Finance and accounting for nurses

Part 4

This is the last in the series of four articles looking at finance and accounting for nurses. Robert Hankins, Timothy Brady and Bonnie Saucier suggest a teaching outline for in-service education in accounting and finance and describe the basic tools that can be used to implement service training.

All clinical personnel should have some training in basic finance and accounting practices (Box 1). Since financial concerns are a major force in today's health care industry, the role of the clinicians as well as the nurse managers include, not only the awareness of economic issues, but also, the need for education in financial management and the importance of accounting.

Even though not all nurse managers are responsible for budget development, an understanding of underlying dynamics is necessary to have any input to the budget and control processes (Grohar-Murray and DiCocco 1992).

No longer is it appropriate to assume that knowledge of traditional accounting methods of revenue/cost centres is adequate. Information needed to determine what causes the costs is more relevant. Managers need to increase the accuracy of specific output costs. To do this, they must be able to trace the cost of activities demanded by those outputs.

Cost control measures should be based on cost analysis and control processes, which in turn, evolve from determining how the costs are generated. It is not reasonable to assume that all clinical managers will have the opportunity for advanced business education. Thus, in-service education should be developed to address the organisation's needs for financial management activities within nursing and other clinical areas.

Financial in-service courses

Step 1 The first step in a successful education program is to determine course participants' awareness of the importance of the organisation's financial performance. The most effective method to ascertain the objectives and content of the early education sessions is to have the potential participants assess their beginning level of competence. This can be done through an introduction/review of financial management terms (Table 1).

Step 2 Based on the results, learning tasks, subtasks and associated objectives can be developed. These indicate the learning to be acquired during each future session (Driesbach 1994). The introductory session can also outline the content of future presentations. Sufficient time needs to be allowed - six months to one year is appropriate to ensure that all financial management responsibilities are covered (Driesbach 1994).

Step 3 The next step should be an orientation to the organisation's objectives with the structure and flow of internal services and resources to the clinical (nursing) function. Costs tied to these flows are caused by the activities needed to create these services and the resources used to make them available for patient care. The interactions between nursing services and other departments must be understood before nursing's effects on the organisation's total costs and revenues can be understood.

Step 4 An explanation of the organisation's information system is appropriate. What data with financial implications is required from nursing services? What information should nursing services provide to get a better understanding of costs and potential for greater efficiency?

While providing this background, critical thinking exercises are valuable. For example, you can ask students to explain what information they believe they need to become more cost efficient and better care givers. Learning groups from different departments can help each other understand inter-department costs and the potential for increases in cost and care efficiency.
The initial focus should be on activities that support nursing interventions and which create costs. From an organisational perspective, minimising the aggregate cost of interacting with patients is a primary financial objective. If prices are set in the marketplace, these become the financial objectives. However, the requirement for good quality of care that meets acceptable standards can never be relaxed.

**Principles of cost analysis**

Resner and Anderson (1994) identify numerous areas of nursing competence. Nursing requires integration of clinical skills while being influenced by financial, environmental, and organisational factors.

A nurse manager must thoroughly understand clinical nursing processes in order to apply financial management to enhance both the quality and the efficiency of nursing care. Though this understanding is not part of financial management training, its relevance is worth emphasising early in this training.

Competitive pricing requires setting a price within the range being charged by other providers in the same service area. Thus, financial management is related to costs through sales, with the requirement that revenue be greater than costs. In order to maintain competitive charge rates, operating management needs to reduce costs to a competitive level.

Nursing managers, therefore, need to understand the various perspectives from which costs can be viewed and analysed. Different perspectives for describing costs (discussed in Part 3 of this series) should be introduced early in the training and then used in discussion of cost control and budgeting.

To understand the cost of nursing services, nurse managers must identify the activities that make up nursing work. These activities arise from interventions ordered by doctors and these interventions cause costs. As well as involving actions by nurses, these activities may require precursor actions both in nursing services and in other departments. The nursing activities are specified in nursing protocols associated with the physician orders. The other inputs to nursing interventions are the activities outside nursing needed to produce the resources and services required for quality care. These costs flow across department boundaries and are aggregated as billable patient charges.

Cost analysis therefore has two levels:

- **Level one** is understanding the cost of resource plus respiratory care, an external input.

**Cost control**

Understanding the activity content of protocols is basic to managing clinical costs. Understanding the differences between the effects of variable and fixed costs on total costs and the effects of fixed cost utilisation on costs per intervention as well as total costs are critical to cost control. These concepts must be intuitively understood and applied before competent operations budgeting is possible.

Traditionally the cost of specific interventions has been analysed by tracking costs through various departments. Some depart-

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**Table 1. Accounting and financial management terms**

<table>
<thead>
<tr>
<th>Financial accounting</th>
<th>Management accounting</th>
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<tr>
<td>Income statement</td>
<td>Full costs</td>
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<tr>
<td>Revenue</td>
<td>Sunk costs</td>
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<tr>
<td>Expense</td>
<td>Resources</td>
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<td>Surplus</td>
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<td>Profit</td>
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<tr>
<td>Accounting period</td>
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<td>Balance sheet</td>
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<tr>
<td>Asset</td>
<td>Cost control methods</td>
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<tr>
<td>Liability</td>
<td>(Net Assets)</td>
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<tr>
<td>Debt</td>
<td></td>
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<tr>
<td>Equity</td>
<td></td>
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<td>Fund balance</td>
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<td>Budgeting</td>
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<td>Benchmarks</td>
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<td>Variance analysis</td>
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<td>Ratio analysis</td>
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<td>Trend analysis</td>
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**Management accounting**

- Relevant costs
- Variable costs
- Fixed costs
- Department costs
- Activity costs
- Marginal costs
- Increment costs
- Cost analysis techniques
- Traditional
- Activity based
- Cost control methods
- Budgeting
- Benchmarks
- Variance analysis
- Ratio analysis
- Trend analysis

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A nurse manager must thoroughly understand clinical nursing processes in order to apply financial management to enhance both the quality and the efficiency of nursing care.
Budgeting
Budgeting is like the nursing process. It entails diagnosis, planning, implementation and evaluation. Incorporation of clinical competence and process understanding with the techniques of cost analysis provides nurse managers the tools to assess cost problems and trends.

In financial, as well as clinical, management a well managed unit is one in which the managers identify problems, explore and evaluate action plans, implement accepted plans and adjust processes depending on feedback information.

The amount of managers’ participation in the budget process depends on their philosophy. The current trend is for managers near the point of service to play a more active role in quantifying the demand for resources.

The budgeting process is an important part of the organisation’s planning and control functions. It starts with the organisation’s strategic objectives. The operating budget for a specific time period derives from the marketing plan for that period. The concepts of fixed and variable cost and capital expenditures explained in previous parts of this series are critical to effective budgeting.

For nursing, the budgeting process begins with the expected case load and mix that the marketing plan indicates it must serve. The standard quantities and prices of the resources that should be used to serve this case load are determined in the clinical setting. These are based on standards defined in the care protocols of the forecast quantity and mix of cases.

Perhaps the most valuable contribution the nursing service can make is in applying its knowledge of effective nursing practice to determining the resources, and, hence the costs, that will be needed to give acceptable care to patients. Part of this responsibility involves keeping abreast of changes in nursing practice that allow cost reduction without compromising the quality of care. Accurate ‘bottom-up’ resource use and cost estimates to ‘top-down’ projections of case loads is the essence of budgeting.

Information on the standard protocols, that is the nursing activities and inputs needed to meet doctors’ orders, is critical to controlling nursing costs. The aim is for each activity to cost no more than it should and for no more resources to be used than required. Financial reports of use to nursing administration should provide this information.

Variances
Management reports should categorise interventions done, indicate the standard cost of filling these orders, show the actual cost and indicate the difference between those two amounts. These differences are called ‘variances’. Cost variances can be shown in money or in quantities of the more expensive resources used. For staff nurses, variances in quantities of resources are often more meaningful than money. Training in measuring the costs of activities and using cost variance analysis is basic to budget management.

Critical success factors
The concept of ‘critical success factors’ was raised by senior managers and explored in part 1 of this series. These are activities in which unacceptable results or inefficient work cause costs to rise significantly above their standard amounts i.e large cost variances. Identifying these success factors demands nursing knowledge and cost measurement skill.

Once identified, tracking the frequency and location of these factors indicates where the

<table>
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<th>Box 2. In-service training guidelines</th>
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<tr>
<td>Have a basic understanding of why surplus/profit is essential to the viability of a health care organisation.</td>
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<td>Understand why clinical personnel and managers should be more concerned about cost control techniques rather than revenue production.</td>
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<td>Understand why measurement of costs should focus on aggregating the costs of activities as opposed to allocating the costs of departments.</td>
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<td>Be able to identify and trace the sequences of activities demanded by clinical interventions associated with specified patients or case categories.</td>
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<td>Be able to work in cross-departmental groups in order to identify appropriate cost suboptimisation and minimise organisation costs.</td>
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<td>Understand the allocation of fixed-cost resources needed to produce the array and quantity of direct patient care services demanded in an accounting period.</td>
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<td>Be able to apply activity cost techniques to compile operating budgets for the department, unit, or service.</td>
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<tr>
<td>Be able to quantify critical success factors and identify critical cost factors within the department, unit, or service.</td>
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<tr>
<td>Understand the concepts of variance, ratio, and trend analysis and apply the principles in decision making about patient services and quality of care.</td>
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Note:
These objectives differ from those the survey respondents imply in that the authors recommend greatly reducing emphasis on revenue and income computations and increasing emphasis on more accurate measurement and control of costs. This is because

| Revenue managers are increasingly being paid at the organisation level as opposed to rates for service from specific departments and these joint revenues cannot be logically divided among departments. |
| Research in other industries has established that measuring the cost of specific outputs by tracing costs through departments and allocating department costs to outputs incorporates so much averaging that the results are frequently erroneous. |
| Nurse managers can and do affect efficiency and costs of operations. They have only a very indirect effect on revenue. |
problems lie. In our original survey, executive managers said that this was the most productive cost control activity nursing management could undertake.

Nursing management also needs information on general trends in performance. This is done by routinely reporting meaningful performance ratios, as discussed in Part 3 of this series. The ratios chosen should be the ones that give the most information about performance that can be controlled.

Nursing's performance can be compared to national benchmarks and trade association averages such as those published by the American Hospital Association (AHA) and American Nurses' Association (ANA). Note that these figures may not be in units of money, though they monitor factors that affect costs.

In-service guidelines

In the first article of this series, 80 per cent of the respondents indicated that budgeting and financial management a financial development plan for modernisation and expansion.

Course participants need to be familiar with the organisation’s income statement and the balance sheet. Emphasis should be placed on the large percentage of total costs (especially in hospitals) that is influenced by nursing and clinical activities. They also need to understand the impact of cost on surpluses, and the importance of surpluses to credit rating and the ability to borrow money (as well as the ability to raise additional equity for profit organisations).

The instructor should make a special effort to explain that increasing numbers of health care organisations have revenue paid directly to the organisation in lump sums for a discharge or a capitated per member per month fee, as opposed to fees for individually billable services. As a result, producing income statements for departments within health care organisations provides very little usable information.

In addition, the instructor should point out that clinical activities such as nursing contribute to the financial strength of the organisation by controlling related costs while maintaining the quality of care. However, there is no legitimate way to attribute organisation revenue to these clinical services.

Instructional aids

Inservice educators need to offer a wide variety of instructional aids. Visual aids such as patient flow diagrams and handouts of budgets should be included to help understand the organisation's operation and demystify financial management processes (Table 2).

The use of available information systems support should be illustrated with examples of the information they contain and pertinent reports. Course participants should be given documentation on requirements and procedures for collecting and entering data from their respective services (Table 3).

Conclusion

This series of articles has discussed survey responses relating to financial management responsibilities of clinicians. Emphasis has been placed on content, purpose and the use of primary financial statements. Background of common cost accounting procedures and the importance of cost factors in nursing management and reporting have been included. Finally, an overview of training needs in accounting and finance has been presented with samples of basic tools for inservice education and course content lesson plans.

Nurses should seize the opportunity to learn about finance, cost containment and all other aspects of business management (Crawford 1993). The long term viability and success of the health care organisation depends on the integration of cost control and quality care.

References


Further reading


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