

RELEASED

RESTRICTED — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Congressional Relations.

115141

REPORT BY THE

17465

Comptroller General

OF THE UNITED STATES

VA Needs A Single System To Measure Hospital Productivity

The Veterans Administration does not have a uniform, centrally coordinated system for its hospitals to measure productivity. Therefore, meaningful comparisons within VA cannot be developed, and opportunities for improving operations and controlling resources are missed.



115141

An adequate productivity measurement system is needed and should be fully developed.

This report was prepared at the request of the Chairwoman of the Subcommittee on Civil Service, House Committee on Post Office and Civil Service.



AFMD-81-23
MARCH 24, 1981

115141
#516098

Request for copies of GAO reports should be sent to:

**U.S. General Accounting Office
Document Handling and Information
Services Facility
P.O. Box 6015
Gaithersburg, Md. 20760**

Telephone (202) 275-6241

The first five copies of individual reports are free of charge. Additional copies of bound audit reports are \$3.25 each. Additional copies of unbound report (i.e., letter reports) and most other publications are \$1.00 each. There will be a 25% discount on all orders for 100 or more copies mailed to a single address. Sales orders must be prepaid on a cash, check, or money order basis. Check should be made out to the "Superintendent of Documents".



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

B-202070

The Honorable Patricia Schroeder
Chairwoman, Subcommittee on Civil Service
Committee on Post Office and Civil Service
House of Representatives

Dear Madam Chairwoman:

This report responds to your May 3, 1979, letter requesting that we evaluate the productivity of Veterans Administration (VA) hospitals. Specifically, you asked us to compare the productivity of VA hospitals with those of the private sector and other public sector hospitals, outlining the reasons for any differences found. You expressed particular interest in the measurement systems we used to make our comparisons.

Measurement of productivity provides managers with information for controlling and budgeting functions, maintaining accountability, linking individual and organizational performance with aspects of personnel management, and improving productivity. One way these measures can be used to improve productivity is by comparing productivity levels of similar operations to determine the best method of conducting the operations.

As you requested, we attempted to measure the productivity of VA hospitals in order to compare them with other hospitals and analyze the differences. We found, however, that adequate data for determining and comparing the productivity of VA hospitals was generally unavailable because needed management information systems have not been fully implemented. As a result, not only was our review considerably curtailed, but we also concluded that VA managers have little information to support their own efforts either to improve productivity or control resources through the budget process.

ONLY LIMITED COMPARISONS CAN BE MADE
FROM AVAILABLE DATA

In our initial discussions with VA officials we found that the VA does not have a uniform, agencywide productivity measurement system. Further, although a few VA hospitals collect measurement data, there is no centralized coordination to ensure uniformity between these hospitals. Therefore, although we examined one VA hospital that has some measurement data, we could not develop comparisons that are representative of most VA hospitals, nor could we make meaningful comparisons within the VA.

In attempting to establish comparisons we selected four departments in each of six hospitals located in the State of Texas. Included in our review were hospitals belonging to the VA, the Department of Defense, and the Public Health Service; and hospitals operated by churches, owned by investors, and sponsored by foundations. The individual departments we visited were the laboratory, pharmacy, recovery room, and operating room.

To establish productivity comparisons for these departments it is necessary to obtain measures of resources used and services provided for each department; further, the units of measure must be generally uniform across the hospitals. For example, in a pharmacy the resources used consist primarily of staff-days and the output primarily of medication dispensed.

We obtained VA hospital productivity measurement data from two sources: the Federal Productivity Measurement Program, which is operated by the Office of Personnel Management and the Department of Labor's Bureau of Labor Statistics, and four information systems currently being developed internally by the VA. Measures for non-VA hospitals were obtained from the specific hospitals contacted. We were unsuccessful in using the data provided by the VA to the Federal Productivity Measurement Program and we had only limited success in using the internal VA data systems.

The Federal Productivity Measurement Program consists of single-agency functional group measures such as printing and publishing services. This program is directed toward overall productivity measurement. Therefore, the data it provides are not sufficiently detailed for comparison with other hospitals because output indicators are not segregated into the various departments. Typical output measures relate more appropriately to the overall hospital and include number of inpatients treated in acute medicine and surgery, inpatient days in extended hospital care, and outpatient visits to VA dental staff.

When using VA's own internal data systems, only in the laboratories and operating rooms were sufficient data available for even a very limited productivity comparison. The laboratories reviewed varied in size, degree of automation, and duties. In spite of this, the laboratory could be considered the most comparable of the four departments studied because of the similar workload reporting method used in all the hospitals. Five of the six hospitals visited used a workload reporting method devised by the College of American Pathologists. This method weights the different kinds of tests with a factor for the degree of automation in the laboratory. The weighted number of tests then reflects a more accurate measure of work performed.

Comparisons of productivity in the various pharmacies were found to be more difficult because the Federal hospitals served both inpatients and outpatients while the other hospitals served

only inpatients. In addition, in the unit dose program alone, we observed three methods for counting workload. These were

- one count for each pill dispensed,
- one count for each type medication dispensed per order, regardless of the quantity of pills, and
- one count for every 10 pills dispensed, whether the same or different medication.

In the operating room, common workload data expressed in number of cases handled was readily available from all six hospitals. However, these cases were not weighted as to the length of time each operation took. Therefore, if comparisons were made, a 15-minute operation would receive as much credit as a 3-hour operation.

Workload information was available for the recovery room in only three hospitals. To assume that the number of patients treated in the operating room is equal to those receiving recovery care is not valid because most people who receive only a local anesthetic do not need the recovery care.

In addition to the lack of uniformity in counting workload, there was no uniform definition of the resources required to produce the workload. For example, one hospital compiled hours worked and hours paid separately for the operating room and the recovery room. Two other hospitals, those of the Department of Defense and the Public Health Service, used personnel whose pay data are recorded on an annual basis and therefore did not record hourly statistics.

Because of inadequate data we could not perform meaningful comparisons between VA hospitals or determine VA-wide productivity for typical hospital departments. Further, variations in methods of measurement precluded all but a few limited productivity comparisons for the single VA hospital selected as a test case. We were unable to perform a reasonable comparison of the pharmacies and recovery rooms in the six surveyed hospitals. Limited comparisons of laboratories and operating rooms, however, are presented in appendix I. The comparisons show that the VA hospital has higher laboratory productivity and lower operating room productivity than the hospitals that could be compared. Further examination disclosed that the higher laboratory productivity was caused partly by extensive automation of tests and partly by a high workload volume which provided economies of scale. The VA operating room, on the other hand, is affected by the fact that the hospital is a teaching hospital. Its operations are performed much more slowly than those in nonteaching hospitals, which lowers the productivity.

VA MAY BE LOSING OPPORTUNITIES
FOR BETTER MANAGEMENT
BECAUSE OF LACK OF PRODUCTIVITY DATA

The lack of data for measuring productivity denies the VA an important tool for such management actions as improving operations and controlling resources. With such data, hospital managers can make better informed decisions and operate departments more cost effectively. Administrators at the less productive hospitals can analyze operations at the more productive hospitals and identify alternatives--such as contracting with an automated laboratory, acquiring equipment that performs tests at less cost, or hiring persons more skilled at performing work. If work measurement standards are combined with the productivity data, a single hospital can compare actual with potential performance. An example of management becoming aware of productivity improvement through comparing actual performance with a standard was provided by a church-operated hospital we visited. In that instance, productivity has been increased by 20 percent in 3 years, through using measurement data to aid management.

Hospital administrators in the private sector have long recognized the value of comparing their productivity with others. As a result, private hospital comparison systems have been developed, such as the American Hospital Association's Hospital Administrative Services. For nearly 20 years, Hospital Administrative Services has been providing its 3,000 active member hospitals--via a monthly report--with a tool that enables them to compare unit costs on a departmental basis with the average departmental costs of other hospitals of the same size in the same geographic area. The system also allows participants to compare current unit costs to previous unit costs for the various departments in the hospitals. The Services' measures are not standards but rather are median unit costs for all reporting hospitals. When an institution's data differs from the appropriate comparative medians, this does not suggest "good" or "bad" performance. Nonetheless, if such differences are significant, the Association recommends that managers seek the causes of discrepancies in the operating policies, procedures, and practices of the particular hospital. Association officials feel the system is useful in that it identifies departments that may need improvement, and suggested to us that VA, with 172 hospitals, should be able to develop a system similar to the Hospital Administrative Services system. They pointed out that differences in accounting systems prevent the inclusion of VA hospitals in the Services system, but that VA should not overlook the opportunity to develop its own productivity data comparisons for productivity improvement efforts.

In addition to losing opportunities for productivity improvement through measurement control, the VA is not obtaining the management control that would be available to it through using productivity data for budgeting. The need to do this has been recognized by both the House Appropriations Committee and the VA. The House

Appropriations Committee, in the spring of 1979, directed the VA to develop "a workable measuring device for use in determining staff sizing and distribution of personnel at hospitals of varying size and complexity." The VA, in the fiscal 1980 House appropriations hearings, pointed out that it is developing a "VA-wide manpower management system" which will include "the use of productivity as a management tool." This system is still in development. The existence of an adequate productivity measurement system could enhance the budget review at all levels--VA, Office of Management and Budget, and the Congress--and recognition of the need for such data is an important step. However, coordinated action on the part of VA management is needed to ensure that such a system will be fully developed.

VA HAS NOT TAKEN EFFECTIVE
AND COORDINATED ACTION TO DEVELOP
NEEDED PRODUCTIVITY DATA SYSTEMS

Adequate information was unavailable for developing productivity comparisons because VA management has not, in the past, made a coordinated, concerted effort to establish and maintain fully adequate measurement systems. Despite efforts as far back as the early 1960s and congressional mandates in 1973 and 1979, the VA is only now starting to coordinate the several measurement systems that are currently being implemented, and to promote their adequate development. VA's Health Systems Development Service was authorized in June 1980 to integrate various productivity measurement efforts but no mechanism has yet been established for VA-wide coordination of all major systems.

Early VA measurement efforts were directed essentially toward individual functions and, according to VA officials, gave little emphasis to developing agencywide measures. For example, in the early 1960s work measurement was applied at selected hospitals to dietetics, engineering, and supply. Later, in the mid-1960s, it began to be applied to other functions. Nursing-medical wards and medical administration functions had measures which even included quality control considerations. Other functions, however, did not receive the same level of emphasis. Key functions such as pharmacy, clinical laboratory, operating room, and physical medicine and rehabilitation never progressed beyond having some measures at development and test sites. This lack of management emphasis was further underscored when, as the result of VA's 1971 reorganization, measurement efforts were largely abandoned until 1974.

In 1974, the National Academy of Sciences began work, as directed by Public Law 93-82 (Aug. 2, 1973), to determine the numbers and types of staff required by VA to provide "high quality care." According to VA officials, the systems devised and recommended by the National Academy were not fully implemented because of a lack of funding.

Despite this lack of funding, effort is now being directed toward developing measurement systems. We note, however, that these current efforts are still not being managed in a coordinated manner.

The following four systems constitute the VA's current major efforts in developing productivity and work measures. These measurement systems are, in all cases, part of larger management information systems. Further, all of these systems are in the development and testing phases.

--The Texas Hospital Association system. The Texas system was started in October 1979. This system is planned to cover 11 services or departments, in which 80 percent of the hospital staff are employed. Products of the system are to include measures of outputs and staff inputs for measuring productivity by department, plus staffing standards to indicate the appropriate staff requirements. The system is not comprehensive, however, since it does not include physicians' services.

--The Patient and Resources Tracking system. This is a subsystem of the Multi-Level Care (MLC) program and was begun in February 1978. Its resource tracking portion is intended to determine the resources in two categories: professional services (physicians and nurses) and ancillary services (such as laboratory and pharmacy).

--The Manpower Tracking System. This system is being developed in response to the 1979 requirement of the House Appropriations Committee that the VA develop "a workable measuring device." The Manpower System uses only data that is available from existing reports to relate type of staffing to workload for various operational areas such as medical, surgical, and psychiatric units.

--Health Manpower Resource Management System. The Health Manpower System was initiated in 1979 as a response to one of the National Academy's recommendations. One purpose of the system is to provide a basis for determining the numbers and types of staff required for VA hospitals. About 80 percent coverage of hospital personnel is planned.

These brief descriptions demonstrate that there is duplication and overlap in the areas covered, and hence in the data collection that will be required. The independent development of these systems, however, created slight differences which make substitution of one data collection system for another infeasible at this time.

Problems in obtaining adequate information systems are not restricted to the VA. In our role of approving and reviewing executive agencies' accounting systems, we have observed that many

problems are commonly encountered in the development of such systems. Drawing on these observations, we published a guide entitled "Lessons Learned About Acquiring Financial Management And Other Information Systems" (Aug. 1976). That publication points out the necessity of centralizing project management, yet doing so with agencywide coordination and user participation in order to ensure adequate systems development. Such an interdisciplinary approach is a key to developing useful management information systems. This issue has already been raised with the VA in our report "VA Must Strengthen Management of ADP Resources To Serve Veterans Needs" (FGMSD-80-60, July 16, 1980). In that report, we pointed out that user participation in data systems design is needed to ensure that the systems will be used, and that existing applications are not overlapped and duplicated. We also noted in that report that duplicate data systems are a common problem for the VA.

VA management has recognized the need for coordination and central guidance for implementing systems. In developing the Multi-Level Care program, a steering committee was established in July 1979, in part to ensure coordination and integration of the MLC systems and objectives with other related departmental systems and objectives. The MLC program is a complex management information system which is being designed to support an improved health care concept. As previously noted, the Patient and Resources Tracking system, which provides productivity data, is a subsystem of the MLC system. The plans of the MLC steering committee include developing a data collection system which could provide basic information needed by all other major VA hospital information systems. For example, the MLC steering committee is examining the data input and reporting requirements for several alternative systems such as the Texas Hospital Association system. The intent of the steering committee is not to eliminate the reports produced by other management information systems. Rather, they plan to eliminate the need for other information systems to collect duplicate and overlapping data. In addition, the committee plans to ensure that the system will provide uniform productivity measures within groupings of similar departments and hospitals.

CONCLUSIONS AND RECOMMENDATIONS

In spite of our efforts, we were unable to perform more than a limited comparison of VA hospital productivity with non-VA hospitals or with other VA hospitals because of inadequate productivity measurement data. The VA has a few partly developed productivity measures but they cannot easily be used to compare with non-VA hospitals because of differences in the methods of measuring resources used and services provided. A similar lack of uniformity hampers comparisons between VA hospitals. Although efforts are underway to establish several management information systems which could provide productivity measures, these are not yet completed and further, if installed as currently planned, they will overlap each other.

VA has a history of starting but not completing systems which could provide the data necessary for developing productivity and work measures. Now, however, there appears to be both interest and management capability in the VA to foster the development of adequate measurement systems. The interest is exhibited by the attempts of the MLC steering committee to coordinate the data input and reporting of the MLC system with other management information systems. Such emphasis should be channeled, and measurement systems should be developed to help VA managers improve productivity through such techniques as comparing similar organizations. Further, these systems should give the VA objective data for supporting budgets. However, no single organization with agencywide representation has been established and given the role of overall coordination of VA systems.

Consequently, we recommend that the Administrator of Veterans Affairs establish a schedule for developing an adequate, single, hospital productivity measurement system for the entire Department of Medicine and Surgery using one of the systems currently being developed as a basis. Further, we recommend that a system guidance role be assigned to an agencywide, user-oriented body such as the MLC steering committee, which would have responsibility for ensuring that

- the measurement system is coordinated with other management information systems,
- duplicate data collection is eliminated,
- data collected and reports developed are uniform across appropriate units of the agency, and
- an annual status report is provided to VA management, OMB, and the appropriations committees of the Congress.

536

AGENCY COMMENTS AND OUR EVALUATION

In commenting on our draft report, the agency agreed with all findings and recommendations. Specifically, the Administrator of Veterans Affairs agreed that a need exists for an adequate, integrated, departmentwide hospital productivity measurement system for the Department of Medicine and Surgery. The Administrator stated that the agency is supporting and stressing many internal projects concerning improved productivity and management, establishment of standards while fostering developmental efforts, resource tracking methods, flexible staffing patterns, and programs to train VA staff in the value and use of productivity measures.

In our draft we proposed that a system guidance role be assigned to an agencywide, user-oriented committee such as the Multi-Level Care Steering Committee. The Administrator concurred that a system guidance role should be assigned, but stated that VA

management should be allowed some discretion in deciding how best to achieve the primary aim of the proposal, and that the word "committee" was too restrictive. We agree that VA management should have some discretion to choose the best method of achieving any desired objective and have changed our proposal to recommend a user-oriented "body." We refer to the Multi-Level Care Steering Committee simply as one alternative that might be considered.

In any event, in exercising its discretion VA should assure the Office of Management and Budget and the appropriations committees of the Congress that whatever management approaches are used will have a reasonable chance of success. In that regard, VA may wish to include in its annual status reports certain information regarding its planned milestones, accomplishments, and resources used. A copy of the Administrator's comments is appendix II of this report.

OBJECTIVES, SCOPE, AND METHODOLOGY
OF OUR REVIEW

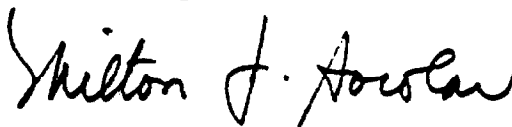
The objectives, limitations, and methodology of our review are described on pages 1 and 2 of this report. The scope of our review included visits to VA headquarters in Washington, D.C., and to the VA hospital in Houston, Texas. In addition, we discussed information systems designed to measure and improve productivity with officials of the following organizations:

- American Hospital Association.
- American Medical Association.
- Texas Hospital Association.
- Two major, privately operated hospital corporations.
- The Veterans Administration.
- Five hospitals which have productivity systems.
- The Subcommittee on Productivity/Technology of the National Council on Health Planning and Development.

To perform this review, we explored current and past efforts of the VA to measure productivity, and looked at the productivity reporting systems of several public and private hospitals. To make our comparisons we collected data from six Texas hospitals. We visited hospitals in the following categories: VA, Department of Defense, Public Health Service, church operated, investor owned, and foundation sponsored. They ranged in bed size from 110 to 1,300. Individual departments visited were the laboratory, pharmacy, recovery room, and operating room.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its date. At that time we will send copies to the Administrator of Veterans Affairs; the Chairmen, House and Senate Appropriations Committees; the Senate Committee on Governmental Affairs; the House Committee on Government Operations; and the Director, Office of Management and Budget; and will make copies available to others upon request.

Sincerely yours,

A handwritten signature in cursive script that reads "Milton J. Rowland". The signature is written in dark ink and is positioned above the typed name.

Acting Comptroller General
of the United States

COMPARISON OF PERFORMANCE
OF VA HOSPITALS TO OTHER HOSPITALS

We collected data in six Texas hospitals in order to learn the similarities and differences in operating procedures and reporting methods. The hospitals visited (Veterans Administration, Department of Defense, Public Health Service, church operated, investor owned, and foundation sponsored) ranged in bed size from 110 to 1,300. The individual departments visited were the laboratory, pharmacy, recovery room, and operating room. This appendix contains tables summarizing the comparison data we collected at the six hospitals.

In addition, we have provided a synopsis of a VA study comparing private hospital costs to VA hospital costs. This information is provided to further illustrate some of the difficulties of comparing dissimilar organizations.

COMPARISONS OF PRODUCTIVITY

Comparisons among hospital operations utilizing hospital productivity systems provide data on hospital areas for productivity improvements. We believe that generalized comparisons, however, whether stated by individual departments or in gross terms, require interpretation because of the differences in hospital size, type, and complexity. These interpretations are especially complex when VA hospitals are compared to hospitals in the private sector because of differences in patient mix, services offered, and health care delivery methods. For example, since VA hospitals are teaching hospitals, this must be considered when making comparisons. However, hospital productivity measurement systems, when properly implemented and operated, can indicate areas where management might profitably concentrate its efforts to achieve realistic improvements in the productivity of hospital operations.

Lack of uniform data was one of the primary difficulties we encountered in developing interhospital comparisons. For example, in the case of laboratories it was necessary to use both hours paid and hours worked as input resources in the formula:

$$\text{Productivity} = \frac{\text{output}}{\text{input}}$$

The differences between the VA laboratory and others should therefore be viewed as a rough indicator, not a precise measurement.

In examining operating room productivity, consideration should be given to the fact that the output is unweighted. Without weighting, a short, simple operation is given as much credit as a more complex one. It seems likely that two hospitals serving different populations will have different mixes of operations, which then clouds the comparison of their productivity levels. Possibly a single hospital will have a fairly constant mix of operation types over a period of years. If such is the case, then an unweighted productivity level trend for a single hospital does reflect the general performance trend.

Laboratory Productivity Ratios

<u>Type of hospital</u>	<u>Weighted number of tests</u>			<u>Hours paid</u>			<u>Number of weighted tests per hour paid</u>			<u>Hours worked</u>			<u>Number of weighted tests per hours worked</u>		
	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>
Veterans Administration	10,895,000	13,398,000	13,664,000	181,584	188,240	165,776	a/ 60.0	a/ 71.2	a/ 82.4	-	-	-	-	-	-
Department of Defense	19,814,000	22,318,000	27,177,000	-	-	-	-	-	-	-	-	-	-	-	-
Public Health Service	1,387,425	1,330,572	1,511,271	-	-	-	-	-	-	-	-	-	-	-	-
Church-operated	5,498,497	5,652,190	5,356,338	116,082	115,211	112,684	47.4	49.1	47.5	107,507	105,301	104,921	51.1	53.7	51.1
Foundation-sponsored	2,861,538	-	-	59,696	56,368	51,584	47.9	-	-	55,952	53,040	48,464	51.1	-	-
Investor-owned	-	-	-	-	-	-	-	-	-	26,800	-	-	-	-	-

a/According to VA officials, annual ratios show differences because weighting factors for tests were changed to more accurately measure the effect of equipment automation. However, the factors used were still the nationally accepted factors of the College of American Pathologists.

Table 1

Mindful of the potential for error, we have developed the comparisons shown in table 1. The comparisons reveal that VA laboratory operations have higher productivity than either the church-operated or foundation-sponsored hospitals. Two factors are largely responsible for this difference. First, the VA's test volume is significantly higher than either of the other two hospitals', enabling VA to take advantage of economies of scale. Secondly, the VA hospital makes much greater use of highly automated equipment.

Table 2

Comparison of Operating Room Productivity

<u>Type of hospital</u>	<u>Number of operations</u>			<u>Number of operating room personnel</u> (note a)			<u>Number of operations performed per staff person</u>		
	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>
Veterans Administration	14,263	14,952	13,884	42	42	42	340	356	331
Church-operated	11,607	10,386	9,703	29	29	29	400	358	335

a/Department supervisors had data for number of personnel as of January 1980 but stated that staffing levels had not changed since 1977.

Table 2, comparing operating room productivity, shows that the church-operated hospital has a higher operating room productivity level than the VA hospital. Further analysis, however, discloses that the VA hospital is a teaching facility where the surgeon must take time to explain the reasons for and the techniques used in performing the operation. This lengthens--perhaps as much as doubles--the time needed to perform the operation. The church-operated hospital is not a teaching facility. Considering this fact, lower VA productivity may be acceptable. Conclusions drawn from this analysis must, of course, be tempered with the knowledge that the productivity levels are based on an output of unweighted operations. The types and mix of operation may vary significantly among hospitals.

Another significant difference in this comparison is that the church-operated hospital uses a productivity measurement system which incorporates standards for departmental operations. According to the hospital administrator, the standard showed that the operating room was overstaffed. Table 2 shows that significant improvement was made in productivity between 1977 and 1979 with no increase in personnel resources.

COMPARISON OF COSTS

In August 1977, the VA published a study entitled "Cost Comparison of the Veterans Administration and Community Medical System." This study was updated in 1978. The first study showed that short term acute care in the VA hospital system cost 89 percent as much as the same care provided by the community sector. The updated study showed that costs had risen to 93 percent. Table 3 shows the fiscal 1978 estimated cost per episode of care in VA and community hospitals by medical and surgical beds.

Table 3

Cost Per Average Stay for VA and Community Hospitals for Fiscal 1978

	<u>VA hospitals</u>	<u>Community hospitals</u>
Medical episode:		
Average cost per day	a/ \$ 144.97	\$ 187.17
Average length of stay (days)	<u>x 15.7</u>	<u>x 11.3</u>
Total	<u>\$2,276.00</u>	<u>\$2,115.00</u>
Average cost of physician svces.	<u>(b)</u>	<u>253.00</u>
Total hospital and physician costs	<u>\$2,276.00</u>	<u>\$2,368.00</u>
Surgical episode:		
Average cost per day	a/ \$ 156.60	\$ 237.61
Average length of stay (days)	<u>x 18.7</u>	<u>x 11.0</u>
Total	<u>\$2,928.00</u>	<u>\$2,614.00</u>
Average cost of physician svces.	<u>(b)</u>	<u>707.00</u>
Total hospital and physician costs	<u>\$2,928.00</u>	<u>\$3,321.00</u>

a/Includes physician costs.

b/Included in average cost per day.

As indicated in table 3, the VA provides health care at less cost than does the community sector. However, comparisons of VA's acute medical and surgical care health costs with those of the private sector must be made with caution due to the number of assumptions necessary to develop comparable values for two distinct delivery systems. Some of these differences are:

- The VA has salaried physicians. Private sector physicians are usually reimbursed by the patient on a fee-for-service basis. The VA system includes the physician cost.
- The VA has statutory responsibilities to promote and support health education and training above and beyond its own training needs. For example, it has 11.0 residents and interns per 100 beds versus 4.2 per 100 beds in the private sector. The training, therefore, must be recognized as an additional cost to the VA.
- The VA offers some services (for example, psychology and dental) which are not normally offered by the community sector. The costs of these services must also be recognized.
- The VA treats males almost exclusively, and the average patient is over 45 years old. The private sector, on the other hand, treats a more balanced ratio of male and female patients with ages varying from newborn to senior citizen.
- The VA does not include a cost for depreciation, overhead, or malpractice insurance.

The VA is conducting another study similar to the ones made in 1977 and 1978. The approach for the present study is more scientific in that the length of stay will be based on a statistical sample of VA patients' files. A review of these files will enable the VA to better classify patients as medical or surgical cases and provide a more accurate measure of length of stay. Statistical techniques were not used in the earlier studies. We were also told that better data on physician costs in the private sector are now available. The results of this study should show more accurately how the VA's medical costs compare to those of the private sector. This comparison, however, will still have limitations since adjustments--such as depreciation and interest expense--will be based on the best available data.

Office of the
Administrator
of Veterans Affairs

Washington, D.C. 20420



December 19, 1980

Mr. Gregory J. Ahart
Director, Human Resources Division
U.S. General Accounting Office
Washington, DC 20548



Dear Mr. Ahart:

We have reviewed your draft report, "Veterans Administration Needs to Concentrate Its Hospital Productivity Measurement Efforts on a Single System," dated November 4, 1980. The report was prepared at the request of Chairwoman Schroeder, Subcommittee on Civil Service, House Committee on Post Office and Civil Service.

This report concerns the General Accounting Office (GAO) comparison of the productivity of Veterans Administration (VA) hospitals with those in the private sector and other public sector hospitals, and outlines the reasons for any differences found. GAO was unable to perform more than a limited comparison (laboratories and operating rooms) because of inadequate productivity measurement data, and partly developed productivity measures which are difficult to compare.

The report states there is a lack of uniformity in methods of measuring resources used and services provided in VA hospitals. There are current efforts to establish management information systems, but they are not complete and, if installed as planned, will overlap. VA's Multi-Level Care (MLC) Steering Committee is developing a system to coordinate MLC system data input and reporting with other management information systems, but GAO states no single organization with Agencywide representation has been established with the overall role of VA-wide coordination of systems.

Therefore, GAO recommends that I establish a schedule for developing an adequate, single, Agencywide productivity measurement system using one of the systems currently being developed as a basis.

We agree there is a need for an adequate, integrated Department of Medicine and Surgery-wide hospital productivity measurement system, based on one of the systems currently being developed. Before GAO conducted their study, the VA recognized the need to develop productivity measurement mechanisms, and also acknowledged this fact during Appropriations Committee hearings in February and March 1979.

This Agency is supporting and stressing many internal projects concerning improved productivity and management, establishment of standards while fostering developmental efforts, resource tracking methods, flexible staffing patterns, and programs to train VA staff in the value and use of these measures. We continue to explore improved data information systems and

have made organizational changes, including establishing a Department of Medicine and Surgery Medical Manpower Analysis Staff, whose functions are still emerging.

We would like to point out that the example given for productivity measurement systems in the private sector, Hospital Administrative Services, developed by the American Hospital Association over 20 years ago, is not a true measurement system because it lacks standards. Similarly, the Manpower Tracking System (MTS) under development by the VA, will not be complete until it contains standards. In this sense, the state-of-the-art in the private sector is little different from that in the VA.

While it is true that the MTS only uses data available from existing reports concerning staffing, etc., the initial MTS development phase was meant to show data could be extracted from existing VA computer systems. Reasons for this approach included (1) the need for a timely response to the June 7, 1979 House Appropriations Committee report which stated that inequities often resulted from misallocation of resources, (2) the need for an interim system to address staffing issues, (3) the need for another system, not requiring a new data base, which could be readily available as a management tool, and (4) the fact that existing data were not readily available in a useful format. The MTS was meant as a quick and economic means of achieving interim resource control, yet permitting ongoing refinements and improvements.

GAO also recommends that a system guidance role be assigned to an Agency-wide user-oriented committee, such as the Multi-Level Care Steering Committee, which would insure that:

- the measurement system would be coordinated with other management information systems,
- duplicate data collection would be eliminated,
- data collected and reports developed would be uniform across appropriate units of the Agency, and
- an annual status report would be provided to VA management, OMB, and the Appropriations Committees of Congress.

We concur that a system guidance role should be assigned to an Agency-wide user-oriented coordinating body. However, to accomplish these objectives, VA management should be allowed some discretion in the decision of how best to achieve the primary aim of the report recommendations, so use of the word "committee" is too restrictive. It is true that the MLC Steering Committee has representatives from all concerned levels of the Agency, and does report to the users.

The MLC Program has five principle components based on level of care: patient classification to identify needs; data support for reporting patient data; tracking to identify resources consumed; financial management

for cost accounting, budgeting, and monitoring; and education and training for medical center staff. This system has the potential for long-term changes in managing total patient resources and applying them in a cost-effective manner. The financial management portion of the system expands data in the current cost allocation system which only reports staffing and cost distribution by funded bed sections. It also permits meaningful comparisons in workload, staffing, and costs.

Our mission is to provide a complete medical care system for veterans. We believe this Agency has the potential for major contributions in designing effective, cost-efficient methods to meet that goal. We trust continuing our present efforts will achieve the objectives of this report's recommendations.

Sincerely,



MAX CLELAND
Administrator

(910311)

AN EQUAL OPPORTUNITY EMPLOYER

**UNITED STATES
GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548**

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

**POSTAGE AND FEES PAID
U. S. GENERAL ACCOUNTING OFFICE**



THIRD CLASS