

Study of Purchasing and Materials Management Functions in Private Hospitals

Opportunities for Improving Hospital Purchasing
Inventory Management and Supply Distribution



109276



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FOREWORD

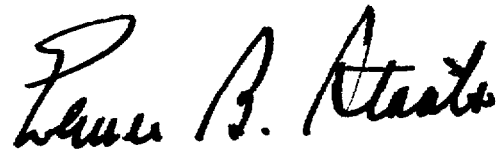
This two-part study of purchasing and other materials management functions in short term, general purpose hospitals identifies opportunities to control costs.

In Part I, we have presented our observations and suggestions that should be considered by hospital officials to improve their purchasing, inventory management, and supply distribution functions. The suggestions contained in our study are directed toward achieving what we believe to be sound procurement and materials management practices. However, given the wide range of hospital sizes and staff available to carry out these practices, we recognize the suggestions may not be appropriate for all hospitals. We trust, however, that hospital administrators and managers will exercise good judgment and, after careful and objective study, implement those suggestions that are cost effective for their organizations.

In Part II, we have presented the management-oriented checklist which is based on prudent purchasing concepts and materials management principles. The checklist and companion audit guide are management tools that can be used effectively by hospital administrators, managers, and auditors in gathering information, surfacing problems, and improving purchasing and other materials management functions. Ultimately, significant cost containment measures and increased public confidence can result from their use.

We received excellent assistance and cooperation from officials of the 21 hospitals participating in this study, several purchasing groups, and the American Hospital Association (AHA). Their cooperation contributed to the successful and timely completion of this study.

The AHA reviewed a draft of this report. The AHA commented that the report generally presents a fair and accurate assessment of current purchasing practices in short term, general purpose hospitals and that the constructive tone of the report and its recommendations should enhance its receptivity. The AHA also commented that the checklist and audit guide are useful management tools. Its detailed comments follow this foreword.



Comptroller General
of the United States



AMERICAN HOSPITAL ASSOCIATION

840 NORTH LAKE SHORE DRIVE CHICAGO, ILLINOIS 60611 TELEPHONE 312-280-6000

TO CALL WRITER, PHONE 312-280-6626

March 1, 1979

The Honorable Elmer B. Staats
Comptroller General of the United States
United States General Accounting Office
441 G. Street, N.W.
Washington, DC 20548

Dear Mr. Staats

The American Hospital Association appreciates the opportunity to have assisted the United States General Accounting Office in a project to develop constructive guidance for improving the materials management functions in our nation's hospitals. We thank you for providing a copy of the draft report for our review and comment. The draft report was reviewed by both an advisory committee representative of hospital purchasing and materials management and by association staff with expertise in materials management and financial management.

The report generally reflects existing practices at the test-site hospitals and presents a fair and accurate assessment of current purchasing practices in short-term, general-purpose hospitals nationally. The tone of the report and its recommendations are constructive rather than critical, a factor which should enhance its receptivity by those professionals involved in managing or evaluating hospital materials management.

The checklist and audit guide, used in a positive and constructive manner, can be of significant value and utility in evaluating and improving a hospital's materials management function. Therefore, we encourage hospital administrators, materials managers, purchasing agents and others to consider the use of the checklist and audit guide as appropriate guidelines for the self-review of the purchasing and materials management functions. Proper use of the results of this self-review can lead to significant improvements in the effectiveness and efficiency of these important hospital functions.

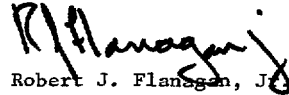
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Elmer B. Staats/2

March 1, 1979

Once again, thank you for the opportunity to have participated in a project designed to provide constructive guidance for improving the materials management functions in our nation's hospitals.

Very truly yours



Robert J. Flanagan, Jr., D.B.A., C.P.A.
Vice President

CHAPTER 1

INTRODUCTION

Health care expenditures in the United States during fiscal year 1976 totaled about \$139 billion--a 14-percent increase from the previous year. Hospital costs in 1976 totaled \$56 billion and increased to \$64 billion in 1977.

Over the past 10 years, hospital costs have increased at an annual rate of 11 to 18 percent. These increases have generated congressional interest in cost containment measures.

Most hospital costs have been paid by medical insurance companies and by the Government through programs such as medicare and medicaid. In recent years, however, insurance companies' reimbursement limits and the threat of Government controls, such as the proposed cost containment bill, have sparked voluntary programs to check cost increases.

In 1977, the American Hospital Association (AHA), the (American Medical Association) and the Federation of American Hospitals began a program to reduce the rate of increase in health care costs. Program objectives were to:

- Cut the annual increases in national hospital expenditures by 2 percentage points in 1978 and 1979 while maintaining quality care.
- Reduce new capital investment by hospitals.
- Improve hospital productivity by at least 2 percent during each of the next 2 years.
- Tighten utilization review controls within hospitals.
- Improve health care delivery systems by employing multihospital system and shared services.

AHA has sponsored several educational programs on cost containment. For example, it has developed an instructional package for in-house training of supervisory and managerial staff on managing operations to control costs. Also, AHA has encouraged hospitals to form internal cost containment committees and has published digests of ongoing cost reduction projects throughout the Nation.

Containing health care costs is of major concern to Government and consumers as well as to the health care industry.

Therefore, with the cooperation of AHA, we studied selected hospitals' management of materials to:

- Identify ways in which hospitals can reduce the cost of supplies and services and increase the effectiveness of purchasing, inventory management, and supply distribution systems.
- Develop a checklist and guidelines for hospital administrators, managers, and auditors to use in monitoring, evaluating, and improving their systems.

With AHA's assistance, we surveyed the purchasing, inventory management, and supply distribution practices of 21 short term, general purpose hospitals in Illinois, Indiana, and Wisconsin. ^{1/} We reviewed in detail the practices of four of these. The following statistics for 1977 give some indication of the size and expenditures of these four hospitals.

	Hospital			
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Inpatient data:				
Beds	516	392	105	75
Admissions	19,128	14,243	5,292	3,646
Census	404	339	77	52
Occupancy (percent)	78	82	73	69
Personnel	1,400	1,294	322	215
Expense (000 omitted):				
Payroll	\$16,046	\$15,331	\$3,355	\$1,879
Nonpayroll	<u>12,176</u>	<u>13,886</u>	<u>3,418</u>	<u>1,997</u>
Total	<u>\$28,222</u>	<u>\$29,217</u>	<u>\$6,773</u>	<u>\$3,876</u>

Effective management of supplies, services, and equipment has become a major concern for most hospitals. With increasing pressures for cost control, hospitals have with varying degrees centralized management control over purchasing and supply functions and employed a number of cost-saving techniques.

^{1/} In 1977, about 7,100 hospitals with a total bed capacity of 1,407,000 were registered with AHA.

Authority for purchasing and supply functions was variously delegated at the 21 hospitals we visited. For example, 12 had appointed a materials manager and 9 had not as shown by the following table.

<u>Bed-size category</u>	<u>Number of hospitals visited</u>	<u>Organization included materials manager</u>	
		<u>Yes</u>	<u>No</u>
6 - 24	0	0	0
25 - 49	1	0	1
50 - 99	2	0	2
100 -199	7	4	3
200 -299	5	4	1
300 -399	4	3	1
400 -499	0	0	0
over 500	<u>2</u>	<u>1</u>	<u>1</u>
Total	<u>21</u>	<u>12</u>	<u>9</u>

At eight of the nine hospitals that did not employ a materials manager, a purchasing agent or manager was responsible for purchasing, receiving, and storing supplies. Some of these managers were responsible for items used by more than one department and had varying degrees of responsibility for items used by single departments such as dietary, pharmacy, and radiology.

In the chapters that follow, we have presented our observations that should be helpful to all short term, general purpose hospitals in improving their purchasing, inventory management, and supply distribution practices, thereby reducing health care costs. We noted varying efficiency and weaknesses in hospital practices; we did not, however, assess each hospital's overall effectiveness. Thus, the examples cited should not be considered indicative of the general efficiency of these hospitals. Part II presents the management-oriented checklist and a companion audit guide for use by auditors, administrators and other officials for evaluating purchasing, inventory management, and supply distribution systems.

CHAPTER 2

OPPORTUNITIES TO CONTROL COSTS

THROUGH CENTRAL PURCHASING

Hospitals require a wide range of supplies, services, and equipment. Most hospitals use relatively large quantities of consumable supplies, such as intravenous solutions, bandages, drugs, food, X-ray film, laboratory chemicals, cleaning agencies, and linen. Hospitals purchase some items directly from manufacturers and some through distributors. Services such as food preparation, housekeeping, and laundry may be either purchased or performed by hospital employees.

Central purchasing is widely recognized as essential to cost containment programs. It can result in savings by consolidating departmental needs and by reducing the number of employees involved in purchasing functions. Further, central purchasing provides a means for strengthening purchasing and for establishing clear purchasing policy.

Most hospitals we visited have centralized under one manager the responsibility for purchasing, receiving, and storing supplies used by more than one department. They have not, however, centralized authority for purchasing supplies of a specialized nature used by one department, such as pharmaceuticals, food, and to a lesser degree, radiology, laboratory, and maintenance supplies. Typically, user department managers are responsible for these purchases.

At times, delegating purchasing authority and responsibility to some department managers may be necessary because of hospital size, special departmental needs, or the purchasing department's lack of expertise. In some of these instances, blanket or standing purchase orders can be effective. Further, the central manager should monitor departmental purchases to ensure they are cost effective and consistent with hospital purchasing policy.

With a greater degree of central management of all purchasing functions hospitals can

- plan and schedule purchases;
- maximize competition;
- apply value analyses, standardize items, and evaluate alternatives;

- participate in purchasing groups;
- share information with each other; and
- strengthen accountability and internal controls.

PLANNING AND SCHEDULING

The concepts of planning and scheduling tend to overlap. Planning is primarily concerned with deciding how to best acquire the goods and services, and scheduling is concerned with when to acquire them.

Planning and scheduling of purchases can be improved. As discussed in chapter 3, hospitals can use quantitative techniques to establish reorder points and economic order quantities for all purchases by centralizing control over all supplies.

COMPETITION

Competitive bidding gives a hospital a wider choice among suppliers and products, leading to higher quality goods and services at lower prices. However, the four hospitals we reviewed in detail did not maximize competition for supplies. Brand name preference of the medical and nursing staffs and the use of group purchasing agreements were two major obstacles to competitive bidding.

Three of these hospitals also did not solicit competitive bids for capital equipment. Generally, the user departments selected the equipment and the vendor on the basis of their own preferences.

Where major supplies were competed for on the basis of committed volume, the hospitals significantly reduced costs. For example, one hospital solicited bids for intravenous solutions and reduced its costs by about 12.5 percent. Another hospital reduced costs by about 17 percent on plastic liners.

Care must be taken when competitive bids are evaluated. For example, one hospital received the following bids for brand name X-ray film:

<u>Vendor</u>	<u>Discount off list price</u>	<u>Prompt payment discount</u>	<u>Total</u>
		Percent	
A	19	-	19
B	17	3-1/2	20-1/2

The hospital, however, overlooked the additional discount for prompt payment and selected vendor A.

VALUE ANALYSIS AND STANDARDIZATION

Value analysis and standardization techniques are invaluable to containing costs while maintaining quality health care services. Value analysis has been defined as follows:

"The study of relationship of design, functions, and cost of any product, material, or service with the object of reducing cost through modification of design or material specification, manufacture by a more efficient process, change in sources of supply (external or internal), or possible elimination or incorporation into a related item." 1/

One authority 1/ developed 10 tests to be used in value analysis. An opportunity for cost reduction may exist if an item fails any of them.

1. Does the item serve a purpose?
2. Is its cost proportionate to its usefulness?
3. Are all of its features needed?
4. Is there another item that will perform more effectively?
5. Can it be made in-house for less?
6. Is there a standardized item that can be substituted? (See below.)
7. Can it meet present and future demand?
8. Does its cost exceed materials, labor, and overhead plus a reasonable profit?
9. Will another dependable source supply it for less?
10. Is anyone buying it at lower cost?

As indicated by test number 6, standardization should be considered in value analysis. The purpose of standardization is to reduce the number of different types and brands of items that serve the same purpose.

Some hospitals established a product evaluation and standardization committee as a vehicle to implement value

1/ Dean S. Ammer, Purchasing and Materials Management for Health Care Institutions, Lexington, Mass.; Lexington Books, D.C. Heath and Company, 1975.

analysis, standardization, and other cost-saving techniques. One hospital formed an exemplary, results-oriented committee of medical, nursing, pharmacy, and administrative staffs. With full support of the administrator, the committee reviewed a significant number of supplies and reduced their costs.

GROUP PURCHASING

Many hospitals have joined a group to increase their purchasing power. The primary benefit of group purchasing is a reduction in costs through volume purchases. It also eliminates duplicate efforts and improves technical support in defining requirements for soliciting, awarding, and administering contracts. Group purchasing's great potential for reducing costs can be realized by maximizing participation, increasing supplies and services available under group agreements, and sharing information.

Of the 21 hospitals included in our study, 19 were members of 10 different purchasing groups. Some hospitals belonged to more than one group. Of the two hospitals that had not joined any group, one disliked group purchasing and the other was considering joining a group.

Small hospitals are particularly attracted to purchasing groups. Their small purchases do not permit them to obtain prices as low as those available under group purchasing agreements. A case in point is a 50-bed hospital that by joining a purchasing group is obtaining intravenous solutions at prices comparable to those paid by a 400-bed hospital.

The attitude among most hospital officials was to use group purchasing agreements whenever possible. Each of the four hospitals reviewed in detail participated extensively in at least one purchasing group, except for food purchases. Some purchases were made individually because:

- Group agreements do not cover all supplies, services, and equipment.
- Doctors, nurses, or radiologists prefer certain brands or suppliers to those in the group agreements.

One hospital had estimated savings for a recent year at about \$70,000. The others had no savings estimates.

Hospitals should consider whether group purchasing saves them money. Comparing prices for similar items purchased by the four hospitals shows that while some were obtained

at lower prices through group agreements than independently, for others the opposite was true.

Sharing information

Hospitals and purchasing groups need to share information. Openness protects against favoritism and profiteering. It also gives all parties concerned an opportunity to learn how suppliers bid on hospital requirements. The principles of openness, however, did not appear to be widely observed among hospitals and purchasing groups we visited. An exchange of information can begin on such readily available data as prices of common supplies and sources and later extend to more sophisticated data, such as results of value analysis and standardization.

A regular flow of information between hospitals and between various purchasing groups, even geographically dispersed, would permit each to take advantage of the other's experiences. To the extent practical, information should be shared on matters such as

- new products entering the market,
- alternative products identified through value analysis,
- cost-effective methods of purchasing, distributing, and sharing supplies, services, and equipment,
- breakthroughs in contracting methods, and
- prices paid for specific goods and services.

ACCOUNTABILITY AND CONTROL WEAKNESSES

Accountability, as well as authority, for the purchasing function should be centralized. This involves the efficiency and cost effectiveness of the manner in which goods and services are acquired. Realistic goals must be set, performance must be periodically reported, and internal and external audits or reviews must be performed. However, none of the studied hospitals required goal setting or performance reporting or had a program for regularly reviewing purchasing activities.

Internal controls are an invaluable aid to efficient management of the purchasing function. Each of the four hospitals reviewed in detail had various weaknesses in internal controls. None of them had clearly separated the functions of purchasing, receiving, recordkeeping, and

verifying invoices. At one small hospital, for example, the same individual performed all of these functions. We realize that the separation of all these duties is not always practical, particularly in smaller hospitals, but the more they are separated, the less chance there will be for unauthorized or improper practices. Other weaknesses included:

- the absence of accurate perpetual inventory records,
- lack of management review of purchase and inventory records,
- ineffective systems for authorizing central stores requisitions, and
- a lack of documentation to resolve discrepancies between purchase orders, receiving reports, and invoices.

CONCLUSIONS AND SUGGESTIONS

Centralization, which is essential to cost containment programs, was not employed to the fullest in hospital purchasing functions. Strong central management would help to maximize competition, value analysis, standardization, group purchasing, information sharing, accountability, and internal controls.)

We, therefore, suggest that hospitals:

- Centralize as many purchasing functions as possible.
- Maximize competition among sources of supplies, services, and equipment.
- Establish a product evaluation and standardization committee comprised of representatives from all key departments such as medical-surgical, nursing, pharmacy, purchasing, and administration to consistently apply the concepts of value analysis and standardization.
- Evaluate all alternatives before participating in group purchasing agreements.
- Share information on such matters as prices and sources, value analysis and standardization results, new distribution methods, and new contracting techniques.

--Establish a program to regularly review and evaluate purchasing functions.

--Establish effective internal controls.

CHAPTER 3

OPPORTUNITIES TO CONTROL COSTS

THROUGH CENTRALIZED INVENTORY MANAGEMENT

AND SUPPLY DISTRIBUTION

Hospitals included in our study did not centrally manage all supplies. Medical-surgical and other supplies were often stored in various user departments. Centrally stored supplies were usually better managed and controlled. Other supplies were expensed when issued to departments and were not subject to inventory management procedures.

The characteristics of some supplies or some user departments, limited storage space, and the physical characteristics of some hospitals may prohibit central storage of all supplies. In those instances, a central manager should establish appropriate policies and procedures and monitor departmental practices.

Centralizing inventory management systems and supply distribution provides opportunities to control costs. Inventory investment, stockouts, obsolescence, shrinkage, and waste can be reduced. Additionally, internal controls can be strengthened and supplies can be distributed more efficiently.

ADVANTAGES OF A CENTRALIZED SYSTEM

Centralized inventory supply and distribution enhances inventory management. Such a system transfers responsibility for all stocks to one individual. Various advantages are attributed to centralized inventory management.

- Inventory responsibility is transferred from the user to an inventory specialist. Department personnel can devote more time to the areas for which they have been trained.
- A single, centrally managed inventory replaces two separate inventories: one in the storeroom and the other located in various departments throughout the hospital. Supplies remain on inventory records until actually used.
- Accordingly, inventory levels can be lowered. Quotas established for each department can be controlled from a central location.

--There is less likelihood of hoarding, spoilage, obsolescence, or pilferage.

--Patient-chargeable supplies are more easily controlled and accounted for.

Some hospitals use a "PAR level" control system or an exchange cart system to centrally control the distribution of supplies to user departments. These systems are adaptable for most hospital supplies. In the PAR level system, each department has its own storage area for a specific quota of supplies established by a central manager. Periodically, these stocks are replenished by central stores personnel. Under the exchange cart system, each department is assigned two carts. One remains in the user department until it is exchanged for a full one from central stores. The used cart is returned to central stores where it is inventoried and restocked. As with the PAR level system, actual usage serves as the basis for reducing inventory.

Centralized distribution methods are appropriate for supplies which are centrally stored and used by more than one department. In departments such as radiology and laboratory, however, the nature of the supplies may preclude this treatment. In these cases, a central manager should establish inventory levels and monitor departmental usage patterns.

INVENTORY MANAGEMENT

Hospitals in our study had formal systems to manage central stores inventories. These hospitals maintained inventory records, including some sort of usage data, and generally applied quantitative techniques to control stock levels. However, at two hospitals we observed similar records were not kept for supplies stored in such user departments as radiology, laboratory, and respiratory therapy. Also, department managers usually requisitioned supplies from central stores or initiated purchase actions on the basis of judgment or available shelf space.

Hospitals need to centralize management control over all supplies including departmental stocks. By doing so, they can apply quantitative techniques to all inventories to establish reorder points and economic purchase quantities; effectively control inventory investment; minimize stockouts, shrinkage, and obsolescence; and strengthen internal controls.

Quantitative methods

Some of the 21 hospitals included in our study indicated that they relied on experience and judgment to manage the

central stores inventory. Others indicated that they used quantitative methods such as "ABC" and economic order quantity (EOQ).

ABC analysis

The ABC analysis is an inventory management technique. Each inventory line is ranked A, B, or C, according to annual usage value (unit price times annual usage). Category A items represent high usage, B items represent average, and C items represent low usage. After all items are ranked, the inventory is set up as follows:

<u>Category</u>	<u>Percentage of</u>	
	<u>Items</u>	<u>Inventory investment</u>
A	10	70
B	20	20
C	70	10

With ABC analysis, inventories are managed more efficiently and inventory investment can be reduced. Safety stock levels of category A items are set relatively low. By this method, a hospital can reduce inventory investment costs on a major portion (70 percent) of its inventory.

The materials manager at one hospital used the ABC analysis to manage the central stores inventory. He reduced safety stocks on category A items to an average of 10 days' supply. Also, the use of the ABC analysis contributed to the reduction of central stores inventory from about \$800 to \$425 per bed.

ABC analysis is also useful in purchasing supplies. The purchasing agent can devote more of his time to developing alternative sources and more favorable prices on high-value items.

Economic order quantity

With the EOQ method, the order point for an item is determined by the following formula.

$$\text{Safety stock} + \text{lead time usage} = \text{order point.}$$

After order points are established, question is "How much should be ordered?" A second formula is used to arrive at the purchase quantity that will result in the lowest total costs for buying and stocking inventory.

$$EOQ = \sqrt{\frac{2 \times U \times C}{P \times I}}, \text{ where:}$$

U = annual usage in units

C = ordering cost per order

P = price per unit

I = inventory carrying cost in percent per year.

Although the EOQ principle assumes a fixed purchase price for each item, suppliers sometimes offer price discounts for large quantity purchases. In such cases, the total annual costs must be calculated using the discount prices. The EOQ is then determined to be the quantity which yields the lowest total cost.

Using the best available estimates for the cost factors, we calculated the EOQ for several items at each of the four hospitals. We compared the EOQ calculations to the hospitals' actual order quantities. Generally, actual order quantities:

- equaled EOQs at one hospital,
- exceeded EOQs at the second,
- fell below EOQs at the third, and
- bore no consistent relationships to EOQs at the fourth.

Only two hospitals calculated the EOQs. And one of these grossly underestimated ordering and carrying costs. It estimated ordering costs as \$1 per order and carrying costs at 24 percent of inventory. However, this hospital has a relatively large purchasing staff, stores the inventories in a rented warehouse, and delivers supplies by truck twice daily to the user departments.

Central stores inventories

All of the 21 hospitals maintained a central stores inventory. The availability of useful data and the composition of the inventories varied widely. For example, information such as the number of line items, inventory quantities and value, ordering and carrying costs, and annual purchases of inventory items was not always available. Further, central stores inventories did not always include

intravenous solutions, X-ray film, or sutures which are high-cost and widely used supplies. At some hospitals, these items were not inventoried but were charged to expense when delivered to the user departments. Sometimes, intravenous solutions were included in the pharmacy's inventory.

Some hospitals maintained perpetual inventory records for centrally stored items. These records can be useful for inventory management since they reflect purchase and usage histories and quantities on hand. The inventory manager can calculate safety stocks, reorder points, and order quantities and can identify slow-moving items, stockouts, and shrinkage.

Perpetual inventory records were not always properly maintained, however. At two hospitals we found posting and mathematical errors. Also, store clerks had access to these inventory records and adjusted inventory balances for shortages without adequate explanation or supervisory approval.

Departmental stocks

Supplies stored in various departments were not inventoried nor centrally managed. At two hospitals, none of the departments kept records showing data such as quantities on hand, inventory values, usage data, and reorder points. Examples of departmental ordering practices are set forth below.

The radiology department at one hospital ordered X-ray film and chemicals through the purchasing department. The supervisor consistently ordered and received delivery of about one month's requirements which ranged from \$3,000 to \$10,000 despite next-day delivery service.

The respiratory therapy department at another hospital requisitioned supplies through the purchasing department. However, the purchasing department's role was limited to "processing the paper" as the respiratory therapy supervisor decided what, when, and from whom to buy. In determining order quantities, the supervisor used his judgment instead of analyzing usage data. The supervisor usually bought from the same suppliers because they provided good service. At this hospital, the laboratory purchased supplies independently of the purchasing department. The laboratory director ordered supplies, issued purchase orders, received the merchandise, and approved invoices for payment. He, too, based order quantities and stock levels on his judgment.

SUPPLY DISTRIBUTION

Most hospitals maintained a central stores unit to store purchased supplies and a central supply unit to function as an intermediate distribution point for medical-surgical supplies and equipment. The central supply unit requisitioned supplies from central stores. Thus, to varying degrees, the same items were stocked in central supply and in central stores.

Controls over medical-surgical supplies--including patient-chargeables--and linen distributed to user departments were weak. Use of PAR level and exchange cart systems stocked and controlled by central stores could improve the efficiency of these distribution functions and ultimately contain costs.

Medical-surgical supplies and equipment

Historically, the function of central supply was to process and sterilize reusable supplies and equipment. However, as the use of disposable supplies increased, the role of central supply in many hospitals was expanded to include storing and distributing these items. At 15 of the 21 hospitals surveyed, the central supply department distributed medical-surgical supplies and equipment directly to nursing stations and other users. Often, supplies were considered used when they were transferred from central stores to central supply. When transferred, the supplies were expensed and removed from the central stores inventory records. This practice resulted in a loss of control, as illustrated by the following examples.

One hospital stocked about 900 line items in central supply for ultimate distribution to nursing stations and other users. These supplies were expensed when transferred from central stores to central supply. No information was available as to the quantities and dollar value of stocks on hand in central supply. Most of the 900 line items were also stocked in central stores. Formal stock levels and reorder points were not established for items stored in central supply. Instead, central supply clerks reordered supplies based on their judgement of what was needed or the amount of shelf space available. Central supply did not maintain a perpetual inventory nor take physical inventories. Hence, quantities and dollar value of supplies on hand were unknown.

At another hospital during a recent year, central supply requisitioned about \$423,000 in medical-surgical supplies from central stores. As central supply distributed supplies

to user departments, it was credited and the user charged. At the end of the year, \$135,000 remained in the medical-surgical expense account for central supply. How much of this amount represented actual inventory on hand could not be determined, as central supply did not use a perpetual inventory system and did not take physical inventories.

At another hospital, both central stores and central supply distributed medical-surgical supplies to user departments. The hospital expensed supplies when received in central supply and adjusted the supplies expense account on the basis of a year-end physical inventory. However, the inventory did not include medical-surgical supplies in central supply and user departments. Also, the central supply department established a PAR level distribution system for four user departments, but controls could be circumvented because the same items could be ordered directly from central stores.

Patient-chargeable supplies

Three of the four hospitals had weak controls over patient-chargeable supplies and inadequate accounting for the related revenue and expenses. These deficiencies may have contributed to lost revenue as well as precluding assessment of departmental performance.

Lost revenue

At one hospital, departments requisitioned patient-chargeable medical-surgical supplies from central supply. Departments were required to detach and return charge tickets when items were issued or used on patients. Central supply procedures, however, did not ensure that departments returned charge tickets. Often they were not, and the hospital did not charge the patients.

At another hospital, central supply reconciled charge slips with items issued by departments supplied through the PAR level system. However, it lacked similar procedures for other departments. In addition, these controls could be circumvented as departments could order the same items directly from central stores.

At a third hospital, a PAR level distribution system was in effect in some user departments. Storeroom personnel did not verify, reconcile, or account for patient charge slips when replenishing stocks; instead, departments sent charge slips directly to data processing for patient billing. Hence, the hospital had no assurance that patients were billed for all items or services.

Accounting weaknesses

At two of the hospitals, accounting procedures for departmental revenue and expense relating to patient-chargeable items were inconsistent. Consequently, departmental performance could not be measured.

One hospital charges all medical-surgical supplies to expense when received in central stores. Central supply and user departments requisitioned these supplies from central stores but were not charged for them. Similarly, although central supply and other departments such as surgery and emergency room submitted patient charges for medical-surgical supplies on their own department charge slips, all revenue was credited to a single account without identification of the source. This system gave hospital officials no information on individual departments' performance and did not encourage departments to use supplies efficiently. Since departments were not accountable for supplies they used, the hospital would have difficulty in detecting problem areas.

At the other hospital, the central supply department was credited for all revenue earned on patient-chargeable supplies. However, the cost of patient-chargeable supplies was charged to the user units. Again, this practice did not permit measuring department performance.

Linen

Replacing linen is costly for hospitals regardless of the type of laundry service--in-house, shared, or commercial. Replacement costs at the four hospitals ranged from about \$16,200 to \$63,000 for a recent year. Although linen eventually wears out, much of the replacement cost--estimates range as high as 80 percent--was due to waste and theft.

All four hospitals had weak controls over linen issued to user departments. As with other hospital supplies, effective internal controls require that individual departments be accountable for linen usage. None of the four hospitals effectively monitored department usage to identify potential problems such as shrinkage.

Additionally, none of the hospitals had a system to ensure that all linen issued was returned, and two hospitals inadequately controlled linen requisitions after regular working hours. For example, at one of the hospitals the quantity of linen issued to departments was recorded, but the data was not used to monitor returned linen. Also, departments

could requisition additional linen beyond established quotas without explanation. Departments often obtained linen after regular working hours without signing for it. Despite linen replacement costs of over \$60,000 in a recent year, management did not attempt to determine how much shrinkage might be due to theft or misuse.

CONCLUSIONS AND SUGGESTIONS

Central management and control of supplies is needed. In addition, weaknesses exist in internal controls over patient-chargeable supplies and in accounting for related revenue and expense.

(Centralizing the responsibility for supplies provides an opportunity to improve inventory management. Quantitative techniques can be applied to control inventory investment. With centralized management there is less risk of excessive buildup, shrinkage, lost charges, and obsolescence.)

We suggest that hospitals:

- Centralize control and distribution of medical-surgical and other supplies in the central stores unit by using systems such as PAR level and exchange carts. Where centralized distribution is not feasible, departmental inventory management systems should be established and centrally monitored.
- Apply quantitative techniques to facilitate inventory management and to control inventory investment. Also, calculate cost-effective order points and reasonably accurate inventory carrying and holding costs, to permit establishment of economic purchase quantities.
- Establish procedures to control and monitor linen use.
- Improve controls over patient-chargeable items. Reconcile supplies and services used with patient charge tickets and investigate differences, and make each department accountable for its revenue and expenses.

CHAPTER 4

OPPORTUNITIES TO CONTROL

PHARMACEUTICAL COSTS

Pharmaceutical costs can be reduced if top management assures that sound purchasing practices are employed in the pharmacy. The hospital pharmacy is a significant cost in the delivery of medical services. Drug purchases are a major portion of this cost--roughly two-thirds of the pharmacy's budget at the hospitals we reviewed.

Historically, pharmaceutical purchasing has been left to the pharmacist and his staff. This was also the case for the hospitals we surveyed, except for one which lacked a pharmacy. In most cases the pharmacies made their own purchases independently of the hospital's purchasing department.

The pharmacies we reviewed were minimizing costs by bargaining with vendors, limiting the number of brands carried, and using purchasing groups. Pharmaceutical purchasing improvements had lagged behind the improvements made in the hospitals' general purchasing activities, however. Procedures were generally very informal. Purchases were often made by simply calling a vendor when stocks were low and ordering what was needed. Decisions on what constituted low stock and how much to order were based on judgment with no formal criteria and few records to guide the decisions. Administrative and internal controls were often lacking.

AUTHORITY AND RESPONSIBILITY

Some experts recommend that the purchasing agent buy the drugs because of his purchasing expertise. Where the purchasing is done by the pharmacy, someone needs to assure that comprehensive purchasing procedures are consistent with those used in the purchasing department.

The purchasing agent's involvement in pharmaceutical purchases was limited at the 21 hospitals we surveyed. Although many of the hospitals had materials managers who could monitor the pharmacy to assure that its purchasing procedures were comprehensive and consistent with hospital policy, only one of these officials had such authority. At the other hospitals, pharmacy purchasing procedures were determined independently.

These procedures were largely informal at the four hospitals reviewed. For example, those items which have the greatest potential for savings--generally the high-dollar volume items--should be given the closest scrutiny. However, only one of the hospitals had accumulated usage data, and it did not report this information in a form that could be used to identify high dollar volume items. This same hospital had started to record purchases on a purchase history card, but limited this data to purchases made directly from the manufacturers although purchases from wholesalers accounted for 30 percent of its volume. The other three hospitals could not readily identify their high dollar volume items with any accuracy, since the best information they had was inventory balances, which do not reflect actual usage.

Only one of the four hospitals had a systematic procedure for determining when to order pharmaceuticals. A reorder point was coded on the stock for each item. Those reorder points were based on judgment and then readjusted by experience. This approach, while better than none at all, was not as satisfactory as that used by the purchasing department, which systematically calculated the reorder point for each item based on vendor leadtime and safety stock requirements.

None of the pharmacies used economic order quantity theory or other quantitative methods in determining the quantity to order. In some cases an item's unpredictable and infrequent usage may negate the value of a strict EOQ computation. The only way to evaluate these situations is to apply the technique to each item to see where it works. The four hospitals, however, did not even apply these techniques to their high-dollar volume pharmaceuticals. Instead, order quantities were based on judgment with no formal criteria to guide the determination.

COMPETITION

Maximum competition is essential for obtaining reasonable prices. To fulfill this requirement formal procedures are necessary. The pharmacists we reviewed bargained informally with the vendors to get lower prices or favorable deals. None of them, however, solicited formal bids. One pharmacist, for example, switched brands and vendors over a 6-month period on his amoxicillin purchases. By doing so he was ultimately able to reduce his costs 16 percent, but formal bidding would have brought a more immediate reduction and probably consumed less time in the long run.

To effectively seek competition, a pharmacy should have data to quantify and rank its use of each item. The pharmacies we reviewed did not have this information. Furthermore, some of the hospitals were reluctant to change vendors and, therefore, did not solicit competition.

Ideally, a hospital should consider as many brands as possible, solicit bids from all acceptable vendors, and make all of its purchases from the successful bidder. This was not the pattern we found, however. Two of the pharmacies surveyed considered only brand name drugs, thus restricting the number of vendors with whom they could bargain. Only five selected the lowest priced generic item. Seven of the hospitals carried more than one brand of the same item. By doing so, they had to split purchases of that item between vendors, thus foregoing possible quantity buying advantages. Generally, the additional brands were carried to satisfy medical staff demands.

Naturally, carrying different brands of the same drug markedly increased the number of line items. Those that carried a single brand of each item averaged 2,500 inventory line items. Those that carried several brands had as many as 5,000 line items.

GROUP PURCHASING

Group purchasing combines the purchasing volume of a number of hospitals to obtain lower costs. Nineteen of the twenty-one hospitals we surveyed belonged to purchasing groups. Our tests at three of these hospitals showed that the pharmacies were making good use of group agreements. Participation in group purchasing requires more planning though, since vendor leadtimes may be longer. One hospital purchased several items independently, because it had run low and could not get the new stock fast enough from the group source. Its costs were 82 to 240 percent higher on the independent purchases.

ACCOUNTABILITY AND INTERNAL CONTROL

The four hospitals reviewed in detail had no formal mechanism for evaluating the pharmacy's management of its purchasing and inventory responsibilities. Internal controls over purchasing and inventory were weak at three of the four. As a result, the pharmacies had less incentive to reduce costs and control performance. Although all four pharmacies had attempted to reduce costs, the absence of vigorous monitoring meant that some opportunities for reductions were ignored.

Because a pharmacy's costs are simply passed on to the patient, it has no inherent incentive to reduce costs. The impetus for savings must be provided by the pharmacist and his superiors as part of a comprehensive plan for accountability and control. Each pharmacy followed a budget, and its operating results were summarized in the hospital's financial reports, which were audited by public accounting firms. The budget process alone, however, does not measure the effectiveness of a pharmacy's purchasing function.

The pharmacy's performance can be evaluated by internal auditors and two of the four hospitals had audit staffs. At one, the audit staff had not examined the pharmacy's operations, while auditors at the other limited their examinations to verifying pharmacy inventories.

Various performance indices are available, including an index based on a "market basket" of items to track changes in costs. The hospitals were not using these measures, however.

Internal controls over pharmacy purchases were weak at three of the hospitals. An essential element of adequate control is that the duties of purchasing, receiving, and invoice verification be done by different departments or at least by different individuals. But at three hospitals these functions were the pharmacist's responsibility and in some cases the same individual performed them all. Invoice verification for payment is properly the accounting department's function. This verification should include comparing the quantities and amounts billed with those shown on the receiving report and purchase orders and checking the invoices' clerical accuracy. At all three hospitals the verification was supposed to be done by the pharmacy staff. At one hospital, however, errors were being missed. As a result the hospital had been overcharged as much \$200 on a single item.

Purchase orders should be sequentially numbered and accounted for. They were not adequately controlled, however. At one hospital the purchase orders, though pre-numbered, were not issued sequentially and no effort was made to account for them. At another hospital the purchase orders were retained in the pharmacy and destroyed after the goods were received. Thus there was no record of the pharmacy's orders. None of the three pharmacies recorded the prices on the purchase orders--information essential for verifying the invoices.

CONCLUSIONS

Regardless of which department purchases pharmaceuticals, sound purchasing principles should be followed. Thus [hospitals should assure that formal purchasing and inventory control procedures consistent with those used for ~~its~~ general purchases are developed for pharmaceuticals. These procedures should include a system of internal controls to safeguard the integrity of all transactions and a mechanism for monitoring the pharmacy's purchasing performance. Maximum advantage should be taken of cost reducing techniques, such as group purchasing and competitive bidding.]

CHAPTER 5

OPPORTUNITIES TO CONTROL

COSTS OF FOOD SUPPLIES

The dietary department, in most hospitals included in our study, provided food service to patients and employees. Usually, the food service manager or dietician purchased food and other supplies independently of the materials manager or purchasing agent. In some hospitals, food purchasing responsibilities were split between the purchasing and dietary departments.

Hospitals need to centralize responsibility for purchasing and managing food supplies. Central purchasing would permit them to control costs by applying quantitative techniques to establish reorder points and economic order quantities, controlling inventories of food supplies, and increasing competition and participation in group purchasing. Further, centralized management should strengthen internal controls in the dietary department.

AUTHORITY AND RESPONSIBILITY

Of the 21 hospitals included in our study, 16 provided food service in-house and 5 contracted for the service. At 14 of the 16 hospitals with in-house service, the food service manager was responsible for purchasing all food products and dietary supplies. One hospital gave responsibility for nonperishables and the other for all food to the purchasing department.

At three of the four hospitals we reviewed in detail, the dietary department provided food service. Responsibility for purchasing and controlling food supplies was variously divided at each hospital. Generally, two hospitals split purchasing and inventory responsibilities between the dietary and purchasing departments. At the third, the dietary department purchased and controlled food supplies. Although the three hospitals participated in group purchasing, food buyers did not always use purchasing agreements. Food purchasing and inventory management practices at these hospitals needed improvement, as discussed below.

PLANNING AND SCHEDULING

The dietary and purchasing departments were not using quantitative methods, such as EOQ theory, to determine quantities nor had they systematically established order levels,

reorder points, and safety stocks. Instead they usually "eyeballed" the stocks on hand and arbitrarily set quantities for purchase. They purchased canned and dry foods a few cases at a time at brief intervals--sometimes daily, weekly, or semimonthly. Regardless of the frequency of the orders, they usually purchased the same quantities, as shown by the following examples at one hospital.

<u>Item</u>	<u>Quantity</u>	<u>Date purchased</u>	<u>Amount</u>
Potatoes	3 sacks	12/27/77	\$30.00
	3 sacks	12/28/77	22.50
	2 sacks	12/29/77	15.00
Canned	1 case	11/04/77	17.22
apricots	2 cases	11/11/77	34.44
	1 case	11/16/77	17.22
	1 case	11/23/77	17.22
Canned soup	1 case	01/04/78	10.89
	1 case	01/06/78	10.89
	1 case	01/20/78	10.89

COMPETITION

The three hospitals did little to encourage competition among food suppliers. Although telephone solicitations were made for some food items, the orders frequently were not placed with the lowest priced suppliers. The following examples represent instances where the items purchased were available from other vendors at a lower price.

<u>Item</u>	<u>Case price</u>	
	<u>Purchased</u>	<u>Available</u>
Stuffed green peppers	\$25.25	\$22.20
Diet pear halves	14.22	10.96
Mandarin orange segments	26.05	18.61
Apple sauce	11.50	9.98
Prepared prunes	14.75	9.95

For many years, one hospital purchased all of its dairy products from one source without soliciting competition. Payments to the supplier totaled \$70,500 in one year. Shortly after the materials manager assumed responsibility for purchasing dairy products, he solicited bids to fill annual requirements. As a result of the solicitation, the hospital received five bids and awarded a contract estimated at \$52,000.

QUALITY AND BRAND NAME SELECTIONS

The hospital dietician or food service manager selects foods for meal preparation and judges price and quality relationships among different types and brands of food. The three hospitals purchased canned foods by brandname or product grade. Two hospitals often purchased fancy grade foods.

By selecting less expensive cuts of meat and less expensive brands or grades of canned goods and other foods, managers can reduce costs often without sacrificing nutritional value. Canned goods, for example, are usually graded or classified as follows:

<u>Agriculture Dept. classification</u>		<u>Wholesaler's optional</u>
<u>Grade</u>	<u>Quality</u>	<u>description</u>
A	Fancy	Red label
B	Choice	Blue label
C	Standard	Black label
SSTD	Sub-standard	-

Generally, grade A canned fruits and vegetables are practically free of defects, possess very good color and flavor, and score at least 90 points when graded in accordance with Department of Agriculture standards. Grade B fruits and vegetables have the same qualities as grade A, but score not less than 80 points. Grade C, or standard produce, has similar qualities and scores not less than 70 points.

Data was not readily available at the hospitals to determine the amount spent annually on canned goods or the price differences between fancy, choice, or standard. However, one manager who normally ordered fancy or choice, estimated a 5 to 10 percent difference between fancy and choice.

A recent consumer price survey in the Chicago area indicated substantial retail price differences between fancy and standard quality foods. Major food chains were selling standard grade products under generic labels at substantially less than the fancy grades found in nationally known brands. For example, a market basket of seven generic items cost 44 percent less than a like basket of national brands. Fancy grades had some advantages, such as more uniformly cut vegetables, but were nutritionally equivalent.

INTERNAL CONTROLS

The three hospitals had not established effective internal control in their food service departments. They had not clearly separated the duties of employees involved in the purchase and control of food supplies. For example, at two hospitals, food service managers and buyers determined requirements, purchased and received food supplies, and approved suppliers' invoices for payment. Also, at one of these hospitals, food service employees purchased supplies by telephone and prepared purchase orders, for internal purposes, after receiving the suppliers' invoices.

Food service employees had unrestricted access to supplies maintained in the department. Furthermore, the food service departments kept no records of inventory quantities on hand or usage data.

CONCLUSIONS

Our study has shown weaknesses in food purchasing practices. Specifically, food buyers have not:

- { --Used quantitative methods for determining order quantities, reorder points, and inventory levels.
- Maximized competition or effectively participated in group purchasing.
- Selected less expensive grades of nutritional food products.
- Established adequate internal controls.]

Food purchasing is not unique; ^{these} practices appropriate for hospital supplies are also appropriate for food and other dietary supplies. By placing responsibility for purchasing and managing food supplies under a central materials manager, hospitals can become more cost effective and strengthen internal controls.

CHAPTER 6

OPPORTUNITIES TO CONTROL COSTS

OF CONTRACTUAL SERVICES

Hospitals enter a wide variety of service contracts. Some of the more commonly acquired services include food preparation, laundry processing, housekeeping management, and equipment maintenance. Contracts for maintenance service cover elevators, heating and air conditioning, office machines, and medical equipment.

Hospitals can control costs of purchased services by centralizing responsibility for contract award and administration, soliciting competition or performing some services in-house, and monitoring contractor performance.

As with purchasing supplies and equipment, the responsibility for contracting for services should be assigned to a central manager. This responsibility should not be limited to processing paperwork but should encompass all aspects of contract award and administration. Additionally, the central manager should maintain an internal control system to monitor contract performance.

For the most part, the hospitals we reviewed had not centralized responsibility for contracting nor established effective internal controls over contractor performance. At one hospital all contracts were maintained in the purchasing department, although user departments sometimes awarded the contracts. At another hospital, files were scattered and incomplete, and we were unable to determine the number of active contracts. User departments awarded many contracts at this hospital, with the purchasing department merely processing the paperwork.

Hospitals also did not routinely solicit competition or consider alternatives such as doing the work in-house. As long as contractors provided satisfactory services, other options tended to be ignored. Such a practice can result in unnecessarily high costs.

FOOD SERVICE

Five of the twenty-one hospitals we surveyed contracted for food service. (See p. 35.) Four of these hospitals

independently contracted with one national firm whose headquarters was in Philadelphia.

At one hospital, food service costs during a recent year totaled about \$328,000, including a management fee of \$12,000. Although the contractor had provided the service for about 16 years, the hospital had not evaluated the cost effectiveness of the service and examined alternatives nor established procedures to verify monthly billings.

The contractor maintained a resident manager and a clerical staff to manage the food service and supervise the kitchen staff. The contractor's staff purchased most food supplies using contracts and vendors approved by its central food purchasing department in Philadelphia. The staff also prepared the payroll and did other accounting work incidental to the food service. The staff received food and other supplies and approved and forwarded suppliers' invoices to the central office for payment. Each month the central office billed the hospital for purchased supplies, wages, salaries, and a management fee. The hospital provided the facilities and utilities.

In its administration of the food service contract, the hospital did not:

- Audit and verify the contractor's reimbursement of costs incurred.
- Review the cost effectiveness of the contractor's purchasing procedures. For example, it had not compared the cost of purchased food with prices available under group purchasing agreements or from other vendors.
- Consider alternatives to the contract. For example, it had not sought competition nor determined whether the food service could be performed more economically with in-house management.

LAUNDRY SERVICE

Of the 21 hospitals surveyed, 9 operated their own laundry and 12 purchased the service. Only 1 of the 12 hospitals indicated it was not satisfied with the quality of the commercial service.

Laundry costs, however, varied widely. Hospitals that purchased laundry service paid between 12 and 24 cents per

pound, with the higher prices including linen replacement and mending. One hospital contracted for the service at 13-1/2 cents a pound from a commercial laundry about 36 miles away. Another hospital was a member of a cooperative laundry service which although it included about 20 Chicago area hospitals, charged 23 cents per pound--one of the highest rates in our study.

The table below shows the type of laundry service, costs, and estimated pounds processed at the four hospitals reviewed in detail.

<u>Hospital</u>	<u>Laundry service</u>	<u>Cents per pound</u>	<u>Estimated pounds processed in a recent year</u>
A	In-house	a/23-1/2	2,632,000
B	In-house	a/21-1/2	2,412,000
C	Contract	12-1/2	482,000
D	Contract	b/24	279,000

a/ Includes direct and indirect cost.

b/ Contract rate includes mending and linen replacement at 6-1/4 cents per pound.

Commercial laundries within reasonable distances of hospitals A, B, and D serviced other hospitals at prices ranging from 12 to 13-1/2 cents per pound. If hospitals A, B, and D had solicited competition they might have obtained laundry service at these rates.

One of the hospitals had not established adequate controls over contractor performance. For example, it did not verify the weight determinations of the commercial laundry service. As these weights serve as the basis for billing, they should be verified to insure against overcharging.

HOUSEKEEPING SERVICE

One of the four hospitals we reviewed contracted for housekeeping service with a commercial firm. Hospital employees did the work under the management and supervision of the contractor's representative, who functioned as the housekeeping manager. During a recent year, the hospital paid the contractor about \$55,400, or 36 percent of the total housekeeping expenses. This amount covered the manager's salary, a management fee, and some incidental supplies, but these costs were not broken down by the contractor. The hospital purchased the service a few years ago because

it was unsuccessful in hiring a manager for the department. Since then it has made no further effort to recruit a manager or solicit competition.

MAINTENANCE SERVICES

Of 44 contracts awarded by the four hospitals for maintenance services, only 4 were competitive. Hospital officials cited a number of justifications for not soliciting competitive bids. One official indicated that since service was satisfactory he saw no need to look elsewhere. Another official told us that contracts tended to be renewed from year to year with little regard for alternatives.

For equipment maintenance, all of the hospitals preferred to contract with the manufacturers' service representatives. This practice was followed because maintaining the equipment was thought to require special training or because another firm would be unable to obtain proper repair parts.

Although these reasons may be valid for certain highly technical medical equipment, we believe that many service contracts could be competitively awarded. For example, a major maintenance expense at most hospitals is for elevators. In some of the hospitals we visited, elevator maintenance costs exceeded \$50,000 per year. Contracts were awarded noncompetitively to the equipment manufacturer. However, our recent review of elevator maintenance procurement in Government buildings showed that competitive awards saved the Government 38 percent of costs for the same work previously purchased noncompetitively. ^{1/} In many cases the low bidder was the same firm that had held the noncompetitive contract.

For some services hospitals may save money by doing the work themselves. For example, one hospital had contracted for painting services for about 15 years with the same firm. It did not seek competition for this service or consider doing the work in-house. During a recent year, it paid about \$120,500 for painting at a rate averaging \$14.46 per hour. The prevailing wage (including fringe benefits) for brush painters in the area was \$10.68 per hour, or 26 percent less. Had the hospital employed its own painters during that year, its costs might have been almost \$32,000 less.

Hospitals had not developed effective internal controls to assure that work billed on maintenance contracts was actually performed. For example, at one hospital the maintenance department did not maintain a log of service visits or copies of work tickets showing what was done on a particular call--either of which would have been useful to verify

contractors' invoices. Instead, the maintenance supervisor relied on his memory of whether the contractor performed the service. The accounts payable department paid several maintenance contracts in advance and did not follow up to determine if the service was performed or compare invoices to amounts authorized on purchase orders.

CONCLUSIONS AND SUGGESTIONS

Hospitals have not solicited competition or considered alternatives before purchasing contractual services. Furthermore, responsibility for selecting contractors, negotiating prices, and monitoring performance is frequently decentralized. This practice encourages subjective preference and results in fragmented control over contracts and contractor performance.

We suggest that hospitals:

- Centralize under materials manager the responsibility and control over all contracts. This individual rather than user departments, should be responsible for soliciting competition and negotiating and awarding contracts.
- Require competition whenever possible and periodically evaluate alternatives to purchased services.
- Establish adequate internal controls to monitor contractor performance and provide assurance that work billed is actually performed.
- Share information on contractual services with each other and with representatives of group purchasing organizations. By sharing information, hospitals may find advantages in cooperative ventures or in negotiating group service contracts with commercial firms. (See Ch. 2.)

1/ PSAD 78-115, June 14, 1978.



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