

Business and Strategic Planning • part 3

# Making financial decisions

## LEARNING OBJECTIVES

- **Identify** the basic components of financial statements.
- **Explain** the difference between accrual and cash basis accounting.
- **Describe** commonly used budgeting techniques.
- **Identify** and define the elements of a budget.
- **Explain** how return on investment (ROI) and pharmacoeconomic analyses are used in economic evaluation.

*This final article in a three-part series focuses on financial statements, budgeting and tools for economic evaluation.*

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The trend toward for-profit, corporate-style management is placing people with business backgrounds, rather than strictly clinicians, in positions to make decisions about how organizations will operate, including which drug products will be used.

This new generation of decision makers tends to have a high level of business sophistication, and wants to know how a product or group of products can provide maximum value and improve their bottom line. Physicians also have business questions on their minds, because their organizations

often require them to account for their prescribing decisions. Therefore, it is important to know how to discuss financial issues knowledgeably with your customers.

Before beginning a discussion of basic accounting, it is helpful to understand the three basic forms of organizations:

- **Sole proprietorship:** a business owned by an individual.
- **Partnership:** a business owned jointly by two or more people.
- **Corporation:** a legal entity owned by stockholders who hold transferable shares of stock.

The major distinguishing factor between corporations and partnerships is liability. Partners have unlimited liability for the actions of the business, while stockholders of a corporation are only liable for their investment in the company.

There is also a subtype of corporation known as an S corporation. This type of organization retains the advantages of a corporate form but is taxed like a partnership. Corporations may be classified as for-profit or not-for-profit.

### Financial statements

Financial statements organize accounting data into formats for understanding an organization's financial transactions. Outcomes are measured on aspects such as: amount of profitability, in and out flows of cash, cumulative levels of expenses and income, current levels of debt, etc. While you may or may not be exposed to your customers' actual financial statements, they may refer

to these reports in their discussions with you.

Annual financial statements reflect an accounting period, which is either based on the calendar year, which begins on January 1 and ends on December 31, or a fiscal year, which consists of any 12 months other than a calendar year. In most cases, updated general financial statements are prepared each month.

The primary components of financial statements are the income statement, statement of owner's equity and balance sheet.

**Income statement.** An income statement lists an organization's total (or gross) income over a certain period of time (a month, a quarter, a year, etc.) and subtracts the total expenses for that period. If there is money left over, the resulting balance is the net profit. If expenses are greater than income, the result is a net loss.

Income statements are often presented in conjunction with the income statements of past years for comparison. Income statements are prepared in basically the same way for sole proprietorships, partnerships and corporations.

**Statement of owner's equity.** Owner's equity (also known as capital) is the stake the owner has in the business at any given time. It is the accumulated net income and/or investment the owner has made in the business over time. The statement of owner's equity shows the changes that occur in the owner's equity during a fiscal period.

If the owner withdraws the income, there is a decrease in equity at the end of the period. If the owner leaves the cash in the

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organization or reinvests the income in the company, the result is an increase in equity.

If the business is set up as a partnership, the statement of owner's equity will show changes in equity for each partner individually. Corporations refer to their owners' equity as retained earnings. Retained earnings are defined as the net income of the corporation less dividends paid to stockholders.

**Balance sheet.** The balance sheet is a "snapshot" of the company's financial strength at a given moment. It shows the dollar amounts of the company's assets, balanced by its liabilities (debts), and owner's equity. In general, a formal balance sheet is prepared at the end of the accounting period, but frequently is updated on a monthly basis. A balance sheet is prepared according to the equation: assets = liabilities + capital.

If the business is set up as a partnership, each partner's capital is listed individually. If the business is set up as a corporation, the balance sheet contains a stockholders' equity section rather than a capital section. Stockholders' equity consists of capital stock (the investment made by stockholders by purchasing stock) plus retained earnings.

**Relationship of financial statements.** The three financial statements are closely related to one another. An income statement is usually prepared first, providing the net income (or net loss) resulting at the end of the accounting period. This figure is used to complete the statement of owner's equity. Lastly, the balance sheet is prepared using the amount of owner's equity as one element of the report (see illustration on right).

**Financial data in annual reports.** When reviewing an annual report, you may see only excerpts of information taken from financial statements, such as net income, total assets and total liabilities.

In addition to financial data, healthcare organizations may include other types of data in their reports, such as the number of hospitals owned by the organization (if applicable), the total number of admissions, the average daily number of patients, the outpatient revenues as a percentage of total patient revenues, and even the number of employees.

**Accrual accounting versus cash basis accounting.** Two common types of accounting methods used for the purpose of organizing, recording and analyzing financial transactions are accrual accounting and cash basis accounting.

When using the accrual method of accounting, revenue is recorded when it is earned, not when it is actually received. Similarly, expenses are recorded on the date they are incurred, instead of on the date they are paid. For example, sales revenue is recognized and recorded when products are delivered to a customer, even though the customer may not pay for the products until weeks later. Not-for-profit organizations use this type of accounting, as do many large companies.

Generally speaking, cash basis accounting recognizes transactions at the point cash is received or paid. For example, an office supply expense is only recorded when a check is written to pay the invoice, not when the item or bill is received.

### Budgeting

Virtually every business, regardless of its size, uses some form of a budget. It may be a simple cash budget that compares projected expenses with actual expenditures, or a complex financial plan designed to achieve profit objectives and meet all financial obligations. The following are commonly used budgeting techniques:

- Incremental budgeting builds a budget by adding inflation and new costs to the previous year's figures.
- Flexible budgeting shows expected costs for different scenarios; therefore, this type of budget is often expressed as a formula. In managed care, flexible budgeting is growing in use, scope and depth. For example, Alpha HMO may have fixed costs of \$100,000 per month, 5,000 members and an average variable cost of \$25 per member per month. Therefore, to project expected per-month costs, the HMO may apply the following formula: \$100,000 + \$25 (5,000). The sum (\$225,000) multiplied by 12 gives the expected annual costs. The formula allows the organization to substitute different values for each element of the equation.

## Financial statements\*

Income statement	
For the month ended January 31, 2003	
Revenue	\$10,640
<b>Expenses</b>	
Advertising expense	\$630
Office salaries expense	\$7,100
Telephone expense	\$144
Depreciation expense: Building	\$150
Depreciation expense: Office equipment	\$45
	\$8,069
<b>Net income</b>	<b>\$2,571</b>

Statement of owner's equity	
For the month ended January 31, 2003	
Capital, December 31, 2002	\$180,000
<b>Add:</b> Net income for January	\$2,571
Additional investment by owner	\$1,000
<b>Subtotal</b>	\$183,571
<b>Less:</b> Withdrawals by owner	\$2,800
<b>Capital, January 31, 2003</b>	<b>\$180,771</b>

Balance sheet	
January 31, 2003	
<b>ASSETS</b>	
Cash	\$15,490
Accounts receivable	\$17,890
Land	\$130,000
Building	\$36,000
<b>Less:</b> Accumulated depreciation	\$150
	\$35,850
Office equipment	\$5,400
<b>Less:</b> Accumulated depreciation	\$45
	\$5,355
<b>Total assets</b>	<b>\$204,585</b>

LIABILITIES AND OWNER'S EQUITY	
<b>Liabilities</b>	
Accounts payable	\$23,814
<b>Owner's equity</b>	
Capital: January 31, 2003	\$180,771
<b>Total liabilities and owner's equity</b>	<b>\$204,585</b>

\* Adapted from Meigs and Meigs

- Zero-base budgeting groups programs and projects into decision packages so they may be evaluated and ranked. The programs are funded according to ranked order and resource availability. Government healthcare institutions are moving from this type of budgeting to flexible budgeting.
- In program budgeting, individual programs or projects are each budgeted separately. An organization may develop several budgets, one for each program.
- Standard cost budgeting assigns standard costs (based on existing data) for all types

of activities. Actual costs can be matched against these standards, and where overages occur, emphasis is placed on improving efficiency.

**Elements of a budget.** A typical budget generally includes at least the following seven elements:

- Activity projections, which assess future demand for services by evaluating things such as demographics, patient usage rates, market share and competition.
- Revenue, which determines the flow of resources into a business from the sale of goods or services.
- Salaries, which include any anticipated new hires, wage increases, payroll taxes and unemployment insurance.
- Non-human-resource expenses, which include supplies (including pharmaceuticals) and operating costs.
- Cash flow, which includes both cash receipts and cash payments of a business during the accounting period for operating, investing and financing activities.
- Capital expenditures, which cover the amount spent for the purchase of long-term assets.
- Discretionary expenses, which may include items such as promotional programs, education, dues, memberships, periodicals and professional listings.

When working with your accounts, you need to identify the type of budgeting they do, the accounting period they follow (a fiscal or calendar year) and the impact of budgeting decisions on the potential use of your products.

### Tools for economic evaluation

Organizations often turn to tools of economic evaluation in response to increased demands for accountability. Widely used tools include return-on-investment (ROI) analysis and several types of pharmacoeconomic analyses.

**Return-on-investment analysis.** Return on investment is a measure of profitability that illustrates how well resources are being leveraged to produce profits. Return on investment can be broadly described as profits divided by investment. In business, ROI is traditionally expressed as a percentage, calculated using data from financial statements. The higher the percentage,

the better. To measure ROI, relevant “hard” and “soft” data must be collected.

Hard data is objective, easy to measure and quantify, dollar values are easily assigned, and it is represented by common measures of organizational performance. An example of hard data is the number of patients treated per month for depression.

Soft data is subjective, difficult to measure and quantify, dollar values are difficult to assign, and it is usually behaviorally oriented. An example of soft data is the cost associated with inappropriately treating or not treating depressive patients.

To figure ROI, data must be converted to monetary values. Once the dollar values have been established, they can be plugged into the following formula:  $ROI (\%) = \text{net program values} \div \text{program costs} \times 100$ .

The following example illustrates how to measure ROI:

According to hard data, an organization with 1,800 patients loses an average of 18% (or 324) of these patients due to dissatisfaction annually. Because the average patient spends approximately \$200 per year at the facility, the organization is losing \$64,800 per year ( $\$200 \times 324$ ). Soft data suggests that each dissatisfied patient will tell 12 others, thus compounding potential future losses.

If the organization were to spend \$60,000 on a patient management program that resulted in retention of half of the lost patients, a savings of \$32,400 would also result. Therefore, the ROI of the program would be illustrated as:  $32,400 \text{ (value of retained patients)} \div \$60,000 \text{ (cost of program)} \times 100 = 54\%$ . The organization would make back the money spent on the program in less than two years.

**Pharmacoeconomic analyses.** Customers use pharmacoeconomic data to select the optimal treatment alternatives in terms of clinical, economic and humanistic outcomes. The most common forms of pharmacoeconomic analyses include:

- **Cost-benefit analysis.** This compares two or more treatment alternatives, assigning a dollar value to nonclinical benefits and comparing them directly with costs. Benefits may include: market valuations, customers’ “willingness to pay,” policy makers’ views and practitioners’ views.

- **Cost-effectiveness analysis.** Treatment alternatives are compared in terms of each one’s effectiveness in its clinical outcome (such as number of lives saved or reduction in cholesterol levels) and its costs of treatment. This comparison is usually expressed as a ratio (cost / unit of effectiveness).

- **Cost-utility analysis.** This tool evaluates the costs of treatment alternatives and their impact on patient quality of life, using a measurement called quality-adjusted life-years (QALYs). Examples of variables used are how well a drug relieves symptoms or improves physical and social functioning.

- **Cost-minimization analysis.** This analysis identifies the least costly treatment alternative. **PR**

*The next series will focus on the principles of pharmaceutical management.*

### ARTICLE SUMMARY

- There are three basic forms of businesses:
  - Sole proprietorships.
  - Partnerships.
  - Corporations.
- Financial statements organize accounting data into formats for understanding an organization’s financial transactions.
- The primary components of financial statements are:
  - Income statement.
  - Statement of owner’s equity.
  - Balance sheet.
- Two common types of accounting methods are:
  - Accrual accounting.
  - Cash basis accounting.
- Commonly used budgeting techniques are:
  - Incremental budgeting.
  - Flexible budgeting.
  - Zero-base budgeting.
  - Program budgeting.
  - Standard cost budgeting.
- Typical elements of a budget include:
  - Activity projections.
  - Revenue.
  - Salaries.
  - Non-human-resource expenses.
  - Cash flow.
  - Capital expenditures.
  - Discretionary expenses.
- Widely used economic evaluation tools include:
  - Return-on-investment analysis.
  - Pharmacoeconomic analyses.