

Unit 4

Budgeting, Variance Analysis, and Pricing

Learning Objectives:

After completing this unit, you should understand:

- The value of budgets in planning and control.
- The use and preparation of the four major budgets:
 - Statistics (Forecasting) budget
 - Operating (Expense and Revenue) budgets
 - Cash budget
 - Capital budget
- The use of standard costs and variance analysis in managing a budget.
- How to determine pricing and pricing strategies.
- DRGs, RVUs, and other payment systems.

The Purpose of Budgeting

Budgeting is perhaps the aspect of financial management that is familiar to all managers, even those not directly involved in finance. Most managers are responsible for preparing budgets, reviewing them, or at least managing within their constraints. The budget is a major planning tool, usually following the earlier planning stages of assessment and strategy development (also called programming). The budget converts the organization's activities planned for the coming year into estimates of how many and what type resources will be needed, how these resources will be paid for, and how much revenue the organization can expect to generate.¹ The budget also provides a basis for evaluating how well the organization is meeting its planned objectives.

The budget should be thought of not as an accounting tool, but as a managerial tool. It also provides the means to communicate operational expectations within the organization.² Budgets make it possible for managers at all levels to know what they can expect in the way of resources and what is expected of them in terms of revenue generation.

Types of Budgets

There are several different types of budgets used in health care organizations. The most

¹ Neumann, B. R., Clement, J. P., and Cooper, J. C. Financial Management: Concepts and Applications for Health Care Organizations. Dubuque, IA: Kendall/Hunt Publishing Company, 1999, 267.

² Gapenski, L. C. Healthcare Finance: An Introduction to Accounting and Financial Management. Chicago, IL: Health Administration Press, 1998, 212.

commonly seen by all managers is the **Operating Budget**, which includes the **Revenue Budget** and the **Expense Budget**. The Operating Budget determines the amount of revenue anticipated for the coming budget period (usually a year), and the amount of expenses that will be required to generate that amount of revenue.

Other types of budgets include:

- The **Statistics Budget**, which predicts volume for the budget period, and is used as a basis of information for developing the operating budget.
- The **Cash Budget**, which provides information about predicted cash flow.
- The **Capital Budget**, which deals with major capital expenditures such as buildings and equipment.

The Process of Budgeting

Some organizations practice “top-down” budgeting, meaning that top management develops the budget and imposes it on the rest of the organization. That has some obvious drawbacks, particularly in that it does not involve those who must live with a budget in the process of developing it.

The opposite of top-down budgeting is “bottom-up” budgeting, meaning that those at the departmental or unit level prepare their own budgets, which are then combined into an organizational budget. That sounds nice, and has some benefits, but is not realistic. The departmental managers each see their own needs but may not have a good understanding of the overall needs of the organization.

What works best is a combination of top-down and bottom-up budgeting. Top management sets some boundaries within which the department heads work, letting them know in general terms what is expected of them. That makes it much easier to meld all of the individual departmental budgets into a reasonable whole. Yet, it gives the lower level managers an opportunity to participate in the process.

However the budget is developed in an individual health care organization, the process can be valuable for its own sake. The very act of predicting future volume and resource needs helps the manager to gain a better understanding of his or her operational responsibilities. It can, if done properly, also give the manager a sense of ownership of the budget, having had a hand in its creation. For that to happen, top management must pay sincere attention to the efforts of lower level managers, and not simply ignore their work. That does not mean that every manager will get everything asked for in a budget submission. Few ever do. The process of negotiation accompanying budget development also aids everyone involved in understanding the big picture. Budget development requires a considerable amount of hard, often tedious, work. That work can be made more tenable if it is shared.

Revenue Sources

One aspect of budgeting for a health care organization that sets it apart from many other types of business, and makes it more difficult as well, is the sources of revenue.

Depending on the nature of the services provided by the health care organization, it may derive some or all of its revenues from Medicare, Medicaid, private insurance, managed care organizations (MCOs), or private pay by patients. Each of these reimbursement sources has its own set of rules, usually very specific and complex. That means that the managers developing the revenue budget must understand all of the regulations involved as well as the nature of the paperwork required. Many other business ventures get their revenue directly from customers or through a smaller number of relatively standard contracts, making their revenue budgets much easier to develop.

Health care reimbursement sources also impact the expense budget, not just in terms of how much expense the revenue generated will accommodate, but also in what types and amounts of expenses will be allowed. Some of those revenue sources, particularly government programs and managed care organizations, set limits on those expenses, something that the budget developers must understand and account for. Since most health care organizations today are reimbursed using some form of prospective payment, the restrictions on costs covered may not be as specific as in the past, but are still a factor.

Monitoring Budget Performance – Variance Analysis

Once the budgets are completed, they become a basis for measuring the operational effectiveness of the organization. A primary method of doing that is a technique called **Variance Analysis**. Variances are the differences between the budget and actual results. Understanding the reasons why variances occur is a valuable management tool for:

- taking corrective action during the year,
- holding units and their managers accountable, and
- preparing a more accurate budget for next year.³

Regular analysis of variances during the budget period can provide managers with a great deal of valuable information. It is common to review variances on a monthly basis, usually showing both the variances for that month for each budget line as well as the year-to-date variances. The year-to-date information can be particularly valuable, as it tells the managers whether a monthly variance is an anomaly or part of a trend. They can also see whether the variance is growing or diminishing over time.

³ Finkler, S. A. Financial Management for Public, Health, and Not-For Profit Organizations. Upper Saddle River, NJ: Prentice Hall, 2000, 226.

A simple example might look as follows:

Expense Category:	This Month			
	Budgeted	Actual	Variance	Variance
	Amount	Amount	\$	%
Telephone	\$300	\$325	-\$25	-8.30%

Expense Category:	Year-To-Date			
	Budgeted	Actual	Variance	Variance
	Amount	Amount	\$	%
Telephone	\$1,200	\$1,265	-\$65	-5.40%

This example shows that we have spent \$25 (or 8.3%) more on telephones this month than the budgeted event. The variance is also negative for the year-to-date, but not as much as this month, which suggests that the problem is getting worse.

Such analysis of variances in expenses primarily serves to alert managers to potential problems. Not all variances mean that there are problems, and not all problems uncovered using this analysis can be corrected. In the case used above, the increase in telephone costs may be caused by a rate increase or by heavier than anticipated usage. There is probably little that can be done about the rate increase (although maybe it should have been anticipated), but the manager can attempt to reduce the volume of telephone usage.

Similar analysis of revenues can reveal whether the organization is on track to make its revenue projections, behind expectations, or ahead of them. Using such information, managers can take any of the following actions, as needed:

- Revise projections
- Attempt to increase revenues for the remainder of the period
- Reduce expenditures to correlate to the reduction in anticipated revenues

In many cases, finding such variances will send the manager back to the Statistics Budget to review actual volume data against projected. When dealing with expenses, it is often easier to make changes in volume than in cost per unit, as was the case above with telephone expenses. When it comes to revenue variances, the managers may or may not be able to control rates and/or volume. If the rates charged are determined by an existing contract, they have to look at volume. Yet, even that may be beyond their control. If so, they will have to look at reducing expenses if they are to break even or show a positive balance at the end of the year.

Variance Analysis can also be used to determine variances from Standard Costs, if such costs have been determined by the organization. Standard costs define the costs that have been determined to be acceptable or allowable for a procedure or service.

Pricing

Pricing of services is a financial management tool that some health care managers tend to overlook. As they are often in a situation where the payment sources (e.g., Medicare & Medicaid) determine the prices, or rates, that they will pay for services, the providers may assume that there is no need to concentrate on pricing strategies. That is not necessarily the case. They still must decide if the payment from those sources is sufficient to assume the risks associated with providing services to the covered populations. Such decisions are very similar to pricing analysis, and should be considered in the same way.⁴ Pricing analysis can help them to know which services they can offer at a cost that is covered by the set rates. Recognizing that health care organizations are in business to serve the needs of the public, they may still have to provide services that do not pay for themselves. However, the pricing analysis process will help an organization determine how much revenue must be generated from other services to compensate for them.

Pricing Strategies

Although there are many variations on pricing strategies, they can generally be divided into the following three categories:⁵

- Cost-based
- Negotiated
- Market-driven

Most health care organizations will use a combination of these approaches. For most governmental reimbursement sources, they will need to justify costs associated with provision of services, so will use a cost-based pricing strategy. If they are dealing with managed care, or other third party contracts, they will negotiate prices. If the services they offer are market-driven, meaning that consumers have choices to make based on competitive prices, they will use a market pricing strategy.

Many of the pricing strategies used depend on level of intensity of the services provided. With government programs, prices have often been set on the basis of payment for a specific patient classification or groupings of patient classification categories. The most prominent of such programs has been the use of **Diagnostic Related Groups (DRGs)**. As part of a prospective payment program (PPS), providers are paid a fixed rate per DRG. It is then up to them to find a way to provide those services at a cost less than the payment allowed. That shifts much of the risk from the government to the provider, unlike former retrospective payment systems where the providers were essentially reimbursed for what they had spent.

⁴ Gapenski, L. C. *Healthcare Finance: An Introduction to Accounting and Financial Management*. Chicago, IL: Health Administration Press, 1998, 177.

⁵ Neumann, B. R., Clement, J. P., and Cooper, J. C. *Financial Management: Concepts and Applications for Health Care Organizations*. Dubuque, IA: Kendall/Hunt Publishing Company, 1999, 348.

Another similar pricing method involves **Relative Value Units (RVUs)**. RVUs are used to determine a price for a procedure or grouping of procedures on the basis of its relationship to a predetermined standard pricing unit. The price per standard RVU unit is set and all others are compared to it. Thus, one procedure might be given an RVU of 1.5 and another an RVU of 3.0. The second would be priced at twice as much as the first.

A pricing strategy that has become much more common with the increasing influence of managed care organizations is **Capitation**. Capitation, literally meaning “per head” pricing, pays a provider an amount based on the number of consumers covered instead of on a fee for service basis. As Medicare has begun to use health maintenance organizations (HMOs) more, it has adopted a capitation payment system in many situations.

Summary

The processes of budgeting, variance analysis, and pricing have been combined in this unit because they are so closely related. Each is a valuable element of financial management, but none exists in a vacuum. Wise health care managers understand the concepts behind these processes, and use them to operate their organizations more effectively and efficiently.

Unit 4 Written Assignment:

Answer the following:

1. Explain, in your own words, the benefits of budgeting for an organization.
2. How does the statistics budget differ from the other types of budget discussed in this unit?
3. How would you describe the budget development process at your current place of employment: is it top-down, bottom-up, or a combination? Explain. (If you cannot use your current employer, you may use a former employer. It does not have to be a health care organization.)
4. How and why do managers use variance analysis?
5. What are “Standard Costs?”

6. Assume that the managers of a hospital are setting the price on a new outpatient service. Here are relevant data estimates⁶:

Variable cost per unit	\$5.00
Annual direct fixed costs	\$500,000
Annual overhead allocation	\$50,000
Expected annual utilization	10,000 visits

- a. What per visit price must be set for the service to break even?
 - b. What per visit price must be set for the service to earn an annual profit of \$100,000?
7. Describe how price may differ from revenues collected from third party payers. What causes the differences?

⁶ Gapenski, L. C. Healthcare Finance: An Introduction to Accounting and Financial Management. Chicago, IL: Health Administration Press, 1998, 204.