

THE INCOME STATEMENT AND STATEMENT OF CHANGES IN EQUITY

Learning Objectives

After studying this chapter, readers will be able to

- Explain why financial statements are so important both to managers and to outside parties.
- Describe the standard-setting process under which financial accounting information is created and reported, as well as the underlying principles applied.
- Describe the components of the income statement—revenues, expenses, and profitability—and the relationships within and among these components.
- Explain the differences between operating income and net income, and between net income and cash flow.
- Describe the format and use of the statement of changes in equity.

Introduction

Financial accounting involves identifying, measuring, recording, and communicating in dollar terms the economic events and status of an organization. This information is summarized and presented in a set of *financial statements*, or just *financials*. Because these statements communicate important information about an organization, financial accounting is often called “the language of business.” Managers of health services organizations must understand the basics of financial accounting because financial statements are the best way to summarize a business’s financial status and performance.

Financial accounting
The field of accounting that focuses on the measurement and communication of the economic events and status of an entire organization.

Historical Foundations of Financial Accounting

It is all too easy to think of financial statements merely as pieces of paper with numbers written on them, rather than in terms of the economic events and *physical assets*—such as land, buildings, and equipment—that underlie the

numbers. If readers of financial statements understand how and why financial accounting began and how financial statements are used, they can better visualize what is happening within a business and why financial accounting information is so important.

Many thousands of years ago, individuals and families were self-contained in the sense that they gathered their own food, made their own clothes, and built their own shelters. When specialization began, some individuals or families became good at hunting, others at making spearheads, others at making clothing, and so on. With specialization came trade, initially by bartering one type of goods for another. At first, each producer worked alone, and trade was strictly local. Over time, some people set up production shops that employed workers, simple forms of money were used, and trade expanded beyond the local area. As these simple economies expanded, more formal forms of money developed and a primitive form of banking began, with wealthy merchants lending profits from past dealings to enterprising shop owners and traders who needed money to expand their operations.

When the first loans were made, lenders could physically inspect borrowers' assets and judge the likelihood of repayment. Eventually, though, lending became much more complex. Industrial borrowers were developing large factories, merchants were acquiring fleets of ships and wagons, and loans were being made to finance business activities at distant locations. At that point, lenders could no longer easily inspect the assets that backed their loans, and they needed a practical way of summarizing the value of those assets. Also, certain loans were made on the basis of a share of the profits of the business, so a uniform, widely accepted method for expressing income was required. In addition, owners required reports to see how effectively their own enterprises were being operated, and governments needed information to assess taxes. For all these reasons, a need arose for financial statements, for accountants to prepare the statements, and for auditors to verify the accuracy of the accountants' work.

The economic systems of industrialized countries have grown enormously since the early days of trade, and financial accounting has become much more complex. However, the original reasons for accounting statements still apply: Bankers and other investors need accounting information to make intelligent investment decisions; managers need it to operate their organizations efficiently; and taxing authorities need it to assess taxes in an equitable manner.

It should be no surprise that problems can arise when translating physical assets and economic events into accounting numbers. Nevertheless, that is what accountants must do when they construct financial statements. To illustrate the translation problem, the numbers shown on the balance sheet to reflect a business's assets and liabilities generally reflect historical costs and prices. However, inventories may be spoiled, obsolete, or even missing; land,

buildings, and equipment may have current values that are much higher or lower than their historical costs; and money owed to the business may be uncollectible. Also, some liabilities, such as obligations to make lease payments, may not even show up in the numbers. Similarly, costs reported on an income statement may be understated or overstated, and some costs, such as depreciation (the loss of value of buildings and equipment), do not even represent current cash expenses. When examining a set of financial statements, it is best to keep in mind the physical reality that underlies the numbers and to recognize that many problems occur in the translation process.

1. What are the historical foundations of financial accounting statements?
2. Do any problems arise when translating physical assets and economic events into monetary units? Give one or two illustrations to support your answer.

SELF-TEST QUESTIONS

The Users of Financial Accounting Information

The predominant users of financial accounting information are those parties that have a *financial interest* in the organization and hence are concerned with its economic status. All organizations, whether not-for-profit or investor owned, have **stakeholders** that have an interest in the business. In a not-for-profit organization, such as a community hospital, the stakeholders include managers, staff physicians, employees, suppliers, creditors, patients, and even the community at large. Investor-owned hospitals have essentially the same set of stakeholders, plus owners. Because all stakeholders, by definition, have an interest in the organization, all stakeholders have an interest in its financial condition.

Stakeholder
A party that has an interest, often financial, in a business. Stakeholders can be affected by the business's actions, objectives, or policies.

Of all the outside stakeholders, *investors*, who supply the *capital* (funds) needed by businesses, typically have the greatest financial interest in health services organizations. Investors fall into two categories: (1) owners who supply equity capital to investor-owned businesses and (2) *creditors* (or *lenders*) who supply debt capital to both investor-owned and not-for-profit businesses. (In a sense, communities supply equity capital to not-for-profit organizations, so they, too, are investors.) In general, there is only one category of owners. However, creditors constitute a diverse group of investors that includes banks, suppliers granting trade credit, and bondholders. Because of their direct financial interest in healthcare businesses, investors are the primary outside users of financial accounting information. They use the information to make judgments about whether to make a particular investment as well as to set

the return required on the investment. (Investor-supplied capital is covered in greater detail in chapters 11, 12, and 13.)

Although the field of financial accounting developed primarily to meet the information needs of outside parties, the managers of an organization, including its board of directors (trustees), also are important users of the information. After all, managers are charged with ensuring that the organization has the financial capability to accomplish its mission, whether that mission is to maximize the wealth of its owners or to provide healthcare services to the community at large. Thus, an organization's managers not only are involved with creating financial statements but also are important users of the statements, both to assess the current financial condition of the organization and to formulate plans to ensure that the future financial condition of the organization will support its goals.

In summary, investors and managers are the predominant users of financial accounting information as a result of their direct financial interest in the organization. Furthermore, investors are not merely passive users of financial accounting information; they do more than just read and interpret the statements. Often, they create financial targets based on the numbers reported in financial statements that managers must attain or suffer some undesirable consequence. For example, many debt agreements require borrowers to maintain stated financial standards, such as a minimum earnings level, to keep the debt in force. If the standards are not met, the lender can demand that the business immediately repay the full amount of the loan. If the business fails to do so, it may be forced into bankruptcy.

SELF-TEST QUESTIONS

1. What is a stakeholder?
2. Who are the primary users of financial accounting information?
3. Are investors passive users of this information?

Securities and Exchange Commission (SEC)
The federal government agency that regulates the sale of securities and the operations of securities exchanges. Also has overall responsibility for the format and content of financial statements.

Regulation and Standards in Financial Accounting

As a consequence of the Great Depression of the 1930s, which caused many businesses to fail and almost brought down the entire securities industry, the federal government began regulating the form and disclosure of information related to publicly traded securities. The regulation is based on the theory that financial information constructed and presented according to standardized rules allows investors to make the best-informed decisions. The newly formed (at that time) **Securities and Exchange Commission (SEC)**, an independent regulatory agency of the US government, was given the authority to establish and enforce the form and content of financial statements. Nonconforming companies are prohibited from selling securities to the public, so many businesses comply to gain better access to capital. Not-for-profit corporations that

do not sell securities still must file financial statements with state authorities that conform to SEC standards. Finally, most for-profit businesses that do not sell securities to the public are willing to follow the SEC-established guidelines to ensure uniformity of presentation of financial data. The end result is that all businesses, except for the smallest, create SEC-conforming financial statements.

Rather than directly manage the process, the SEC designates other organizations to create and implement the standards system. For the most part, the SEC has delegated the responsibility for establishing reporting standards to the **Financial Accounting Standards Board (FASB)**—a private organization whose mission is to establish and improve standards of financial accounting and reporting for private businesses. (The *Government Accounting Standards Board [GASB]* has the identical responsibility for businesses that are partially or totally funded by a government entity.) Typically, the guidance issued by FASB, which is promulgated by numbered *statements*, applies across a wide range of industries and, by design, is somewhat general in nature. More specific implementation guidance, especially when industry-unique circumstances must be addressed, is provided by *industry committees* established by the **American Institute of Certified Public Accountants (AICPA)**—the professional association of public (financial) accountants. For example, financial statements in the health services industry are based on the AICPA Audit and Accounting Guide titled *Health Care Entities*, which was published most recently on September 1, 2014.

Because of the large number of statements and pronouncements that have been issued by FASB and other standard-setting organizations, FASB combined all of the previously issued standards into a single set called the *FASB Accounting Standards Codification*, which became effective on September 15, 2009. The purpose of the codification is to simplify access to accounting standards by placing them in a single source and creating a system that allows users to more easily research and reference accounting standards data.

When even more specific guidance is required than provided by the standards, other professional organizations may participate in the process, although such work does not have the same degree of influence as codification has. For example, the Healthcare Financial Management Association has established the *Principles and Practices Board*, which develops position statements and analyses on issues that require further guidance—for example, its statement regarding the valuation and financial statement presentation of charity care and bad debt losses, which was issued in 2006 and revised in 2012.

When taken together, all the guidance contained in the codification and the amplifying information constitute a set of guidelines called **generally accepted accounting principles (GAAP)**. GAAP can be thought of as a set of objectives, conventions, and principles that have evolved through the years to guide the preparation and presentation of financial statements. In essence, GAAP sets the rules for the financial statement preparation game.

Financial Accounting Standards Board (FASB)
A private organization whose mission is to establish and improve the standards of financial accounting and reporting for private businesses.

American Institute of Certified Public Accountants (AICPA)
The professional association of public (financial) accountants.

Generally accepted accounting principles (GAAP)
The set of guidelines that has evolved to foster the consistent preparation and presentation of financial statements.

Note, however, that GAAP applies only to the area of financial accounting (financial statements), as distinct from other areas of accounting, such as managerial accounting (discussed in later chapters) and tax accounting.

It should be no surprise that the field of financial accounting is typically classified as a social science rather than a physical science. Financial accounting is as much an art as a science, and the end result represents negotiation, compromise, and interpretation. The organizations involved in setting standards are continuously reviewing and revising GAAP to ensure the best possible development and presentation of financial data. This task, which is essential to economic prosperity, is motivated by the fact that the US economy is constantly evolving, with new types of business arrangements and securities being created almost daily.

For large organizations, the final link in the financial statement quality assurance process is the *external audit*, which is performed by an independent (outside) *auditor*—usually one of the major accounting firms. The results of

the external audit are reported in the *auditor's opinion*, which is a letter attached to the financial statements stating whether or not the statements are a fair presentation of the business's operations, cash flows, and financial position as specified by GAAP.

There are several categories of opinions given by auditors. The most favorable, which is essentially a “clean bill of health,” is called an *unqualified opinion*. Such an opinion means that, in the auditor's opinion, the financial statements conform to GAAP, are presented fairly and consistently, and contain all necessary disclosures. A *qualified opinion* means that the auditor has some reservations about the statements, while an *adverse opinion* means that the auditor believes that the statements do not present a fair picture of the financial status of the business. The entire audit process, which is performed by the organization's internal auditors and the external auditor, is a means of verifying and validating the organization's financial statements. Of course, an unqualified opinion gives users, especially those external to the organization, more confidence that the statements truly represent the business's current financial condition.

Although one would think that the guidance given under GAAP, along with

For Your Consideration

International Financial Reporting Standards

As the globalization of business continues, it becomes more and more important for financial accounting standards to be uniform across countries. At this time, FASB and the International Accounting Standards Board (IASB) are working jointly on *convergence*, a process to develop a common set of standards that would be accepted worldwide. These standards, called *International Financial Reporting Standards (IFRS)*, ultimately will be applicable to for-profit businesses in more than 150 countries, including the United States. Currently, over 100 countries have adopted IFRS standards, but not the United States.

Needless to say, a large number of details must be worked out, and differences between current US and international standards must be resolved. Thus, it is expected that total convergence will not occur for a number of years. Also, the impact of international standards on not-for-profit organizations is uncertain at this time.

What do you think? Should financial accounting standards be applicable to for-profit businesses worldwide as opposed to country by country? What is the rationale behind your opinion? Should not-for-profit organizations be subject to international standards? Support your position.

auditing rules, would be sufficient to prevent fraudulent financial statements, in the early 2000s several large companies, including HealthSouth, which operates the nation's largest network of rehabilitation services, were found to be "cooking the books." Because the US financial system is so dependent on the reliability of financial statements, in 2002 Congress passed the *Sarbanes-Oxley Act*, generally known as SOX, as a measure to improve transparency in financial accounting and to prevent fraud. (According to the SEC, *transparency* means the timely, meaningful, and reliable disclosure of a business's financial information.) Here are just a few of the more important provisions of SOX:

- An independent body, the Public Accounting Oversight Board, was created to oversee the entire audit process.
- Auditors can no longer provide non-auditing (consulting) services to the companies that they audit.
- The lead partners of the audit team for any company must rotate off the team every five years (or more often).
- Senior managers involved in the audits of their companies cannot have been employed by the auditing firm during the one-year period preceding the audit.
- Each member of the audit committee shall be a member of the company's board of directors and shall otherwise be independent of the audit function.
- The chief executive officer (CEO) and chief financial officer (CFO) shall personally certify that the business's financial statements are complete and accurate. Penalties for certifying reports that are known to be false range up to a \$5 million fine, 20 years in prison, or both. In addition, if the financial statements must be restated because they are false, certain bonuses and equity-based compensation that certifying executives earned must be returned to the company.

It is hoped that these provisions, along with others in SOX, will deter future fraudulent behavior by managers and auditors. So far, so good.

1. Why are widely accepted principles important for the measurement and recording of economic events?
2. What entities are involved in regulating the development and presentation of financial statements?
3. What does GAAP stand for, and what is its primary purpose?
4. What is the purpose of the auditor's opinion?
5. What is the purpose of SOX, and what are some of its provisions?

SELF-TEST QUESTIONS

Conceptual Framework of Financial Reporting

Because the actual preparation of financial statements is done by accountants, a detailed presentation of accounting theory is not required in this book. However, to better understand the content of financial statements, it is useful to discuss some aspects of the conceptual framework that accountants apply when they develop financial accounting data and prepare an organization's financial statements. By understanding this framework, readers will be better prepared to understand and interpret the financial statements of healthcare organizations.

The goal of financial accounting is to provide information about organizations that is useful to present and future investors and other users in making rational financial and investment decisions. To achieve this objective, GAAP specifies recognition and measurement concepts that include four assumptions, four principles, and two constraints.

Assumptions

Accounting Entity

Accounting entity
The entity (business) for which a set of accounting statements applies.

The first assumption is the ability to define the **accounting entity**, which is important for two reasons. First, for investor-owned businesses, financial accounting data must be pertinent to the business activity as opposed to the personal affairs of the owners. Second, within any business, the accounting entity defines the specific areas of the business to be included in the statements. For example, a healthcare system may create one set of financial statements for the system as a whole and separate sets of statements for its subsidiary hospitals. In effect, the accounting entity specification establishes boundaries that tell readers what business (or businesses) is being reported on.

Going Concern

It is assumed that the accounting entity will operate as a *going concern* and hence will have an indefinite life. This means that assets, in general, should be valued on the basis of their contribution to an ongoing business as opposed to their current fair market value. For example, the land, buildings, and equipment of a hospital may have a value of \$50 million when used to provide patient services, but if they are sold to an outside party for other purposes, the value of these assets might only be \$20 million. Furthermore, short-term events should not be allowed to unduly influence the data presented in financial statements. The going concern assumption, coupled with the fact that financial statements must be prepared for relatively short periods (as explained next), means that financial accounting data are not exact but represent logical and systematic approaches applied to complex measurement problems.

Periodicity

Because accounting entities are assumed to have an indefinite life but users of financial statements require timely information, it is common to report financial results on a relatively short periodic basis. The period covered, called an **accounting period**, can be any length of time over which an organization's managers, or outside parties, want to evaluate operational and financial results. Most health services organizations use calendar periods—months, quarters, and years—as their accounting periods. However, occasionally an organization will use a **fiscal year** (financial year) that does not coincide with the calendar year. For example, the federal government has a fiscal year that runs from October 1 to September 30, and the State of Florida has a fiscal year that runs from July 1 to June 30. Although annual accounting periods are typically used for illustrations in this book, financial statements commonly are prepared for periods shorter than one year. For example, many organizations prepare semiannual and quarterly financial statements in addition to annual statements.

Accounting period
The period (amount of time) covered by a set of financial statements—often a year, but sometimes a quarter or another time period.

Monetary Unit

The *monetary unit* provides the common basis by which economic events are measured. In the United States, this unit is the dollar, unadjusted for inflation or deflation. Thus, all transactions and events must be expressed in dollar terms.

Fiscal year
The year covered by an organization's financial statements. It usually, but not necessarily, coincides with a calendar year.

Principles

Historical Costs

The **historical cost** principle requires organizations to report the values of most assets based on acquisition costs rather than fair market value, which implies that the dollar has constant purchasing power over time. In other words, land that cost \$1 million 20 years ago might be worth \$2 million today, but it is still reported at its initial cost of \$1 million. The accounting profession has grappled with the inflation impact problem for years but has not yet developed a feasible solution. The historical cost principle ensures reliable information, which removes subjectivity, but it does not provide the most current information. We should note, however, that some items (primarily security holdings) are reported at fair market value.

Historical cost
In accounting, the purchase price of an asset.

Revenue Recognition

The **revenue recognition principle** requires that revenues be recognized in the period in which they are realizable and earned. Generally, this is the period in which the service is rendered, because at that point the price is known (realizable) and the service has been provided (earned). However, in some instances, difficulties in revenue recognition arise, primarily when there are uncertainties surrounding the revenue amount or the completion of the service.

Revenue recognition principle
The concept that revenues must be recognized in the accounting period in which they are realizable and earned.

Expense Matching

The *expense-matching principle* requires that an organization's expenses be matched, to the extent possible, with the revenues to which they are related. In essence, after the revenues have been allocated to a particular accounting period, all expenses associated with producing those revenues should be matched to the same period. Although the concept is straightforward, implementation of the matching principle creates many problems. For example, consider long-lived assets such as buildings and equipment. Because such assets—for example, an MRI machine—provide revenues for several years, the expense-matching principle dictates that its acquisition cost should be spread over the same number of years. However, there are many alternative ways to do this, and no single method is clearly best.

Full Disclosure

Financial statements must contain a complete picture of the economic events of the business. Anything less would be misleading by omission. Furthermore, because financial statements must be relevant to a diversity of users, the *full-disclosure principle* pushes preparers to include even more information in financial statements. However, the complexity of the information presented can be mitigated to some extent by placing some information in the notes or supplementary information sections as opposed to the body of the financial statements.

Constraints

Materiality

If the financial statements contained all possible information, they would be so long and detailed that making inferences about the organization would be difficult without a great deal of analysis. Thus, to keep the statements manageable, only entries that are important to the operational and financial status of the organization need to be separately identified. For example, medical equipment manufacturers carry large inventories of materials that are both substantial in dollar value relative to other assets and instrumental to their core business, so such businesses report inventories as a separate asset item on the balance sheet. Hospitals, on the other hand, carry a relatively small amount of inventories. Thus, many hospitals and other healthcare providers do not report inventories separately but combine them with other assets. In general, the *materiality constraint* affects the presentation of the financial statements rather than their aggregate financial content (i.e., the final numbers).

Cost-Benefit

There are costs associated with financial statement information for both the preparers of the statements and the users. Preparers must collect, record, verify,

and report financial information, while users must analyze and interpret the information. As a result, financial statements cannot report all possible information that every potential user might find relevant. When deciding what information should be reported, and how that information should be reported, standards setters and accountants must determine whether the benefits of the information outweigh the associated costs.

1. Why is it important to understand the basic accounting concepts that underlie the preparation of financial statements?
2. What is the goal of financial accounting?
3. Briefly explain the following assumptions, principles, and constraints as they apply to the preparation of financial statements:
 - Accounting entity
 - Going concern
 - Accounting period
 - Monetary unit
 - Historical cost
 - Revenue recognition
 - Expense matching
 - Full disclosure
 - Materiality
 - Cost–benefit

SELF-TEST QUESTIONS

Accounting Methods: Cash Versus Accrual

In the implementation of the conceptual framework discussed in the previous section, two different methods have been applied: cash accounting and accrual accounting. Although, as we discuss below, each method has its own set of advantages and disadvantages, GAAP specifies that only the accrual method can receive an unqualified auditor's opinion, so accrual accounting dominates the preparation of financial statements. Still, many small businesses that do not require audited financial statements use the cash method, and knowledge of the cash method helps our understanding of the accrual method, so we discuss both methods here.

Cash Accounting

Under **cash accounting**, often called *cash basis accounting*, economic events are recognized—put into the financial statements—when the cash transaction

Cash accounting
The recording of economic events when a cash exchange takes place.

occurs. For example, suppose Sunnyvale Clinic, a large multispecialty group practice, provided services to a patient in December 2015. At that time, the clinic billed Florida Blue (Blue Cross and Blue Shield of Florida) \$700, the full amount that the insurer was obligated to pay. However, Sunnyvale did not receive payment from the insurer until February 2016. If it used cash accounting, the \$700 obligation on the part of Florida Blue would not appear in Sunnyvale's 2015 financial statements. Rather, the revenue would be recognized when the cash was actually received in February 2016.

The core argument in favor of cash accounting is that the most important event to record on the financial statements is the receipt of cash, not the provision of the service (i.e., the obligation to pay). Similarly, Sunnyvale's costs of providing services would be recognized as the cash is physically paid out: Inventory costs would be recognized as supplies are purchased, labor costs would be recognized when employees are paid, new equipment purchases would be recognized when the invoices are paid, and so on. To put it simply, cash accounting records the actual flow of money into and out of a business.

There are two advantages to cash accounting. First, it is simple and easy to understand. No complex accounting rules are required for the preparation of financial statements. Second, cash accounting is closely aligned to accounting for tax purposes, and hence it is easy to translate cash accounting statements into income tax filing data. Because of these advantages, about 80 percent of all medical practices, typically the smaller ones, use cash accounting. However, cash accounting has its disadvantages, primarily the fact that in its pure form it does not present information on revenues owed to a business by payers or the business's existing payment obligations.

Before closing our discussion of cash accounting, we should note that most businesses that use cash accounting do not use the "pure" method described here but use a hybrid method called *modified cash basis accounting*. The modified statements combine some features of cash accounting, usually to report revenues and expenses, with some features of accrual accounting, usually to report assets and liabilities. Still, the cash method presents an incomplete picture of the financial status of a business and hence the preference by GAAP for accrual accounting.

Accrual accounting

The recording of economic events in the periods in which the events occur, even if the associated cash receipts or payments happen in a different period.

Accrual Accounting

Under **accrual accounting**, often called *accrual basis accounting*, the economic event that creates the financial transaction, rather than the transaction itself, provides the basis for the accounting entry. When applied to revenues, the accrual concept implies that revenue earned does not necessarily correspond to the receipt of cash. Why? Earned revenue is recognized in financial statements when a service has been provided that creates a payment obligation on the part of the payer, rather than when the payment is actually received.

For healthcare providers, the payment obligation typically falls on the patient, a third-party payer, or both. If the obligation is satisfied immediately, such as when a patient makes full payment at the time the service is rendered, the revenue is in the form of cash. In such cases, the revenue is recorded at the time of service whether cash or accrual accounting is used.

However, in most cases, the bulk of the payment for services comes from third-party payers and is not received until later, perhaps several months after the service is provided. In this situation, the revenue created by the service does not create an immediate cash payment. If the payment is received within an accounting period—one year, for our purposes—the conversion of revenues to cash will be completed, and as far as the financial statements are concerned, the reported revenue is cash. However, when the revenue is recorded (i.e., services are provided) in one accounting period and payment does not occur until the next period, the revenue reported has not been collected.

Consider the Sunnyvale Clinic example presented in our discussion of cash accounting. Although the services were provided in December 2015, the clinic did not receive its \$700 payment until February 2016. Because Sunnyvale's accounting year ended on December 31 and the clinic actually uses accrual accounting, the clinic's books were closed after the revenue had been recorded but before the cash was received. Thus, Sunnyvale reported this \$700 of revenue on its 2015 financial statements, even though no cash was collected. When accrual accounting is used, the amount of revenues not collected is listed as a receivable (the amount due to Sunnyvale) in the financial statements, so users will know that not all reported revenues represent cash receipts.

The accrual accounting concept also applies to expenses. To illustrate, assume that Sunnyvale had payroll obligations of \$20,000 for employees' work during the last week of 2015 that would not be paid until the first payday in 2016. Because the employees actually performed the work, the obligation to pay the salaries was created in 2015. An expense will be recorded in 2015 even though no cash payment will be made until 2016. Under cash basis accounting, Sunnyvale would not recognize the labor expense until it was paid, in this case in 2016. But under accrual accounting, the \$20,000 will be shown as an expense on the financial statements in 2015 and, at the same time, the statements will indicate that a \$20,000 liability (or obligation to pay employees) exists.

1. Briefly explain the differences between cash and accrual accounting, and give an example of each.
2. What is modified cash basis accounting?
3. Why does GAAP favor accrual over cash accounting?

SELF-TEST QUESTIONS

Recording and Compiling Financial Accounting Data

The ultimate goal of a business's financial accounting system is to produce financial statements. However, the road from the recording of basic accounting data to the completion of the financial statements is long and arduous, especially for large, complex organizations. The starting point for the identification and recording of financial accounting information is a *transaction*, which is defined as an exchange of goods or services from one individual or enterprise to another. To ensure that the transaction is faithfully represented and verifiable—two qualitative characteristics of useful financial information under the conceptual framework—each transaction must be supported by relevant documentation, which is retained for some required length of time.

Once a transaction is identified, it must be recorded, or *posted*, to an *account*, which is a record of transactions for one uniquely identified activity. For example, under the general heading of cash, separate accounts might be established for till cash, payroll checks, vendor checks, other checks, and the like. A large business can easily have hundreds, or even thousands, of separate *primary accounts*, which are combined to form the **general ledger**, plus *subsidiary accounts* that support the primary accounts. The subsidiary accounts, which pertain to specific assets or liabilities or to individual patients or vendors, are aggregated to create data for a primary (general ledger) account. For example, individual patient charges, which are carried in subsidiary accounts, are aggregated into one or more general ledger revenue accounts.

To help manage the large number of accounts, businesses have a document called a **chart of accounts**, which assigns a unique numeric code to each account. For example, the till cash account might have the code 1-1000-00, while the account for checks written might have the code 1-1100-00. The first 1 indicates that the account is an asset account; the second 1 indicates a cash account; and the next digit, 0 or 1, indicates the specific cash account. Further numbers are available should the organization decide to subdivide either the till cash or the checks-written accounts into subsidiary accounts. For example, the next digit of the checks-written account might indicate the purpose of the check: 1 for payroll, 2 for vendor payments, and so on. Because everyone who deals with the accounts is familiar with the business's chart of accounts, transactions can be easily sorted by account code to ensure that they are posted to the correct account.

Within the system of primary and subsidiary accounts, accounts are further classified as follows:

- *Permanent accounts* include items that must be carried from one accounting period to another. Thus, permanent accounts remain active until the items in the account are no longer “on the books” of the business. For example, an account might be created, or *opened*, to

General ledger
The master listing of an organization's primary accounts, which record the transactions that ultimately are used to create a business's financial statements.

Chart of accounts
A document that assigns a unique numerical identifier to every account of an organization.

contain all transactions related to a five-year bank loan. The account would remain open to record transactions relating to the loan—say, annual interest payments—until the loan was paid off in five years, at which time the account would be closed.

- *Temporary accounts* are for those items that will automatically be closed at the end of each accounting period. For example, a business's revenue and expense accounts typically are closed at the end of the accounting period, and then new accounts are opened, with a zero balance, at the beginning of the next period.
- *Contra accounts* are special accounts that convert the gross value of some other account into a net value. As you will see in the next chapter, there is a contra account associated with depreciation expense, which accounts for the loss of value of buildings and equipment due to "wear and tear."

Each transaction is recorded in an account by a *journal entry*. The system used in making journal entries is called the **double entry system** because each transaction must be entered in at least two different accounts—once as a *debit* and once as a *credit*. Such a system ensures consistency among the financial statements. Because accounts have both debit and credit entries, they traditionally have been set up in a "T" format and hence are called *T accounts*, with debits entered on the left side of the vertical line and credits entered on the right side. To illustrate the double entry system, assume that Sunnyvale Clinic receives \$100 in cash from a self-pay patient at the time of the visit. A debit entry would be made in the cash account indicating a \$100 receipt, while a credit entry would be made in the equity account indicating that the business's value has increased by the amount of the cash revenue. Note that whether an entry is a debit or a credit depends both on the nature of the entry (revenue or expense) and the type of account, so these entries may be counterintuitive to someone not familiar with the double entry system.

Ultimately, the journal entries are verified, consolidated, and reconciled in a trial balance, and the trial balance is formatted into the business's financial statements. Often, the primary means for disseminating this information to outsiders is the business's **annual report**. It typically begins with a descriptive section that discusses, in general terms, the organization's operating results over the past year as well as developments that are expected to affect future operations. The descriptive section is followed by the business's financial statements.

Because the actual financial statements cannot possibly contain all relevant information, additional information is provided in the *notes* section. For health services organizations, these notes contain information on such topics as inventory accounting practices, the composition of long-term debt, pension plan status, the amount of charity care provided, and the cost of malpractice insurance.

Double entry system

The system used to make accounting journal entries. Called double entry because each transaction has to be entered in at least two different accounts.

Annual report

A report issued annually by an organization to its stakeholders that contains descriptive information and historical financial statements.

In addition to the body of the financial statements and the notes section, GAAP requires organizations to provide certain *supplementary information*. Other supplementary information may be voluntarily provided by the reporting organization. For example, a healthcare system may report the revenues of its primary subsidiaries as supplementary data even though the statements focus on the aggregate revenues of the entire system. Because the notes and supplementary information sections contain a great deal of information essential to a good understanding of the financial statements, a thorough examination always considers the information contained in these two sections.

SELF-TEST QUESTIONS

1. Briefly explain the following terms used in the recording and compiling of accounting data:
 - Transaction
 - Account
 - Posting
 - Chart of accounts
 - General ledger
 - T account
 - Double entry system
2. Why are the notes and supplementary information sections important parts of the financial statements?

Income Statement Basics

In this section, we begin our coverage of the four primary financial statements by discussing the income statement. Then, in a later section, we discuss the statement of changes in equity. In Chapter 4, the remaining two statements—the balance sheet and the statement of cash flows—are discussed. Unfortunately, the names of the statements are not consistent across types of organizations. We will introduce the alternative names of each statement as it is discussed.

The purpose of our financial accounting discussion is to provide readers with a *basic understanding* of the preparation, content, and interpretation of a business's financial statements. Unfortunately, the financial statements of large organizations can be long and complex, and there is significant leeway regarding the format used, even within health services organizations. Thus, in our discussion of the statements, we use *simplified illustrations* that focus on key issues. In a sense, the financial statements presented here are summaries of actual financial statements, but this is the best way to learn the basics; the nuances must be left to other books that focus exclusively on accounting issues.

Perhaps the most frequently asked, and the most important, question about a business is this: Is it making money? The **income statement** summarizes the operations (activities) of an organization with a focus on its revenues, expenses, and profitability. Thus, the income statement is also called the *statement of operations*, *statement of activities*, or *statement of revenues and expenses*.

The income statements of Sunnyvale Clinic are presented in Exhibit 3.1. Most financial statements contain two or three years of data, with the most recent year presented first. The *title section* tells us that these are annual income statements, ending on December 31, for the years 2015 and 2014. Whereas the balance sheet, which is covered in Chapter 4, reports a business's financial position at a single point in time, the income statement contains operational results *over a specified period of time*. Because these income statements are part of Sunnyvale's annual report, the time (accounting) period is one year. Also, the dollar amounts reported are listed in *thousands of dollars*, so the \$148,118 listed as net patient service revenue for 2015 is actually \$148,118,000.

The core components of the income statement are straightforward: revenues, expenses, and profitability (net operating income and net income). *Revenues*, as discussed previously in the section on cash versus accrual accounting, represent both the cash received and the unpaid obligations of payers for

Income statement
A financial statement, prepared in accordance with generally accepted accounting principles (GAAP), that summarizes a business's revenues, expenses, and profitability.

	2015	2014
Operating Revenues:		
Patient service revenue	\$ 150,118	\$123,565
Less: Provision for bad debts	2,000	1,800
Net patient service revenue	\$ 148,118	\$ 121,765
Premium revenue	18,782	16,455
Other revenue	3,079	2,704
Net operating revenues	\$ 169,979	\$140,924
Expenses:		
Salaries and benefits	\$ 126,223	\$102,334
Supplies	20,568	18,673
Insurance	4,518	3,710
Lease	3,189	2,603
Depreciation	6,405	5,798
Interest	5,329	3,476
Total expenses	\$ 166,232	\$136,594
Operating income	\$ 3,747	\$ 4,330
Nonoperating income:		
Contributions	\$ 243	\$ 198
Investment income	3,870	3,678
Total nonoperating income	\$ 4,113	\$ 3,876
Net income	\$ 7,860	\$ 8,206

EXHIBIT 3.1
Sunnyvale
Clinic:
Statements of
Operations,
Years Ended
December 31,
2015 and 2014
(in thousands)

services provided during each year presented. For healthcare providers, the revenues result mostly from the provision of patient services. However, in addition to revenues from patient and patient-related services, some revenues, designated *contributions* and *investment income* in Exhibit 3.1, stem from donations and securities investments, respectively, and hence have nothing to do with patient services.

To produce revenues, organizations must incur *expenses*, which are classified as *operating* or *capital (financial)*. Although not separately broken out on the income statement, *operating expenses* consist of salaries, supplies, insurance, and other costs directly related to providing services. *Capital costs* are the costs associated with the buildings and equipment used by the organization, such as depreciation, lease, and interest expenses. Expenses decrease the profitability of a business, so expenses are subtracted from revenues to determine an organization's profitability. Sunnyvale's income statement reports two different measures of profitability: operating income and net income.

The income statement, then, summarizes the ability of an organization to generate profits. Basically, it lists the organization's revenues (and income), the expenses that must be incurred to produce the revenues, and the differences between the two. In the following sections, the major components of the income statement are discussed in detail.

SELF-TEST QUESTIONS

1. What is the primary purpose of the income statement?
2. In regard to time, how do the income statement and balance sheet differ?
3. What are the major components of the income statement?

Revenues

Revenues can be shown on the income statement in several different formats. In fact, there is more latitude in the construction of the income statement than there is in that of the balance sheet, so the income statements for different types of healthcare providers tend to differ more in presentation than do their balance sheets. (See problems 3.2 and 3.3, as well as Exhibit 17.1, for examples of income statements from other types of providers.)

Sunnyvale's operating revenues section (see Exhibit 3.1) focuses on revenues that stem from the provision of patient services; in other words, they derive from operations. As we discuss in a later section, Sunnyvale also has revenues from contributions and securities investments (nonoperating income), but because such income is not related to core business activities, it is reported separately on the income statement.

The first line of the operating revenues section reports **patient service revenue** of \$150,118,000 for 2015. The key term here is *patient service*. This line contains revenues that stem solely from patient services, as opposed to revenues that stem from related sources, such as parking fees or food services, which are reported on a separate line in the operating revenues section. Also, as discussed later, patient service revenue that stems from capitated patients may be reported separately. If this is the case, the \$150,118,000 reported by Sunnyvale as patient service revenue includes only revenue from fee-for-service patients.

Patient service revenue
Revenue that stems solely from the provision of patient services. In some situations, may only reflect revenue from fee-for-service patients.

Sunnyvale, like all healthcare providers, has a charge description master file, or chargemaster, that contains the charge code and *gross price* for each item and service that it provides. However, the chargemaster price rarely represents the amount the clinic expects to be paid for a particular service. For example, the price for a particular service might be \$800, while the contract with a particular payer might specify a 40 percent *discount* from charges, which would result in a reimbursement of only \$480. In addition to negotiated discounts, governmental payers such as Medicare and Medicaid reimburse providers a set amount that often is well below the chargemaster (gross) price.

Because recorded revenue must reflect only amounts that are realizable (collectible), differences between chargemaster prices and actual reimbursement amounts are incorporated before the revenue is recorded on the patient service revenue line. Thus, the patient service revenue shown on the income statement is reported after *contractual allowances* have been considered and hence represents the actual reimbursement amount expected.

To add to the complexity of revenue reporting, some services have been provided as *charity care* to indigent patients. (*Indigent patients* are those who presumably are willing to pay for services provided but do not have the ability to do so.) Sunnyvale has no expectation of ever collecting for these services, so, like contractual allowances, charges for charity care services are not reflected in the \$150,118,000 patient service revenue reported for 2015.

Finally, some payments for patient services that are owed, and hence reported as patient service revenue, will never be collected and ultimately will become *bad debt losses*. To recognize that Sunnyvale does not really expect to collect the entire \$150,118,000 patient service revenue reported, the second entry in the operating revenues section for 2015 lists a \$2,000,000 provision for bad debts. When this amount is subtracted, the result is a *net patient service revenue* of \$148,118,000 for 2015. Note the distinction between charity care and bad debt losses. Charity care represents services that are provided to patients who **do not have** the capacity to pay. Typically, such patients are identified before the service is rendered. Bad debt losses result from the failure to collect revenues from patients or third-party payers who **do have** the capacity to pay.

Industry Practice

Revenue Reporting in the “Good Old Days”

About 20 years ago, hospital revenues were reported differently from today. Back then, the revenues section would begin with gross patient services revenue based on chargemaster prices. In other words, every service provided would be recorded at its chargemaster price and those prices would be aggregated to calculate reported revenues.

Then, the total amount of discounts and allowances would be listed, followed by the total amount of charity care provided, and these values would be subtracted from gross patient service revenue to obtain net patient service revenue. In this format, discounts and allowances and charity care were prominently displayed at the top of the income statement. Today, however, if these amounts are listed at all, they typically are listed in the notes to the financial statements as opposed to the income statement itself.

Also, the treatment of bad debt losses has recently changed. Whereas the provision for bad debts had been listed on the income statement as an expense, it is now listed as a deduction to patient service revenue.

What do you think? Is the “old” way or the current system best? Why do you think GAAP was changed to report only the net amount expected to be collected, as opposed to the gross amount billed? Also, why was the provision for bad debt losses moved from an expense item to the revenues section?

Premium revenue
Patient service revenue that stems from capitated patients as opposed to fee-for-service patients.

the clinic did not actually receive \$148,118,000 in cash payments from fee-for-service patients and insurers in 2015. Rather, some of the revenue has not yet been collected. As readers will learn in Chapter 4, the yet-to-be-collected portion of the net patient service revenue—\$28,509,000—appears on the balance sheet (see Exhibit 4.1) as net patient accounts receivable.

If a provider has a significant amount of revenue stemming from capitation contracts, it is often reported separately in the operating revenues section as **premium revenue**. Sunnyvale reported premium revenue of \$18,782,000 for 2015. The key difference is that patient service revenue is reported when

A description of policies regarding discounts and charity care often appears in the notes to the financial statements. Sunnyvale’s financial statements include the following two notes:

Revenues. Sunnyvale has entered into agreements with third-party payers, including governmental programs, under which it is paid for services on the basis of established charges, the cost of providing services, predetermined rates, or discounts from established charges. Revenues are recorded at estimated amounts due from patients and third-party payers for the services provided. Settlements under reimbursement agreements with third-party payers are estimated and recorded in the period the related services are rendered and are adjusted in future periods, as final settlements are determined. The adjustments to estimated settlements for prior years are not considered material and thus are not shown in the financial statements or footnotes.

Charity care. Sunnyvale has a policy of providing charity care to indigent patients in emergency situations. These services, which are not reported as revenues, amounted to \$67,541 in 2015 and \$51,344 in 2014.

Even though Sunnyvale ultimately expects to collect all of its reported net patient service revenue not yet received,

services are provided, but premium revenue is reported at the start of each contract payment period—typically the beginning of each month. Thus, premium revenue implies an obligation on the part of the reporting organization to provide future services, while patient service revenue represents an obligation on the part of payers to pay the reporting organization for services already provided. Also, different types of providers may use different terminology for revenues; for example, some nursing homes report *resident service revenue*.

Most health services organizations have revenue related to, but not arising directly from, patient services, and Sunnyvale is no exception. In 2015, Sunnyvale reported *other revenue* of \$3,079,000. Examples of other revenue include parking fees; nonpatient food service charges; office and concession rentals; and sales of pharmaceuticals to employees, staff, and visitors.

When all the revenue associated with patient services is totaled, the amount reported as *net operating revenues* for 2015 is \$169,979,000. This amount represents the net amount of revenue that stems from a provider's core operations—the provision of patient services. Income that results from noncore activities—primarily contributions and securities investments—will be reported at the bottom of the income statement.

1. What categories of revenue are reported on the income statement?
2. Briefly, what is the difference between gross patient service revenue and net patient service revenue?
3. Describe how the following types of revenue are reported on the income statement:
 - Contractual discounts and allowances
 - Charity care
 - Bad debt losses
4. Is income from securities investments included in the revenue section? If not, why not?

SELF-TEST QUESTIONS

Expenses

Expenses are the costs of doing business. As shown in Exhibit 3.1, Sunnyvale reports its expenses in categories such as salaries and benefits, supplies, insurance, and so on. According to GAAP, expenses may be reported using either a *natural classification*, which classifies expenses by the nature of the expense, as Sunnyvale does, or a *functional classification*, which classifies expenses by purpose, such as inpatient services, outpatient services, and administrative.

Expenses
The costs of doing business. Or, the dollar amount of resources used in providing services.

The number and nature of expense items reported on the income statement can vary widely depending on the nature and complexity of the organization. For example, some businesses, typically smaller ones, may report only two categories of expenses: health services and administrative. Others may report a whole host of categories. Sunnyvale takes a middle-of-the-road approach to the number of expense categories. Most users of financial statements would prefer more, as well as a mixing of classifications, rather than less because more insights can be gleaned if an organization reports revenues and expenses both by service breakdown (e.g., inpatient versus outpatient) and by type (e.g., salaries versus supplies). To assist readers, some organizations present additional detail on expenses in the notes to the financial statements.

Sunnyvale is typical of most healthcare providers in that the dominant portion of its cost structure is related to labor. The clinic reported *salaries and benefits* of \$126,223,000 for 2015, which amounts to 75 percent of Sunnyvale's total expenses. The detail of how these expenses are broken down by department or contract, or the relationship of these expenses to the volume or type of services provided, is not part of the financial accounting information system. However, such information, which is very important to managers, is available in Sunnyvale's managerial accounting system. Chapters 5 through 8 focus on managerial accounting matters.

The expense item titled *supplies* represents the cost of supplies (primarily medical) used in providing patient services. Sunnyvale does not order and pay for supplies when a particular patient service requires them. Rather, the clinic's manager estimates the usage of individual supply items, orders them beforehand, and then maintains a supplies inventory. As readers will see in Chapter 4, the amount of supplies on hand is reported on the balance sheet. The income statement expense reported by Sunnyvale represents the cost—\$20,568,000—of the supplies **actually consumed** in providing patient services for 2015. Thus, the expense reported for supplies does **not** reflect the actual cash spent by Sunnyvale on supplies purchased during the year. In theory, Sunnyvale could have several years' worth of supplies in its inventories at the beginning of 2015, could have used some of these supplies without replenishing the stocks, and hence might not have actually spent one dime on supplies during 2015.

Sunnyvale uses commercial insurance to protect against many risks, including property risks, such as fire and damaging weather, and liability risks, such as managerial malfeasance and professional (medical) liability. The cost of this protection is reported on the income statement as *insurance* expense, which for 2015 amounted to \$4,518,000.

Sunnyvale owns all of its land and buildings but leases (rents) much of its diagnostic equipment. The total amount of lease payments—\$3,189,000 for 2015—is reported as *lease expense* on the income statement. There are

many reasons that health services organizations lease rather than purchase equipment, including protection against technological obsolescence. Chapter 18, which is available online, contains more information on leases and how they are analyzed.

The next expense category, **depreciation**, requires closer examination. Businesses require *property and equipment (fixed assets)* to provide goods and services. Although some of these assets are leased, Sunnyvale owns most of the fixed assets necessary to support its mission. When fixed assets are initially purchased, Sunnyvale does not report their cost as an expense on the income statement. The reason is found in the expense-matching principle, which dictates that such costs be matched to the accounting periods during which the asset produces revenues. A more pragmatic reason for not reporting the costs of fixed assets when they are acquired is that reported earnings would fluctuate widely from year to year on the basis of the amount of fixed assets acquired.

To match the cost of fixed assets to the revenues produced by such long-lived assets, accountants use the concept of depreciation expense, which spreads the cost of a fixed asset over many years. Note that most people use the terms *cost* and *expense* interchangeably. To accountants, however, the terms can have different meanings. Depreciation expense is a good example. Here, the term *cost* is applied to the actual cash outlay for a fixed asset, while the term *expense* is used to describe the allocation of that cost over time.

The calculation of depreciation expense is somewhat arbitrary, so the amount of depreciation expense applied to a fixed asset in any year generally is not closely related to the actual usage of the asset or its loss in fair market value. To illustrate, Sunnyvale owns a piece of diagnostic equipment that it uses infrequently. In 2014 it was used 23 times, while in 2015 it was used only nine times. Still, the depreciation expense associated with this equipment was the same—\$7,725—in both years. Also, the clinic owns another piece of equipment that could be sold today for about the same price that Sunnyvale paid for it four years ago, yet each year the clinic reports a depreciation expense for that equipment, which implies loss of value.

Depreciation expense, like all other financial statement entries, is calculated in accordance with GAAP. The calculation typically uses the *straight-line method*—that is, the depreciation expense is obtained by dividing the historical cost of the asset, less its estimated salvage value, by the number of years of its estimated useful life. (*Salvage value* is the amount, if any, expected to be received when final disposition occurs at the end of an asset's useful life.) The result is the asset's annual depreciation expense, which is the charge reflected in each year's income statement over the estimated life of the asset and, as readers will discover in Chapter 4, accumulated over time on the organization's balance sheet. (The term *straight line* stems from the fact that the depreciation expense is constant in each year, and hence the implied value of the asset

Depreciation
A noncash charge against earnings on the income statement that reflects the “wear and tear” on a business's fixed assets (property and equipment).

declines evenly—like a straight line—over time.) In 2015, Sunnyvale reported a depreciation expense of \$6,405,000, which represents the total amount of depreciation taken on all of the clinic's fixed assets during the year.

In addition to depreciation calculated for financial statement purposes, which is called *book depreciation*, for-profit businesses must calculate depreciation for tax purposes. *Tax depreciation* is calculated in accordance with IRS regulations, as opposed to GAAP. Also, note that land is not depreciated for either financial reporting or tax purposes.

In closing our discussion of depreciation expense, note that depreciation is a *noncash expense*, meaning there is no actual payment associated with the expense. The cash payment was made some time, possibly many years, before the expense appears on the income statement. The impact of noncash expenses on a business's cash flows will be covered in a later section.

Key Equation: Straight-Line Depreciation Calculation

Suppose Sunnyvale Clinic purchases an X-ray machine for \$150,000. Its useful life, according to accounting guidelines, is ten years, and the machine's expected value at that time is \$25,000. The annual depreciation expense, calculated as follows, is \$12,500:

$$\begin{aligned}\text{Annual depreciation expense} &= (\text{Initial cost} - \text{Salvage value}) \div \text{Useful life} \\ &= (\$150,000 - \$25,000) \div 10 \text{ years} \\ &= \$125,000 \div 10 \\ &= \$12,500.\end{aligned}$$

The final expense line reports *interest expense*. Sunnyvale owes or paid its lenders \$5,329,000 in interest expense for debt capital supplied during 2015. Not all of the interest expense reported has been paid because Sunnyvale typically pays interest monthly or semiannually, and hence interest has accrued on some loans that will not be paid until 2016. The amount of interest expense reported by an organization is influenced primarily by its *capital structure*, which reflects the amount of debt that it uses. Also, interest expense is affected by the borrower's creditworthiness, its mix of long-term versus short-term debt, and the general level of interest rates. (These factors are discussed in detail at different points in later chapters.)

In closing our discussion of expenses, note that many income statements contain a catchall category labeled "other." Listed here are general and administrative expenses that individually are too small to list separately, including items such as marketing expenses and external auditor fees. Although organizations cannot possibly report every expense item separately, it is frustrating for users of financial statement information to come across a large, unexplained

expense item. Thus, income statements that include the “other” category often add a note that provides additional detail regarding these expenses.

1. What is an expense?
2. Briefly, what are some of the commonly reported expense categories?
3. What is the logic behind depreciation expense?

SELF-TEST QUESTIONS

Operating Income

Although the reporting of revenues and expenses is clearly important, the most important information on the income statement is profitability. As shown in Exhibit 3.1, two different profit measures can be reported on the income statement. (Not all healthcare organizations report both measures. Some report only the final measure—net income.)

The first profitability measure reported by Sunnyvale Clinic is **operating income**, calculated in Exhibit 3.1 as net operating revenues minus total expenses. The precise calculation is tied to the format of the income statement, but the general idea of operating income is to focus on revenues and expenses that are related to operations (the provision of patient services).

Because net operating revenues in Exhibit 3.1 are all related to patient services, operating income measures the profitability of core operations (patient services and related endeavors). Many healthcare providers, especially large ones, have significant revenues that stem from non-patient-service-related activities, so it is useful to report the inherent profitability of the core business separately from the overall profitability of the enterprise.

Sunnyvale reported \$3,747,000 of operating income in 2015, which means that the provision of healthcare services and directly related activities generated a profit of that amount. Operating income is an important measure of a healthcare business’s profitability because it focuses on the core activities of the business. Some healthcare businesses report a positive net income (net income is discussed below) but a negative

Operating income
The earnings of a business directly related to core activities. For a healthcare provider, earnings related to patient services.

For Your Consideration

Will the Real Operating Income Please Stand Up?

Who would think it would be hard to measure operating income? After all, the basic definition is straightforward: operating revenues minus operating expenses. Still, different analysts can look at the same set of revenue and expense data and calculate different values for operating income.

The problem in calculating operating income lies primarily in the definition of what constitutes a provider’s operations (core activities). Here, there are at least three approaches: Operations include (1) only patient care activities; (2) patient care and directly related activities, such as cafeteria and parking garage operations; and (3) patient

(continued)

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care, directly related activities, and government appropriations. Each definition results in a different value for operating income. In general, as the definition of core operations expands, the value calculated for operating income increases.

What do you think? Consider the hospital industry. What activities should be considered part of core operations? Should hospitals be required by GAAP to report multiple measures of operating income, each using a different definition of core activities?

operating income (an operating loss). This situation is worrisome, because a business is on shaky financial ground if its core operations are losing money, especially if they do so year after year.

Note that the operating income reported on the income statement is defined by GAAP and represents an estimate of the long-run operating profitability of the business. It has some shortcomings—for one, it does not represent cash flow—that are similar to the shortcomings related to net income discussed in a later section. Still,

measuring the core profitability of a business is critical to understanding its financial status.

SELF-TEST QUESTIONS

1. What is operating income?
2. Why is operating income such an important measure of profitability?

Nonoperating Income

Nonoperating Income

The earnings of a business that are unrelated to core activities. For a healthcare provider, the most common sources are contributions and investment income.

The next section of the income statement lists **nonoperating income**. As mentioned earlier, reporting the income of operating and nonoperating activities separately is useful. The nonoperating income section of Sunnyvale's income statement shown in Exhibit 3.1 reports the income generated from activities unrelated to the provision of healthcare services.

The first category of nonoperating income listed is *contributions*. Many not-for-profit organizations, especially those with large, well-endowed foundations, rely heavily on charitable contributions as an income source. Those charitable contributions that can be used immediately (spent now) are reported as nonoperating income. However, contributions that create a permanent endowment fund, and hence are not available for immediate use, are not reported on the income statement.

The second category of nonoperating income is *investment income*, another type of income on which not-for-profit organizations rely heavily. It stems from two primary sources:

1. Healthcare businesses usually have funds available that exceed the minimum necessary to meet current cash expenses. Because cash earns

no interest, these “excess” funds usually are invested in short-term, interest-earning securities, such as Treasury bills or money market mutual funds. Sometimes these invested funds can be quite large—say, when a business is building up cash to make a tax payment or to start a large construction project. Also, prudent businesses keep a reserve of funds on hand to meet unexpected emergencies. The interest earned on such funds is listed as investment income.

2. Not-for-profit businesses may have a large amount of endowment fund contributions. When these contributions are received, they are not reported as income because the funds are not available to be spent. However, the income from securities purchased with endowment funds is available to the healthcare organization, and hence this income is reported as nonoperating (investment) income.

In total, Sunnyvale reported \$4,113,000 of nonoperating income for 2015, consisting of \$243,000 in spendable contributions and \$3,870,000 earned on the investment of excess cash and endowments. Nonoperating income is not central to the core business, which is providing healthcare services. Overreliance on nonoperating income could mask operational inefficiencies that, if not corrected, could lead to future financial problems. Note that the costs associated with creating nonoperating income are not separately reported. Thus, the expenses associated with soliciting contributions or investing excess cash and endowments must be deducted before the income is reported on the income statement.

Finally, note that the income statements of some providers do not contain a separate section titled *nonoperating income*. Rather, nonoperating income is included in the revenue section that heads the income statement. In this situation, total revenues include both operating and nonoperating revenues.

1. What is nonoperating income?
2. Why is nonoperating income reported separately from revenues? Is this always the case?

SELF-TEST QUESTIONS

Net Income

The second profitability measure reported by Sunnyvale Clinic is **net income**, which in Exhibit 3.1 is equal to Operating income + Total nonoperating income. Sunnyvale reported net income of \$7,860,000 for 2015: \$3,747,000 + \$4,113,000 = \$7,860,000. (Not-for-profit organizations use the term *excess*

Net income
The total earnings of a business, including both operating and nonoperating income.

of revenues over expenses, but we call this measure *net income* because that is the more universally recognized term. Also, one could argue that there are three profitability measures on Sunnyvale's income statement: operating income, nonoperating income, and net income. We wouldn't object to that position, but accountants generally view nonoperating income as an entry on the statement rather than a calculated profitability measure.)

Because of its location on the income statement and its importance, net income is referred to as the *bottom line*. In spite of the fact that Sunnyvale is a not-for-profit organization, **it still must make a profit**. If the business is to offer new services in the future, it must earn a profit today to produce the funds needed for new assets. Furthermore, because of inflation, Sunnyvale could not even replace its existing assets as they wear out or become obsolete without the funds generated by positive profitability. Thus, turning a profit is essential for all businesses, including not-for-profits.

What happens to a business's net income? For the most part, it is reinvested in the business. Not-for-profit corporations **must** reinvest all earnings in the business. An investor-owned corporation, on the other hand, may return a portion or all of its net income to owners in the form of dividend payments. The amount of profits reinvested in an investor-owned business, therefore, is net income minus the amount paid out as dividends. (Some for-profit businesses distribute profits to owners in the form of bonuses, which often occurs in medical practices. However, when this is done, the distribution becomes an expense item that reduces net income rather than a distribution of net income. The end result is the same—monies are distributed to owners—but the reporting mechanism is much different.)

Note that both operating income and net income measure profitability **as defined by GAAP**. In establishing GAAP, accountants have created guidelines that attempt to measure the *economic income* of a business, which is a difficult task because economic gains and losses often are not tied to easily identifiable events.

Furthermore, some of the income statement items are estimates (e.g., provision for bad debt losses) and others (e.g., depreciation expense) do not represent actual cash costs. Because of accrual accounting and other factors, the fact that Sunnyvale reported net income of \$7,860,000 for 2015 does not mean that the business actually experienced a net cash inflow of that amount. This point is discussed in greater detail in the next section.

SELF-TEST QUESTIONS

1. Why is net income called "the bottom line"?
2. What is the difference between net income and operating income?
3. What happens to net income?

Net Income Versus Cash Flow

As stated previously, the income statement reports total profitability (net income), which is determined in accordance with GAAP. Although net income is an important measure of profitability, an organization's financial condition, at least in the short run, depends more on the actual cash that flows into and out of the business than it does on reported net income. Thus, occasionally a business will go bankrupt even though its net income has historically been positive. More commonly, many businesses that have reported negative net incomes (i.e., net losses) have survived with little or no financial damage. How can these things happen?

The problem is that the income statement is like a mixture of apples and oranges. Consider Exhibit 3.1. Sunnyvale reported net operating revenues of \$169,979,000 for 2015. Yet, this is not the amount of cash that was actually collected during the year, because some of these revenues will not be collected until 2016. Furthermore, some revenues reported for 2014 were actually collected in 2015, but these do not appear on the 2015 income statement. Thus, because of accrual accounting, reported revenue is not the same as cash revenue. The same logic applies to expenses; few of the values reported as expenses on the income statement are the same as the actual cash outflows. To make matters even worse, not one cent of depreciation expense was paid out as cash. Depreciation expense is an accounting reflection of the cost of fixed assets, but Sunnyvale did not actually pay out \$6,405,000 in cash to someone called the "collector of depreciation." According to the balance sheet (see Exhibit 4.1), Sunnyvale actually paid out \$88,549,000 sometime in the past to purchase the clinic's total fixed assets, of which \$6,405,000 was recognized in 2015 as a cost of doing business, just as salaries and fringe benefits are a cost of doing business.

Can net income be converted to *cash flow*—the actual amount of cash generated during the year? As a **rough estimate**, cash flow can be thought of as net income plus noncash expenses. Thus, the cash flow generated by Sunnyvale in 2015 is not merely the \$7,860,000 reported net income, but this amount plus the \$6,405,000 shown for depreciation, for a total of \$14,265,000. Depreciation expense must be added back to net income to get cash flow because it initially was subtracted from revenues to obtain net income even though there was no associated cash outlay.

Key Equation: Net Income to Cash Flow Conversion

Because of accrual accounting, net income does not represent an estimate of the organization's cash flow for the reporting period. This equation is used to convert net income to a rough estimate of cash flow: Cash flow = Net income + Noncash expenses. Because depreciation often is

(continued)

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the only noncash expense, the equation can be rewritten as Cash flow = Net income + Depreciation. To illustrate, Sunnyvale reported net income of \$8,206,000 and depreciation of \$5,798,000 in 2014. Thus, a rough measure of its 2014 cash flow is \$14,004,000:

$$\begin{aligned}\text{Cash flow} &= \text{Net income} + \text{Depreciation} \\ &= \$8,206,000 + \$5,798,000 \\ &= \$14,004,000.\end{aligned}$$

Here is another way of looking at cash flow versus accounting income: If Sunnyvale showed no net income for 2015, it would still be generating cash of \$6,405,000 because that amount was deducted from revenues but not actually paid out in cash. The idea behind the income statement treatment is that Sunnyvale would be able to set aside the depreciation amount, which is above and beyond its cash expenses, this year and in future years. Eventually, the accumulated total of *depreciation cash flow* would be used by Sunnyvale to replace its fixed assets as they wear out or become obsolete.

Thus, the incorporation of depreciation expense into the cost and, ultimately, the price structure of services provided is designed to ensure the ability of an organization to replace its fixed assets as needed, assuming that the assets could be purchased at their historical cost. To be more realistic, businesses must plan to generate net income, in addition to the accumulated depreciation funds, sufficient to replace existing fixed assets in the future at inflated costs or even to expand the asset base. It appears that Sunnyvale does have such capabilities, as reflected in its \$7,860,000 net income and \$14,265,000 cash flow for 2015.

It is important to understand that the \$14,265,000 cash flow calculated here is only an *estimate* of actual cash flow for 2015, because almost every item of revenues and expenses listed on the income statement does not equal its cash flow counterpart. The greater the difference between the reported values and cash values, the less reliable is the rough estimate of cash flow defined here. The value of knowing the precise amount of cash generated or lost has not gone unnoticed by accountants. In Chapter 4, readers will learn about the statement of cash flows, which can be thought of as an income statement that is recast to focus on cash flow.

SELF-TEST QUESTIONS

1. What is the difference between net income and cash flow?
2. How can income statement data be used to estimate cash flow?
3. What is depreciation cash flow, and what is its expected use?
4. Why do not-for-profit businesses need to make a profit?

Income Statements of Investor-Owned Businesses

Our income statement discussion focused on a not-for-profit organization: Sunnyvale Clinic. What do the income statements for investor-owned businesses, such as Community Health Systems and Brookdale Senior Living, look like? The financial statements of investor-owned and not-for-profit businesses are generally similar except for entries, such as tax payments, that are applicable only to one form of ownership. Because the transactions of all health services organizations are similar in nature, ownership plays only a minor role in the presentation of financial statement data. In reality, more differences exist in financial statements because of lines of business (e.g., hospitals versus nursing homes versus managed care plans) than because of ownership.

The impact of taxes and depreciation on net income and cash flow for for-profit businesses deserves discussion. Exhibit 3.2 contains four income statements that are based on Sunnyvale's 2015 income statement presented in Exhibit 3.1. First, note that the Exhibit 3.2 statements are condensed to show only total revenues (including nonoperating income); all expenses except depreciation; depreciation; and net income. Lines for taxable income, taxes, and cash flow have also been added. The column labeled "Not-for-Profit" presents Sunnyvale's income statement assuming not-for-profit status (zero taxes), so the reported net income and cash flow are the same, as discussed previously.

Now consider the column labeled "For-Profit A," which assumes that Sunnyvale is a for-profit business with a 20 percent tax rate. Here, the clinic

EXHIBIT 3.2

Sunnyvale Clinic: Condensed Income Statements Under Alternative Tax Assumptions, Year Ended December 31, 2015 (in thousands)

	<i>Not-for-Profit</i> <i>(Tax rate = 0%)</i>	<i>For-Profit A</i> <i>(Tax rate = 20%)</i>	<i>For-Profit B</i> <i>(Tax rate = 40%)</i>	<i>For-Profit C</i> <i>(Tax rate = 40%)</i>
Total revenues	\$174,092	\$174,092	\$174,092	\$174,092
Expenses:				
All except depreciation	\$159,827	\$159,827	\$159,827	\$159,827
Depreciation	6,405	6,405	6,405	0
Total expenses	\$166,232	\$166,232	\$166,232	\$159,827
Taxable income	\$ 7,860	\$ 7,860	\$ 7,860	\$ 14,265
Taxes	0	1,572	3,144	5,706
Net income	\$ 7,860	\$ 6,288	\$ 4,716	\$ 8,559
Cash flow (NI + depreciation)	\$ 14,265	\$ 12,693	\$ 11,121	\$ 8,559

Note: Total revenues = Net operating revenues + Total nonoperating income. NI (net income).

must pay taxes of $0.20 \times \$7,860,000 = \$1,572,000$, which reduces net income by a like amount: $\$7,860,000 - \$1,572,000 = \$6,288,000$. In the next column, labeled “For-Profit B,” the tax rate is assumed to be 40 percent, which results in higher taxes of \$3,144,000 and a lower net income of \$4,716,000. The impact of taxes on net income is clear: The addition of taxes reduces net income, and the greater the tax rate, the greater the reduction.

Finally, let’s examine the impact of depreciation and taxes on cash flow (net income plus depreciation). The right column, labeled “For-Profit C,” is the same as the “For-Profit B” column, except the depreciation expense is assumed to be zero rather than \$6,405,000. What is the impact of depreciation expense? Depreciation expense lowers taxable income by a like amount and hence lowers taxes by $T \times \text{Depreciation expense}$, where T is the tax rate. The amount of taxes saved— $0.40 \times \$6,405,000 = \$2,562,000$ —is called the **depreciation shield**. It is the dollar amount of taxes that will not have to be paid because of the business’s depreciation expense.

Let’s check our work. According to Exhibit 3.2, the taxes due without depreciation expense are \$5,706,000, but with depreciation taxes they are \$3,144,000. Thus, the depreciation expense has saved the business $\$5,706,000 - \$3,144,000 = \$2,562,000$, which is the amount of the depreciation shield just calculated. Also, note that the cash flow is higher by the same amount, so the depreciation expense, which reduces taxes but does not impact cash flow, has increased cash flow by the amount of the tax reduction (the depreciation shield).

Key Equation: Depreciation Shield

Because depreciation expense reduces taxes, it is said to shield a for-profit business from taxes, and the amount of taxes saved is called the depreciation shield. If a business has \$500,000 in depreciation expense and pays taxes at a 30 percent rate, its depreciation shield is \$150,000:

$$\begin{aligned}\text{Depreciation shield} &= T \times \text{Depreciation expense} = 0.30 \times \$500,000 \\ &= \$150,000.\end{aligned}$$

SELF-TEST QUESTIONS

1. Are there appreciable differences in the income statements of not-for-profit businesses and investor-owned businesses?
2. What are the impacts of taxes and depreciation on net income and cash flow?
3. What is the depreciation shield?

	2015	2014
Net income	\$ 7,860	\$ 8,206
Equity (net assets), beginning of year	<u>46,208</u>	<u>38,002</u>
Equity (net assets), end of year	<u>\$54,068</u>	<u>\$46,208</u>

EXHIBIT 3.3
Sunnyvale
Clinic: State-
ments of
Changes in
Equity (Net
Assets), Years
Ended Decem-
ber 31, 2015
and 2014 (in
thousands)

Statement of Changes in Equity

As discussed in a previous section, all or some portion of a business's net income will be retained in the business. The **statement of changes in equity**, also called *statement of changes in net assets*, is a financial statement that indicates how much of an organization's net income will be retained in the business and hence increase the amount of equity shown on the balance sheet.

Exhibit 3.3 contains Sunnyvale's statements of changes in equity. Because we have simplified the financial statements presented in this book to facilitate understanding, the statements shown here are very basic. In most situations, the Exhibit 3.3 statements would contain several more lines reflecting transactions that affect the amount transferred to the balance sheet.

Exhibit 3.3 tells us that, in 2015, the entire amount of Sunnyvale's net income was retained in the business, hence the equity (net assets) of the clinic increased from \$46,208,000 at the beginning of the year to \$54,068,000 at the end of the year. This can be confirmed by the amount of equity shown for 2015 in Exhibit 4.1 (see Chapter 4).

To illustrate more complex statements of changes in equity, consider Exhibit 3.4, which assumes that Sunnyvale is a for-profit entity. Now, some portion of the earnings (net income) of the business is paid out as dividends. In 2015, the business had a net income of \$7,860,000, but \$2,000,000 of this amount was paid to owners. Thus, only $\$7,860,000 - \$2,000,000 = \$5,860,000$ is available to increase the balance sheet equity account. Note that, in total, the 2015 ending equity was $\$54,068,000 - \$50,168,000 = \$3,900,000$ greater in Exhibit 3.3 than in Exhibit 3.4. The difference is caused by the fact that Sunnyvale, when assumed to be for-profit, paid out \$3,900,000 total in dividends over 2014 and 2015; hence, the amount retained in the business was reduced by a like amount. (For simplicity, we did not reduce the net income in Exhibit 3.4 by the amount of taxes that would be paid if Sunnyvale were for-profit.)

Statement of changes in equity
A financial statement that reports how much of a business's income statement earnings flows to the balance sheet equity account.

1. What is the purpose of the statement of changes in equity (net assets)?
2. How does the statement differ between not-for-profit and for-profit entities?

SELF-TEST QUESTIONS

EXHIBIT 3.4

Sunnyvale
Clinic:
Statements of
Changes
in Equity
Assuming For-
Profit Status,
Years Ended
December 31,
2015 and 2014
(in thousands)

	2015	2014
Net income	\$ 7,860	\$8,206
Less: Dividends paid	<u>2,000</u>	<u>1,900</u>
Increase in equity	\$ 5,860	\$6,306
Equity, beginning of year	<u>44,308</u>	<u>38,002</u>
Equity, end of year	<u><u>\$50,168</u></u>	<u><u>\$44,308</u></u>

A Look Ahead: Using Income Statement Data in Financial Statement Analysis

Chapter 17 discusses in some detail the techniques used to analyze financial statements to gain insights into a business's financial condition. At this point, however, it would be worthwhile to introduce *financial ratio analysis*—one of the techniques used in financial condition analysis. In financial ratio analysis, values found on the financial statements are combined to form ratios that have economic meaning and help managers and investors interpret the numbers.

Total (profit) margin
Net income divided by total revenues. It measures the amount of total profit per dollar of total revenues.

To illustrate, **total profit margin**, usually just called *total margin*, is defined as net income divided by total revenues, which includes nonoperating income. For Sunnyvale Clinic, the total margin for 2015 was $\$7,860,000 \div (\$169,979,000 + \$4,113,000) = \$7,860,000 \div \$174,092,000 = 0.045 = 4.5\%$. Thus, each dollar of revenues and income generated by the clinic produced 4.5 cents of profit (i.e., net income). By implication, each dollar of revenues and income required 95.5 cents of expenses. The total margin is a measure of expense control; for a given amount of revenues and income, the higher the net income, and hence total margin, the lower the expenses. If the total margin for other similar clinics were known, judgments about how well Sunnyvale is doing in the area of expense control, relative to its peers, could be made.

Sunnyvale's total margin for 2014 was $\$8,206,000 \div \$144,800,000 = 0.057 = 5.7\%$, so the clinic's total margin slipped from 2014 to 2015. This finding should alert managers to examine carefully the increase in expenses in 2015. In effect, Sunnyvale's expenses increased faster than its revenues plus investment income, which resulted in falling profitability as measured by total margin. If this trend continues, it would not take long for the clinic to be operating in the red (i.e., losing money).

Operating margin
Operating income divided by net operating revenues. It measures the amount of operating profit per dollar of operating revenues and focuses on the core activities of a business.

Finally, let's take a quick look at Sunnyvale's **operating margin**, which is defined as operating income divided by net operating revenues. For 2015, Sunnyvale's operating margin was $\$3,747,000 \div \$169,979,000 = 0.022 = 2.2\%$. Thus, each dollar of operating revenues generated by the clinic produced 2.2 cents of profit (operating income). Because operating margin does not include noncore revenues (contributions and investment income), it is lower than Sunnyvale's total margin, which does include such income.

A complete discussion of financial ratio analysis can be found in Chapter 17. The discussion here, along with a brief visit in Chapter 4, is merely intended to give readers a preview of how financial statement data can be used to make judgments about a business's financial condition.

1. Explain how ratio analysis can be used to help interpret income statement data.
2. What is the total profit margin, and what does it measure?

SELF-TEST QUESTIONS

Key Concepts

Financial accounting information is the result of a process of identifying, measuring, recording, and communicating the economic events and status of an organization to interested parties. This information is summarized and presented in four primary financial statements: the income statement, the statement of changes in equity, the balance sheet, and the statement of cash flows. The key concepts of this chapter are as follows:

- The predominant *users of financial accounting information* are parties who have a direct financial interest in the economic status of a business—primarily its managers and investors.
- *Generally accepted accounting principles (GAAP)* establish the standards for financial accounting measurement and reporting. These principles have been sanctioned by the *Securities and Exchange Commission (SEC)*, developed by the *Financial Accounting Standards Board (FASB)*, and refined by the *American Institute of Certified Public Accountants (AICPA)* and other organizations.
- The *goal* of financial accounting is to provide information about organizations that is useful to present and future investors and other users in making rational financial and investment decisions.
- The preparation and presentation of financial accounting data are based on the following set of assumptions, principles, and constraints: (1) *accounting entity*, (2) *going concern*, (3) *accounting period*, (4) *monetary unit*, (5) *historical cost*, (6) *revenue recognition*, (7) *expense matching*, (8) *full disclosure*, (9) *materiality*, and (10) *cost-benefit*.
- Under *cash accounting*, economic events are recognized when the cash transaction occurs. Under *accrual accounting*, economic

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events are recognized when the obligation to make payment occurs. GAAP requires that businesses use accrual accounting because it provides a better picture of a business's true financial status.

- The collection and recording of financial accounting data use the following concepts: (1) *transaction*, (2) *posting*, (3) *chart of accounts*, (4) *general ledger*, (5) *double entry*, and (6) *T account*.
- The *income statement* reports on an organization's operations over a period of time. Its basic structure consists of *revenues*, *expenses*, and one or more *profit* measures.
- *Operating revenues* are monies collected or expected to be collected that are related to the core business, namely, patient services. Operating revenues are broken down into categories such as *net patient service revenue*, *premium revenue*, and *other revenue*.
- *Expenses* are the economic costs associated with the provision of services.
- *Nonoperating income* reports earnings that are unrelated to patient services, typically unrestricted contributions and investment income.
- *Operating income* focuses on the profitability of a provider's core operations (patient services), while *net income* represents the total economic profitability of a business as defined by GAAP.
- Because the income statement is constructed using accrual accounting, net income does not represent the actual amount of cash that has been earned or lost during the reporting period. To estimate *cash flow*, noncash expenses (primarily depreciation) must be added back to net income.
- The income statements of investor-owned and not-for-profit businesses tend to look very much alike. However, the income statements of health services organizations in different lines of business can vary. The good news is that all income statements have essentially the same economic content.
- For-profit (taxable) entities must include taxes as an income statement expense item. Because depreciation expense reduces operating (taxable) income, and hence a business's tax liability, it creates a *depreciation shield* equal to the tax rate times the depreciation expense. However, as a noncash expense, depreciation itself does not reduce cash flow, so the greater the amount of

depreciation (and therefore, the depreciation shield), the greater the cash flow.

- The *statement of changes in equity* indicates how much of the total profitability (net income) is retained for use by the reporting organization.
- *Financial ratio analysis*, which combines values that are found in the financial statements, helps managers and investors interpret the data with the goal of making judgments about the financial condition of the business.

In this chapter, we focused on financial accounting basics, the income statement, and the statement of changes in equity. In Chapter 4, the discussion of financial accounting continues with the remaining two statements: the balance sheet and statement of cash flows.

Questions

- 3.1
 - a. What is a stakeholder?
 - b. What stakeholders are most interested in the financial condition of a healthcare provider?
 - c. What is the goal of financial accounting?
- 3.2
 - a. What are generally accepted accounting principles (GAAP)?
 - b. What is the purpose of GAAP?
 - c. What organizations are involved in establishing GAAP?
- 3.3 Briefly describe the following concepts as they apply to the preparation of financial statements:
 - a. Accounting entity
 - b. Going concern
 - c. Accounting period
 - d. Monetary unit
 - e. Historical cost
 - f. Revenue recognition
 - g. Expense matching
 - h. Full disclosure
 - i. Materiality
 - j. Cost-benefit

- 3.4 Explain the difference between cash accounting and accrual accounting. Be sure to include a discussion of the revenue recognition and matching principles.
- 3.5 Briefly describe the format of the income statement.
- 3.6 a. What is the difference between gross revenues and net revenues? (Hint: Think about discounts, charity care, and bad debt.)
 b. What is the difference between patient service revenue and other revenue?
 c. What is the difference between charity care and bad debt losses? How is each handled on the income statement?
- 3.7 a. What is meant by the term *expense*?
 b. What is depreciation expense, and what is its purpose?
 c. What are some other categories of expenses?
- 3.8 a. What is the difference between operating income and net income?
 b. Why is net income called “the bottom line”?
 c. What is the difference between net income and cash flow?
 d. Is financial condition more closely related to net income or to cash flow?
- 3.9 a. What is the purpose of the statement of changes in equity?
 b. What is its basic format?

Problems

- 3.1 Entries for the Warren Clinic 2015 income statement are listed below in alphabetical order. Reorder the data in proper format.

Depreciation expense	\$ 90,000
General/administrative expenses	70,000
Interest expense	20,000
Investment income	40,000
Net income	30,000
Net operating revenues	410,000
Other revenue	10,000
Patient service revenue	440,000
Provision for bad debts	40,000
Purchased clinic services	90,000
Salaries and benefits	150,000
Total expenses	460,000

3.2 Consider the following income statement:

BestCare HMO Statement of Operations Year Ended June 30, 2015 (in thousands)	
Revenue:	
Premiums earned	\$26,682
Coinurance	1,689
Interest and other income	242
Total revenues	<u>\$28,613</u>
Expenses:	
Salaries and benefits	\$15,154
Medical supplies and drugs	7,507
Insurance	3,963
Depreciation	367
Interest	385
Total expenses	<u>\$27,376</u>
Net income	<u>\$ 1,237</u>

- How does this income statement differ from the one presented in Exhibit 3.1?
- Did BestCare spend \$367,000 on new fixed assets during fiscal year 2015? If not, what is the economic rationale behind its reported depreciation expense?
- What is BestCare's total profit margin? How can it be interpreted?

3.3 Consider this income statement:

Green Valley Nursing Home, Inc. Statement of Income Year Ended December 31, 2015	
Revenue:	
Patient service revenue	\$3,163,258
Less provision for bad debts	<u>(110,000)</u>
Net patient service revenue	\$3,053,258
Other revenue	<u>106,146</u>
Net operating revenues	<u>\$3,159,404</u>

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Expenses:	
Salaries and benefits	\$1,515,438
Medical supplies and drugs	966,781
Insurance and other	296,357
Depreciation	85,000
Interest	206,780
Total expenses	<u>\$3,070,356</u>
Operating income	\$ 89,048
Provision for income taxes	31,167
Net income	<u><u>\$ 57,881</u></u>

- a. How does this income statement differ from the ones presented in Exhibit 3.1 and Problem 3.2?
 - b. Why does Green Valley show a provision for income taxes while the other two income statements do not?
 - c. What is Green Valley's total profit margin? How does this value compare with the values for Sunnyside Clinic and BestCare?
 - d. The before-tax profit margin for Green Valley is operating income divided by total revenues. Calculate Green Valley's before-tax profit margin. Why might this be a better measure of expense control when comparing an investor-owned business with a not-for-profit business?
- 3.4 Great Forks Hospital reported net income for 2015 of \$2.4 million on total revenues of \$30 million. Depreciation expense totaled \$1 million.
- a. What were total expenses for 2015?
 - b. What were total cash expenses for 2015? (Hint: Assume that all expenses, except depreciation, were cash expenses.)
 - c. What was the hospital's 2015 cash flow?
- 3.5 Brandywine Homecare, a not-for-profit business, had revenues of \$12 million in 2015. Expenses other than depreciation totaled 75 percent of revenues, and depreciation expense was \$1.5 million. All revenues were collected in cash during the year, and all expenses other than depreciation were paid in cash.
- a. Construct Brandywine's 2015 income statement.
 - b. What were Brandywine's net income, total profit margin, and cash flow?
 - c. Now, suppose the company changed its depreciation calculation procedures (still within GAAP) such that its depreciation expense doubled. How would this change affect Brandywine's net income, total profit margin, and cash flow?

- d. Suppose the change had halved, rather than doubled, the firm's depreciation expense. Now, what would be the impact on net income, total profit margin, and cash flow?
- 3.6 Assume that Mainline Homecare, a for-profit corporation, had exactly the same situation as reported in Problem 3.5. However, Mainline must pay taxes at a rate of 40 percent of pretax (operating) income. Assuming that the same revenues and expenses reported for financial accounting purposes would be reported for tax purposes, redo Problem 3.5 for Mainline.
- 3.7 Consider Southeast Home Care, a for-profit business. In 2015, its net income was \$1,500,000 and it distributed \$500,000 to owners in the form of dividends. Its beginning-of-year equity balance was \$12,000,000. Use this information to construct the business's statement of changes in equity. What is the ending 2015 value of the business's equity account?
- 3.8 Bright Horizons Skilled Nursing Facility, an investor-owned company, constructed a new building to replace its outdated facility. The new building was completed on January 1, 2015, and Bright Horizons began recording depreciation immediately. The total cost of the new facility was \$18,000,000, comprising (a) \$10 million in construction costs and (b) \$8 million for the land. Bright Horizons estimated that the new facility would have a useful life of 20 years. The salvage value of the building at the end of its useful life was estimated to be \$1,500,000.
- Using the straight-line method of depreciation, calculate annual depreciation expense on the new facility.
 - Assuming a 40 percent income tax rate, how much did Bright Horizons save in income taxes for the year ended December 31, 2015, as a result of the depreciation recorded on the new facility (i.e., what was the depreciation shield)?
 - Does the depreciation shield result in cash or noncash savings for Bright Horizons? Explain.
- 3.9 Integrated Physicians & Associates, an investor-owned company, had the following general ledger account balances at the end of 2015:

Gross patient service revenue (total charges)	\$975,000
Contractual discounts and allowances to third-party payers	250,000
Charges for charity (indigent) care	100,000
Estimated provision for bad debts	50,000

- Construct the revenue section of Integrated Physicians & Associates' income statement for the year ended December 31, 2015.

b. Suppose the 2015 contractual discounts and allowances balance reported above is understated by \$50,000. In other words, the correct balance should be \$300,000. Assuming a 40 percent income tax rate, what would be the effect of the misstatement on Integrated Physicians & Associates' 2015 reported:

1. Net patient service revenue?
2. Total expenses, including income tax expense?
3. Net income?

For each item (1–3), indicate whether the balance is overstated, understated, or not affected by the misstatement. If overstated or understated, indicate by how much.

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