- 362*fig*; nine steps in, 353; preliminaries of, 353–354; project your future state, 361–363; refine and test your plan, 364–365; roll out your plan, 367; sample report on ratings for proposed initiative, 364*fig*; set mission and vision, 355*fig*–357; summarize your current state, 360–361*t*
- Business plans: evaluating your organization, 357–358; issues addressed by type of practice, 350*t*; participants in developing, 351–353; planning process leadership, 351*fig*; process of, 353–367; sample timeline for implementation of, 366*fig*
- C**
- C corporation, 86–87
- California Medical Injury Compensation Reform Act (1974) [MICRA], 218
- California Nurses Association, 334
- Capital budget, 12
- Capital budgeting process: assessing the capital investment, 121–122; evaluation of opportunities, 102–117; financing the capital investment, 117–121*t*; four stages listed, 101; planning, 102–103
- Capital equipment costs, 381–382
- Capital investment analysis: IIR (internal rate of return), 111–113*t*; illustrative case study of, 113–117, 115*t*; internal rate of return, 111–112; net present value, 108–111*t*, 113*t*; overview of, 105–106*fig*; payback period, 106–108, 113*t*; strengths and weaknesses of ROI analytical tools, 113*t*
- Capital investment assessment, 121–122
- Capital investment financing: analyzing the lease vs. purchase decision, 118–119, 119*t*; financing with debt, 119–121*t*; internal financing, 117; leasing, 118
- Capital investments: assessing the, 121–122; defining, 100; financing the, 117–121*t*; three general categories of, 100–101*fig*. *See also* Project business case
- Capitation: breakeven calculation for new patients, 78*fig*; breakeven capitation rate, 74*fig*–76; described, 73, 158; distributing to providers, 167; Dr. Foster's capitation breakeven calculation, 74–75*fig*; fee-for-service equivalents, 167; full professional, 166–167; group practice acceptance of, 74*fig*; MCO contracts regarding, 165–168; payer determination of patients and paid, 168; primary care, 165; specialty care, 166. *See also* Reimbursement methodologies
- Case rates: described, 158; MCO contracts on, 168
- Cash accounting method, 11–12
- Cash application, 53
- Cash budget: described, 12–13; Highgrove Family Practice (2004), 31*t*
- Cash flows: compensation payout schedule and, 307–308; using discounted, 103–105; evaluated for operating lease, 121*t*; evaluated for purchase, 120*t*
- Cause-and-effect (fishbone or Ishikawa) diagram, 518–520*fig*, 519*fig*
- Center for Studying Health System Change, 248, 377
- Centers of excellence, 376
- Certificate of need laws, 185–186, 243, 388
- CFR (Code of Federal Regulations), 274
- Charge capture, 51
- Charge entry process, 51
- Charity care, 19
- Chrysalis Family Practice, 119
- Civil Monetary Penalties Act, 198, 243, 388
- Claims filed electronically, 52
- Claims management, 229–231
- Claims in unbilled status, 52
- Clayton Antitrust Act, 187–188
- Clean claims, 52
- CLIA (Clinical Laboratory Improvement Act), 186
- Clinical denials, 48, 49
- Clinical integration issues, 190–191
- Clinical nurse specialists, 315
- Clinical performance monitoring, 138–139. *See also* PI (performance improvement)
- Clinical trial process: budgeting/estimation of recruitment potential, 421–423; facility requirements for, 418–419; knowledge and organization requirements, 415–416; overview of, 414–415; personnel requirements, 416–418
- Clinical trial subjects: informed consent from, 423–424; methods of recruitment, 424–428; reasons for dropouts by, 429*t*; retention of study, 428–429
- Clinical trials: compensation from clinical revenue vs. phase III, 411*t*; ethical issues of, 429–430; example of adverse event during, 425; how to get started, 419–421; organization of process, 413–414; potential benefits from involvement in, 413; private vs. academic practice as site for, 412; process of, 414–419; recruitment of trial subjects, 423–428
- Clinton, B., 533
- CME (continuing medical education), 57
- Coding accuracy, 51
- Coffman, C., 340

- Collections. *See* Billing and collections
- Comanagement, 450
- Communication: claims management and role of, 229; IT (information technology) improving patient-physician, 482; listening and, 226, 276; used in marketing, 400–402; monitoring telephone, 223; provider-patient, 225–226; using vocabulary and language facilitating, 227
- Community hospitals, 378
- Community relations, 402–403
- Community standards, 152
- Compensation: budgeting physician/nonphysician, 23*t*; declining rates of physician, 253; establishing comparability of physicians, 93*t*; impact of organizational nature/strategy on, 292–293; managing employee benefits and, 285–287; for NPs and PAs, 316; nursing classifications and range of, 339, 341; PFP (pay-for-performance) approach to, 286–287; phase III trial vs. clinical revenue, 411*t*; practice governance and model of physician, 257–258; process for physician, 293–309; Stark (Start I and II laws) on, 91–92; tax perspective on, 90–92; in tax-exempt organizations, 92–96; variance analysis of FTE, 81. *See also* Employees
- Compensation formula: allocation of revenue/costs by individual, 305*t*; cost allocation considerations/by specialty, 303*t*–304*t*; example of, 299*fig*; including quality performance in, 301–302, 303*fig*; overall design for, 300*fig*; performance areas and metrics for, 298*t*; step 1: considering design characteristics, 296; step 2: determining allocation of resources, 296–297; step 3: determining how production will be recognized, 297–298
- Compensation process: compensation redesign committee role in, 294–295, 296*fig*; considering productivity in, 297–298, 301; designing appeals process, 308; designing transition plan, 308; determining objectives/principles, 295; determining payout schedule/cash flow, 307–308; developing conceptual design for, 298–302, 300*fig*; matching compensation to strategy, 296–298; meeting with key representatives, 307; modeling the proposed methodology, 302, 306; rolling out the methodology, 309; steps in the, 293–294*fig*
- Compensation redesign committee, 294–295, 296*fig*
- Compensation (tax-exempt organizations): accounting methods, 94–96; financial accounting issues, 94; taxability in, 92–93
- Competition: between new services/programs and, 380–381; evaluating marketplace, 149; proscriptions on, 191
- Compliance: increasing focus on health care corporate, 195–196; laws and regulations relevant to, 196–203; objectives of, 204–205; OIG identified risk areas for, 208*t*–209*t*; planning for, 139
- Compliance programs: corporate integrity agreements/compliance guidance, 203; development of, 205–207; elements of effective, 204
- Confidentiality: federal laws governing, 186; group practice, 263; HIPAA regarding patient record, 498, 505; importance of keeping patient's, 228; physician contracts regarding, 263
- Constructive receipt, 94
- Consumer-directed health, 358
- Consumerism, 245, 252
- Contento, D., 444
- Contracts: important considerations/issues involved in, 262–263; legal issues of, 181–182; MCOs (managed care organizations), 146*fig*–172
- Contractual allowance, 133
- Control charts, 511*fig*
- Cooper, R. A., 255, 311
- Cornerstone ENT Practice, 113–117, 115*t*
- Corporate veil, 87
- Corporation, 86–87, 178, 179
- Cost allocation: assumptions behind, 60*t*; relative value units as basis for, 63–65; step-down method to calculate, 59–63. *See also* Pittsburgh Family Practice
- Cost-to-collect, 48
- Costs: allocation of, 59–65; definition of, 56–57; health care, 253, 527–529
- Costs of practice: activity based costing to calculate, 67–68; breakeven analysis of, 68*fig*–79*fig*; direct and indirect, 58; elements making up, 57–58; fixed and variable, 66–67; mammography screening data, 69*fig*; productivity management and, 80–83; relative value units as basis for allocation, 63–65; step-down method to calculate allocation of, 59–63; sunk and avoidable, 79. *See also* Physician services
- COTH (Council of Teaching Hospitals), 456, 457*fig*
- CPT (Current Procedural Terminology) codes: analysis process on, 159, 160*fig*; budgeting using list of frequently used, 7; categories of, 385–386; categorized by level of effort, 9*t*; payer evaluation sheet on, 131, 133, 134*t*

Credentiaing: checking references and, 275; of hospitals, 439; JCAHO role in, 313, 389, 502; MCOs (managed care organizations), 164–165; new services/programs, 389–390; of NPCs (nonphysician clinicians), 313–316
 CRO (contract research organization), 413–414, 420, 421, 429
Current Award Trends, 213
Current Procedural Terminology, 386
 Customer service, 53–54

D

Davis's Dictum, 512
 DEA (Drug Enforcement Administration) number, 152
 Death. *See* Mortality
 Debt financing, 119, 121*t*
 Deductible expenses, 95–96
 Defense Industry Initiative, 195
 Demand for services, 127, 129–130
 Denial rates, 48
 Departmental meetings, 354
 Depositions, 232–233
 Depreciation, 95, 103–104
 DHSs (designated health services): other exceptions to financial relationships with, 201–202; Stark law exceptions regarding, 201–202; Stark self-referral prohibitions regarding, 200
 Diamond, F., 313
 Dietrich, C. L., 255, 311
 Direct costs of practice, 58
 Direct mail (newsletter), 401
 Disease management programs, 375–376
The Doctor's Dilemma (Shaw), 530
 Documentation: causes of poor, 225; as loss prevention strategy, 223–225. *See also* Patient records
 Drucker, P., 524, 527, 530
 Dunlop, D., 394

E

Economies of scale, 67
 Edwards, T. L., 25, 124
 EEO (equal employment opportunity) laws, 274
 EEOC (Equal Employment Opportunity Commission), 274, 283
 EIN (employer identification number), 97
 Electronically filed claims, 52
 Employee job satisfaction: factors of, 275–276; strategies to improve, 276–277
 Employee recruitment: advantages/disadvantages of internal vs. external candidates, 272–273*fig*; checking references and credentials, 275; human management process of, 271–273; legal concerns in interviewing, 274
 Employees: costs of delays and errors by, 136; costs of replacing, 269–270; ensuring ongoing training of, 281; evaluating performance of, 277–280; federal antidiscrimination laws applying to, 281–285; human resource recruiting of new, 271–275; independent contractor vs. status of, 96–97; maximum RVUS per month for clinical FTE, 24*t*; measuring monthly variable labor requirements for FTE, 25*t*; offering rewards and recognition to, 287–288; preparing projection of FTE, 23–24; retaining, 275–277; strategies to improve satisfaction factors, 276*fig*; time requirements for typical clinical trial, 416–418; variance analysis of compensation/skill mix of FTE, 81. *See also* Compensation
 Employment law/practices: ADA (Americans with Disabilities Act), 184, 274, 281–282; equal employment opportunity and antiharassment laws, 184;

ERISA (Employee Retirement Income Security Act), 185; FLSA (Fair Labor Standards Act), 183, 284; FMLA (Family and Medical Leave Act), 184, 284; OSHA (Occupational Safety and Health Act), 184
 Entity structure: advantages/disadvantages of taxable/tax-exempt status, 91*fig*; C corporation, 86–87; comparison of tax, 89*t*; legal issues regarding, 178–180; LLC (limited liability company), 88–89, 178, 179–180; nonprofit corporation, 89–90; options/factors to consider when selecting, 86; partnerships, 88, 178, 179; S corporation, 87–88
 Epochal transformation periods, 524
 Equal employment opportunity laws, 184, 284
 Equal Pay Act, 274
 Equity relationships, 447
 Equity ventures, 242
 ERISA (Employee Retirement Income Security Act), 185
 Evaluating marketplace: illustration of, 149*fig*; major payers, 148–149; networks, 150; practice competition, 149
 Exclusion of providers issue, 191
 Expansion capital investments, 100–101*fig*
 Expense budget: creating the, 22–30; described, 12; using MGMA cost survey benchmarks to compare, 25
 Expert reviews, 232
 External management, 242
 External physician practice activities: additional laws and rules applying to, 192–193, 243; antitrust concerns over integration, 190–191; antitrust laws applicable to, 187–188, 243; monopolies and market power issues applicable to, 188; restraint of trade and, 188–190; tax-exempt organization concerns, 191–192

F

- Facilities licensure provisions, 186, 192
- Family-centered health care, 396
- FCA (U.S. False Claims Act), 196–198
- FDA (Food and Drug Administration), 413, 420, 424
- FDA Form 1572, 415–416
- Federal antidiscrimination laws: ADA (Americans with Disabilities Act), 184, 274, 281–282; Age Discrimination in Employment Act (1967), 284; FLSA (Fair Labor Standards Act), 183, 284; FMLA (Family and Medical Leave Act), 184, 285; on gender, racial, national origin, 283–284; religious discrimination, 284; Title VII (Civil Rights Act), 274, 283; Vocational Rehabilitation Act (1973), 281
- Federal income tax returns, 97–98
- Federal regulations: antitrust laws, 187–191; applying antidiscrimination, 281–285; governing employee recruitment, 274–275; governing external operations, 183–185; governing internal operations, 185–187; governing joint ventures, 388; governing reimbursement, 187, 193; governing tax issues, 187, 191–192; relevant to compliance, 196–203; tort reform movement and changing, 216–218
- Fee-for-service: capitation and equivalent, 167; described, 158
- Feedback: patient satisfaction, 220–221, 396; 360-degree, 280. *See also* Patient complaints
- Female workforce, 530–531
- FICA (old age, survivor, and disability insurance), 92
- Financial performance: comparing budget to actual, 135–137; demand for services to measure, 127, 129–130; general accounting function to measure, 133, 135; payer mix used to calculate, 132–133, 134*t*; the revenue cycle used to measure, 131–132
- First assistant fees, 320
- Fishbone (or cause-and-effect) diagram, 518–520*fig*, 519*fig*
- 501(c)(3) organizations, 191–192
- 501(c)(4) organizations, 191–192
- Fixed costs of practice, 66–67
- FLSA (Fair Labor Standards Act), 183, 284
- FMLA (Family and Medical Leave Act), 184, 285
- FMV (fair market value), 191, 192
- Focus groups, 354
- Form 8822, 97
- Form of entity. *See* Entity structure
- Form SS-4, 97
- Foster's capitation breakeven calculation, 74–75*fig*
- Fried, B. J., 268, 273
- FTE (full-time equivalent) employees: independent contractor vs. employee status of, 96–97; maximum RVUS per month for clinical, 24*t*; measuring monthly variable labor requirements for, 25*t*; MGMA recommendations for, 341; preparing projection of, 23–24; variance analysis of compensation/skill mix of, 81. *See also* Employees
- Full professional capitation, 166
- Fund flow analyses, 470

G

- GAAP (generally accepted accounting principles), 11
- Gain sharing, 242, 446–447
- Gans, D. N., 251
- Garvin, F. O., 485
- Gatekeepers, 165

- GDRO (gross days revenue outstanding), 46–47
- Gender discrimination, 274, 283
- General accounting function, 133, 135
- Goodrich, L. L., 268
- Great Society program, 529
- Grima, J. A., 56
- Grima, S. H., 56

H

- Harris, S. M., 444
- HCPCS (Healthcare Common Procedure Coding System), 6
- Health: impact of technological advances on, 529–530; value of human life and, 529–530
- Health care: challenges faced for the U.S., 532–534; comparison of administrative costs in U.S. and Canada, 439*fig*; increased pressure from clinical advances/technology, 396–397; patient-centered and family-centered, 396; recent trends in, 395–397
- Health Care Advisory Board, 277
- Health care costs: aging baby boomer generation patients and, 218–219; impact on overhead by rising, 253; MCOs (managed care organizations) focus on, 529; as percentage of GDP, 527, 528*fig*; worldwide concerns with, 528–529
- Health Care Quality Improvement Act, 192
- Health insurance. *See* Insurance
- Health Resources and Services Administration report (2000), 269
- Healthcare Quality Improvement Act (1986), 234
- healthgrades.com, 138
- HEDIS (Health Plan Employer Data and Information Set) [NCQA], 301
- HHS (U.S. Department of Health and Human Services), 199, 275

- High-risk patients monitoring, 223
- Highgrove Family Practice: actual and projected visits for 2003/2004, 14*t*; budgeting general operating costs (2003/2004), 28*t*; budgeting physician/nonphysician compensation (2004), 23*t*; cash budget (2004), 31*t*; CPT codes converted to work level RVUS/charges per payer type, 20*t*; creating expense budget for, 22–30; creating revenue budget for, 18–22*t*; creating statistics budget for, 14–18*t*; examining budgeting process of, 13; indicators for additional analysis, 17*t*; maximum RVUS per month for clinical employees, 24*t*; operating budget (2004), 29*t*; percentage of patients in work level by specialty, 17*t*; projected gross/net revenue per payer per specialty, 21*t*–22*t*; projected income levels in service area (2004), 15*t*; projected patient visits by month (2004), 16*t*; projected population in service areas (2004), 15*t*; revenue budget for all specialties, 22*t*; RVUS for January, 24*t*; total visits/RVUS by specialty, 18*t*; variable labor requirements for January, 25*t*
- HIPAA (Health Insurance Portability and Accountability Act), 186, 498, 505
- HMOs (health maintenance organizations): interactions between practice management organizations and, 244–246; origins and development of, 245
- Hobson, J., 259
- Hooker, R. S., 313
- Hospital-based clinics, 242, 448
- Hospitals: acute care beds/average length of stay in selected, 438*fig*; community, 378; comparison of U.S. and other countries, 437*fig*–438; credentialing of, 439; decreased inpatient utilization of, 435–436; decreasing discharge rates/lengths of hospital stay, 435*fig*; finances of, 436–438; general facts on, 434–435; joint ventures between practices and, 387–388; specialty, 376–378; teaching, 456–457*fig*; top three revenue generators per FTE physician, 451*fig*. *See also* Academic medical centers (AMCs); Vertical integration
- “How Medical Testing Has Turned Millions of Us into Human Guinea Pigs” (*Time* magazine), 423
- HR 4600, Help Efficient, Accessible, Low Cost, Timely Healthcare (HEALTH) Act of 2002, 216–217
- Human capital, 288
- Human resource management: aligning practice strategy with practices of, 270–271; of compensation and benefits, 285–287; ensuring ongoing training of employees, 281; evaluating employee performance, 277–280; fundamental goals of, 268; new services/programs and increased costs of, 383; recruiting personnel, 271–275; retaining employees, 275–277
- Human resource specialists: applying federal antidiscrimination laws, 281–285; areas of expertise by, 269; checking references and credentials, 275; legal concerns when conducting interview, 274; offering employee rewards and recognition, 287–288
- I**
- IMPACT CARE: action plan created using, 512–514, 513*fig*; described, 504, 505–506; implementing, 506–514; principles of, 505; for prioritizing problems, 511–512
- Incident reports, 221
- Incremental budgeting, 9
- Independent contractor, 96–97
- Indirect costs of practice, 58
- Informed consent: clinical trial subjects and, 423–424; providing comprehensive, 226
- Insurance: current system in U.S., 529; increased out-of-pocket expenditures for patients, 396; new services/programs and increased, 383; NPC payments for malpractice, 320; as part of risk management, 234–235; patient receipts and delays by, 136; physician contract regarding malpractice, 263; professional liability, 178–179, 234–235
- Insurance company: debate over NPC services by, 320; litigation and early notification to, 231–232
- Integration: comanagement, 450; equity relationships form of, 447; 501(a) medical foundation form of, 445; gain sharing, 242, 446–447; hospital support of medical practices, 450; hospital within a hospital, 449; hospital-based clinics form of, 448; independent practice associations (IPAs) form of, 150, 296, 443; legal issues regarding, 190–191; medical directorships form of, 448–449; MSOs (management services organizations) form of, 242, 444–445; of NPCs (nonphysician clinicians), 321–323; payer contracting, 449; PHO (physician hospital organization) form of, 443–444; quality incentive programs, 449; special bond issues and, 447–448; vertical, 241, 440–442

Intelligent agents, 496
 Intensity of service, 82
 Intermediate sanctions law, 191
 Internal physician practice activities: contracts and contractual relationships, 181–182; employment law and, 182–185; form of entity concerns, 178–179; laws applicable to practice entities, 179–180, 243; other legal issues affecting, 185–187; physician licensure/restrictions on corporate practice, 180–181
 IOM (Institute of Medicine) report [1999], 214
 IPAs (independent physician associations), 296, 443
 IPAs (independent practice associations), 150
 IRB (institutional review board), 414
 IRC Section 501(c)(3), 191–192
 IRC Section 4958, 191, 192
 IRR (internal rate of return), 106, 111–113*t*
 Ishikawa (or fishbone) diagram, 518–520*fig*, 519*fig*
 IT (information technology): application to strategic planning, 486*fig*, 487*fig*; choosing a new system, 487–494; common applications with patient focus, 484*fig*; common practice applications and functions, 483*fig*; electronic medical record software, 481; improving communication with patients, 482; physician use of PDAs in practice, 484–485; products available for physician practice, 479–483, 480*t*; strategic considerations for using, 483, 485–487. *See also* Technology
 IT (information technology) system: decision to build, buy, or adapt, 493–494; evaluating information architecture of, 489–490; financing the purchase of, 494; getting expert

help in selecting, 490–492; implementing, 494, 495*t*; integrated solutions vs. component approaches of, 492–493; needs assessment prior to selecting, 488–489; security, privacy, and regulatory requirements of, 495–498

J

Jackson, C., 451
 Jacob, J. A., 244, 263, 445
 JAMA (*Journal of the American Medical Association*), 214
 JCAHO (Joint Commission on Accreditation of Healthcare Organizations), 313, 389, 502
 Johnson, B. A., 174, 195
 Johnson, J., 273
 Johnson, K., 211
 Johnson, L., 529
 Joint ventures: with hospitals, 387–388; with other groups, 388
 Jury Verdict Research, 215

K

Kagarise, M. J., 455
 Kaiser survey of physicians (2001), 252
 Keagy, B. A., 241, 311, 369, 433
 Kickbacks, 198–200
 Kidwell, K., 249
 Knowledge society, 524, 526–527
 Knowledge worker, 526, 530
 Kurzweil, R., 524–525

L

Land use restriction laws, 187
 Laud, P., 255, 311
 Law/laws: analytical framework for medical practices and applied, 175–177*fig*; applicable to external physician practice activities, 187–193, 243; applicable to internal physician practice activities, 177–187, 243; applying federal

antidiscrimination, 281–285; governing joint ventures, 388; important characteristics of, 174–175; regarding job candidate interviews, 274; regarding job candidate references/credentials, 275; regarding security of patient records, 498, 505; relevant to compliance, 196–203; sources by practice issue, 176*t*; tort reform movement and changing, 216–218

LCME (Liaison Committee on Medical Education), 456
 Leasing: advantages over borrowing, 118; analyzing purchase decision vs., 118–119; cash flow evaluation for operating, 121*t*
 Legs for Life program (Society for Interventional Radiology), 373
 Liability issues. *See* Medical malpractice
 Life expectancies, 525, 527, 530
 Listening, 226, 276
 Litigation management: depositions as part of, 232–233; early notification to insurance company, 231–232; expert reviews as part of, 232; settle or defend decision during, 233; summary of steps in, 231; trial preparation during, 233. *See also* Medical malpractice
 LLC (limited liability company), 88–89, 178, 179–180
 Loss prevention strategies: billing adjustments as, 227–228; confidentiality as, 228; disclosure of errors as, 228; documentation as, 223–225; monitoring area of high risk as, 222–223; provider-patient communication as, 225–227
 LPN (licensed practical-vocational nurse), 338
 Luxury primary care, 374–375

M

- McCall, K., 394
- MacDonald, K., 483
- McGeorge, A. M., 85
- Macy, T., 262
- Magnet hospital, 335
- Magnet Recognition Program, 335
- Malik, S., 482
- Malpractice. *See* Medical malpractice
- Mammography screenings:
 - breakeven analysis of, 69*fig*,
 - breakeven graph for, 70*fig*,
 - payer mix and average reimbursement rates for, 73*t*
- Mandelkehr, L., 501
- Market power issues, 188
- Marketing: changing health care environment and, 395–397; communication vehicles used during, 400–402; identifying an audience, 397–398; mapping activities for the year, 405; measuring effectiveness of advertising, 406–407; new services/programs, 390–391; outline of basic plan for, 406; patient education as opportunity for, 404; patient's experience as, 403–404; planning/budgeting for, 404–406; public (media) relations and community relations, 402–403; quick tips for, 395; storytelling technique used in, 398–400
- Markets: analyze your, 358–360; characteristics of three different, 361*t*; evaluation of, 148–150, 149*fig*; power issues of, 188
- Marston, W. A., 410
- MBO (Management by Objectives), 279
- MCO contract preparation: choosing a contracting team, 150; evaluating the marketplace, 148–150; understanding current payer mix, 147–148; understanding goals/objectives of practice, 146–147; understanding practice costs, 147
- MCO contract review: analyzing/modeling effects of the contract, 158–163; avoiding silent PPOs, 163–164; considering administrative issues, 164–168; performing due diligence, 19; understanding contract structure, 150–158; understanding who the payer is, 163
- MCOs (managed care organizations): credentialing and provider directories of, 164–165; health care cost focus of, 529; operational capabilities of, 165; product lines of, 162
- MCOs (managed care organizations) contract components: 1. identification of participants, 151; 2. definition of terms, 151; 3. physician obligations, 151–152; 4. MCO obligations, 152–155; 5. general provisions, 155–156; 6. additional agreements/provisions, 156–157; 7. reimbursement, 157; 8. referenced documents, 157; 9. contract discussion issues, 158
- MCOs (managed care organizations) contracts: conducting final negotiations, 169–170; implementing, 170; management of, 170–171; minimum categories of information found in, 151–158; preparing the, 146*fig*–150; reaching practice participation decision, 169; reviewing, 150–169; steps in, 146*fig*; termination considerations, 171–172
- Media relations, 402–403
- Medicaid: comparative data published by, 138; establishing participation/nonparticipation in, 132–133; FCA (U.S. False Claims Act) and, 196–198; gain sharing prohibition of, 446; impact on hospital finances by, 436; NPC billing guidelines by, 319; population served by, 529; Stark law on referrals to, 201
- Medical consultation agreements, 242
- Medical directorships, 448–449
- Medical errors. *See* Adverse events
- Medical malpractice: climate in various states (2003), 212*t*; defining, 211–213; four elements by preponderance proven in, 235; litigation management in case of, 231–233; median awards for medical negligence (2002), 215*fig*; by omission, 223; patient safety and costs of, 214–215; trends and their causes of, 213–214. *See also* Risk management
- Medical necessity, 151
- Medical Practice Acts, 180–181, 182
- Medical practices: academic as trial site vs. private, 412; adding new service or program to, 369–391; balancing mission/margin in academic, 26–27; compensation from phase III trial vs. clinical revenue, 411*t*; entity structure of, 86–91*fig*, 178–180; hospital support of, 450; laws applicable to internal/external activities of, 177–193; potential benefits from clinical trial involvement, 413; reasons why some physicians sell their, 440. *See also* Physician services; Practice management organizations; Specialty practices
- Medical schools. *See* Academic medical centers (AMCs)

- Medicare: establishing participation/nonparticipation in, 132–133; FCA (U.S. False Claims Act) and, 196–198; gain sharing prohibition of, 446; impact on hospital finances by, 436, 437; NPC billing guidelines by, 319; payment cycle by, 131; payment reimbursement provisions of, 187, 193; on physician's interaction with patient, 319; population served by, 529; RBRVS (resource-based relative value scale) of, 159–160; Stark law on referrals to, 201
- Medline searches, 380
- MedPartners, 244
- Member surveys, 354
- Merritt, Hawkins & Associates, 248, 252
- Metzger, J., 483
- Meyer, A. A., 455
- MGMA (Medical Group Management Association): benchmark data available through, 126; comparable performance data available through, 503–504; compensation data available through, 257; cost survey (2002) conducted by, 22, 25; data on benchmarking metrics by specialty provided by, 133, 135; FTE recommendations for physician practices by, 341; regarding size and governance structure, 247–248; surveys conducted by, 46, 67
- MICRA (California Medical Injury Compensation Reform Act) [1974], 218
- Midlevel providers. *See* NPCs (nonphysician clinicians)
- Minugh, P., 33
- Mission litmus test, 27
- Mission statements: academic medical practice and balancing, 26–27; characteristics of, 355*fig*; setting your, 355–357
- Mission-based budgeting, 469–470
- Mock, E. F., 100
- Monitoring: areas of high risk, 222–223; clinical performance, 138–139; IMPACT CARE used for, 509–510
- Monitoring financial performance: by comparing budget to actual performance, 135–137; demand for services used for, 127, 129–130; general accounting function used for, 133, 135; measurement of patient charges used for, 130–131; payer mix used for, 132–133, 134*t*; on the revenue cycle used for, 131–132
- Monitoring operational performance, 137–138
- Monitoring tools: benchmarking, 126, 127*fig*; practice report card, 125–126, 128*t*, 132; variance and ratio analysis, 126
- Monopolies, 188
- Moody's, 436
- Moore, P., 252
- Mortality: causes of, 527; declining rates (1900–2000) of, 526*t*
- MSOs (management services organizations), 242, 444–445
- Murphy, K. M., 529
- ## N
- National origin discrimination, 283–284
- National Practitioner Data Bank, 193
- NCBPNP/N (National Certification Board of Pediatric Nurse Practitioners and Nurses), 314
- NCC (National Certification Corporation for Obstetric Gynecologic Neonatal Nursing Specialties), 314
- NCLEX (nursing standardized licensing examination), 337
- NCQA (National Committee for Quality Assurance), 301, 313
- NCSBN (National Council of State Boards of Nursing), 337
- NDA (new drug application), 415
- Net cash collection rate, 47
- Network evaluation, 150
- New Capitalist, 530
- New Deal programs, 533
- New patients: breakeven analysis on existing vs., 77; capitation breakeven calculation for, 78*fig*; scheduling and registration of, 50–51
- New service/program economics: billing issues, 386–387; creating a business plan, 381; reimbursement potential, 384; setting a fee, 384–386; specific costs of, 381–384
- New services/programs: ACOs (ambulatory care organizations), 218–219, 379; ancillary services by specialty, 371*fig*–372*fig*; boutique medicine, 374; centers of excellence, 376; clinical need for, 379–381; Credentialing, 389–390; disease management programs, 375–376; economics of, 381–387; expanded office hours, 372–373; joint ventures, 387–388; luxury primary care, 374–375; marketing the, 390–391; opportunities for, 370–379; professional satisfaction element of, 381; screening programs, 373; specialty hospitals, 376–378
- Newborn visits: fully allocated cost for, 65*fig*; proposed HMO fixed rate to cover costs of, 65*fig*
- Newsletter, 401
- Newspaper advertisements, 401
- NIH (National Institutes of Health), 412, 461
- Noncompliant patients, 221–222
- Nonphysician compensation budget, 23*t*
- Nonprofit corporations: compensation in, 92–96; described, 89–90; regulatory considerations for, 445

- Norbut, M., 375
- NPCs (nonphysician clinicians):
 billing/economic issues regarding, 318–320; credentialing, certification, and training of, 313–316; developing trends regarding, 312; duties of supervising physician regarding, 320; general scope of practice by, 316–318; impact on medical service delivery, 255–256; increasing numbers of, 312–313; insurance debate over services of, 320; integration into office of, 321–323; malpractice insurance payments by, 320; new services/programs and, 383–384; PA or NP residency programs for, 324–325; as replacements for residents, 323–324; specialty care by, 323; ten types of, 311. *See also* NPs (nurse practitioners); PAs (physician assistants)
- NPDB (National Practitioner Data Bank), 234, 320
- NPPs (nonphysician practitioners), 531
- NPs (nurse practitioners): attitudes of, 321–322; autonomous practice by, 317–318; new services/programs and, 383–384; office duties of, 322–323; residency programs for, 324–325; salaries of, 316; scope of practice by, 316–317; training programs for, 314–315. *See also* NPCs (nonphysician clinicians)
- NPV (net present value): analysis of, 108–111*t*; defining, 106; strengths and weaknesses of, 113*t*
- Nurse manager, 342
- Nurse Practice Act, 337
- Nurse practitioners, 314–315
- Nurse Reinvestment Act (2002), 334
- Nurses: clinical nurse specialists, 315; nurse practitioners, 314–315; registered nurse (RN), 336–337, 340–341, 384; relationship between physicians and RN, 343–344
- Nursing classifications: licensed practical-vocational nurse (LPN), 338; registered nurse (RN), 336–337; salary ranges of, 339; unlicensed assistive personnel (UAP), 338
- Nursing workforce: ages of registered nurses (1980–1996), 333*fig*; classifications of, 336–339; medical errors and increasing workload of, 333; national supply/demand projections for, 331*fig*; office support team, 339–341; proposed incentives to relieve shortage of, 334–335; shortages of, 269, 331–335; unit-level support team, 342–343
- Nursys Licensure Quick-Confirm system, 337
- O**
- Office hours, 372–373
- Office support team, 339–341
- OIG (Office of Inspector General), 199, 203, 208*t*–209*t*, 275, 319
- Omnibus Budget Reconciliation Act (1989), 6
- One-hour AIDE team meeting, 517*fig*, 521
- Operating budget, 12
- Operational performance monitoring, 137–138
- OSHA (Occupational Safety and Health Act), 184
- Outdoor advertising, 401
- P**
- PANCE (Physician Assistant National Certification Examination), 315
- Partnerships, 88, 178, 179
- PAs (physician assistants): attitudes of, 321–322; hospital duties of, 325; increased number of, 255–256; new services/programs and, 383–384; office duties of, 322–323; residency programs for, 324–325; scope of practice by, 317; training programs for, 315–316. *See also* NPCs (nonphysician clinicians)
- Patient access: as revenue cycle challenge, 43–44; revenue cycle and functions of, 35*fig*–37
- Patient complaints: attorney contacts regarding, 221; benefits of monitoring, 219–220; incident reports regarding, 221; noncompliant patients filing, 221–222; satisfaction surveys for feedback on, 220–221. *See also* Feedback; Patient satisfaction
- Patient education, 404
- Patient receipts issues, 136–137
- Patient records: claims management and quality of, 230–231; HIPAA regarding security of, 498, 505; importance of confidentiality of, 228; software used for, 481. *See also* Documentation
- Patient satisfaction: growing importance of, 396; surveys on, 220–221. *See also* Patient complaints
- Patient visits: average variable cost per, 78–79*fig*; expanded office hours for, 372–373; failure to keep appointments for, 222–223; four factors affecting receipts from, 136–137; fully allocated cost for newborn, 65*fig*; importance of respect/punctuality during, 230; marketing through experience of, 403–404; measuring charges for, 130–131; proposed HMO fixed rate to cover costs of newborn, 65*fig*
- Patient volume: examining MCO ability to deliver, 162–163; impact on patient receipts, 136

- Patient-centered health care, 396
- Patients: aging baby boomer generation, 397; billing inquiry by, 53–54; breakeven analysis on new vs. existing, 77; capitation breakeven calculation for new, 78*fig*; communication between providers and, 225–226; failure to keep appointments by, 222–223; importance of listening to, 226; increased options (late 1990s) available to, 246*fig*; informed consent of, 226, 423–424; as Internet-empowered consumers, 395–396; monitoring medical regimens for high-risk, 223; noncompliant, 221–222; profile of ideal, 397; scheduling and registration of, 50–51; telephone communication with, 223; terminating relationship with, 222
- Payback period analysis, 106–108, 113*t*
- Payer contracting, 449
- Payer evaluation sheet: sample, 134*t*; Stonehill Family Practice, 135*t*
- Payers: categories of, 148*fig*; major, 148–149; MCO contract on calculating capitation for, 168; MCO contract identification of, 163; MCO contract on reimbursement to, 158–159; monitoring mix of, 132–133; reviewing designated MCO contract, 163
- Payment reimbursement provisions, 187
- PDAs (personal digital assistants), 484–485
- Performance. *See* PI (performance improvement)
- PPF (pay-for-performance) approach, 286–287
- PHI (protected health information), 186
- PHO (physician hospital organization), 443–444
- PhRMA (Pharmaceutical Research and Manufacturers of America), 416, 421
- PhyCor, 244
- Phyrr, P., 10
- Physician assistants. *See* PAs (physician assistants)
- Physician compensation: budgeting, 23*t*; declining rates of, 253; establishing comparability of, 93*t*; practice governance and model of, 257–258; process for, 293–309
- Physician extenders. *See* NPCs (nonphysician clinicians)
- Physician gap, 360
- Physician mentoring programs, 263–264
- Physician practice activities. *See* Medical practices
- Physician services: evaluating competition for, 149; mammography screenings, 69*fig*, 70*fig*, 73*t*; variable cost calculation for more diverse mix of, 77–78. *See also* Costs of practice; Medical practices
- Physician-administrator team, 256–257
- Physicians: attitudes about practice of medicine by, 252–253; charity care by, 19; declining incomes of, 253; gatekeeper, 165; importance of listening to patients, 226; increased number of, 254–255, 531*fig*–532*fig*; involvement in practice management by, 250–256; licensure/restrictions on corporate practice by, 180–181; midlevel providers as replacements for resident, 323–324; NPC supervisory duties by, 320; patient receipts and coding/billing by, 136; as performance improvement leader, 502–503; reasons for selling of medical practices by, 440; relationship between RN and, 343–344; telephone communication with patients by, 223; top three hospital revenue generators per, 451*fig*. *See also* Practice management organizations
- Physicians Fee Reference*, 385, 387
- PI (performance improvement): AIDE approach to, 515–521; data used for, 503–505; definition of, 502; IMPACT CARE approach to, 504, 505–514; physician as leader of, 502–503; quality in context of, 501–502. *See also* Clinical performance monitoring
- Pittsburgh Family Practice: allocated costs and total costs, 62*t*; allocation of costs to visits and RVUs, 64*t*–65; assumptions behind allocation bases, 60*t*; calculating percentages to allocate support costs, 61*fig*; direct and indirect costs for, 60*fig*; fully allocated cost for newborn visit, 65*fig*; proposed HMO fixed rate to cover newborn visit costs, 65*fig*. *See also* Cost allocation
- Population demographics, 525–526
- Porn, L., 33, 291
- POS (point of service) plans: described, 51; options available in, 245–246
- Potenziani, D. D., 479
- PPM (physician practice management), 244
- PPOs (preferred provider organizations): avoiding silent, 163–164; described, 148
- Practice brochure, 402
- Practice management organizations: bylaws and boards of corporate, 260–261; experiences with, 243–244; governance of, 258–262; impact on physician compensation by nature/strategy of, 292–293; interactions between HMOs and, 244–246; NPC integration into, 321–323; physician

- compensation model used in, 257–258; physician involvement in, 250–256; physician mentoring program of, 263–264; physician-administrator team in, 256–257; PPM (physician practice management), 244; regulations governing, 243; rising overhead of, 253; size of practice, 247–248*fig*; traditional group practice, 246–247; types of physician contracts used in, 262–263; various types of structures for, 241–242. *See also* Medical practices; Physicians
- Practice managers: using budget as monitoring/managing mechanism, 3–4; compliance planning by, 139; core activities of catalyst role of, 340–341; education, duties, salaries of, 249–250; evaluation of investment opportunities by, 102–117; monitoring clinical performance role of, 138–139; monitoring financial performance role of, 127–137; monitoring operational performance role of, 137–138; monitoring tools used by, 125–127*fig*; responsibilities of, 124–125
- Practice report card: indicators measured on, 132; overview of, 125–126; of Richardson Obstetric Group, 128*t*, 129–130
- “Preface on Doctors” (Shaw), 530
- Primary care capitation, 165
- Process performance indicators: billing and collections, 52–53; billing inquiry or customer service, 53–54; cash application, 53; charge capture, coding, and charge entry, 51; described, 49–50; scheduling and registration processes, 50–51
- Productivity management: benchmarking used in, 80; defining, 80; variance analysis used in, 80–83
- Professional liability insurance, 178–179, 234–235
- Project business case: capital investment analysis, 105–117; components of, 102–103*fig*; using discounted cash flows, 103–105. *See also* Capital investments
- Provider exclusivity issue, 190–191
- Providers: communication between patients and, 225–226; MCO contract on distributing capitation to, 167
- Public (media) relations, 402–403
- Purchased diagnostic test rule, 388
- PVOA (present value of ordinary annuity), 108, 110
- ## Q
- QA (quality assurance), 501
- QC (quality control), 502
- QI (quality improvement), 501, 502
- Quality incentive programs, 242, 449
- Quality pool, 301–302
- ## R
- Racial discrimination, 283–284
- Radio promotion, 401
- Ratio analysis, 126
- RBRVS (resource-based relative value scale): calculating payment using, 41*fig*; fee schedule components of, 6; illustration of, 8*t*; Medicare, 159–160; negotiating MCO contract allowable charges using, 159–162; objectives/functions of, 6–7. *See also* Reimbursement methodologies
- Registration processes, 50–51
- Reimbursement: federal laws governing, 187, 193; increasing practice costs and decreasing, 253; potential of new service/program, 384
- Reimbursement methodologies: analyzing/modeling effects of MCO contract, 158–163; common types listed, 40–41; dis-counted fee-for-service, 43; physician capitation, 42; prospective fee schedules, 42. *See also* Capitation; RBRVS (resource-based relative value scale)
- Reinke, T., 259
- Religious discrimination, 284
- Replacement capital investments, 100–101*fig*
- Residents (NPC replacement of), 323–324
- Restraint of trade, 188–190
- Revenue budget: described, 12; shortcut for constructing, 20
- Revenue cycle: billing and collections during, 39*fig*–40; common challenges during, 43–45; described, 33*fig*, 131–132; measuring success during, 46–49; patient access functions during, 35*fig*–37; process performance indicators during, 49–54; reimbursement methodologies used during, 40–43; service capture during, 37–38
- Revenue cycle challenges: billing and collections, 44–45; patient access, 43–44; service capture, 44
- Revenue cycle initiatives: net revenue improvement focus of, 33; two objectives of, 33
- Rewards/recognition, 287–288
- Reynolds, M., 446
- RFP, 491–492
- Richardson Obstetric Group report card, 127–128*t*, 129–130
- Ridky, J., 251
- Risk management: claims management as part of, 229–231; climate for tort reform and, 216–218; defining, 216; evaluation of patient complaints, 219–222; insurance coverage as part of, 234–235; litigation

- management as part of, 231–233; loss prevention strategies used in, 222–228; NPDB functions and role in, 234; risk identification in ambulatory care organizations, 218–219. *See also* Medical malpractice
- RN (registered nurse), 336–337, 340–341, 343–344, 384
- Rolodex cards, 402
- Roosevelt, F. D., 533
- RVUs (relative value units): allocating costs using, 63–65; used to calculate physician's compensation, 258; charging percentage of Medicare, 132; intensity of service measured by, 6; patient visits converted to, 17
- ## S
- S corporation, 87–88
- Safe harbors regulations, 199–200
- Salaries. *See* Compensation
- Satellite office, 382–383
- Scheduling processes, 50–51
- Schryver, D., 261
- Seasonal variation, 82–83
- Section 179 expenses, 95
- Section 501(a) medical foundation, 445
- Section 501(c)(3) [IRC], 191–192
- Self-referrals, 200–203
- September 11, 2001, 95
- Service capture process, 44
- Sexual harassment, 283
- Shaw, G. B., 530
- Sheldon, G. F., 524
- Sherman Antitrust Act, 187–189, 243, 388
- Signage (practice), 402
- Silent PPOs (preferred provider organizations), 163–164
- Society for Interventional Radiology, 373
- Solucient, 138
- Special bond issues, 242, 447–448
- Specialty care capitation, 166
- Specialty hospitals, 376–378
- Specialty practices: ancillary services by, 371*fig*–372*fig*; capitation used in, 166; care provided by NPCs, 323; cost allocation considerations for compensation in, 303*t*–304*t*; marketing for family vs., 398; MGMA data on benchmarking metrics by, 133, 135; percentage of patients in work level by, 17*t*; projected gross/net revenue per payer per, 21*t*–22*t*; revenue budget for, 22*t*; total visits/RVUS by, 18*t*. *See also* Medical practices
- Staff. *See* Employees
- Standard & Poor's, 436
- Stark (Start I and II laws): compensation-sharing arrangements and, 91–92; described, 243; joint ventures under, 388; MSOs (management services organization) and, 445; self-referral prohibitions in, 200–203; three broad elements of, 200–201
- State income tax returns, 98
- State regulations: antitrust laws, 187–191; on employer-employee relationship, 185; governing tax issues, 187, 191–192; Nurse Practice Act, 337; origins of practice prohibitions in, 181; on physician licensure/corporate practices, 180–181; relevant to compliance, 196–203; tort reform movement and changing, 217–218
- “Statement of Antitrust Enforcement Policies in Health Care,” 385
- Statistics budget: creating the, 14–18*t*; described, 12
- Step-down costing, 59–63
- Stewart, E. E., 262
- Stonehill Family Practice payer evaluation sheet, 133, 134*t*
- Strategic business plans. *See* Business plans
- Strategic capital investments, 100–101*fig*
- Strategic planning: emerging approach to, 487*fig*; process of, 486*fig*
- Strategic thinking, 486
- Subchapter C corporation, 86–87
- Subchapter K of IRS Code, 88
- Sunk costs, 79
- Surgical practice indicators, 139
- SWOT (strengths, weaknesses, opportunities, and threats), 357, 358
- ## T
- Tallia, A. F., 441
- Tax-exempt organization issues, 191–192
- Taxation issues: compensation arrangements in context of, 90–96; deductible expenses, 95–96; federal and state regulations on, 187, 191–192; independent contractor vs. employee status for workers, 96–97; selecting an entity structure, 86–90, 89*t*, 91*fig*; tax compliance, 97–99; tax filings and registration for start-up, 97
- Teaching hospitals, 456–457*fig*. *See also* Academic medical centers (AMCs)
- Technology: advances made in medical, 396–397; application to strategic planning, 486*fig*, 487*fig*; epochal transformation periods and advancements in, 524; impact on health by, 529–530. *See also* IT (information technology)
- Telephone communication, 223
- Television promotion, 401
- Terminating patient relationship, 222
- Thomas, M. S., 3, 100, 268
- 360-degree evaluation, 280
- Title IV of Public Law 99-660 (Healthcare Quality Improvement Act of 1986), 234

Title VII (Civil Rights Act), 274, 283
 Topel, R., 529
 Tort reform movement, 216–218
 TPA (third-party administrator), 163
 TQM (Total Quality Management), 501, 502
 Training courses, 383
 Truman, H., 533

U

UAP (unlicensed assistive personnel), 338
 UNC (University of North Carolina) Department of Family Medicine, 26–27
 Uniform Guidelines on Employee Selection Procedures, 274
 Unit-level support team, 342–343
 United States: comparing numbers of physicians in developed countries and, 532*fig*; comparison of administrative costs in Canada and, 439*fig*; comparison of hospitals in other countries and, 437*fig*–438; current health

systems in the, 532–533; current insurance system in, 539; health care challenges in the, 532–534; increased number of physicians in, 254–255, 531*fig*
 University of North Carolina Hospitals, 216
 U.S. Department of Health and Human Services, 199, 275
 U.S. Health Security Act of 1993 (failed bill), 529, 533
 Use rate sensitivity, 76*t*
 USSR life expectancy, 530

V

Variable costs of practice, 66–67
 Variance analysis: described, 80–81; intensity vs. other, 82; monitoring financial performance using, 126; over or under budget, 81; rate and skill mix vs. FTEs, 81; seasonal variation vs. unexpected change, 82–83; volume vs. other causes, 82
 Variation control charts, 510
 Vertical integration: defining, 241, 440; financial impact of,

440–441; future of, 442; loss of physician control in, 441–442. *See also* Hospitals
 Vision statements, 355*fig*–357
 Vocational Rehabilitation Act (1973), 281
 Volume adjustment of budget, 82

W

Web site marketing, 401
 Web surveys, 354
 Weighted average cost of capital, 105*t*
 Workforce population, 530–531
 Wray, B., 145

Y

Yellow Page advertising, 401–402, 407
 “Your Medicine: Play It Safe” (AHRQ), 223

Z

Zero-based budgeting, 10–11
 Zinober, J. W., 250, 258
 Zoning laws, 187