### COST ALLOCATIONS FOR HOSPITAL MANAGEMENT

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# COST ALLOCATIONS FOR HOSPITAL MANAGEMENT

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#### CASE DESCRIPTION

The primary subject matter of this case concerns structuring cost accounting information. A secondary issue is the focus on how the information might be used and to this end there are no numbers in the case. Depending upon the requirements chosen by the instructor, this case could be successfully used in an undergraduate cost accounting or accounting information systems course. It could also be an effective tool for an MBA-level managerial course. Level of difficulty would therefore be at the four or five level. The case is designed to be discussed in one and one-half hours and should take students no more than five hours of outside preparation.

#### CASE SYNOPSIS

This hospital-based cost accounting case is unique in its lack of numerical information. The objective is to make students focus on the way the information should be structured and the way the information may be used rather than completing some financial reports. For most students this is far more challenging than it appears at first .Jamesville Hospital has grown rapidly, but its accounting system is still very basic. The financial records are adequate, but the hospital's growth has challenged the management team to provide improved information about revenue and cost centers in preparation for developing information about the costs of the various procedures. The real issue in this case is that as the hospital grew, its accounting system did not evolve in a useful, practical or logical manner. Few departmental managers actually use the data generated by the current accounting system so the hospital has no real way to manage its costs.

### INSTRUCTORS' NOTES

### Teaching Approaches

Jamesville Hospital has grown rapidly, but its accounting system is still very basic. The financial records are adequate, but the hospital's growth has challenged the management team to provide improved information about revenue and cost centers in preparation for developing information about the costs of the various procedures. The real issue in this case is that as the

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hospital grew its accounting system did not evolve in a useful, practical or logical manner. Few departmental managers actually use the data generated by the current accounting system so the hospital has no real way to manage its costs.

The case is unique and particularly challenging because no financial information is provided. The information is descriptive in nature and requires that students think about the underlying accounting concepts and applications without the complications (or crutch) of dollar amounts or quantities.

Because of the unfamiliarity of most students to medical settings, this case is best used with teams. The unfamiliarity coupled with the complete lack of numbers poses a challenge in guiding the teams to a meaningful analysis. Introduction of the case is not difficult because the students automatically assume an accounting case with "no numbers" will be easy and the "solution" will be brief. Depending upon the course level and the topics to be emphasized, an instructor may want to spend an hour answering questions for the entire class at some mid-point in the assignment when the students have realized the depth of the case.

#### LEARNING OBJECTIVES/KEY TOPICS

This case allows the instructor to tailor the students' learning objectives to the topics emphasized in the class. Some learning objectives/key topics that can be stressed include:

- ♦ Analytical/critical thinking
- ♦ Role of accounting information in decision making
- Relevant information for decision making
- ♦ Assigning costs to customized procedures (job order costing)
- ♦ Assigning costs to standard procedures (process costing)
- Overhead allocation design
- ♦ Use of ABC in a non-traditional setting
- ♦ Selection of cost drivers (allocation bases)
- ♦ Allocation design for support department costs
- ♦ Limitations of cost allocations
- Joint processes and joint costs
- ♦ Variance analysis
- ♦ Behavioral impact of cost accounting
- ♦ Accounting system design (or redesign)

## POSSIBLE QUESTIONS FOR CASE ANALYSIS

1. Review the chart of accounts in Table 2. For each account, determine the need to designate any accounts as "controlling" and then to establish subsidiary accounts. For any subsidiary account, determine how that account is to be defined (what costs are to be collected in that subsidiary account). For example, should account 6000 Salaries be a controlling account with subsidiary accounts for nursing salaries at each site and other salaries at each site?

In general, the students will initially take the easy way out and respond that all accounts should be control accounts and should have subsidiary accounts. After a discussion of materiality, students should begin to realize that some accounts do not need subsidiary accounts while others may need many more than three subsidiary accounts.

While student answers may vary, most students will recognize that 6830 Postage probably doesn't need to be broken down into subsidiary accounts. In particular, those accounts that appear to have less activity (no matter the materiality) are also items that would not typically be broken down any further (see accounts 6682, 6684, 6690 6735, and 6890)

At the other extreme, tracking utilities for each site would seem to have intuitive appeal. The medical accounts could be sorted into subsidiary accounts depending upon location or procedure, as is appropriate to the hospital's interesting in tracking those costs and the relative materiality. The biggest item to break down is clearly that of 6000 salaries – depending upon the sophistication of the students, the instructor may encourage the students to consider range of possibilities. For lower level students, two subsidiary accounts (Nursing Salaries and Other Salaries) may be sufficient while graduate students might be encouraged to think about narrower subsidiary accounts based on possible decision making (e.g., Nursing Salaries by sites, Professional Salaries by area, and related fringe benefits traced to these accounts).

 Review the cost classifications from Table 3. Redo using the information from Table 2 and any changes recommended as a part of question 1.

This question will throw many students into a panic to make changes where (possibly) none is needed. Unless the students recommend making changes to the accounting system (the way the costs are currently accumulated), any changes are merely superficial. As indicated in Question 1, postage should probably remain as a part of the indirect, non-traceable costs of the hospital.

A simple example of a cost pool that could be reworked is Information Systems. Information Systems contains accounts 6301, some of 6310, 6541 and occasionally some

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items from 6546. Some of these costs are related to services provided to specific centers while others are generic. Astute students might group these costs under the umbrella of Information Systems with subsidiary accounts for cost/revenue centers and a generic subsidiary account for services that are not traced to any cost/revenue center.

Make a list of questions to be asked and any further information needed to refine the
proposed cost allocation system along with explanations of why the information might
be useful.

Most students want an appendix of medical terms; this request allows the instructor to branch into a discussion of continuous learning, including such issues as who is responsible for an employee's clarification of unknown processes and terminology. Another common and reasonable request is for clarification of exactly what does each expense account include. This, too, presents the instructor with the opportunity to touch on the need to know more than accounting rules and regulations.

 Based upon your reviews for parts 1 and 2, list suggested changes to the accounting system.

The suggested changes are limitless. Some reasonable, obvious ones are

- A better numbering system (one where each digit has meaning and expenses are grouped by similar characteristics);
- a breakdown of some of the large expense accounts into smaller, more defined accounts (salaries is particularly troubling as is depreciation); and
- development of a system with ease of expansion.
- 5. Review the cost pools and allocation bases from Table 4a. Based upon (your recommendations above and) the information gleaned from the JH narrative, write a memo recommending and explaining changes in the cost pools and allocation bases.

Student responses will be varied. The students who have been led to this point with previous questions (especially questions 1 and 2 above) will be better equipped to respond meaningfully, but if the instructor has just finished discussing cost allocations (service departments, ABC costing and overhead bases), the class will be able to offer suggestions in pools and allocation bases readily.

At the lowest class level, not many students will change the cost pools (or the suggested changes will be minor). However at all levels, many students will immediately ascertain that better allocation schemes are available and suggestions sometimes have to be

reined in by the instructor as to what is practical. A typical response that is impractical relates to the long-distance usage on the telephone cost pool; students want to track and assign this cost without much reflection.

The most creative area for student reflection is the cost pool of Nutrition/Cafeteria. It is worthwhile to spend class time discussing the potential for change in this cost pool and its allocation base. This discussion provides a natural segue into the uses of different bases by the reimbursement accountant and the cost accountant. Instructors should take care to emphasize the available information that is simply ignored in the cost accounting implementation.