

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

**DEVELOPMENT OF AN ACTIVITY-BASED COSTING
MODEL FOR IMPLEMENTING CAPITATION AT
NAVAL MEDICAL CENTER SAN DIEGO**

by

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December, 1996

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FOR IMPLEMENTING CAPITATION AT
NAVAL MEDICAL CENTER SAN DIEGO**

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Lieutenant, United States Navy
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of the requirements for the degree of

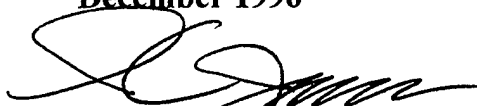
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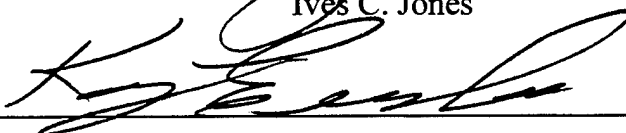
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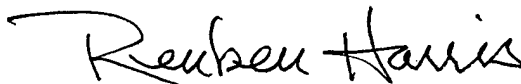
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ABSTRACT

The purpose of this research is to develop a financial model for Naval Medical Center San Diego for the calculation of an appropriate capitation rate under capitation budgeting. The current cost accounting system at Naval Medical Center San Diego and records of the Military Expense and Reporting System and the Uniform Management Report were analyzed to determine their usefulness in providing the information for and implementing capitation budgeting. An accounting model based on the principles of activity-based costing was used to develop a financial model and was applied to the current accounting system at Naval Medical Center San Diego.

The research showed the current accounting system used at Naval Medical Center San Diego and the Military Expense and Reporting System and the Uniform Management Report do not provide the needed financial information for the calculation of an appropriate capitation rate. The accounting system will need to be realigned to identify expenses by activities versus cost categories. The analysis done for this thesis indicates that activity-based costing can provide a more accurate measure of the cost of services (outputs) and facilitate in the calculation of an appropriate capitation rate for Naval Medical Center San Diego.

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I. INTRODUCTION

A. PURPOSE OF RESEARCH

The purpose of this research is to develop a financial model for Naval Medical Center San Diego (NMCS D) to facilitate the tracking and accumulation of costs associated with providing healthcare services. A more accurate measure of healthcare costs would facilitate the determination of an appropriate capitation rate that could be used to allocate Defense Health Program (DHP) resources to NMCS D under capitation budgeting. Computation of individual capitation rates for each medical treatment facility (MTF) includes direct care¹ dollars, Civilian Health and Medical Program of the Uniformed Services (CHAMPUS²) costs, MILPERS dollars, and Managed Care contract costs (Martin, 1996). This research proposes to apply the principles of activity-based costing (ABC) in designing a financial model that would allow direct care costs to be measured more accurately than under the current system.

¹ The military health services system is made up of two parts: direct health care and CHAMPUS. Direct care is made up of MTFs operated by the Military Departments providing services to active-duty personnel, dependents of active-duty personnel, retirees and their dependents and survivors.

² Military healthcare program for non-active duty beneficiaries (under age 65) wherein they receive healthcare from the civilian sector when not available at the MTF. Cost is shared by the beneficiary with the military department through the auspices of the CHAMPUS program.

B. THE PROBLEM

The military health services system (MHSS) is continuously faced with challenges in managing its resources and the rising cost of health care in an environment of continuing reductions in defense funding. The DOD Coordinated Care program has been developed by personnel from the Office of the Assistant Secretary of Defense for Health Affairs (OASD(HA)) to improve the MHSS by enhancing the quality of care, increasing accessibility, and containing costs (DOD Coord Care Proposal, 1991). Under Coordinated Care, OASD(HA) has planned for the Military Departments to use capitation budgeting as one of the strategies for containing costs while maintaining accessibility and high quality of healthcare services (DOD Coord Care Proposal, 1991).

Positioning the MHSS for capitation and to efficiently provide access to quality care will involve behavioral and structural changes as it transitions from a disease-based, workload measure to a capitation methodology (Office of the Assistant Secretary of Defense (Health Affairs), 1993A). To facilitate the transition, it is necessary to understand the method of costing the services performed by the MTF and the relation between costs and outputs. Utilizing ABC can provide information on how expenditures are accumulated and means to affect the cost of outputs. (Rotch, 1990)

The successful application of ABC by manufacturing organizations has lead to the investigation of its usefulness in the healthcare sector for providing an analytical framework to quantify costs and relationships (Rotch, 1990), and improved cost control and decision making

(Chan, 1993). This research uses ABC methodology to develop a financial model and investigate whether it will provide the same benefits for MTFs.

C. THE RESEARCH QUESTIONS

There are two questions that this research attempted to answer with regard to determining the accuracy of NMCSO's accounting system in tracking and accumulating costs for the calculation of a capitation rate. First, what would be an effective and accurate costing system to support the objectives of the Navy capitation model and provide useful information to capture the total costs of healthcare? Second, does the accounting structure of NMCSO accurately capture costs and permit tracking of costs to services? If not, what alternative costing system would support such objectives?

This research addressed two additional questions to determine the usefulness of ABC for developing an alternative financial model for NMCSO to track and accumulate healthcare costs. First, what advantages does ABC provide in tracking and accumulating costs? Second, will ABC provide an appropriate measure for primary outputs at NMCSO that would accurately reflect its total cost per output within a capitation budget?

D. SCOPE AND LIMITATIONS

The capitation-based resource allocation system for funding Navy MTFs was initiated by BUMED using full FY94 financial data and deployed for the first time in FY95. The inception

of Tricare³ in the MHSS in FY96 introduces other factors that will affect allocation of CHAMPUS resources within a capitated system (Lamar, 1994).

A prototype accounting model for capitation-based resource allocation is developed and applied to NMCS D in Chapter VI. This is not intended to be a full working model and is an attempt at increasing the accuracy of capturing cost information at NMCS D for capitation budgeting.

E. PREVIEW OF CHAPTERS

Chapter II is a discussion of the concept of capitation and presents both the DOD and Navy-specific capitation models. Chapter III describes the concept of activity-based costing (ABC). Chapter IV discusses the construction of a proposed ABC model as the basis for measuring the cost of providing healthcare at NMCS D. The findings of an analysis of the current cost accounting system at NMCS D are presented in Chapter V. Using the current cost accounting structure at NMCS D, Chapter VI discusses the applicability of the ABC model as an alternative to the current accounting system for appropriately tracking and accumulating healthcare costs.

³ A DOD healthcare reform program designed to ensure the most effective execution of the military healthcare mission, ensure access to quality healthcare services, control healthcare costs, and respond to changes in military and national healthcare priorities.

II. CAPITATION

A. INTRODUCTION

The purpose of this chapter is to discuss the concept of capitation and its applications within the DOD and the Department of the Navy. This section begins by defining the elements of capitation followed by a presentation of current DOD guidelines that address the method of allocating DHP resources to the Military Departments for FY97. Finally, the Navy's catchment area⁴ capitation budget model for FY97 is discussed.

Capitation is a population-based budgeting methodology wherein the responsibility to provide or assure delivery of an identified benefit structure to a defined population is assumed by the MTF commander in return for a fixed amount per beneficiary (Office of the Assistant Secretary of Defense (Health Affairs), 1993A). It is an effective means of containing costs because it places a cap on expenditures and eliminates the incentive for escalating budgets by increasing services or providing costly care. Additionally, the BUMED Comptroller stated that capitation holds MTF Commanders accountable for all resources, emphasizes outcome vs. volume, discourages inappropriate care, rewards efficient delivery of healthcare, and is sensitive to mission changes (population) (Martin, 1994).

⁴ A catchment area defines a region surrounding an MTF that would determine its area of responsibility for providing healthcare. The Military Health Care Study Project Team in 1975 set a 40-mile limit inpatient boundary surrounding an MTF as its catchment area. Department of Defense and others, *Reports of the Military Health Care Study, Supplemental: Detailed Findings* (1975), p. 947.

B. ELEMENTS OF CAPITATION

A capitation plan consists of the following three elements: 1) a defined population, 2) a fixed payment, and 3) an assumed financial risk. (CBO Study, 1988)

1. Defined population

A defined population is an estimate of the number of eligible beneficiaries who would be relying on the MTF for healthcare. Establishing this population is one of the factors in determining how much healthcare an MTF will provide.

2. Fixed payment

Under capitation, an MTF commander accepts the responsibility to provide a range of healthcare services to a defined population, in return for a fixed amount per beneficiary. The basis for the allocation of resources under a capitated budget is the fixed payment or capitation rate.

3. Financial risk

A financial risk is assumed in part by an MTF commander under capitation budgeting (Office of the Assistant Secretary of Defense (Health Affairs), 1993A). Depending on the efficient use of resources, an MTF may breakeven, have a surplus or a deficit from providing healthcare to its beneficiaries within a capitation budget. In order for savings to be realized under capitation, services have to be provided effectively and efficiently, thereby increasing productivity and not generating workload from unnecessary care.

C. DOD CAPITATION MODEL

Historical resource consumption and workload trends have been the basis for programming and budgeting in the Military Departments. This tradition rewards submission of budgets with increased workloads without holding the activity and its staff accountable for generating additional services. In an effort to improve the incentives facing healthcare personnel and contain healthcare costs, DOD adopted capitation budgeting. (Office of the Assistant Secretary of Defense (Health Affairs), 1993B)

Capitation addresses two issues which made it very attractive to DOD policymakers. First, it provides MTF commanders the proper incentives to efficiently provide care by increasing the performance of their MTFs and their use of scarce resources. Second, it supports the development and execution of a more predictable budget through a prospectively determined capitation rate. (Office of the Assistant Secretary of Defense (Health Affairs), 1993A)

The ASD(HA) expected this new budgeting system to discourage the provision of unnecessary care while ensuring increased accessibility and high quality of care (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). Since the funds distributed to an MTF do not depend on the services used, there is no financial motivation to increase the number of services or to provide particularly costly care.

Capitation budgeting is not new to DOD. A trial project was executed in the late 1970's by the Military Departments as part of a movement to control healthcare costs. In a memorandum for the ASD(HA) in April 1993, the Surgeon General of the Navy, indicated some

policy concerns as a result of the trial project. One of these issues was the ability of the MTF commander to access, in real time, accurate and timely information on the quantity, composition, and cost of workload being performed in the catchment area. Another policy concern was the lack of a capitation rate setting mechanism that rewards effective performance. (Surgeon General of the Navy, 1993)

Most recently, DOD demonstration projects have shown that capitation budgeting promises to hold down military health care costs and can increase efficiency. This has been illustrated through the Army's Gateway to Care Program and the Navy's Catchment Area Management (CAM) projects, and indirectly through the CHAMPUS Reform Initiative (CRI). (Reischauer, 1993)

The initial program guidance for FY93/94 prompted OASD(HA) and the Services to develop an interim capitation methodology based on the experience gained from the Army's Gateway to Care Program capitation budgeting model used in FY92/93. The amount of the capitation budget in the Army's model was a product of historical cost per beneficiary served and the number of beneficiaries projected for the next fiscal year. The Army's Health Services Command reported that the use of its capitation-based resource allocation methodology created incentives for more efficient use of resources. (Office of the Assistant Secretary of Defense (Health Affairs), 1993A)

In FY93/94, personnel from OASD(HA) working with the Military Departments, developed an initial plan for a financial-based, capitation methodology for allocating DHP

resources to the Military Departments. Computation of a capitation rate was performed for unique military, medical-related functions identified to be funded within a capitation budget. (Office of the Assistant Secretary of Defense (Health Affairs), 1993B) A budgeting system based on this capitation model was implemented in FY94 and had been adjusted over the following years with a plan for full implementation by FY97. (Office of the Assistant Secretary of Defense (Health Affairs), 1993A)

The DOD Capitation approach is population driven and consists of three major categories: 1) CAT I - Military Medical Support, 2) CAT II - Military Medical Unique Capitation Rate, and 3) CAT III - Medical Capitated Cost. At a minimum, the Service-specific methodology takes account of Operation and Maintenance (O&M) Direct Care, O&M CHAMPUS, Military Personnel (MILPERS), and population (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

1. Category I (CAT I)

The first category is not calculated on a per capita basis and covers budgets for some fixed costs that relate to the military's unique medical infrastructure and services not directly related to size of the military force structure (Office of the Assistant Secretary of Defense (Health Affairs), 1993B; Reischauer, 1993). These functions are not conducive to population-based budgeting which prevents inclusion in a capitation rate (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). Examples include the following: (Office of the Assistant Secretary of Defense (Health Affairs), 1993B)

- Armed Forces Institute of Pathology
- Contingency Bed Capacity
- Referrals from Overseas
- Aeromedical Evacuation System
- Medical Entrance Processing
- Environmental Restoration
- Overseas Activities
- Capital Expense Initial Outfitting

Funding for these functions is determined based on mission changes, realignments, base closings, inflation, and other adjustments considered in the budgeting process. This category contains O&M Direct Care and MILPERS funding (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

2. Category II (CAT II)

CAT II incorporates budgets for variable costs that relate to the military's unique medical infrastructure and a capitation rate is calculated based on the active duty population (Office of the Assistant Secretary of Defense (Health Affairs), 1993B; Reischauer, 1993). This reflects the costs of military medical unique functions and readiness related to the size of the force structure and Service-specific military requirements. The costs for these items are adjusted for the

overseas portion which is included in CAT I. O&M Direct Care and MILPERS funding are also included (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

The second category is further divided into A and B. For CAT IIA a capitation rate is determined based on the local active duty population (e.g., dental care, optical laboratories) while for CAT IIB a capitation rate is determined based on the local medical population (e.g., readiness planning, education and training). (Martin, 1993) Examples of CAT II functions include: (Office of the Assistant Secretary of Defense (Health Affairs), 1993B)

- Readiness Planning
- Physiological Training Flights and Laboratories
- Dental Care
- Veterinary Services
- Optical Laboratories
- Military Funded Emergency Leave
- Readiness Exercises and Training
- Education and Training

3. Category III (CAT III)

The third category includes medical healthcare services that are capitated based on the total number of beneficiaries, including active-duty and non-active-duty beneficiaries. This component is made up of budgets for costs that relate to the peacetime health care system and

services that are directly comparable to civilian healthcare. (Office of the Assistant Secretary of Defense (Health Affairs), 1993B; Reischauer, 1993) It contains O&M Direct Care, MILPERS, and O&M CHAMPUS funding associated with providing healthcare other than those included in the first and second categories (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

D. NAVY FY97 CAPITATION MODEL

The FY97 capitation budget was developed by BUMED personnel from data generated at the MTF level between April 1995 - March 1996. The data included direct O&M, MILPERS, CHAMPUS (if applicable), and managed care contract dollars (if applicable). (Martin, 1996)

The capitated rate for an MTF consists of patient care dollars (variable cost) and non-patient care dollars (fixed cost). Patient care dollars consist of expenses generated from providing patient care in the MTF and CHAMPUS dollars as indicated in Figure 2-1. Non-patient care dollars is made up the cost related to the infrastructure of the MTF and MILPERS dollars which is displayed in Figure 2-2. (Martin, 1996)

The calculation of the MTF FY97 capitated rate consists of computing the patient care cost, non-patient care cost, CHAMPUS cost, and managed support contract cost. Table 2-1 illustrates the methodology involved in these calculations. (Martin, 1996)

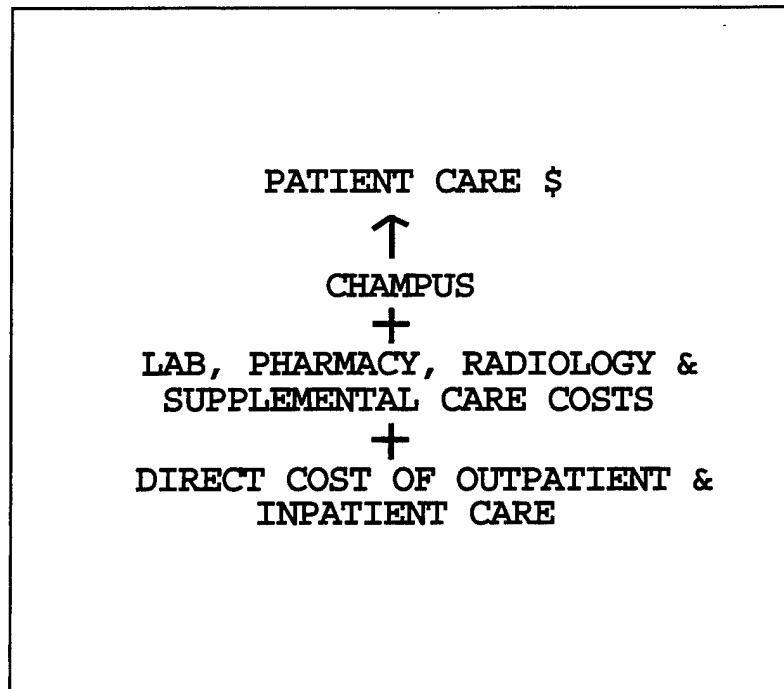


Figure 2-1 Patient Care Dollars

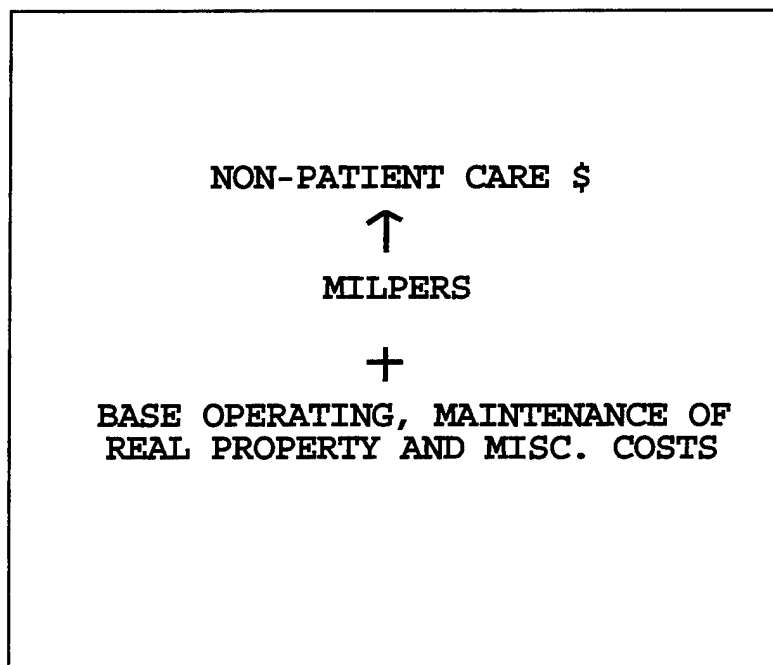


Figure 2-2 Non-Patient Care Dollars

Table 2-1 Calculation of FY97 Capitated Rate

Patient Care (PC) Cost	
STEP 1	FY96 PC costs ÷ FY96 population = FY96 rate
STEP 2	FY96 rate x FY97 population
STEP 3	Apply FY97 inflation rate
Non-Patient Care (NPC) Cost	
STEP 1	FY96 NPC costs - "One-Time" ⁵ costs
STEP 2	Apply FY97 inflation rate
STEP 3	Add/subtract functional transfers, mission changes, and one-time costs
CHAMPUS Cost	
STEP 1	FY96 CHAMPUS costs ÷ FY96 eligible population = FY96 rate
STEP 2	FY96 rate x FY97 eligible population
STEP 3	Apply FY97 inflation rate
Managed Support Contract (MSC) Cost	
	FY96% of regional RPD ⁶ MR cost x FY97 regional target
MILPERS Cost	
STEP 1	FY96 costs ÷ onboard strength = FY96 rate
STEP 2	FY96 rate x FY97 authorized billets
STEP 3	Incorporate FY97 pay raise
STEP 4	Calculate FY97 target

Putting all the financial variables together, Figure 2-3 shows the overall calculation of a capitated budget. (Martin, 1996)

⁵ Non-recurring cost due to a unique requirement (i.e. construction).

⁶ Regional Paid Data Management Report (RPDMR) is the financial source for CHAMPUS dollars.

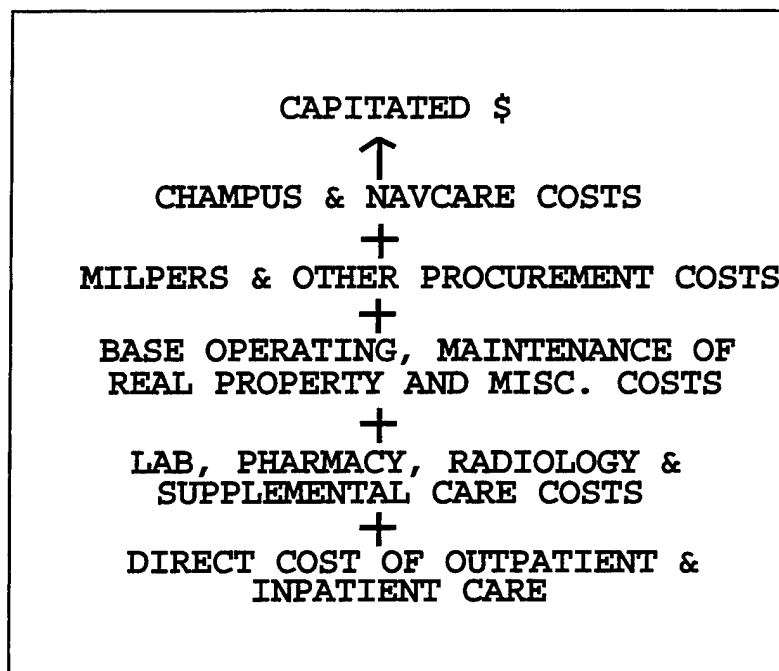


Figure 2-3 Capitaled Dollars

Concerns have been raised by the BUMED comptroller regarding the applicability of a capitation methodology for allocating resources at the catchment area. The comptroller argues that the MTF commanders will have problems in actual execution against a per capita resource allocation using the present accounting system because of the inherent limitations of the current accounting structure. (Cuddy, 1993)

Alignment of the Navy accounting system to the capitation methodology was identified by BUMED as one of the future issues to be addressed in the implementation process (BUMED, 1993). Since the implementation by DOD of capitation budgeting within the MHSS in FY94, the BUMED Comptroller has executed changes to the cost structure of the accounting system

used by NMCSO. These changes were formulated in order to support the DOD capitation budgeting guidelines. Specifically, the changes were made in order to separate the readiness and operational costs (CAT I and II) from the cost of peacetime healthcare services (CAT III). (Chief, Bureau of Medicine and Surgery, 1996) The goal of the BUMED Comptroller was to avoid improperly inflating the capitation rate for Navy Medicine. (Chief, Bureau of Medicine and Surgery, 1996)

E. SUMMARY

DOD transitioned from its traditional budgeting system to capitation budgeting in an effort to contain healthcare costs. In FY94, the Military Departments received their budget allocations for unique military, medical-related functions through capitation, based on the Army's capitation budgeting methodology. A budgeting system based on this capitation model was implemented in FY94 and had been adjusted over the following years with a plan for full implementation by FY97. BUMED staff developed the Navy's plan for the use of capitation budgeting at the catchment area level or the MTFs. An issue of concern identified by the BUMED Comptroller is the alignment of the existing Navy accounting system in the implementation of capitation budgeting at the MTF.

III. ACTIVITY-BASED COSTING

A. INTRODUCTION

The existing accounting system will have to be adjusted as Navy medicine transitions to capitation budgeting from the current budget method (Cuddy, 1993). Realignment of the Navy accounting system is an important aspect of the successful implementation of the new budgeting system. This research investigates an accounting model based on the principles of activity-based costing (ABC) as an alternative to the current accounting structure used by MTFs.

This chapter begins with a discussion of the use of activities as a management tool for an MTF commander. This is followed by a presentation of the difference between ABC and a traditional cost system. Finally, the main ingredients of an ABC system are discussed.

B. ABC AS A MANAGEMENT TOOL

There are several characteristics of activities⁷ that make them a useful management tool for an MTF commander. Some of these characteristics are discussed in the following sections.

1. Activities are action

Inherent limitations of the current accounting system presents difficulties for decision making in actual execution within a capitation budgeting environment (Cuddy, 1993). The traditional accounting system collects costs by cost elements (such as labor, plant and equipment, and supplies) and does not provide the detailed information necessary to identify needed

⁷ An activity functions as a means of converting resources (labor, materials, technology) into outputs.

managerial decision changes (Brimson, 1991). ABC can provide an MTF commander the information to make the decisions at a level at which actions can be taken -- at the level of activities.

2. Activities drive cost

Costs of services computed on the basis of cost elements distort cost because the usage of the cost elements are assumed to be proportional to the direct factors such as manhours, ambulatory visits, surgical procedures, and equipment issued. Cost control is often focused on the basis of this information and at the point where cost occurs without consideration of what drives the cost. Identifying activities enables an MTF commander to focus on the factors that drive cost and indicate where action is required. (Brimson, 1991)

3. Compatible with total quality management

Total quality management (TQM) has become part of the DOD culture of doing business. Two objectives of TQM are to do things right the first time and to work for continuous improvement (Brimson, 1991).

Continuous improvement focuses on the elimination of non-value added⁸ and secondary activities. Visibility of these activities together with the factors that drive cost can be achieved through activity analysis. An understanding of activities by the MTF commander can provide a foundation to eliminate waste. (Brimson, 1991)

⁸ Activities which result in wasteful use of time, money, and resources and add unnecessary cost to outputs.

4. Improves decision support

ABC contributes to decision support in two ways. First, it facilitates in providing the appropriate financial information. Second, it does this in a timely manner.

Cost accounting systems often accumulate cost information based on organizational units (Brimson, 1991). An ABC system would accumulate costs according to the activities performed by an MTF making available the appropriate financial information for a more accurate measure of providing healthcare services.

Financial data from the current Navy accounting system are not timely because it corresponds to the monthly accounting close rather than corresponding to the timing of the decision (Brimson, 1991). Having the appropriate financial information available in a timely manner would support MTF commanders in making decisions on actual execution of the budget.

The adoption by DOD of a capitation-based resource allocation methodology is expected to provide the incentives for MTF commanders to make decisions that improve the provision of healthcare and use of scarce resources (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). This could be facilitated by an ABC system which provides a realistic picture of the impact of managerial decisions on current activity consumption.

C. ACTIVITY-BASED COSTING VS. TRADITIONAL COST SYSTEMS

Activity-based costing (ABC) can provide accurate information on the cost of activities performed by an organization by linking the cost of these activities to outputs⁹ for which these

⁹ "Outputs" is used to refer to services, products, beneficiaries, projects, or any object that creates a demand for or benefits from the activities of an organization. ABC

activities are performed (Rotch, 1990; Cooper and Kaplan, 1992A; Cooper and Kaplan, 1992B).

Two factors differentiate ABC systems from traditional systems: 1) cost pools are defined in terms of activities rather than cost centers; and 2) the allocation bases or cost drivers used are structurally different (Cooper and Kaplan, 1992A).

1. Cost pools defined in terms of activities

Traditional cost systems assign an organization's operating expenses to outputs by first allocating to cost pools and secondly to outputs (see Figure 3-1) (Cooper and Kaplan, 1992A).

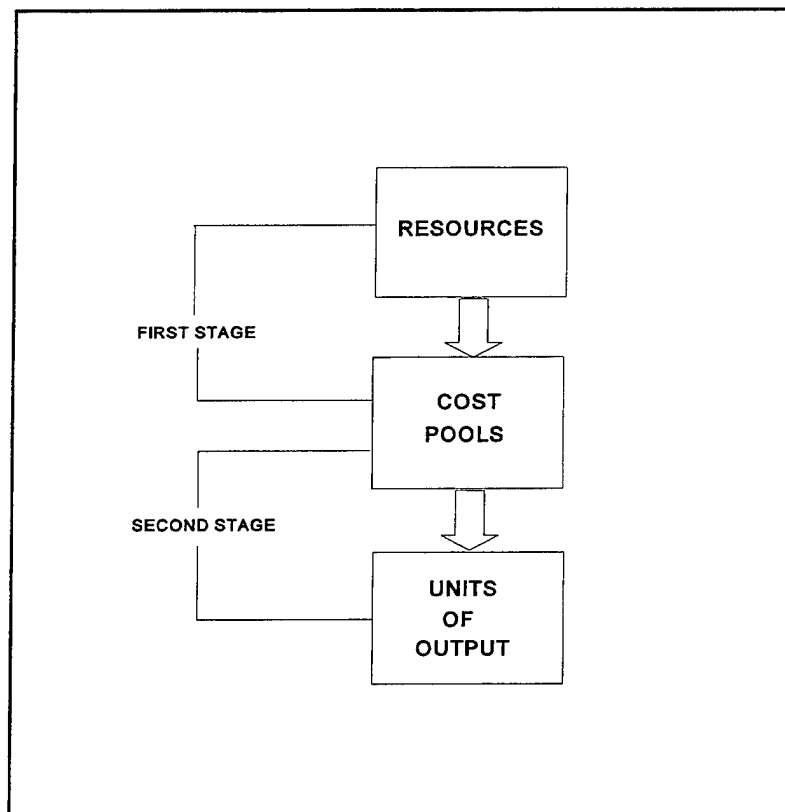


Figure 3-1 Traditional Two Stage Approach

systems tracks the organization's operating expenses to outputs based on the activities performed for these outputs.

ABC systems estimate the cost of resources used by an organization to produce outputs by breaking down an organization into activities (Brimson, 1991). Resource usage is measured based on the activities for which resources are consumed and then tracing the activity costs to the outputs (see Figure 3-2) (Brimson, 1991; Rotch, 1990; Cooper and Kaplan, 1992A).

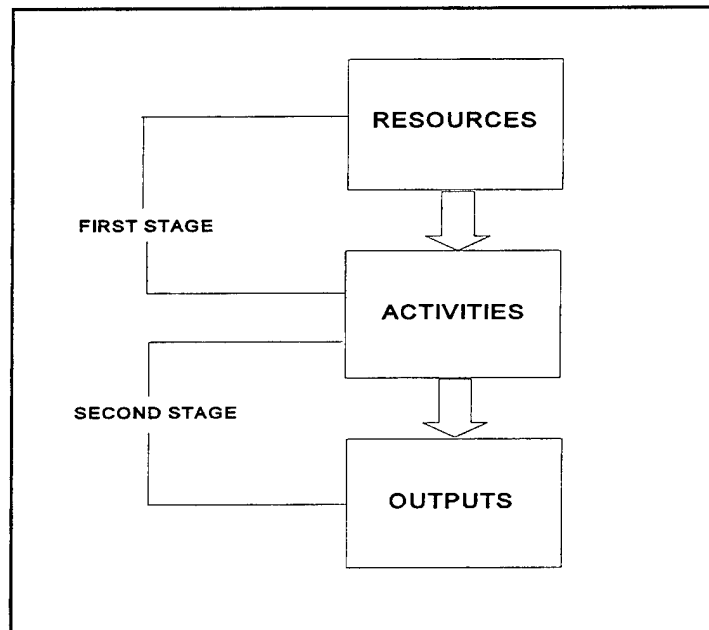


Figure 3-2 ABC Two Stage Approach

This process identifies the costs of the different activities being performed in an organization allowing for a more accurate reporting of the cost of resources (Rotch, 1990; Cooper and Kaplan, 1992A). An advantage it has over traditional costing is that ABC provides a more accurate measure of the cost of activities that are not performed proportionate to the volume of procedures performed (Rotch, 1990; Cooper and Kaplan, 1992A).

For instance, in a traditional costing system administrative costs, which include costs of operating the accounting, finance, personnel, and other administrative departments, might be included in overhead and allocated to outputs on the basis of direct labor hours. This could result in an inaccurate cost allocation because there may not be a cause-and-effect relationship between the accounting services provided to other departments and direct labor hours. Thus, departments with the largest proportion of direct labor absorb the bulk of the administrative costs. By determining the cost drivers¹⁰ for the accounting department, the most appropriate cost base for allocation allows an ABC system to distribute overhead costs more accurately.

2. Structurally different allocation bases

In a traditional costing system, volume-driven allocation bases or cost drivers, such as direct labor hours, ambulatory visits, material purchases and procedures performed are used to assign an organization's operating expenses to the outputs (Brimson, 1991; Cooper and Kaplan, 1992A); Cooper and Kaplan, 1992B). When activities that are not directly related to short-term volume (such as engineering support, purchasing, and ancillary support) are allocated using volume-driven bases, output costs can become inaccurate.

The result is a misrepresentation of the relationship between the activities that generate the support cost and outputs. The accuracy of the costs of outputs reported by some traditional cost systems, when they are expended in relation to the volume of outputs produced is questionable (Brimson, 1991). By shifting the allocation base to an activity that is related to

¹⁰ A driver is an activity that directly influences the performance and/or the cost structure of other activities.

output, ABC systems can provide more accurate information on the link between the use of resources and output (Rotch, 1990). Unlike some traditional cost systems, ABC systems directly measure the cost of resources used by an organization to perform specific activities and then link the activity costs to the outputs.

D. ESSENTIAL FACTORS IN ACTIVITY-BASED COSTING

Several writers (e.g., Euske (1992), Brimson (1991), Cooper and Kaplan (1992)) have identified factors regarded as essential to designing ABC systems.

1. Activity analysis

ABC is enhanced by the discrete tracing of activity cost to outputs. This is done through an activity analysis which identifies how an organization uses its resources to meet its objectives (Brimson, 1991). However, defining too many activities could lead to an enormous task of gathering data that could become costly (Cooper and Kaplan, 1992A).

2. Trace resources to activities

Thinking about cost in terms of processes, drivers and activities can be useful for capturing costs incurred at a particular point in time (Euske, 1992, p.41).

A process is made up of a chain of events or decisions (drivers) which generate the activities performed in an organization. The association between drivers and activities allows the proper assignment of costs to the tasks performed. (Euske, 1992) However, the designer of an ABC system may be forced to assign costs to activities from financial information in the general ledger. Most general ledger systems report the costs of the different types of resources and not

the costs of activities. There are three ways of assigning resource cost to activities: direct charging, estimation, and arbitrary allocation. (Cooper and Kaplan, 1992A)

Direct charging captures cost more accurately than the other methods but becomes expensive to use. Using estimates is more affordable. Estimates can be derived from surveys and interviews. Use of arbitrary allocation should be postponed until there is no other means available to estimate the cost of resources used. (Cooper and Kaplan, 1992A)

Calculation of an activity cost is computed in terms of all the significant traceable factors of production¹¹ used to perform the activity. The activity cost is then derived by mapping the resources employed to perform an activity through a causal relationship. The activity cost is expressed in terms of an activity measure, which may be an input, output, or a physical attribute of the activity. (Brimson, 1991)

3. Identify outputs

It is necessary to determine all the outputs produced by resources whose costs are being assigned. Omitting certain categories of outputs will result in a disproportionate assignment of costs to the remaining outputs. Similarly, costs of future or past products and unused capacity should be excluded when assigning costs to currently produced outputs. (Cooper and Kaplan, 1992A)

¹¹ A factor of production is said to be traceable when a cause-and-effect relationship has been established with a specific activity.

4. Link activity costs to outputs

The activity-based cost pools are distributed to outputs by tracking the individual activities associated with the output and charging the cost of each activity directly to the output. Proper distribution of costs to the second level is achieved by recognizing the generator of a cost or activity. (Euske, 1992)

E. SUMMARY

DOD is transitioning from its traditional budgeting system to capitation budgeting in an effort to contain healthcare costs. ABC may have the potential to provide Navy medicine an accounting system to its current system for providing the necessary financial information that would support the cost objectives of capitation budgeting. The potential advantages ABC could provide an MTF commander are visibility and understanding of the costs of the activities associated with providing healthcare. This would facilitate the calculation of an appropriate capitation rate for the MTF. Increased accuracy of the estimate of the costs of the activities for which resources are consumed should also allow the MTF commander to effectively budget for the services rendered within the catchment area.

IV. MODEL DEVELOPMENT

A. INTRODUCTION

Computation of a capitation rate for NMCSO requires the availability of financial information for an accurate estimate of the cost of providing healthcare within a catchment area. Therefore, the ability to effectively measure healthcare costs is essential for the successful implementation of capitation budgeting.

The purpose of this chapter is to discuss the construction of a proposed model using the principles of ABC as the basis for measuring the cost of providing healthcare at NMCSO.

The models by Brimson (1991) and Cooper and Kaplan (1992) are used in the development of a model for measuring the cost of providing healthcare at NMCSO. Figure 4-1 shows the steps necessary to design the model. An activity analysis to determine the activities that NMCSO performs in providing direct care is the first step. Next, resource costs are traced to the individual activities using the method of estimation. This is followed by identifying the cost objects or outputs for which activities are performed. Finally, activity costs are traced to outputs based on cost drivers.

B. ACTIVITY ANALYSIS

The first step in this ABC model is to break down the organization, NMCSO, into understandable and manageable activities and outputs.

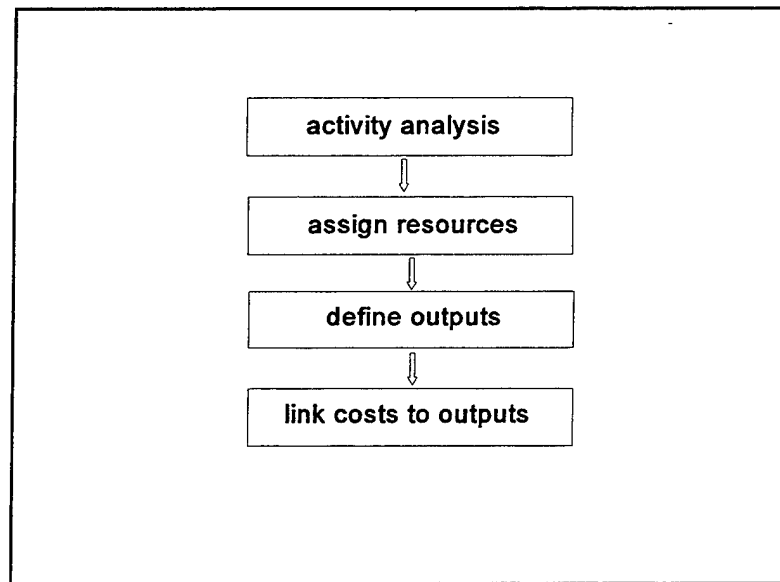


Figure 4-1 Steps to Develop an ABC Model

An activity analysis according to Brimson (1991, p. 78),

... identifies the significant activities of an enterprise to establish a clear and concise basis for describing business operations and for determining their cost and performance. The process of analyzing time use is known as **activity analysis**.

Defining a very large number of activities will result in a disproportionately high cost of measurement and will be time consuming. Identifying numerous activities can lead to a huge data collection task that would make measurement of the activity-output relationship difficult and costly. An organization designing its first ABC system typically defines 25 to 100 distinct activities (Cooper and Kaplan, 1992A). Figure 4-2 illustrates the primary steps performed for an activity analysis and are described in the following sections (Brimson, 1991).

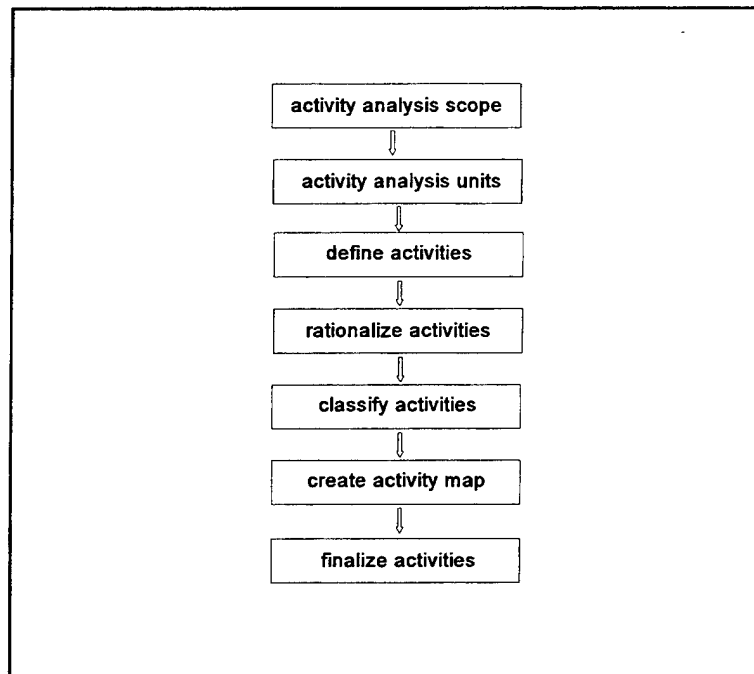


Figure 4-2 Activity Analysis Approach

1. Activity analysis scope

Determining the range of activities for the analysis allows for information to be efficiently gathered (Brimson, 1991). The scope of this activity analysis is limited to O&M dollars for direct healthcare services provided at NMCS D as delineated in the Navy capitation plan.

2. Activity analysis units

To facilitate a comprehensive and cost-effective analysis, an organizational unit should be divided into groups or departments with a common purpose. These are called activity units that may correspond to organizational units or cross organizational boundaries. (Brimson, 1991)

A starting point for identifying activity units for NMCS D is its organization chart. Information for dividing an organization unit into groups may also be obtained from flowcharts, departments instructions, facilities' layouts and other related documentation (Brimson, 1991).

3. Define activities

Defining the activities performed by an activity unit can be performed by employing several techniques for data collection, such as analysis of historical records, organizational units, business processes, business functions, and directed industrial engineering studies. Techniques which require more precise measurements require considerable training to perform and usually require more time for data collection. (Brimson, 1991)

Determining the method used for defining the activities performed at NMCS D depends on the degree of precision required and the cost of measurement. An activity analysis for NMCS D can be initiated with an organizational review of each department followed by a business process¹² or functional analysis.¹³ However, it is important to make use of existing financial information such as a past activity analysis which may have been part of a zero-base budgeting or special project. (Brimson, 1991)

¹² A business process analysis studies the business processes (a network of related activities that occur in a structured sequence to accomplish specific objectives and are interconnected by a flow of information) that predominate the organization and defines them according to major activities.

¹³ A functional analysis studies each major function performed by an organization and breaks it down into activities. This allows common activities to be considered across the whole organization.

A starting point can be records of past budget submissions and financial reports generated to track budget expenditure. These can then be supplemented with further activity analyses.

4. Rationalize activities

The next step after identifying the activities performed at NMCS D is to arrange them in an activity list at a level of detail that will allow for proper separation or combination of activities with different cost behavior patterns.¹⁴ (Brimson, 1991)

The analysis requires that the list of activities be manageable and not too complex to help influence business decisions. It also requires that the list provides enough detail to allow for sufficient information to account for activity cost behavior. Usually, the flow of information or outputs between activities provides insight into how to separate/combine activities. (Brimson, 1991)

Each major activity must be decomposed to the level of detail where costs are proportionately distributed among activities with similar inputs and outputs. Defining the activities in this manner would provide the MTF commander with more accurate costing of healthcare services and improved decision making information. However, one needs to be cautious when aggregating dissimilar activities because the aggregation may inaccurately indicate the cost behavior patterns. (Brimson, 1991)

¹⁴ Cost behavior patterns are defined as the manner in which costs behave as volume changes over a range of activity levels.

5. Classify activities

Each activity on the activity list is classified as primary or secondary. A primary activity is one that directly contributes to the mission of a department or an organization. It also produces an output used outside an organizational unit. (Brimson, 1991) For example, performing a laboratory test is a primary activity conducted by the Laboratory Department for patient care units.

Activities performed by a department to support the primary activities are secondary activities. They are generally activities such as administration, training, and maintenance. (Brimson, 1991) Ordering supplies and setting up equipment are examples of secondary activities for conducting a laboratory test.

6. Create activity map

The activity list is arranged to create a NMCS D activity map which identifies the interaction of its functions, business processes and activities. Business processes and activities are first mapped to functions, then activities are connected to business processes. Processing the information for ABC creates a map of the activities performed by an organization and a description of the cost structure in terms of activity consumption. (Brimson, 1991) This can provide information on activity cost which would help an MTF commander to make decisions on how to manage costs.

7. Finalize activities

The result of the ABC activity analysis is an aggregate list of activities for NMCSO, the product of the organizational, business process, and functional analyses conducted. This list should provide a breakdown of NMCSO into its activities for a clear and concise understanding of NMCSO operations and determining the cost of those operations.

C. ASSIGN RESOURCE COSTS TO ACTIVITIES

Once activities are identified for the services provided by NMCSO the costs associated with performing these activities will be mapped to the individual activities. Assigning the expense of all traceable factors of production employed to perform an activity permits the calculation of an activity cost (Brimson, 1991).

The initial ABC model of NMCSO is designed to assign resource costs to activities by estimating expenses from the Uniform Management Report (UMR) and Medical Expense and Performance Reporting System (MEPRS) reports. UMR and MEPRS provide a means of viewing financial data in terms of execution dollars and associated workload (Roscham, 1993). Additionally, these reports list the amount of O&M dollars that will be used by BUMED for calculating the capitation rate at the catchment area level and for which the MTF commander is responsible for execution. Part of the analysis performed for this research was to determine the availability of information from the UMR and MEPRS for identifying the appropriate activities that would be used in the proposed ABC model.

Knowing the cost per activity is important in managing cost. The conventional approach of capturing costs at the cost element level combines multiple demands for a factor of production (Brimson, 1991). Knowing the total consumable supplies expenses of a department, for example, does not provide insight into the activities that generate the need for supplies. To control the cost of consumable supplies a manager must first understand the factors (that is, the activities) that drive the need for supplies.

An activity cost is expressed in terms of an activity measure. The activity measure is that unit or elements of work or effort which causes the cost of a given process to change most directly. It is critical to select the appropriate activity measure because it makes visible the factors that drive activity volume and subsequently cost. (Brimson, 1991) Examples of activity measures include number of patients, number of manhours, number of prescriptions, and number of laboratory tests.

1. Methods of assigning resource costs

There are three ways of assigning the cost of resources: direct charging, estimation, and arbitrary allocation. (Cooper and Kaplan, 1992A)

a. Direct charging

Direct charging uses actual usage of resources which most accurately captures the cost of resources used by activities. However, this method is expensive because it requires measurement of actual usage. (Cooper and Kaplan, 1992A)

b. Estimation

ABC models typically estimate the cost of resources through interviews and surveys when direct measurement is not available. Interviews are relatively fast and inexpensive to perform and can be supplemented or replaced with surveys. Both interview and survey methods require supervisors to estimate the percentage of time spent by employees on the activities performed by the department. (Cooper and Kaplan, 1992A)

Assigning resource costs for NMCSO will also involve estimating expenses from existing financial reports, such as UMR and MEPRS, which are used to account for execution of O&M dollars.

c. Arbitrary allocation

When neither direct charging or estimation can be utilized for assigning resource costs an arbitrary allocation can be performed. This method does not improve the understanding of the economics of activities and must be avoided whenever possible. (Cooper and Kaplan, 1992A)

2. Steps in assigning resource costs

There are five key steps in tracing resources to activities: determine source of data, group related general ledger costs, establish causal relationship, trace people-related costs, and trace all other costs. (Brimson, 1991)

a. *Source of data*

Initial ABC models usually assign resource costs to activities by estimating expenses from the general ledger. Subsequent models use either budgeted or targeted information which enables an organization to make decisions based on projected activity and outputs costs, rather than on historical costs. (Cooper and Kaplan, 1992A) As stated earlier, data for NMCS D will be collected from the UMR and MEPRS reports.

The general ledger is the recommended source of cost information because financial data under ABC would reconcile to the financial reporting system, ensuring consistency between the management system and financial accounting data. The level of detail in the current accounting system rarely limits the cost analysis but affects the level of effort to translate cost to activity costs. (Brimson, 1991)

b. *Group related costs*

Expenses collected from the general ledger are classified according to expenditures (e.g., salary and wages, office supplies, insurance, and depreciation) which are accumulated by department or cost centers. In order for an accounting system containing this types of resource costs to provide meaningful information, it needs to mirror the service process. Therefore, it is recommended that tracing resource costs to activities be performed for expenses with similar cost behavior and summarized by natural expense categories. (Brimson, 1991)

For example, expenses with similar cost behavior pattern such as salary, income tax withholding, and benefits can be summarized under a natural expense category for labor.

Other natural expense categories include material, utilities, plant and facilities, information systems, travel, inventory, and intercompany activities. (Brimson, 1991)

c. Establish causal relationship

After expenses are grouped on the basis of similar cost behavior, the next step is to establish a causal relationship. Direct consumption of a factor of production by an activity defines a causal relationship. The key factor in establishing this relationship is defining an activity measure that is common to both the factor of production and the activity. (Brimson, 1991)

An activity measure is a measure of activity volume by which the costs of a given process vary most directly. An activity measure is an input, output, or physical attribute of the activity. (Brimson, 1991) For example, the number of patients is an activity measure that determines the volume of examinations performed. Similarly, the amount of examinations is normally stated in terms of the number of patients seen. Therefore, it can be said that there exist a causal relationship between the number of patients and examinations performed.

Two additional factors are important in establishing a causal relationship: reproducibility and completeness. Reproducibility allows others to understand what was done in terms of the analysis performed. (Brimson, 1991) For example, an individual not part of the ABC design team computing the cost of examinations should be able to duplicate the process used for cost estimation.

The analysis encompasses the entire system wherein nontraceable costs are allocated to primary activities. (Brimson, 1991) Administration costs incurred in support of performing examinations are allocated when estimating the cost of an examination.

d. Trace people-related costs

Next, human resources are traced to activities. Time or a physical output of an activity is usually the basis for tracing labor costs to activities. When the activities performed to produce outputs are homogenous, the use of physical outputs can be employed for tracing employee costs. Otherwise, time spent on activities is a more valid basis if outputs require different amounts of effort or workers perform several activities. (Brimson, 1991) For example, when the output "treatment" is considered, an appropriate measure of employee costs is time because different activities are performed to produce this output, including examination, laboratory tests and nursing care.

Tracing employee costs to activities starts with an analysis of the organization chart and the corresponding job descriptions. For each job classification techniques such as interviews, review of logs, or engineering studies are used to determine which of the activities employees support in a department. Labor cost is then charged to activities by multiplying people-related costs by the time percentages determined in the activity analysis, using one of three methods: (Brimson, 1991)

(1) Total Labor Method. Traces labor cost to activities by using percentage of time spent on each activity within a department.

(2) Occupation Code Method. Traces labor cost to activities by using percentage of time spent on each activity by specific class of employee.

(3) Specific Employee Method. Traces labor cost to activities by using percentage of time spent on each activity by individual employee.

e. Trace all other costs

It is seldom possible or cost-effective to charge 100 percent of a department's costs to activities. Organizations usually trace between 80 to 90 percent of department costs to activities. The remaining are "nontraceable" which represent general department support costs. Because these costs are tied to a specific department, they should not be allocated using a hospital-wide cost pool. It is recommended that allocation of general department costs be made to the organization's primary activities based on the department's primary factor of production. (Brimson, 1991) For example, pharmaceutical "nontraceable" costs be assigned based on prescriptions filled.

D. DEFINING THE OUTPUTS

The third step in this ABC model identifies the outputs produced by activities at NMCSO. An output is the product or the result of an activity. The product of an activity is also its activity measure (Brimson, 1991). Typical outputs include prescriptions, treatment, laboratory tests, or projects.

Within an ABC system all outputs produced by resources should be identified. This facilitates accurate tracking of costs to outputs. If certain categories are omitted, too many costs

are assigned to the remaining outputs resulting in inaccurate costs of the outputs. Similarly, resources used for future or past products should be excluded from costs assigned to current products. Furthermore, costs attributed to unused capacity should not be allocated to actual products produced. (Cooper and Kaplan, 1992A)

The successful implementation of capitation budgeting at the catchment area level requires the accounting system to accurately measure the costs of outputs. It is necessary to identify all outputs produced by an MTF. The process of identifying all of the output at NMCS D involves a detailed analysis which requires more resources than are available for performing this research. However, the analysis in Chapter VI provides an example of the model applied to the current system operating at NMCS D.

E. LINK ACTIVITY COSTS TO OUTPUTS

When all outputs produced by an organization have been identified, activity costs can be assigned to outputs. Tracing activity cost to the final cost objective has two primary purposes, to understand the cost structure and to determine superior alternatives to performing activities (Brimson, 1991).

Knowing the cost of providing a service supports the decision-making process of an MTF commander. This final step of tracing activity cost to outputs can provide the MTF commander visibility of how resources are consumed by the activities performed by the MTF and allows him/her to execute the budget effectively.

It is important that all costs be traced to a final cost objective where practical and economically feasible. As stated previously, a rule of thumb is that 80 to 90 percent of a department's costs should be traced to the activities performed by the department -- tracing more is usually uneconomical. (Brimson, 1991)

Costs can be traced to the final cost objective using a bill of activities (BOA). The BOA indicates the sequence of activities and the quantity of each activity used in achieving the organization's mission. (Brimson, 1991)

From the BOA activity costs can be traced to outputs the same three ways as resource costs can be assigned to activities: direct charging, estimation, and arbitrary allocation. (Cooper and Kaplan, 1992A)

Activity costs at NMCSO can be assigned to outputs by estimation. This would provide consistency with the method used to assign resource costs to activities. Estimates obtained from realistic cost behavior patterns provide an excellent basis for making routine decisions and controlling operations (Brimson, 1991).

F. SUMMARY

The transition to a capitation-based resource allocation within Navy medicine will involve an adjustment of the current accounting structure to one that would enable the MTF commander to support the cost objectives of this budgeting system. This research investigates a model based on the principles of ABC to facilitate in designing an alternative accounting structure to the current system for implementing capitation budgeting.

An ABC system can identify the way an MTF uses its resources to accomplish its mission. ABC can make it possible for activity costs to be measured more accurately than traditional cost systems. A better understanding of activity costs should allow an MTF commander to make appropriate budget execution decisions using a capitation budget. Additionally, ABC could provide the means for a more accurate calculation of a unit cost which can serve as an estimate of the direct care portion of a capitation rate for NMCS.

V. ACCOUNTING SYSTEM AT NAVAL MEDICAL CENTER SAN DIEGO

A. INTRODUCTION

The purpose of this chapter is to present the findings of an analysis of the current cost accounting system at NMCS D. The system was analyzed to determine its usefulness in providing the information for and implementing capitation budgeting. Records of the Military Expense and Performance Reporting System (MEPRS) and Uniform Management Report (UMR) were analyzed to determine how costs are accumulated, and the usefulness of the systems for providing information to support implementation of capitation budgeting at NMCS D.

This chapter begins with a discussion of how cost accounting is performed at NMCS D. Next, the process of cost accumulation by the MEPRS and UMR systems is described separately, for an understanding of the cost information they provide.

B. CURRENT ACCOUNTING SYSTEM

Cost accounting at Navy activities is a job order cost accounting system. The Navy's job order cost system is used to facilitate proper recording and classification of costs. Costs are accumulated and classified using job order numbers (JONs). A JON is structured to provide information on how funds are spent. The basis of this information is the uniform chart of expense accounts. (Practical Comptrollership Manual, 1993)

The uniform chart of expense accounts classifies and charges all expenses to the Navy for performing the operations of an organization. NMCS D operating expenses are reported by Sub-

Activity Group (SAG), Functional/Sub-Functional Category (F/SFC), Cost Account Code (CAC), and Expense Element (EE) which make up the JON. (Practical Comptrollership Manual, 1993)

1. Sub-Activity Group (SAG)

The SAG account accumulates expenses and gross adjusted obligations¹⁵ in the same manner in which an MTF commander formulates, justifies, and executes the operating budget. This account facilitates evaluation of program execution and provides execution data to support the development of subsequent budgets. It also represents the major functional areas in Navy medicine for administration of O&M funds. (Practical Comptrollership Manual, 1993) For example, all expenses associated with providing ambulatory care are categorized under SAG "MC".

The SAG structure for medical facilities is defined by the BUMED Comptroller. See Appendix A for a listing of the valid SAG categories used by NMCS.

2. Functional/Sub-Functional Category (F/SFC)

Functional/Sub-functional category codes represent the grouping of operations or tasks related to the performance of a particular function. For example, "YH" represents the expenses and gross adjusted obligations related to the operation of a clinical laboratory service. The code is intended to identify a particular operation for which resources are consumed in performing a function. (Practical Comptrollership Manual, 1993)

¹⁵ This is the sum of all obligations that have been matched or not matched with an expenditure (liquidated or unliquidated).

The relationship between the SAG and F/SFC categories can be illustrated by the following example. A major function performed within an MTF is ambulatory care. This is assigned a SAG code of "MC". In the process of providing ambulatory care, resources are consumed in performing operations such as administration (D1), supply operations (E1), laboratory (YH), janitorial (YN) and personnel support (S1). The corresponding F/SFC codes provide visibility of the costs associated with these tasks.

The F/SFC structure for medical facilities are delineated by the BUMED Comptroller. See Appendix B for a listing of the F/SFC codes used by NMCSO.

3. Cost account code (CAC)

Transactions are classified according to the purpose of a transaction using cost account codes (CAC). A detailed breakdown of where resources are being used is provided by CACs. Each CAC has a unique measurement of output called a work unit. (Practical Comptrollership Manual, 1993)

Work units are used to accumulate data and prepare reports on actual work (units) performed together with actual expenses (Practical Comptrollership Manual, 1993). For example, ambulatory visit is the work unit associated with the CAC "4BHA" for Primary Care Clinic. Both the CACs and work units are established by the BUMED Comptroller. See Appendix C for a listing of some of the cost accounts and work units that NMCSO uses.

4. Expense elements (EE)

Expense elements identify the kinds of resources used by an organization (Practical Comptrollership Manual, 1993). For example, expense element "T" identifies expenses associated with medical/dental supplies. The expense elements are defined by the BUMED Comptroller. See Appendix D for a listing of the expense elements used by NMCS D.

C. MILITARY EXPENSE AND PERFORMANCE REPORTING SYSTEM (MEPRS)

Military Expense and Performance Reporting System (MEPRS) provides uniform reporting of expense, manpower, and workload (performance) data by fixed DOD medical and dental facilities at the local, Service, and DOD levels (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). Financial, workload, and manpower data are accumulated to final cost accounts using MEPRS codes. (Navy MEPRS User Guide, 1996)

1. MEPRS Code Structure

The MEPRS codes used by NMCS D are provided in a DOD instruction, DOD 6010.13M. A MEPRS code is assigned for each work center within an MTF meeting the following criteria: (Navy MEPRS User Guide, 1996)

- Identifiable expenses
- Allocated/assigned manpower
- Allocated physical space
- A meaningful work output
- A meaningful workload measure

- A uniqueness of service provided or expenses incurred when compared to other established work centers
- Compatibility with the MTF organizational structure

An alphabetical coding structure is employed in the MEPRS with the maximum of four characters per code. The first character defines a functional category, the second letter identifies a summary account, the third position uniquely defines a subaccount for a particular work center and a fourth character can be used by an organization to meet a specific local need. (Navy MEPRS User Guide, 1996) For example, the MEPRS code BAAO is broken down as follows:

- B - Functional category - Ambulatory Care
- BA - Summary Account - Medical Care
- BAA - Subaccount/Work Center - Internal Medicine
- BAAO - Special Account - Internal Medicine at Branch Medical
Clinic Naval Station

a. Functional categories

The first position of the MEPRS code indicates functional categories which identify major activities and organizational functions within an MTF. Costs are accumulated for the following: (Navy MEPRS User Guide, 1996)

A - Inpatient care

B - Ambulatory care

C - Dental care

D - Ancillary services

E - Support services

F - Special programs

G - Readiness

b. Summary accounts

The second character of the MEPRS code identifies summary accounts which represent general areas within each functional category (Navy MEPRS User Guide, 1996), such as:

AB - Surgical care

BD - Pediatric care

CB - Dental services

DC - Radiology

EH - Laundry

FB - Public health

GB - Readiness exercises

c. Subaccounts

The third position of the MEPRS code represents subaccounts which describe the actual work centers in an MTF/DTF, like: (Navy MEPRS User Guide, 1996)

ABI - Plastic surgery
BDC - Well baby clinic
CBA - Dental laboratory
DCA - Diagnostic radiology
EHA - In-house laundry
FBB - Preventive medicine
GBA - Field or fleet readiness exercises

d. Special accounts

A fourth character can be used by an organization to meet a specific local need for enhancing the utilization and flexibility of MEPRS output at the MTF level. (Navy MEPRS User Guide, 1996) NMCS D uses an alphabetic character in the fourth position to designate a specified location or to identify special accounts. BAAO, for example, contains the same information as the earlier BAA example for Branch Medical Clinic Naval Station.

The letters E and F cannot be used at the local level. DOD uses E for the collection of workload in work centers that are solely supported by contract personnel and F for workload provided by partnership¹⁶ personnel. (Navy MEPRS User Guide, 1996)

¹⁶ NMCS D has resource sharing contracts with AETNA Insurance that are designated partnership contracts.

2. Data Collection

The MEPRS collects three types of information in cost accounts: expense, workload and manpower. MEPRS is designed to cumulatively collect data from one cost account and allocate them to another based on the services provided (workload). (Navy MEPRS User Guide, 1996) MEPRS data are presented as costs, full-time equivalents (FTEs), inpatient work units (IWUs), ambulatory work units (AWUs), medical work units (MWUs), and by performance factors.

Cost accounts are classified as either revenue producing/final accounts or nonrevenue producing/intermediate accounts. The functional categories Inpatient Care (A), Ambulatory Care (B), Dental Care (C), Special Programs (F) and Readiness (G) are considered revenue producing or final accounts. For this reason expenses from these categories do not require further allocation. The functional categories Ancillary Services (D) and Support Services (E) are nonrevenue producing or intermediate accounts. Cost from these categories are allocated to the final accounts using a stepdown allocation process. (Navy MEPRS User Guide, 1996) Figure 5-1 graphically shows how costs are charged to a work center.

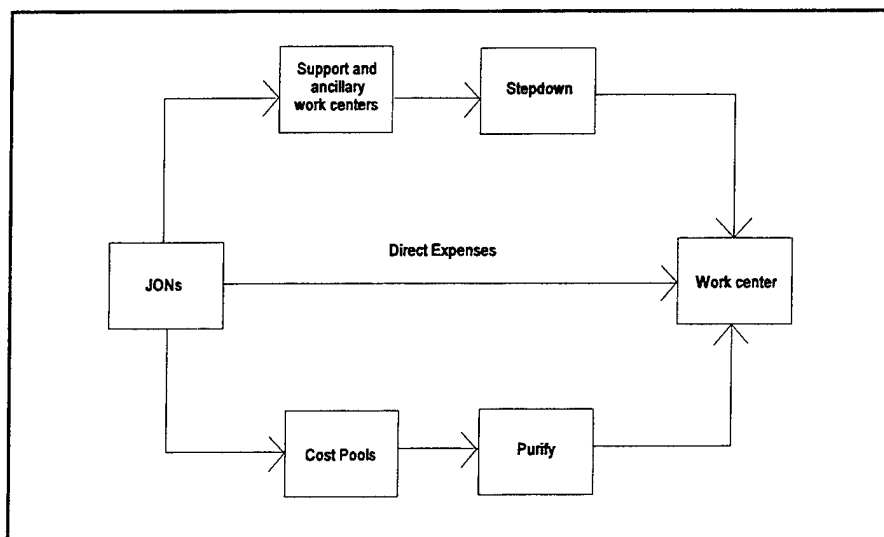


Figure 5-1 Flow of expense data to a work center in MEPRS

a. Expense

The MEPRS recognizes expenses within an MTF as either direct or indirect. A direct expense is directly traceable to a work center. An indirect, stepdown expense, or overhead, cannot be directly associated with a particular work center. (Navy MEPRS User Guide, 1996) The indirect costs are ancillary, support and cost pools.

(1) Direct Expenses All work centers normally incur direct expenses in the performance of ambulatory care or inpatient care. Direct expenses for military and civilian salaries, travel, office supplies, and other broad categories of expense are tracked by using separate JONs for each work center. (Navy MEPRS User Guide, 1996).

(2) Ancillary and Support Costs. Functional categories Ancillary Services (D) and Support Services (E) identify ancillary and support services, respectively, provided to other work centers. Expenses from these accounts are allocated to the final accounts (i.e., inpatient, outpatient, dental, special programs and readiness) using a stepdown procedure. In the stepdown process, direct expenses are allocated on the basis of performance factors and the flow of health care services. (Navy MEPRS User Guide, 1996) The stepdown process is graphically depicted in Figure 5-2.

Performance factors represent a unit of measure such as:

- dispositions, occupied bed days, and visits for inpatient/outpatient work centers
- weighted procedures for ancillary work centers

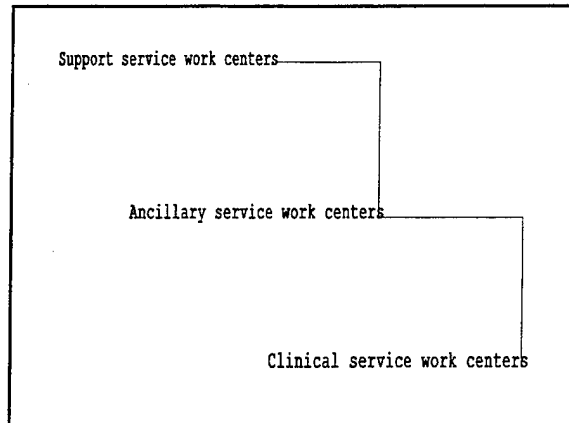


Figure 5-2 Stepdown Process

- FTEs for administrative support work centers
- square footage for utilities and housekeeping services

Performance factors are also used for the computation of unit costs including cost per occupied bed days, disposition, and visit. (Navy MEPRS User Guide, 1996)

The direct and indirect relationship of health care services provide the basis upon which the flow of health care services is defined. Support and ancillary services are traditionally considered indirectly related to the provision of health care, while clinical services are directly related. Support services are considered more indirect in the provision of health care than ancillary services since support services provide support to other support services, ancillary services, and clinical services. The flow of health care services list support services first, followed by ancillary services when allocating indirect costs to clinical services. (Navy MEPRS User Guide, 1996)

The stepdown process begins by allocating the cost of support services to other work centers, then the ancillary service costs are allocated to the clinical work centers. The amount stepped down into other work centers from a work center will consist of its initial direct costs and indirect costs received from the stepdown. As a work center's costs are stepped down, its balance becomes zero. The net effect of the stepdown process results in a final expense being charged to the inpatient, outpatient, and dental services that will serve as the basis for computing unit costs. (Navy MEPRS User Guide, 1996)

(3) Cost Pools. Cost of resources shared among work centers such as personnel, space, and supplies cannot be tracked directly to work centers. These expenses are assigned to cost pools since the actual use of these resources can not be determined by individual work centers. Allocation of these costs is based on a ratio of total workload to the workload reported by each work center. (Navy MEPRS User Guide, 1996) For example, the internal medicine clinic is charged its share of the cost pool for an inpatient mixed-ward supply closet in proportion to the amount of occupied bed days (OBDs) it performed in the month.

The sum of the cost pool allocations to the work centers (e.g., internal medicine clinic) under a particular final account (e.g., ambulatory care) yields the amount assigned to that account from the cost pools. This allocation process is said to "purify" costs charged to final accounts when the work center balances are closed out at this level. Therefore, expenses from cost pools are said to be allocated using a "purification process."

b. Workload

MEPRS measures workload on the basis of a performance factor such as a disposition, occupied bed day, visit, FTE, square footage, and weighted procedure. This unit of measure represents the relative resource consumption of a service performed by a work center. (Navy MEPRS User Guide, 1996) The amount to be allocated is calculated by counting and weighing the amount of services provided to other work centers each month using the performance factor. Appendix E lists the work centers and their respective performance factors.

A weight is assigned to each procedure to account for differences in resources used to perform each procedure. Ideally, the weights should account for all differences in resource use, including personnel time, materials, and equipment. However, MEPRS costs reflect primarily differences in personnel time.

Using hypothetical data, Table 5-1 depicts the allocation of workload from an ancillary work center for services rendered to other inpatient work centers. This is the same process employed for support services.

Table 5-1 Allocation of ancillary workload rendered to inpatient work center

MEPRS code	Inpatient work center	Total weighted procedures
AAA	Internal medicine	200
ABK	Urology	350
ACB	Obstetrics	450
ADA	Pediatrics	100
AEB	Podiatry	<u>50</u>
		1,150

The table lists the total workload performed for the inpatient work centers. It shows that the ancillary work center performed 200 procedures for internal medicine. After counting the number of procedures rendered the ancillary workload expense is allocated directly to each inpatient work center in proportion to the amount of procedures provided to each work center.

Table 5-2 shows the proportion of the total procedures that will be allocated to each work center. In this example, approximately 17 percent (200/1,150) of the ancillary workload expense would be allocated to the internal medicine work center. The same method is used to allocate expenses from support service work centers.

Table 5-2 Allocation of ancillary workload rendered to inpatient work center

MEPRS code	Inpatient work center	Total weighted procedures	Percent allocated
AAA	Internal medicine	200	17%
ABK	Urology	350	30%
ACB	Obstetrics	450	40%
ADA	Pediatrics	100	9%
AEB	Podiatry	<u>50</u>	<u>4%</u>
		1,150	100%

c. Manpower

Manpower data is entered by personnel in the Manpower Department at an MTF into the MEPRS/Military Labor 3 (MML3) module of the Standard Personnel Management System (SPMS). An individual is classified into one of the personnel categories and skill types. The personnel categories are officer, enlisted, civilian, contract, reserve, volunteer, and other.

The different skill types are clinician, direct-care professional, direct-care paraprofessional, registered nurse and administrative/clerical. (Navy MEPRS User Guide, 1996)

Personnel time is captured as available¹⁷ or non-available¹⁸ to a specific work center by using MEPRS codes. Time spent in various work centers provides the basis for assigning personnel expense to the appropriate MEPRS codes. (Navy MEPRS User Guide, 1996) In Table 5-3, an OB/GYN physician may report his hours for a month as follows:

Table 5-3 Reporting Personnel Time

MEPRS Code	MEPRS Description	Available time (hrs)	Non-available time (hrs)
BCB	Gynecological Clinic	60	9
BCC	Obstetrics Clinic	60	5
EBC	Administration	20	
GFA	Physical Training	12	

These manhours are entered into SPMS and are automatically converted to FTEs and labor cost. The Navy composite standard military rates and the civilian standard rates are used to calculate the labor cost which represent the average pay for various military and civilian pay scales. (White, 1993)

¹⁷ Time spent in support of the medical mission and work center functions, divided by 168.

¹⁸ Time spent in support of activities unrelated to the medical mission or work center functions, divided by 168.

D. UNIFORM MANAGEMENT REPORT (UMR)

The UMR is a management tool for cost identification, execution reporting, and fiscal planning. It focuses attention on mission performance and productivity by highlighting variances from planned performance/operating budget. The UMR provides a mechanism to implement unit pricing and provides a basis for management's decision making process. (BUMEDINST 7301.1)

The expenses tracked by using JONs provide the cost information found in the UMR. Cost information is accumulated for individual cost centers/sub-cost centers (CC/SCC) and classified according to CACs by expense element. A work unit or measure of performance is assigned to each CAC for the calculation of a unit price.

The UMR is generated by the Defense Finance and Accounting Service San Diego Operating Location in different formats, of which Format C is the most commonly used by MTFs because it provides information by cost centers and provides the most cost information. Figure 5-3 shows part of the UMR-C.

1. Cost/sub-cost Center Structure

The CC/SCC structure reflects a logical breakdown of the organization from a management standpoint. It is designed for visibility of all functions under the cognizance of a cost center manager. Construction of the CC/SCC structure is the choice of the local activity.

FOR PERIOD ENDING 30 SEPTEMBER 1995 PAGE 10									
SUBMISSION DATE 30 SEPTEMBER 1995									
UNIFORM MANAGEMENT REPORT C									
FROM: 60956 DAO CLEVELAND CTR CLAMES									
TO: 00259 NAVHOSP SAN DIEGO									
TOTAL									
50 FC CAC DESCRIPTION	ENCLINMENTS	Y	YTD ACT -- WORK UNITS --	DIRECT	UNIT	PLANNED	YTD	PRIOR YR UNDELIVERED GROSS ADJUST	
			MAN HRS	PLANNED YTD ACT	COST	ANNUAL EXP	EXPENSE	ORDERS	OBLIGATIONS
MC YV 1H60 INFO TECH ADP C	T						7597		7597
MC YV 1H60 INFO TECH ADP C	W						12807		12807
MC YV 1H60 COST ACCT TOTAL							20405		20405
MC YV 4BAA INTERNAL MEDICI	C	86					2414		400
MC YV 4BAA INTERNAL MEDICI	Q						600		16136
MC YV 4BAA INTERNAL MEDICI	T						14008	328	369246
MC YV 4BAA INTERNAL MEDICI	U	17924					369246		742
MC YV 4BAA INTERNAL MEDICI	W						742		1386540
MC YV 4BAA INTERNAL MEDICI	1	51180					8670		366925
MC YV 4BAA INTERNAL MEDICI	6	52							
MC YV 4BAA COST ACCT TOTAL			79242	25499	13.29	311000	176421	328	
MC YV 4BAB ALLERGY CLINIC	C	36					11892		8403
MC YV 4BAB ALLERGY CLINIC	T						3343	60	132865
MC YV 4BAB ALLERGY CLINIC	U	5047					132865		235
MC YV 4BAB ALLERGY CLINIC	W						235		32
MC YV 4BAB ALLERGY CLINIC	1	11696					224915		9475
MC YV 4BAB ALLERGY CLINIC	4								
MC YV 4BAB ALLERGY CLINIC	6	36							
MC YV 4BAB COST ACCT TOTAL			16815	6420	20.49	95000	367757	60	141535
MC YV 4BAC CARDIOLOGY CLIN	C	434					34069		232240
MC YV 4BAC CARDIOLOGY CLIN	P						183534	48706	5084
MC YV 4BAC CARDIOLOGY CLIN	Q						3610	1444	34708
MC YV 4BAC CARDIOLOGY CLIN	T						34708		135298
MC YV 4BAC CARDIOLOGY CLIN	U	6107					135298		8
MC YV 4BAC CARDIOLOGY CLIN	1	62251					1256737		25367
MC YV 4BAC CARDIOLOGY CLIN	4								
MC YV 4BAC CARDIOLOGY CLIN	6	371							
MC YV 4BAC COST ACCT TOTAL			69163	28480	9.09	560000	1673312	50150	407308
MC YV 4BAF ENDOCRINOLOGY C	P						223		223
MC YV 4BAF ENDOCRINOLOGY C	T						2020		2020
MC YV 4BAF ENDOCRINOLOGY C	U								
MC YV 4BAF ENDOCRINOLOGY C	1	6605					274310		
MC YV 4BAF COST ACCT TOTAL			8605	3400	.63	1000	276553		2243

Figure 5-3 UMR-C

2. Data Collection

Financial data pertaining to funds appropriated under DHP, Civilian Labor, and Real Property Maintenance are reported on the UMR-C according to SAG/FC/CAC at the expense element level and summarized as:

- Year-to-date(YTD)-expenses
- Undelivered orders - Funds obligated for material or service that has not been received by the activity that ordered it.
- Gross adjusted obligations

Information is also provided for:

- Total consignments - Funds that have been committed for material or service still to be purchased.
- YTD actual manhours - Workload data generated through the MEPRS are reported as YTD actual manhours on the UMR
- Planned and YTD actual work units - Work units provide information on actual work (units) performed for CACs which have been delineated by the BUMED Comptroller as the units of measure for outputs. Planned figures for FY97 are being submitted by NMCSO using actual numbers for FY96.
- Unit cost - The unit cost is computed by summing up the fiscal YTD obligations and expenses for an expense element and dividing this amount by the fiscal YTD actual work units.
- Planned annual expense - FY96 actual expenses are being submitted by NMCSO for FY97 planned expenses.
- Prior year expense - Prior year expense will equal planned expenses figures.

NMCSD developed cost centers patterned after its organization structure at the directorate level (e.g., Director for Medical Services). Separate sub-cost centers are established for each department under each directorate (e.g., Internal Medicine Department). Appendix F lists the CC/SCC used by NMCSD.

Figure 5-3 is part of the end-of-fiscal year (30 September 1995) report. The cost information enclosed in the box is for the Internal Medicine Clinic as indicated by CAC "4BAA" and is classified by expense elements. The Internal Medicine Clinic accumulated 17,924 man hours and \$349,248 in expense element "U" (Personnel compensation and benefits) year-to-date (YTD). Overall, the Internal Medicine Clinic accumulated 79,242 man hours YTD, planned to performed 25,699 work units (Ambulatory visits, as listed in Appendix C), actually performed 27,602 work units, for a unit cost of \$13.29 per ambulatory visit. The total planned expenses is \$321,000 while actual expenses is \$1,764,421.

E. SUMMARY

The current cost accounting system at NMCSD is designed to accumulate costs according to JONs and to categorize costs by AG/SAG, F/SFC, CAC and EE. The cost system is structured to provide information on how funds are spent by identifying the various operations or tasks performed at NMCSD and the types of resources consumed in the performance of these operations/tasks. The MEPRS and UMR reflect the cost information accumulated in this cost accounting system. The MEPRS provides expense, manpower and workload data related to accomplishing the operations/tasks performed by individual work centers at NMCSD. Cost

information is accumulated for each work center and allocated to final accounts using the stepdown and purification methods. This provides total expenses for the functional categories of inpatient care, ambulatory care, dental care, special programs and readiness.

The UMR collects similar cost data as in the MEPRS for individual CC/SCCs. It provides year-to-date expenses for functions under the cognizance of a Directorate and Department Head. The UMR provides additional information not found in MEPRS such as gross adjusted obligations, consignments, prior year expenses, planned expenses and work units.

VI. APPLICATION OF THE MODEL TO THE ACCOUNTING SYSTEM AT NAVAL MEDICAL CENTER SAN DIEGO

A. INTRODUCTION

This research addresses the question of the need for realignment of the Navy accounting system as an important aspect of the successful implementation of capitation budgeting. An accounting model based on the principles of activity-based costing (ABC) was introduced in Chapter IV as an alternative to the current accounting structure used by MTFs.

The purpose of this chapter is to apply the model of ABC to the current accounting system at NMCS D in order to facilitate the tracking and accumulation of costs associated with performing healthcare services it provides. This chapter begins with a discussion of the cost accumulation and allocation methodologies employed by the current accounting system at NMCS D. Next, the ABC model presented in Chapter IV is applied to the current accounting system to improve the current method of accumulating and allocating cost through MEPRS and the UMR. Finally, a discussion of the conclusions and recommendations formulated through this study are presented.

B. ANALYSIS OF COST ACCUMULATION AND ALLOCATION

Calculation of the cost of providing a service requires determining the chain of activities which make up a particular service. Furthermore, calculation of an activity cost is computed in terms of all traceable factors of production consumed to perform the activity. Therefore, the

various factors or resources used need to be identified for proper accumulation of cost and proportionate allocation of cost through MEPRS and the UMR.

1. Cost accumulation

Cost information for the calculation of the capitation rate for NMCSO will be collected from its accounting system and the resource information systems reviewed in this research: MEPRS and the UMR. This information is accumulated based on how funds are spent or according to SAG, F/SFC, CAC and EE. This method of classifying cost collects costs by cost elements or at the point where cost occurs without consideration of what drives the cost. This system also groups activities with different cost behavior patterns. For example, the SAG "M9" identifies all costs associated with the operation of a hospital or medical clinic such as supplies, equipment, laboratory, pharmacy, salaries, utilities, and housekeeping. The F/SFC "YG" for laboratory includes costs for supplies, salaries, equipment, maintenance and repair, and services associated with operating a laboratory. The CAC "4BHC" for the optometry clinic collects all the costs of operation. Finally, the expense element "T" identifies costs associated with the purchase of medical/dental supplies.

A MEPRS code is designed to accumulate cost on the basis of the primary function of a work center. For example, MEPRS code "BAA" is used to collect all direct and indirect costs for the Internal Medicine Clinic. It is assigned a performance factor of patient visit which allows for the calculation of a cost per patient visit. However, this does not provide visibility of the resources employed to perform the service(s) the work center provides.

The UMR on the other hand, accumulates costs according to CACs at the expense element level. This method identifies the purpose of a transaction by CACs while the expense element indicates the kinds of resources used. For example, CAC "4BHA" collects costs for the Primary Care Clinic while EE "T" indicates the resources used for supplies. Although the expense elements provide visibility of the kinds of resources consumed by a work center, there does not exist a means of relating how consumption of these resources affects outputs. Therefore, it does not aid in making resource consumption decisions.

What is needed is for the current classification method to provide the detailed information necessary to identify needed managerial decision changes if an MTF commander is to provide a range of healthcare services to a defined population for a fixed amount per beneficiary. Identifying activities focuses on the factors that drive cost and indicates where cost control action is required.

2. Cost allocation

The accuracy of the MEPRS stepdown and purification methods for cost allocation based on the performance factor is questionable because there is no direct relationship between the costs being assigned and the actual resources consumed by a work center in providing services. Measurement of the cost to be assigned is based on the relative volume of services provided instead of the actual amount of resources consumed in providing services.

For example, in Table 6-1, 40 percent of the laboratory workload as measured by MEPRS was performed for Obstetrics while 17 percent can be attributed to Internal Medicine. This is

Table 6-1 Allocation of laboratory workload rendered to inpatient work centers

MEPRS code	Inpatient work center	Total weighted procedure	Percent allocated
AAA	Internal Med	200	17%
ABK	Urology	350	30%
ACB	Obstetrics	450	40%
ADA	Pediatrics	100	9%
AEB	Podiatry	<u>50</u>	<u>4%</u>
		1,150	100%

used to allocate laboratory cost to these work centers without regard for the actual amount of resources consumed. However, weighted laboratory procedures are not necessarily indicative of the amount of resources used. In general, laboratory services for Internal Medicine patients use more resources than services provided to Obstetrics patients. This method of cost allocation does not provide visibility of the resources consumed which drive cost for a particular work center. Furthermore, analysis of work center expense variances becomes difficult to perform since there is no cause-and-effect relationship between costs and the resources consumed, making it difficult to identify areas of operation for cost control.

The UMR uses work units as the basis for allocating work center cost to outputs. These work units have been determined by the BUMED Comptroller as the appropriate allocation bases for distributing the cost of resources consumed by work centers. The actual relationship of these allocation bases to resources consumed can only be determined after a thorough analysis of the processes performed by the work centers, which is beyond the scope of this research. If ABC is

to be implemented an activity analysis will be necessary to determine the appropriate allocation base which drives cost to facilitate calculating a more accurate cost for services performed by a work center (outputs).

C. APPLICATION OF ABC

The methods for accumulating and allocating cost through the current accounting system does not provide visibility of the actual resources consumed in providing services. The cost accumulation and allocations methods also prevent an accurate measure of resource consumption by work centers and computation of the cost of services.

Table 6-2 provides a side-by-side comparison of the cost accumulation and allocation methodologies employed by MEPRS, UMR and ABC. The information in the table indicates that the application of the ABC model presented in Chapter IV would provide an improvement over the current method of accumulating and allocating cost through MEPRS and the UMR.

1. Activity analysis

The current accounting system at NMCSO, MEPRS and UMR, do not provide cost information on the basis of the specific tasks or activities performed in work centers. As suggested in Chapter IV, a desirable starting point for defining the activities performed in a work center is the efficiency review records at NMCSO. The efficiency review provides detailed definition of the activities performed by work centers for an understanding of the cost structure in terms of activity consumption. Breaking down a work center into understandable and

Table 6-2 Cost Accumulation and Allocation Comparison

MEPRS	UMR	ABC
<i>Cost Accumulation</i>		
based on the primary function of a work center	based on the purpose of a transaction & type of resource	based on activities
no visibility of resources consumed to perform the services the work center provides	no means of relating resource consumption to outputs	focuses on factors that drive cost
<i>Cost Allocation</i>		
based on a performance factor	based on a work unit	based on cost driver
no direct relationship between the costs being assigned and the actual resources consumed	appropriate allocation base?	uses cause-and-effect relationship between the resources consumed and specific tasks performed

manageable activities helps to identify the significant tasks performed to establish a clear and concise basis for determining costs.

Understanding the cost structure of the tasks performed in work centers facilitates proper separation or combination of activities with different cost behavior patterns for a proportional distribution of costs among activities with homogenous inputs and outputs. Decomposing activities in this manner also allows classification of activities as primary or secondary and assists in assigning the cost of secondary activities to primary activities. Furthermore, this highlights non-value added activities which can be eliminated. Additionally, accurately mapping

the activities performed by NMCS D and the associated costs provides more accurate information for calculating a capitation rate.

2. Assigning resource costs to activities

Initial ABC models usually assign resource costs to tasks performed by estimating expenses from the general ledger. Using the NMCS D general ledger as a source of data for calculating healthcare cost prevents an accurate computation of the cost of services. The Navy accounting system accumulates expenses for each work center according to cost elements (i.e., SAGs, F/SFCs, CACs, and EEs) which group activities with different cost behavior patterns. Allocating costs which have been accumulated in this manner does not provide visibility of the actual resources consumed.

Additionally, MEPRS and UMR allocate costs on the basis of a performance factor or work unit, respectively which combine multiple demands for the resources consumed. This also does not allow visibility of the factors of production consumed. Furthermore, this does not provide insight of the elements of work which cause the cost of a given process to change most directly.

Assigning resources costs from the NMCS D general ledger can only be beneficial when expenses with similar behavior are summarized by natural expense categories (i.e., a means of classification that is universal and company-dependent, such as labor, material, utilities, plant and facilities, and information systems). (Brimson, 1991) This would assist in establishing a

cause-and-effect relationship between the resources consumed and the services performed by a work center.

3. Defining outputs

The performance factor and work unit are utilized in MEPRS and UMR respectively, for measuring cost per unit produced in work centers. MEPRS provides a calculation of the cost per disposition and admission while the UMR calculates a unit cost figure per work unit. However, the "output measures" used in MEPRS and the UMR may not be measures of output. The extent that MEPRS and UMR identify outputs produced at NMCSO is limited, including only dispositions, admissions and work units. This certainly does not provide an extensive list of the outputs produced at NMCSO, much less differentiate among the various types of dispositions, admissions and work units.

A starting point for identifying specific outputs at NMCSO is a process analysis to determine the end products of the individual tasks or activities performed in a work center. It is necessary to identify the outputs produced at NMCSO for resources to be proportionately assigned in costing out outputs and for accurately measuring the appropriate capitation rate for NMCSO.

4. Assigning activity costs to outputs

As argued in Chapter IV it is important that approximately 80-90 percent of work center costs are traced to a final cost objective for a clear understanding of the cost structure for providing services. MEPRS allocates cost to a final cost or "revenue producing" account while

the UMR assigns work center expenses to CACs. Cost can be effectively assigned to these final accounts when service costs are proportionally allocated to outputs.

It was shown earlier that MEPRS and UMR do not provide a means for identifying the outputs at NMCS D. Given the lack of output identification costs are currently not being allocated proportionately to outputs. Not allocating costs proportionately to the cost of the output will result in miscalculating the capitation rate.

The ABC model presented in Chapter IV provides a means for tracing activity costs to the final cost objectives. This is achieved using a bill of activities (BOA) that represents the sequence of activities performed and the quantity of each activity consumed in meeting the MTF's mission. For example, the BOA for a laboratory test would indicate each primary activity performed in the process, the cost of each primary activity, and the total cost of activities to produce a test. Similarly, the sequence of activities involved in providing all laboratory services could be represented in a BOA. Accumulating cost information in this manner would provide the MTF commander a clear understanding of the cost structure of the services provided by the organization. Additionally, the BOA would provide greater visibility of possible alternatives to provide healthcare services most cost effectively under a capitated budget.

D. CONCLUSIONS AND RECOMMENDATIONS

This research attempted to answer two questions with regard to determining the accuracy of NMCS D's accounting system in tracking and accumulating costs for the calculation of a capitation rate. First, what would be an effective and accurate costing system to support the

objectives of the Navy capitation model and provide useful information to capture the total costs of healthcare? Second, does the accounting structure of NMCS D accurately capture costs and permit tracking of costs to services? If not, what alternative costing system would support such objectives?

The BUMED Comptroller has implemented several changes to the cost structure of the accounting system since FY95. These changes were made to separate the readiness and operational costs (CAT I and II) from the cost of peacetime healthcare services (CAT III) in order to avoid inflating the calculation of the capitation rate for an MTF. Costs are still captured based on SAGs, F/SFCs, CACs and EEs. This information is of limited usefulness to an MTF commander to determine where cost control action is required. The current cost tracking system distorts cost because it is assumed that the usage of the cost elements (i.e., SAGs, F/SFCs, CACs, EEs) are proportional to the direct resources consumed (e.g., manhours, ambulatory visits, surgical procedures, and equipment used). Additionally, volume-driven allocation bases are used as the basis for distributing non-volume related costs (e.g., administration, education and training, communication) which results in inaccurately reporting the cost of producing outputs.

This research addressed two additional questions to determine the usefulness of ABC (activity-based costing) for developing an alternative financial model for NMCS D to track and accumulate healthcare costs. First, what advantages does activity-based costing provide in tracking and accumulating costs? Second, will activity-based costing provide an appropriate

measure for primary outputs at NMCS D that would accurately reflect its total cost per output within a capitation budget?

Activity-based costing can provide an MTF commander the information to make needed managerial decision changes within a capitated budget. Activity-based costing is based on the factors that drive cost. An activity-based costing system would accumulate cost according to the activities performed by an MTF making available the appropriate financial information for a more accurate measure of the total cost per output.

The current accounting system used at NMCS D and the resource information systems (MEPRS and the UMR) studied in this research do not provide the MTF commander with the appropriate financial information to make managerial decision changes within a capitated budget. This accounting system will need to be realigned to identify expenses by activities versus cost categories to provide an MTF commander with the information to make decisions at a level at which actions can be taken. Activity-based costing can provide a more accurate measure of the cost of services (outputs) and support an MTF commander in making decisions on actual execution of a capitated budget.

APPENDIX A

SAG	DESCRIPTION
C1	Support to Readiness& Other Activities
C2	Readiness Planning, Exercises, & Training
FT	Hazardous Waste
FU	Pollution Prevention-Health Care
FW	Environmental Conservation-Health Care
FX	Shore Environmental Protection
Q6	Environmental Restoration
RX	Environmental Protection Projects
FC	Operation Of Utilities
FD	Other Engineering Support
FE	Payments To GSA
FF	Administration
FG	Retail Supply Operations
FJ	Bachelor Housing Operation & Furnishing
FK	Other Personnel Support
FL	Morale, Welfare, and Recreation
FN	Base Communications
FR	Other Base Services
FV	Physical Security
V2	Audiovisual/Visual Information
FA	Maintenance & Repair of Real Property
FB	Minor Construction
LN	Other Personnel Supp-Care Of The Dead
LR	Other Personnel Supp-Child Development
EP	Management Headquarters-Command & Admin
M1	Naval Healthcare Support Offices
MA	Education & Training
MF	Health Care Precom Prof Scholar Programs
MC	Medical Centers
M9	Station Hospitals & Medical Clinics
3C	CHAMPUS
3S	Health Care Support Contracts
MID	Care In Non-Defense Facilities
ME	Other Health Activities
M3	Military Unique/Other Medical
M2	Military Public Health
WH	Occupational Safety & Health Program
MR	Dental Care Activities
RW	Collateral Equipment
ZY	Foreign Currency Fluctuation
7M	Servicewide Support

APPENDIX B

F/SFC TITLE	F/SFC
CARE OF DEAD	CA
MED CARE IN NONSVC FACILITIES	C0
REIMBURSABLE COSTS	CZ
ADMINISTRATION, GENERAL	D1
FED EMPLOYEES COMPENSATION	D3
OTHER ADMINISTRATIVE EXPENSE	DC
MISSION RELATED SYSTEMS	DP
REIMBURSABLE COSTS	DZ
SUPPLY OPERATIONS	E1
REIMBURSABLE COSTS	EZ
INITIAL SKILLS TRAINING	J1
SKILLS PROGRESSION TRAINING	J2
PROFESSIONAL EDUC & TRAINING	J3
FUNCTIONAL SKILLS TRAINING	J4
OP/FLEET EXERCISE/TRAINING	J5
OTHER TRAINING SUPPORT	J6
HLTH PROF SCHOLARSHIP PROGRAM	J7
GRADUATE MEDICAL EDUCATION	J8
AUGMENTATION OF OCONUS ACTIVITIES	JA
AUGMENTATION OF HOSPITAL SHIPS	JB
AUGMENTATION OF FLEET	JC
AUGMENTATION OF FLEET MARINE FORCE	JD
AUGMENTATION OF FLEET HOSPITAL	JE
AUGMENTATION OF OTHER SUPPORT SVC	JF
SUPPORT TO OTHER MIL ACTIVITY	JG
SUPPORT TO OTHER FED ACTIVITY	JH
SUPPORT TO NON-FEDERAL ACTIVITY	JI
SUPP TO NON-MEPRS REPORTING	JJ
READINESS LOGISTICS	JK
NAT'L DISASTER MEDICAL SYSTEM	JL
OCONUS DISASTER/HUMANITARIAN	JM
DEPLOY PLAN & ADMIN	JN
REIMBURSABLE COSTS	JZ
BASE COMMUNICATIONS	LA
BASE SERVICES	L1
O&M OF TRANSPORTATION EQUIPMENT	L7
REIMBURSABLE COSTS	LZ
RECURRING MAINTENANCE	M1
NON-RECURRING MAINTENANCE	M2
REIMBURSABLE COSTS	MZ
OPERATION OF UTILITIES	N1
REIMBURSABLE COSTS	NZ
OP,DHP PURCHASES	OP
GENERAL ENGINEERING SUPPORT	P1
TECHNICAL ENGINEERING DIR & SUP	P5
REIMBURSABLE COSTS	PZ
MINOR CONSTR (CO Authority)	R1
MINOR CONSTR (BUMED Authority)	R2
REIMBURSABLE COSTS	RZ
PERSONNEL SUPPORT	S1
NAVY EXCHANGE	S2

F/SFC TITLE	F/SFC
REIMBURSABLE COSTS	SZ
ADP SUPPORT(NON MISSION)	V1
REIMBURSABLE COSTS	VZ
AUTOMATED INFO SYSTEMS MGMT HQ	W3
AUTOMATED INFO SYSTEMS ACTIVITY	W4
REIMBURSABLE COSTS	WZ
CLINICAL INVESTIGATION	YA
CONTINUING MEDICAL EDUCATION	YB
LECTURES	YC
DRUG TESTING	YD
PATIENT AFFAIRS	YE
NUTRITION MANAGEMENT	YF
PHARMACY	YG
LABORATORY	YH
RADIOLOGY	YJ
ALCOHOL REHABILITATION	YK
OCCUPATIONAL HEALTH	YL
SAFETY	YM
JANITORIAL	YN
SUPPLEMENTAL CARE	YP
SPECIAL BUREAU DIRECTED PRGM	YQ
OTHER OPERATIONS	YR
HEALTH CARE ADMINISTRATION	YS
PURCHASED VETERAN ADM HLT CARE	Y1
INPATIENT CARE	YU
AMBULATORY CARE	YV
NAVCARE CLINICS	YW
MANAGED CARE	YX
CHAMPUS(Recapture Prgm)	YY
AMBULATORY SAME DAY SURGERY	Y3
REIMBURSABLE COSTS	YZ

APPENDIX C

WORK UNITS

CAC CAC DESCRIPTION

7110	TRAINING BUILDINGS	1,000 SQ. FT.
7120	MAINTENANCE AND PRODUCTION BUILDINGS	1,000 SQ. FT.
7130	RESEARCH AND DEVELOPMENT BUILDINGS	1,000 SQ. FT.
7140	COVERED STORAGE FACILITIES	1,000 SQ. FT.
7150	MEDICAL BUILDINGS	1,000 SQ. FT.
7160	ADMINISTRATIVE BUILDINGS	1,000 SQ. FT.
7170	BACHELOR EM BARRACKS	1,000 SQ. FT.
7190	BACHELOR HOUSING DET FACILITIES	1,000 SQ. FT.
71A0	BACHELOR OFFICER QUARTERS	1,000 SQ. FT.
71J0	COMMUNITY BUILDINGS	1,000 SQ. FT.
7410	IMPROVED GROUNDS	ACRES
9220	PEST WEED CONTROL	ACRES OF AREA
@ 41AA	INTERNAL MEDICINE (ADMISSIONS)	ADMISSIONS
@ 41AB	CARDIOLOGY (ADMISSIONS)	ADMISSIONS
@ 41AD	DERMATOLOGY (ADMISSIONS)	ADMISSIONS
@ 41AE	ENDOCRINOLOGY (ADMISSIONS)	ADMISSIONS
@ 41AF	GASTROENTEROLOGY (ADMISSIONS)	ADMISSIONS
@ 41AG	HEMATOLOGY (ADMISSIONS)	ADMISSIONS
@ 41AI	NEPHROLOGY (ADMISSIONS)	ADMISSIONS
@ 41AJ	NEUROLOGY (ADMISSIONS)	ADMISSIONS
@ 41AK	ONCOLOGY (ADMISSIONS)	ADMISSIONS
@ 41AL	PULMONARY/UPPER RESPIRATORY DISEASE (ADMISSIONS)	ADMISSIONS
@ 41AM	RHEUMATOLOGY (ADMISSIONS)	ADMISSIONS
@ 41AN	PHYSICAL MEDICINE (ADMISSIONS)	ADMISSIONS
@ 41AP	HIV III (REFERRAL CTRS ONLY) - ADMISSIONS	ADMISSIONS
@ 41AR	INFECTIOUS DISEASE (ADMISSIONS)	ADMISSIONS
@ 41AS	ALLERGY (ADMISSIONS)	ADMISSIONS
@ 41BA	GENERAL SURGERY (ADMISSIONS)	ADMISSIONS
@ 41BB	CARDIOVASCULAR/THORACIC (ADMISSIONS)	ADMISSIONS
@ 41BD	NEUROSURGERY (ADMISSIONS)	ADMISSIONS
@ 41BE	OPHTHALMOLOGY (ADMISSIONS)	ADMISSIONS
@ 41BG	OTORHINOLARYNGOLOGY (ADMISSIONS)	ADMISSIONS
@ 41BH	PEDIATRIC SURGERY (ADMISSIONS)	ADMISSIONS
@ 41BI	PLASTIC SURGERY (ADMISSIONS)	ADMISSIONS
@ 41BJ	PROCTOLOGY (ADMISSIONS)	ADMISSIONS

@ 41BK	UROLOGY (ADMISSIONS)	ADMISSIONS
@ 41BM	BURN UNIT (REFERRAL CENTER ONLY) - ADMISSIONS	ADMISSIONS
@ 41BN	PERIPHERAL VASCULAR SURGERY (ADMISSIONS)	ADMISSIONS
@ 41CA	GYNECOLOGY (ADMISSIONS)	ADMISSIONS
@ 41CB	OBSTETRICS (ADMISSIONS)	ADMISSIONS
@ 41DA	PEDIATRICS (ADMISSIONS)	ADMISSIONS
@ 41DB	NURSERY (ADMISSIONS)	ADMISSIONS
@ 41DD	ADOLESCENT PEDIATRICS (ADMISSIONS)	ADMISSIONS
@ 41EA	ORTHOPEDICS (ADMISSIONS)	ADMISSIONS
@ 41EB	PODIATRY (ADMISSIONS)	ADMISSIONS
@ 41EC	HAND SURGERY (ADMISSIONS)	ADMISSIONS
@ 41FA	PSYCHIATRIC CARE (ADMISSIONS)	ADMISSIONS
@ 41GA	FAMILY PRACTICE MEDICINE (ADMISSIONS)	ADMISSIONS
@ 41GB	FAMILY PRACTICE SURGERY (ADMISSIONS)	ADMISSIONS
@ 41GC	FAMILY PRACTICE OBSTETRICS (ADMISSIONS)	ADMISSIONS
@ 41GD	FAMILY PRACTICE PEDIATRICS (ADMISSIONS)	ADMISSIONS
@ 41GE	FAMILY PRACTICE GYNECOLOGY (ADMISSIONS)	ADMISSIONS
@ 41GF	FAMILY PRACTICE PSYCHIATRY (ADMISSIONS)	ADMISSIONS
@ 41GG	FAMILY PRACTICE ORTHOPEDICS (ADMISSIONS)	ADMISSIONS
@ 41GH	FAMILY PRACTICE PEDIATRIC NURSERY (ADMISSIONS)	ADMISSIONS
4BA6	MED/DEN MED-OUTPATIENT	AMBULATORY VISITS
4BA7	VA MEDICAL-OUTPATIENT (NO SHARING AGREEMENT)	AMBULATORY VISITS
4BA9	CG MEDICAL-OUTPATIENT	AMBULATORY VISITS
4BAA	INTERNAL MEDICINE CLINIC	AMBULATORY VISITS
4BAB	ALLERGY CLINIC	AMBULATORY VISITS
4BAC	CARDIOLOGY CLINIC	AMBULATORY VISITS
4BAE	DIABETIC CLINIC	AMBULATORY VISITS
4BAF	ENDOCRINOLOGY CLINIC	AMBULATORY VISITS
4BAG	GASTROENTEROLOGY CLINIC	AMBULATORY VISITS
4BAH	HEMATOLOGY CLINIC	AMBULATORY VISITS
4BAI	HYPERTENSION CLINIC	AMBULATORY VISITS
4BAJ	NEPHROLOGY CLINIC	AMBULATORY VISITS
4BAK	NEUROLOGY CLINIC	AMBULATORY VISITS
4BAL	NUTRITION CLINIC	AMBULATORY VISITS
4BAM	ONCOLOGY CLINIC	AMBULATORY VISITS

WORK UNITS

CAC CAC DESCRIPTION

4BAN	PULMONARY DISEASE CLINIC	AMBULATORY VISITS
4BAO	RHEUMATOLOGY CLINIC	AMBULATORY VISITS
4BAP	DERMATOLOGY CLINIC	AMBULATORY VISITS
4BAQ	INFECTIOUS DISEASE CLINIC	AMBULATORY VISITS
4BAR	PHYSICAL MEDICINE CLINIC	AMBULATORY VISITS
4BAW	HIV INFECTIOUS MEDICINE	AMBULATORY VISITS
4BAX	HIV ALLERGY CLINIC	AMBULATORY VISITS
4BAY	HIV DERMATOLOGY CLINIC	AMBULATORY VISITS
4BAZ	OTHER MEDICAL CARE	AMBULATORY VISITS
4BB6	MED/DEN SURG-OUTPATIENT	AMBULATORY VISITS
4BB7	VA SURG-OUTPATIENT (NO SHARING AGREEMENT)	AMBULATORY VISITS
4BB9	CG SURG-OUTPATIENT	AMBULATORY VISITS
4BBA	GENERAL SURGERY CLINIC	AMBULATORY VISITS
4BBB	CARDIOVASCULAR/THORACIC CLINIC	AMBULATORY VISITS
4BBC	NEUROSURGERY CLINIC	AMBULATORY VISITS
4BBD	OPHTHALMOLOGY CLINIC	AMBULATORY VISITS
4BBE	ORGAN TRANSPLANT CLINIC (REFERRAL CENTER ONLY)	AMBULATORY VISITS
4BBF	OTORHINOLARYNGOLOGY CLINIC	AMBULATORY VISITS
4BBG	PLASTIC SURGERY CLINIC	AMBULATORY VISITS
4BBH	PROCTOLOGY CLINIC	AMBULATORY VISITS
4BBI	UROLOGY CLINIC	AMBULATORY VISITS
4BBJ	PEDIATRIC SURGERY CLINIC	AMBULATORY VISITS
4BBZ	OTHER SURGICAL CLINICS	AMBULATORY VISITS
4BC6	MED/DEN OB/GYN-OUTPATIENT	AMBULATORY VISITS
4BC7	VA OB/GYN-OUTPATIENT (NO SHARING AGREEMENT)	AMBULATORY VISITS
4BCA	FAMILY PLANNING CLINIC	AMBULATORY VISITS
4BCB	GYNCOLOGY CLINIC	AMBULATORY VISITS
4BCC	OBSTETRICS CLINIC	AMBULATORY VISITS
@ 4BCD	BREAST CARE PREVENTION & DIAGNOSIS	AMBULATORY VISITS
4BCZ	OTHER OB/GYN CARE NOT CLASSIFIED ELSEWHERE	AMBULATORY VISITS
4BD7	VA PEDIATRIC-OUTPATIENT (NO SHARING AGREEMENT)	AMBULATORY VISITS
4BDA	PEDIATRIC CLINIC	AMBULATORY VISITS
4BDB	ADOLESCENT CLINIC	AMBULATORY VISITS
4BDC	WELL BABY CLINIC	AMBULATORY VISITS
4BDZ	OTHER PEDIATRIC CLINICS	AMBULATORY VISITS

4BE6	MED/DEN ORTHO-OUTPATIENT	AMBULATORY VISITS
4BE7	VA ORTHO-OUTPATIENT (NO SHARING AGREEMENT)	AMBULATORY VISITS
4BEA	ORTHOPAEDIC CLINIC	AMBULATORY VISITS
4BEB	CAST CLINIC	AMBULATORY VISITS
4BEC	HAND SURGERY CLINIC	AMBULATORY VISITS
4BEE	ORTHOTIC LABORATORY CLINIC	AMBULATORY VISITS
4BEF	PODIATRY CLINIC	AMBULATORY VISITS
4BEZ	CHIROPRACTIC CLINIC (TRI-SERVICE DEMO PROJECT)	AMBULATORY VISITS
4BF5	MENTAL HEALTH - OUTPATIENT (TRICARE)	AMBULATORY VISITS
4BF6	MED/DEN PSYCH-OUTPATIENT	AMBULATORY VISITS
4BF7	VA PSYCH-OUTPATIENT (NO SHARING AGREEMENT)	AMBULATORY VISITS
4BFA	PSYCHIATRY CLINIC (NAMI)	AMBULATORY VISITS
4BFA	PSYCHIATRY CLINIC	AMBULATORY VISITS
4BFB	PSYCHOLOGY CLINIC	AMBULATORY VISITS
4BFC	CHILD GUIDANCE CLINIC	AMBULATORY VISITS
4BFD	MENTAL HEALTH CLINIC	AMBULATORY VISITS
4BFE	SOCIAL WORK SERVICES	AMBULATORY VISITS
4BFF	SUBSTANCE ABUSE CLINIC	AMBULATORY VISITS
4BFW	FAMILY ADVOCACY PROGRAM	AMBULATORY VISITS
4BFX	HIV PSYCHIATRIC CARE	AMBULATORY VISITS
4BFY	HIV SOCIAL WORK SERVICES	AMBULATORY VISITS
4BFZ	OTHER PSY & MENTAL HLTH NOT CLASSIFIED ELSEWHERE	AMBULATORY VISITS
4BGA	FAMILY PRACTICE CLINIC	AMBULATORY VISITS
4BH0	TRIPRIME CLINICS (TRICARE Outpatient Clinics)	AMBULATORY VISITS
4BHA	PRIMARY CARE CLINICS	AMBULATORY VISITS
4BHB	MEDICAL EXAMINATION CLINIC	AMBULATORY VISITS
4BHC	OPTOMETRY CLINIC	AMBULATORY VISITS
4BHD	AUDIOLOGY CLINIC	AMBULATORY VISITS
4BHE	SPEECH PATHOLOGY CLINIC	AMBULATORY VISITS
4BHF	COMMUNITY HEALTH CLINIC	AMBULATORY VISITS
4BHG	OCCUPATIONAL HEALTH CLINIC	AMBULATORY VISITS
4BHH	NAV/CARE CLINICS	AMBULATORY VISITS
4BHI	IMMEDIATE CARE CLINIC	AMBULATORY VISITS
4BHZ	OTHER PRIMARY MED CARE NOT CLASSIFIED ELSEWHERE	AMBULATORY VISITS
4BIA	EMERGENCY MEDICAL CLINIC	AMBULATORY VISITS

4BJA	FLIGHT MEDICINE CLINIC	AMBULATORY VISITS
4BKA	UNDERSEAS MEDICINE CARE	AMBULATORY VISITS
4BLA	PHYSICAL THERAPY	AMBULATORY VISITS
4BLB	OCCUPATIONAL THERAPY	AMBULATORY VISITS
4BLC	NEUROMUSCULOSKELETAL SCREENING	AMBULATORY VISITS
4EAB	AMBULATORY DEPRECIATION	AMBULATORY VISITS
4EKA	OUTPATIENT ADMIN	AMBULATORY VISITS - TOTAL
87C0	OTHER UTILITY SYSTEMS	AS REQUIRED
4FB8	HEARING CONSERVATION	AUDIOGRAMS PROCESSED
1A10	COMMAND AND EXECUTIVE OFFICES	AVERAGE # OF PERSONNEL (CIVILIAN AND MILITARY)
6650	TOTAL SERVICE CONTRACTS	AVERAGE # OF VEHICLES
1C50	PAYROLL	AVG # OF CIV PERSONNEL ON PAYROLL
4ADB	NURSERY	BASSINET DAY
4AGH	FAMILY PRACTICE PEDIATRIC NURSERY	BASSINET DAY
7730	POT WATER DIST FACILITIES	CAPACITY IN THOUSANDS OF GALLONS
7510	REFG EQUIPMENT > 25 TONS	CAPACITY IN TONS
75K0	REFG EQUIPMENT 5 TO 25 TONS	CAPACITY IN TONS
76A0	AIR-COND 25-100 TONS	CAPACITY IN TONS
76B0	AIR-COND 5-25 TONS	CAPACITY IN TONS
76G0	AIR-COND 100 TONS OVER	CAPACITY IN TONS
4CBA	DENTAL LABORATORY (General Procedures)	COMPOSITE LABORATORY VALUES (CLVs)
4CBB	DENTAL LABORATORY (Fixed Partial Dentures)	COMPOSITE LABORATORY VALUES (CLVs)
4CBC	DENTAL LABORATORY (Removable Partial Dentures)	COMPOSITE LABORATORY VALUES (CLVs)
4CBD	DENTAL LABORATORY (Complete Dentures)	COMPOSITE LABORATORY VALUES (CLVs)
4CBE	DENTAL LABORATORY (Orthodontics)	COMPOSITE LABORATORY VALUES (CLVs)
4CBF	DENTAL LABORATORY (Maxillofacial Protheses)	COMPOSITE LABORATORY VALUES (CLVs)
4CBG	DENTAL LABORATORY (Miscellaneous)	COMPOSITE LABORATORY VALUES (CLVs)
4CBH	DENTAL LABORATORY (Remakes)	COMPOSITE LABORATORY VALUES (CLVs)
4CAA	DENTAL SERVICES (Diagnostic)	COMPOSITE TIME VALUES (CTVs)
4CAB	DENTAL SERVICES (Preventive)	COMPOSITE TIME VALUES (CTVs)
4CAC	DENTAL SERVICES (Restorative)	COMPOSITE TIME VALUES (CTVs)
4CAD	DENTAL SERVICES (Endodontics)	COMPOSITE TIME VALUES (CTVs)
4CAE	DENTAL SERVICES (Periodontics)	COMPOSITE TIME VALUES (CTVs)
4CAF	DENTAL SERVICES (Prosthodontics, Removable)	COMPOSITE TIME VALUES (CTVs)
4CAG	DENTAL SERVICES (Oral & Maxillofacial Surgery)	COMPOSITE TIME VALUES (CTVs)

CAC

CAC DESCRIPTION

WORK UNITS

4CAH	DENTAL SERVICES (Orthodontics)	COMPOSITE TIME VALUES (CTVs)
4CAI	DENTAL SERVICES (Adjunctive General Services)	COMPOSITE TIME VALUES (CTVs)
4DEB	CENTRAL MATERIAL SERVICE	COST OF SUPPLIES AND MINOR PLANT EQUIP ISSUED
9270	HAZARDOUS WASTE/MATERIAL DISPOSAL	CUBIC FOOT
9231	TRASH WASTE MAT RECYCLE	CUBIC YARDS
6A65	MAINT ANTENNAS SYS	CURRENT PLANT VALUE
7520	LIQUID FUEL DISPENSING	CURRENT PLANT VALUE
7530	COMMUNICATION FACILITIES	CURRENT PLANT VALUE
75A0	BULK LIQUID FUEL STORAGE	CURRENT PLANT VALUE
75D0	OTHER ADMINISTRATIVE STRUCTURES	CURRENT PLANT VALUE
75G0	MWR EXTERIOR FACILITIES	CURRENT PLANT VALUE
75H0	REFUSE DISPOSAL FACILITIES	CURRENT PLANT VALUE
7690	COMPRES AIR PLTS SYSTEMS	CURRENT PLANT VALUE
76E0	OTHER MISC UTILITIES	CURRENT PLANT VALUE
7810	PREVENTIVE MAINTENANCE INSPECTION	CURRENT PLANT VALUE
9290	OTHER MAINTENANCE AND SERVICE	CURRENT PLANT VALUE OF BUILDINGS
9911	MESS HALLS AND GALLEY	DAILY RATIONS ISSUED
@ 40AA	INTERNAL MEDICINE (DISPOSITIONS)	DISPOSITIONS
@ 40AB	CARDIOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AD	DERMATOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AE	ENDOCRINOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AF	GASTROENTEROLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AG	HEMATOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AI	NEPHROLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AJ	NEUROLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AK	ONCOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AL	PULMONARY/UPPER RESPIRATORY DISEASE (DISPOSITIONS)	DISPOSITIONS
@ 40AM	RHEUMATOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40AN	PHYSICAL MEDICINE (DISPOSITIONS)	DISPOSITIONS
@ 40AP	HIV III (REFERRAL CTRS ONLY) - DISPOSITIONS	DISPOSITIONS
@ 40AR	INFECTIOUS DISEASE (DISPOSITIONS)	DISPOSITIONS
@ 40AS	ALLERGY (DISPOSITIONS)	DISPOSITIONS
@ 40BA	GENERAL SURGERY (DISPOSITIONS)	DISPOSITIONS
@ 40BB	CARDIOVASCULAR/THORACIC (DISPOSITIONS)	DISPOSITIONS
@ 40BD	NEUROSURGERY (DISPOSITIONS)	DISPOSITIONS

@ 40BE	OPHTHALMOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40BG	OTORHINOLARYNGOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40BH	PEDIATRIC SURGERY (DISPOSITIONS)	DISPOSITIONS
@ 40BI	PLASTIC SURGERY (DISPOSITIONS)	DISPOSITIONS
@ 40BJ	PROCTOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40BK	UROLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40BM	BURN UNIT (REFERRAL CENTER ONLY) - DISPOSITIONS	DISPOSITIONS
@ 40BN	PERIPHERAL VASCULAR SURGERY (DISPOSITIONS)	DISPOSITIONS
@ 40CA	GYNCOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40CB	OBSTETRICS (DISPOSITIONS)	DISPOSITIONS
@ 40DA	PEDIATRICS (DISPOSITIONS)	DISPOSITIONS
@ 40DB	NURSERY (DISPOSITIONS)	DISPOSITIONS
@ 40DD	ADOLESCENT PEDIATRICS (DISPOSITIONS)	DISPOSITIONS
@ 40EA	ORTHOPEDECS (DISPOSITIONS)	DISPOSITIONS
@ 40EB	PODIATRY (DISPOSITIONS)	DISPOSITIONS
@ 40EC	HAND SURGERY (DISPOSITIONS)	DISPOSITIONS
@ 40FA	PSYCHIATRIC CARE (DISPOSITIONS)	DISPOSITIONS
@ 40FB	SUBSTANCE ABUSE REHABILITATION (DISPOSITIONS)	DISPOSITIONS
@ 40GA	FAMILY PRACTICE MEDICINE (DISPOSITIONS)	DISPOSITIONS
@ 40GB	FAMILY PRACTICE SURGERY (DISPOSITIONS)	DISPOSITIONS
@ 40GC	FAMILY PRACTICE OBSTETRICS (DISPOSITIONS)	DISPOSITIONS
@ 40GD	FAMILY PRACTICE PEDIATRICS (DISPOSITIONS)	DISPOSITIONS
@ 40GE	FAMILY PRACTICE GYNECOLOGY (DISPOSITIONS)	DISPOSITIONS
@ 40GF	FAMILY PRACTICE PSYCHIATRY (DISPOSITIONS)	DISPOSITIONS
@ 40GG	FAMILY PRACTICE ORTHOPEDICS (DISPOSITIONS)	DISPOSITIONS
@ 40GH	FAMILY PRACTICE PEDIATRIC NURSERY (DISPOSITIONS)	DISPOSITIONS
63A2	SEDANS, MID-SIZE	GALLONS OF FUEL
63A3	SEDANS, SUBCOMPACT	GALLONS OF FUEL
63A4	SEDANS, COMPACT	GALLONS OF FUEL
63A5	SEDANS, LIGHT	GALLONS OF FUEL
63A6	SEDANS, MEDIUM	GALLONS OF FUEL
63B0	BUS 37 PASS UNDER	GALLONS OF FUEL
63C0	BUS 38 PASS OVER	GALLONS OF FUEL
63E0	STATION WAGONS	GALLONS OF FUEL
63G0	PICKUP, TRUCK, 1/2 TON	GALLONS OF FUEL

63H0	CARRYALLS ETC	GALLONS OF FUEL
63J0	TRUCKS 1.5 TO 2 TONS	GALLONS OF FUEL
63K0	TRUCKS 2.5 TONS	GALLONS OF FUEL
63M0	TRUCKS 5 TO 10 TONS	GALLONS OF FUEL
6520	TRUCKS SPECIAL	GALLONS OF FUEL ISSUED
6530	FIREFIGHTING EQUIP	GALLONS OF FUEL ISSUED
6540	MISC EQUIPMENT	GALLONS OF FUEL ISSUED
65R0	MATERIALS-HANDLING EQUIP	GALLONS OF FUEL ISSUED
65U0	GROUPS MAINT EQUIPMENT	GALLONS OF FUEL ISSUED
6612	OPS (FUEL) COSTS COMM RENTED (A-N) VEH	GALLONS OF FUEL ISSUED
6614	OPS (FUEL) COSTS COM RENTED (O-Z) VEH	GALLONS OF FUEL ISSUED
6622	OPS (FUEL) COSTS GSA RENTED (A-N) VEH	GALLONS OF FUEL ISSUED
6624	OPS (FUEL) COSTS GSA RENTED (O-Z) VEH	GALLONS OF FUEL ISSUED
4DE2	CENTRAL OXYGEN SUPPLY SVC	HOURS OF SERVICE
4DEA	CENTRAL STERILE SUPPLY	HOURS OF SERVICE
4DJA	MEDICAL INTENSIVE CARE	HOURS OF SERVICE
4DJB	SURGICAL INTENSIVE CARE	HOURS OF SERVICE
4DJC	CORONARY CARE UNIT	HOURS OF SERVICE
4DJD	NEONATAL INTENSIVE CARE	HOURS OF SERVICE
4DJE	PEDIATRIC INTENSIVE CARE	HOURS OF SERVICE
4DJZ	OTHER INTENSIVE CARE NOT CLASSIFIED ELSEWHERE	HOURS OF SERVICE
4ECD	MINOR CONSTRUCTION (FREE RECEIPT)	HOURS OF SERVICE
4EGA	BIOMEDICAL EQUIP REPAIR - IN HOUSE	HOURS OF SERVICE
4EGB	BIOMEDICAL EQUIP REPAIR - CONTRACT	HOURS OF SERVICE
4FEA	PATIENT TRANSPORTATION	HOURS OF SERVICE
7610	ELECTRICITY GENERATING	KILOVOLT-AMPERE
75L0	SECURITY STRUCTURES	LENGTH IN LINEAR FEET
7710	ELECTRICAL DISTRIBUTION SYSTEM	LENGTH IN LINEAR FEET
7720	STEAM AND HOT WATER DISTRIBUTION SYS	LENGTH IN LINEAR FEET
7740	POT WATER DIST LINES	LENGTH IN LINEAR FEET
7760	SEWAGE COLLECTION	LENGTH IN LINEAR FEET
7770	GAS DISTRIBUTION SYSTEMS	LENGTH IN LINEAR FEET
6A60	COMMUNICATION LINES	LENGTH IN STATUTE MILES
2210	REQUISITION PROCESSING	LINE ITEMS PROCESSED
2220	OTHER STOCK CONTROL OPERATIONS	LINE ITEMS PROCESSED

2310	FREIGHT	LINE ITEMS RECEIVED
7450	DRAINAGE	LINEAR FEET
7550	AIRFILED PAVEMENT LIGHTING	LINEAR FEET
7230	SEAWALLS	LINEAR FEET
7220	PIERS	LINEAR FEET OF BERTHING SPACE
6A50	ADMIN TEL DISTR SYS	MAIN STATIONS
6A40	ADMIN TEL PLANTS ETC	MAIN STATIONS (EACH LINE - A MAIN STATION)
4ECG	TRANSPORTATION (FREE RECEIPT)	MILES
62A2	SEDANS, MID-SIZE	MILES
62A3	SEDANS, SUBCOMPACT	MILES
62A4	SEDANS, COMPACT	MILES
62A5	SEDANS, LIGHT	MILES
62A6	SEDANS, MEDIUM	MILES
62B0	BUS 37 PASS UNDER	MILES
62C0	BUS 38 PASS OVER	MILES
62E0	STATION WAGONS	MILES
62G0	PICKUP, TRUCK, 1/2 TON	MILES
62H0	CARRYALLS ETC	MILES
62I0	TRUCKS 1 TON	MILES
62J0	TRUCKS 1.5 TO 2 TONS	MILES
62K0	TRUCKS 2.5 TONS	MILES
62M0	TRUCKS 5 TO 10 TONS	MILES
62N0	TRUCKS 11 TONS OVER	MILES
6611	MAINT COSTS COMM RENTED (A-N) VEH	MILES TRAVELED
6621	MAINT COSTS GSA RENTED (A-N) VEH	MILES TRAVELED
9931	CHAPLAIN'S OFFICE	MILITARY POPULATION SERVED
9937	SPECIAL SERVICES	MILITARY POPULATION SERVED
9962	MAINTENANCE AND REPAIR OF PSE	MILITARY POPULATION SERVED
99C1	NAVY MIL REC FUNDS, ASHORE	MILITARY POPULATION SERVED
8110	S/HW, 750,000 TO 3,500,000 BTU/HR	MILLIONS OF BTU'S (MBTU)
8210	S/HW OVER 3,500,000 BTU/HR, PROD PL	MILLIONS OF BTU'S (MBTU)
8220	STEAM & HOT WATER DIST SYSTEMS	MILLIONS OF BTU'S (MBTU)
8250	PUR S/HW COMMERCIAL	MILLIONS OF BTU'S (MBTU)
8260	PUR STEAM S/HW NAVACT	MILLIONS OF BTU'S (MBTU)
8270	PUR S/HW OTHER	MILLIONS OF BTU'S (MBTU)

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8750	GAS PLANTS	MILLIONS OF BTU'S (MBTU)
8760	GAS DISTR SYSTEM	MILLIONS OF BTU'S (MBTU)
87H0	FUELS ISSUED - PLANTS UNDER 750K BTU/HR	MILLIONS OF BTU'S (MBTU)
87J0	PURCHASED GAS - COMMERCIAL	MILLIONS OF BTU'S (MBTU)
87K0	PURCHASED GAS - NAVY	MILLIONS OF BTU'S (MBTU)
87M0	PURCHASED GAS - OTHER	MILLIONS OF BTU'S (MBTU)
8320	ELEC PLANT OP DIESEL GAS	MILLIONS OF WATTHOURS (MWH)
8330	ELEC DISTR SYSTEMS OPS	MILLIONS OF WATTHOURS (MWH)
8350	PUR ELEC COMMERCIAL	MILLIONS OF WATTHOURS (MWH)
8360	PURCHASED ELECTRICITY - NAVY	MILLIONS OF WATTHOURS (MWH)
8370	PURCHASED ELECTRICITY - OTHER	MILLIONS OF WATTHOURS (MWH)
4DFA	ANESTHESIOLOGY	MINUTES OF SERVICE
4DFB	SURGICAL SUITE	MINUTES OF SERVICE
4DFC	POST ANESTHESIA CARE UNIT	MINUTES OF SERVICE
4DGA	AMBULATORY PROCEDURE UNIT	MINUTES OF SERVICE
4DGB	HEMODIALYSIS	MINUTES OF SERVICE
4DGC	HYPERBARIC MEDICINE	MINUTES OF SERVICE
4DGD	PERITONEAL DIALYSIS	MINUTES OF SERVICE
4DGE	AMBULATORY NURSING SERVICES	MINUTES OF SERVICE
4FDC	NONPATIENT FOOD OPERATIONS	NON PATIENT RATIONS SERVED
6290	ACCIDENT COSTS FOR ADMIN VEH	NUMBER OF ACCIDENTS
7430	SEMI-IMPROVED GROUNDS	NUMBER OF ACRES
7440	UNIMPROVED GROUNDS	NUMBER OF ACRES
1A30	PUBLIC AFFAIRS OFFICES	NUMBER OF ACTIONS COMPLETED
4FBJ	EARLY INTERVENTION SERVICES	NUMBER OF ACTIVE INDIVIDUALIZED FAMILY SERVICE PLANS (IFSP)
2330	HOUSEHOLD GOODS	NUMBER OF APPLICATIONS
4EJ6	TRI-SVC PATIENT APPOINTMENT & SCH (TRIPAS)	NUMBER OF APPOINTMENTS
7820	EMERG SER REAL PROP	NUMBER OF CALLS
7830	EMERG SVC REL PROP UTIL SYSTEMS	NUMBER OF CALLS
9250	EMER SERV WORK NON REAL PROP	NUMBER OF CALLS
1A40	LEGAL OFFICE	NUMBER OF CASES COMPLETED DURING REPORTING PERIOD
4M50	CONTINUING EDUC - CIVILIAN	NUMBER OF CIV PERSONNEL TRAINED
1D10	ADMINISTRATION (CIVILIAN PERSONNEL)	NUMBER OF CIVILIAN EMPLOYEES
1D40	EMPLOYEE REL (LABOR REL PRGM)	NUMBER OF CIVILIAN EMPLOYEES
1D50	EMPLOYEE SERVICES	NUMBER OF CIVILIAN EMPLOYEES

1D80	CIV TVL/HHG MOVE	NUMBER OF CIVILIAN PERSONNEL MOVED
4CA2	MED/DEN DENTAL CARE	NUMBER OF CLAIMS PROCESSED
4CA4	VA DENTAL CARE (NO SHARING AGREEMENT)	NUMBER OF CLAIMS PROCESSED
4EB5	3RD PARTY LIABILITY	NUMBER OF CLAIMS PROCESSED
4EBH	3RD PARTY COLLECTION	NUMBER OF CLAIMS PROCESSED
1D30	WAGE AND CLASSIFICATION	NUMBER OF CLASSIFICATIONS OR REVIEWS COMPLETED
4FA7	DRUG LABORATORY CONFIRMATION OPERATIONS	NUMBER OF CONFIRMATION PROCEDURES PERFORMED
2850	CONTRACTOR PAYMENT	NUMBER OF CONTRACTOR'S INVOICES PROCESSED FOR PAYMENT
2820	CONTRACT ADMINISTRATION	NUMBER OF CONTRACTS REQUIRING CONTRACT ADMIN ACTION
4FAP	DRUG LABORATORY LEGAL SUPPORT	NUMBER OF DAYS TAD
@ 4FB5	CONSOLIDATED INDUSTRIAL HYGIENE LAB (CIHL)	NUMBER OF DETERMINATIONS
1C40	ACCOUNTING	NUMBER OF DOCUMENTS PROCESSED
4FAF	DRUG LABORATORY DATA SUPPORT OPERATIONS	NUMBER OF DOCUMENTS PROCESSED
4FDH	MILITARY FUNDED EMERGENCY LEAVE	NUMBER OF EMERGENCY LEAVE PAID
4R00	SEPARATION INCENTIVES	NUMBER OF EMPLOYEES GRANTED SEPARATION
1E30	ENLISTED PERSONNEL RECORDS	NUMBER OF ENLISTED PERSONNEL RECORDS
1H30	ADP OPERATIONS	NUMBER OF EQUIPMENT OPERATING HOURS
4201	NURSE CORPS BOARD CERTIFICATION	NUMBER OF EXAMS TAKEN
4202	MEDICAL CORPS BOARD CERTIFICATION	NUMBER OF EXAMS TAKEN
4203	MEDICAL SERVICE CORP BOARD CERTIFICATION	NUMBER OF EXAMS TAKEN
4204	DENTAL CORPS BOARD CERTIFICATION	NUMBER OF EXAMS TAKEN
4205	PHYSICIAN ASSISTANT CERTIFICATION	NUMBER OF EXAMS TAKEN
7790	FIRE ALARMS	NUMBER OF FIRE ALARM BOXES
9380	FIRE PROTECTION, STRUCTURAL	NUMBER OF FIRE FIGHTERS ASSIGNED
9390	FIRE, AIRCRAFT, AND RESCUE	NUMBER OF FIRE FIGHTERS ASSIGNED
4FBI	IMMUNIZATIONS CLINIC	NUMBER OF IMMUNIZATION/SCREENING TESTS
4FA6	DRUG LABORATORY IMMUNOASSAY OPERATIONS	NUMBER OF IMMUNOASSAYS PERFORMED
92B0	MAINT DEHUMID EQP	NUMBER OF ITEMS
92D0	MAINT REP RFG OVER 5 TN	NUMBER OF ITEMS
1J30	GRAPHIC ARTS	NUMBER OF ITEMS COMPLETED DURING THE REPORTING PERIOD
2110	RECEIPT	NUMBER OF LINE ITEMS
2124	SHIPPING	NUMBER OF LINE ITEMS
2130	STORAGE SUPPORT	NUMBER OF LINE ITEMS
6A45	LEAS COMM CIRC/MOD	NUMBER OF LOCALLY LEASED CIRCUITS
9260	INTRASTATION MOVES	NUMBER OF MOVES

1E20	OFFICER PERSONNEL RECORDS	NUMBER OF OFFICERS' RECORDS
6A80	TELEPHONE	NUMBER OF OFF-STATION CALLS
92F0	ELEVATOR OPERATION	NUMBER OF OPERATORS
1J10	PRINTING AND REPRODUCTION	NUMBER OF PAGES PRODUCED
1D20	EMPLOYMENT	NUMBER OF PERSONNEL ACTIONS/ REQUEST
4M60	PROFESSIONAL SKILLS (NON CR)	NUMBER OF PERSONNEL TRAINED
4M71	CME - MED CORPS	NUMBER OF PERSONNEL TRAINED
4M72	CME - MED SERV CORPS	NUMBER OF PERSONNEL TRAINED
4M73	CME - DENTAL CORPS	NUMBER OF PERSONNEL TRAINED
4M74	CME - NURSE CORPS	NUMBER OF PERSONNEL TRAINED
4M75	CME - INDEPENDENT DUTY CORPMEN	NUMBER OF PERSONNEL TRAINED
6B70	PHOTOGRAPHIC SERVICES	NUMBER OF PICTURES
1C20	COMMAND EVALUATION	NUMBER OF PROCEDURAL STUDIES AND AUDITS COMPLETED
4DDA	ELECTROCARDIOGRAPHY	NUMBER OF PROCEDURES
4ddb	ELECTROENCEPHALOGRAPHY	NUMBER OF PROCEDURES
4DDC	ELECTRONEUROMYOGRAPHY	NUMBER OF PROCEDURES
4DDZ	OTHER SPEC PROCEDURES NOT CLASSIFIED ELSEWHERE	NUMBER OF PROCEDURES
4FA5	DRUG LABORATORY ACCESSIONING OPERATIONS	NUMBER OF SAMPLES RECEIVED
4FAC	OPHTHAL FAB AND REPAIR	NUMBER OF SPECTACLES PRODUCED/REPAIRED
@ 4633	SURFACE FORCE MEDICAL INDOCTRINATION COURSE	NUMBER OF STUDENTS
@ 4634	SPECIAL OPERATIONS COMBAT MEDICINE COURSE	NUMBER OF STUDENTS
@ 4635	ADVANCE SPECIAL OPERATIONS COMBAT MEDICINE COURSE	NUMBER OF STUDENTS
4FAK	STUDENT EXP CLASSROOM/OTHER LEARNING	NUMBER OF STUDENTS
1D60	TRAINING OFFICE, CCPO	NUMBER OF STUDENTS ENROLLED
1E40	TRAINING OFFICE, MILITARY	NUMBER OF STUDENTS ENROLLED
4501	COLD WEATHER MEDICINE TRAINING	NUMBER OF STUDENTS TRAINED
4502	MMART TRAINING	NUMBER OF STUDENTS TRAINED
4503	MED EFFECTS OF NUCLEAR WEAPONS TRNG	NUMBER OF STUDENTS TRAINED
4504	COMBAT CASUALTY CARE COURSE	NUMBER OF STUDENTS TRAINED
4505	MED MGMT OF CHEMICAL CASUALTIES COURSE	NUMBER OF STUDENTS TRAINED
4506	OPERATING FORCES MGMT SEMINAR	NUMBER OF STUDENTS TRAINED
4507	INTERAGENCY TRAINING	NUMBER OF STUDENTS TRAINED
4508	BLOOD BANK TRAINING	NUMBER OF STUDENTS TRAINED
4509	PRACTICAL COMPTROLLERSHIP COURSE	NUMBER OF STUDENTS TRAINED
4510	ARMY-BAYLOR PRECEPTOR TRAINING	NUMBER OF STUDENTS TRAINED

4511	MEDICAL LOGISTICS COURSE	NUMBER OF STUDENTS TRAINED
4512	SHORE STATION MANAGEMENT TRAINING	NUMBER OF STUDENTS TRAINED
4601	MEDICAL REGULATING COURSE	NUMBER OF STUDENTS TRAINED
4602	MEDICINE IN THE TROPICS COURSE	NUMBER OF STUDENTS TRAINED
4603	JOINT MEDICAL PLANNERS COURSE	NUMBER OF STUDENTS TRAINED
4604	PLAN, OPS, AND MED INTELLIGENCE COURSE	NUMBER OF STUDENTS TRAINED
4605	SURFACE WARFARE MED ORCR INDOCTRINATION COURSE	NUMBER OF STUDENTS TRAINED
4607	STRATEGIC MED READINESS CONTINGENCY COURSE	NUMBER OF STUDENTS TRAINED
4608	QUALITY ASSURANCE/RISK MGMT COURSE	NUMBER OF STUDENTS TRAINED
4609	MANAGEMENT DEVELOPMENT COURSE	NUMBER OF STUDENTS TRAINED
4610	SUPERVISORY SKILLS COURSE	NUMBER OF STUDENTS TRAINED
4611	SENIOR NAVY LEADER DEVELOPMENT COURSE	NUMBER OF STUDENTS TRAINED
4612	MEDICAL DEPARTMENT HEAD COURSE	NUMBER OF STUDENTS TRAINED
4613	COMMAND NAVY LEADER DEVELOPMENT COURSE	NUMBER OF STUDENTS TRAINED
4614	INTERMEDIATE NAVY LEADER DEV COURSE	NUMBER OF STUDENTS TRAINED
4615	HEALTH RESOURCES MGMT COURSE	NUMBER OF STUDENTS TRAINED
4616	TOTAL QUALITY LEADERSHIP DEPT HEAD COURSE	NUMBER OF STUDENTS TRAINED
4617	NAV MED QUAL INST PLAN FOR QUAL TRNG	NUMBER OF STUDENTS TRAINED
4618	NAV MED QUAL INST EXE STEERING COMM TRNG	NUMBER OF STUDENTS TRAINED
4619	NAV MED QUAL INST FACILITATOR COURSE	NUMBER OF STUDENTS TRAINED
4620	DESIGNING EFFECT EDUC PRGM FOR MED DEPT PERSON	NUMBER OF STUDENTS TRAINED
4621	NAV MED QUAL INST CUSTOMER SATISFACTION	NUMBER OF STUDENTS TRAINED
4622	NAV MED QUAL INST SENIOR MGMT COURSE	NUMBER OF STUDENTS TRAINED
4623	NAV MED QUAL INST TEAM BUILDING WKSHOP	NUMBER OF STUDENTS TRAINED
4624	MANPOWER MANAGEMENT COURSE	NUMBER OF STUDENTS TRAINED
4625	FINANCIAL AND MATERIAL MGMT COURSE	NUMBER OF STUDENTS TRAINED
4626	PATIENT ADMINISTRATION COURSE	NUMBER OF STUDENTS TRAINED
4627	GAS FREE ENGINEERING COURSE	NUMBER OF STUDENTS TRAINED
4628	NURSE CORPS OPERATING ROOM ORIENT COURSE	NUMBER OF STUDENTS TRAINED
4629	OPERATIONAL ENTOMOLOGY TRAINING	NUMBER OF STUDENTS TRAINED
4630	CASUALTY TREATMENT TRAINING	NUMBER OF STUDENTS TRAINED
4655	DENTAL OFFICER SHORT COURSES	NUMBER OF STUDENTS TRAINED
4657	DENTAL TECHNICIAN SHORT COURSES	NUMBER OF STUDENTS TRAINED
4FA1	HIV PROFESSIONAL TRAINING	NUMBER OF STUDENTS TRAINED
4FA2	OCCUPATIONAL HEALTH TRAINING	NUMBER OF STUDENTS TRAINED

WORK UNITS

CAC DESCRIPTION

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4FA3	PREVENTIVE MEDICINE TRAINING	NUMBER OF STUDENTS TRAINED
4M81	RAPID DEPLOY OF MEDICAL FORCES TRAINING	NUMBER OF STUDENTS TRAINED
4M82	FLEET HOSPITAL TRAINING (PHASE I)	NUMBER OF STUDENTS TRAINED
4M84	FLEET HOSPITAL TRAINING (PHASE II)	NUMBER OF STUDENTS TRAINED
4FAH	CLINICAL INVESTIGATIONS	NUMBER OF STUDIES
6A70	MAINT ADMIN TEL	NUMBER OF TELEPHONES
2320	PASSENGERS	NUMBER OF TRANS REQUEST(SF 1169) (TR'S) ISSUED
1C70	DISBURSING	NUMBER OF TRANSACTIONS
6440	MISC EQUIP	NUMBER OF UNITS
64T0	CONSTRUCTION EQP NOT REQUIRED	NUMBER OF UNITS
6420	TRUCKS SPECIAL	NUMBER OF VEHICLES
64P0	TRAILERS	NUMBER OF VEHICLES
1A20	RECEPTION OFFICE	NUMBER OF VISITORS
4FAT	OPERATIONAL PSYCHOLOGY (NAMI)	NUMBER TESTS/ANALYSES CONDUCTED
4FEC	TRANSIENT PATIENT CARE	OBDs DAYS BY TRANSIENT PATIENT
4AA6	MED/DEN MED - INPATIENT	OCCUPIED BED DAYS
4AA7	VA MEDICAL-INPATIENT (NO SHARING AGREEMENT)	OCCUPIED BED DAYS
4AAA	INTERNAL MEDICINE	OCCUPIED BED DAYS
4AAB	CARDIOLOGY	OCCUPIED BED DAYS
4AAD	DERMATOLOGY	OCCUPIED BED DAYS
4AAE	ENDOCRINOLOGY	OCCUPIED BED DAYS
4AAF	GASTROENTEROLOGY	OCCUPIED BED DAYS
4AAG	HEMATOLOGY	OCCUPIED BED DAYS
4AAI	NEPHROLOGY	OCCUPIED BED DAYS
4AAJ	NEUROLOGY	OCCUPIED BED DAYS
4AAK	ONCOLOGY	OCCUPIED BED DAYS
4AAL	PULMONARY/UPPER RESPIRATORY DISEASE	OCCUPIED BED DAYS
4AAM	RHEUMATOLOGY	OCCUPIED BED DAYS
4AAN	PHYSICAL MEDICINE	OCCUPIED BED DAYS
4AAP	HIV III (REFERRAL CTRS ONLY)	OCCUPIED BED DAYS
4AAR	INFECTIOUS DISEASE	OCCUPIED BED DAYS
4AAS	ALLERGY	OCCUPIED BED DAYS
4AAX	HIV MEDICAL CARE	OCCUPIED BED DAYS
4AAZ	OTHER MEDICAL CARE	OCCUPIED BED DAYS
4AB6	MED/DEN SURG-INPATIENT	OCCUPIED BED DAYS

4AB7	VA SURGICAL-INPATIENT (NO SHARING AGREEMENT)	OCCUPIED BED DAYS
4ABA	GENERAL SURGERY	OCCUPIED BED DAYS
4ABB	CARDIOVASCULAR/THORACIC	OCCUPIED BED DAYS
4ABD	NEUROSURGERY	OCCUPIED BED DAYS
4ABE	OPHTHALMOLOGY	OCCUPIED BED DAYS
4ABF	ORAL SURGERY (MEDICAL TREATMENT FACILITY)	OCCUPIED BED DAYS
4ABG	OTORHINOLARYNGOLOGY	OCCUPIED BED DAYS
4ABH	PEDIATRIC SURGERY	OCCUPIED BED DAYS
4ABI	PLASTIC SURGERY	OCCUPIED BED DAYS
4ABJ	PROCTOLOGY	OCCUPIED BED DAYS
4ABK	UROLOGY	OCCUPIED BED DAYS
4ABM	BURN UNIT (REFERRAL CENTER ONLY)	OCCUPIED BED DAYS
4ABN	PERIPHERAL VASCULAR SURGERY	OCCUPIED BED DAYS
4ABZ	OTHER SURGICAL CARE	OCCUPIED BED DAYS
4AC6	MED/DEN OB/GYN-INPATIENT	OCCUPIED BED DAYS
4AC7	VA OB/GYN-INPATIENT (NO SHARING AGREEMENT)	OCCUPIED BED DAYS
4ACA	GYNECOLOGY	OCCUPIED BED DAYS
4ACB	OBSTETRICS	OCCUPIED BED DAYS
4ADA	PEDIATRICS	OCCUPIED BED DAYS
4ADD	ADOLESCENT PEDIATRICS	OCCUPIED BED DAYS
4ADZ	OTHER PEDIATRIC CARE	OCCUPIED BED DAYS
4AE6	MED/DEN ORTHO-INPATIENT	OCCUPIED BED DAYS
4AE7	VA ORTHO-INPATIENT (NO SHARING AGREEMENT)	OCCUPIED BED DAYS
4AEA	ORTHOPEDICS	OCCUPIED BED DAYS
4AEB	PODIATRY	OCCUPIED BED DAYS
4AEC	HAND SURGERY	OCCUPIED BED DAYS
4AEZ	OTHER ORTHOPEDIC CARE NOT CLASSIFIED ELSEWHERE	OCCUPIED BED DAYS
4AF5	MENTAL HEALTH - INPATIENT (TRICARE)	OCCUPIED BED DAYS
4AF6	MED/DEN PSYCH-INPATIENT	OCCUPIED BED DAYS
4AF7	VA PSYCH-INPATIENT (NO SHARING AGREEMENT)	OCCUPIED BED DAYS
4AF8	ST E PSYCH-INPATIENT	OCCUPIED BED DAYS
4AFA	PSYCHIATRIC CARE	OCCUPIED BED DAYS
4AFB	SUBSTANCE ABUSE REHABILITATION	OCCUPIED BED DAYS
4AFZ	OTHER PSYCHIATRIC CARE NOT CLASSIFIED ELSEWHERE	OCCUPIED BED DAYS
4AGA	FAMILY PRACTICE MEDICINE	OCCUPIED BED DAYS

4AGB	FAMILY PRACTICE SURGERY	OCCUPIED BED DAYS
4AGC	FAMILY PRACTICE OBSTETRICS	OCCUPIED BED DAYS
4AGD	FAMILY PRACTICE PEDIATRICS	OCCUPIED BED DAYS
4AGE	FAMILY PRACTICE GYNECOLOGY	OCCUPIED BED DAYS
4AGF	FAMILY PRACTICE PSYCHIATRY	OCCUPIED BED DAYS
4AGO	FAMILY PRACTICE ORTHOPEDICS	OCCUPIED BED DAYS
4AGZ	OTHER FAMILY PRACTICE NOT CLASSIFIED ELSEWHERE	OCCUPIED BED DAYS
4EAA	INPATIENT DEPRECIATION	OCCUPIED BED DAYS
4EJA	INPATIENT ADMIN	OCCUPIED BED DAYS - TOTAL
6430	FIREFIGHTING EQUIP	OPERATING HOURS
64R0	MATERIAL-HANDLING EQUIP	OPERATING HOURS
64U0	GROUNDS MAINT EQUIPMENT	OPERATING HOURS
64Y0	WEIGHT-HANDLING EQUIPMENT	OPERATING HOURS
4EIA	PATIENT FOOD OPERATIONS	PATIENT MEAL DAYS SERVED
4FB7	ASBESTOS MED SURVE PROG	PATIENT VISITS
1D70	SAFETY	POPULATION SERVED
9964	LIBRARY, GENERAL	POPULATION SERVED
4EHA	LAUNDRY - IN HOUSE	POUNDS PROCESSED
4EHB	LAUNDRY - CONTRACT	POUNDS PROCESSED
2720	CONTRACT EXECUTION	PROCUREMENT ACTION PROCESSED
2710	PROCUREMENT PLANNING	PROCUREMENT LINE ITEM PROCESSED
4ECA	PLANT MANAGEMENT (FREE RECEIPT)	SQUARE FEET
4ECB	OPERATION OF UTILITIES (FREE RECEIPT)	SQUARE FEET
4ECE	OTHER ENGINEERING SUPPORT (FREE RECEIPT)	SQUARE FEET
4ECH	FIRE PROTECTION (FREE RECEIPT)	SQUARE FEET
4ECI	POLICE PROTECTION (FREE RECEIPT)	SQUARE FEET
4EFA	CUSTODIAL SERVICES - IN HOUSE	SQUARE FEET CLEANED
4EFB	CUSTODIAL SERVICES - CONTRACT	SQUARE FEET CLEANED
4ECF	LEASES OF REAL PROPERTY (FREE RECEIPT)	SQUARE FEET LEASED
4ECC	MAINT. OF REAL PROPERTY (FREE RECEIPT)	SQUARE FEET/ HRS OF SVC
7330	OTHER AIRFIELD PAVEMENTS	SQUARE YARDS
7350	SIDEWALKS OTHER PAVEMENTS	SQUARE YARDS
9240	EXTERIOR CLEAN-UP	SQUARE YARDS
7310	ROADS AND STREETS	SQUARE YARDS OF TRAFFIC AREAS
4101	GENERAL DUTY HOSP CORPSMEN TRNG	STUDENT AVERAGE ON BOARD

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4170	BASIC DENTAL ASSISTANT TRAINING	STUDENT AVERAGE ON BOARD
4301	INSERVICE PROCUREMENT PROGRAM	STUDENTS (AVERAGE ON BOARD)
4302	MEDICAL SERVICE CORPS FULL-TIME OUTSERVICE	STUDENTS (AVERAGE ON BOARD)
4303	MEDICAL CORPS FULL-TIME OUTSERVICE	STUDENTS (AVERAGE ON BOARD)
4304	NURSE CORPS FULL-TIME OUTSERVICE	STUDENTS (AVERAGE ON BOARD)
4305	DENTAL CORPS FULL-TIME OUTSERVICE	STUDENTS (AVERAGE ON BOARD)
4306	ARMED FORCES SCHOLAR FORM	STUDENTS (AVERAGE ON BOARD)
4307	NURSE CORPS ANESTHESIA TRAINING, DIDACTIC	STUDENTS (AVERAGE ON BOARD)
4308	RESERVE ALLIED MEDICAL PERSONNEL PRGM	STUDENTS (AVERAGE ON BOARD)
4402	NUCLEAR SUBMARINE MEDICINE TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4406	CLINICAL NUCLEAR MEDICINE TECH, PHASE I	STUDENTS (AVERAGE ON BOARD)
4407	RADIATION HEALTH TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4408	CARDIOPULMONARY TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4409	OCCUPATIONAL THERAPY ASST., PHASE II	STUDENTS (AVERAGE ON BOARD)
4410	UNDERSEA MEDICAL OFFICER COURSE	STUDENTS (AVERAGE ON BOARD)
4411	OPTICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4413	RADIATION HEALTH OFFICER COURSE	STUDENTS (AVERAGE ON BOARD)
4415	RESPIRATORY TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4416	CLINICAL NUCLEAR MEDICINE TECH, PHASE II	STUDENTS (AVERAGE ON BOARD)
4417	DENTAL OFFICER IN-SERVICE RESIDENCY	STUDENTS (AVERAGE ON BOARD)
4418	UNDERSEA REFRESHER TRAINING	STUDENTS (AVERAGE ON BOARD)
4419	RADIATION HEALTH INDOCTRINATION COURSE	STUDENTS (AVERAGE ON BOARD)
4425	SURFACE FORCE INDEPENDENT DUTY TECH TRNG	STUDENTS (AVERAGE ON BOARD)
4432	PREVENTIVE MEDICINE TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4434	HEMODIALYSIS/APHERESIS TECH TRNG	STUDENTS (AVERAGE ON BOARD)
4445	OCULAR TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4446	OTOLARYNGOLOGY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4451	BASIC X-RAY TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4452	ADVANCED X-RAY TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4453	HISTOLOGY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4454	ELECTRONEURODIAGNOSTIC TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4455	CYTOLOGY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4456	ADVANCED MED LAB TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4457	ADVANCED DENTAL PROSTHETIC LAB TECH TRNG	STUDENTS (AVERAGE ON BOARD)
4465	ADVANCE MED LAB TECH TRAINING, PHASE II	STUDENTS (AVERAGE ON BOARD)

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4466	PHYSICAL THERAPY TECHNICIAN TRNG	STUDENTS (AVERAGE ON BOARD)
4472	BIOMEDICAL PHOTOGRAPHY TECH TRNG	STUDENTS (AVERAGE ON BOARD)
4473	MED AND DEN ADMIN TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4474	DENTAL EQUIPMENT REPAIR TECH TRAINING	STUDENTS (AVERAGE ON BOARD)
4475	BASIC DENTAL PROSTHETIC LAB TECH TRNG	STUDENTS (AVERAGE ON BOARD)
4476	MAXILLOFACIAL TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4482	PHARMACY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4483	OPERATING ROOM TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4485	PSYCHIATRY TECHNICIAN, PHASE II TRAINING	STUDENTS (AVERAGE ON BOARD)
4486	UROLOGY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4488	PHYSICIAN ASSISTANT TRAINING	STUDENTS (AVERAGE ON BOARD)
4494	MED DEEP SEA DIVING INDEPEND DUTY TECH TRNG	STUDENTS (AVERAGE ON BOARD)
4495	DERMATOLOGY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4498	NURSE CORPS ANESTHESIA TRAINING, CLINICAL	STUDENTS (AVERAGE ON BOARD)
44HT	HISOPATHY TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
44OR	OPERATING ROOM TECH (Non-NEC) TRAINING	STUDENTS (AVERAGE ON BOARD)
4631	PHYSICAL THERAPY TRAINING	STUDENTS (AVERAGE ON BOARD)
4645	EMERGENCY EGRESS REFRESHER & TRNG	STUDENTS (AVERAGE ON BOARD)
4649	AEROSPACE MEDICINE FLIGHT SURGEON, OFCR TRNG	STUDENTS (AVERAGE ON BOARD)
4650	FLEET MARINE FORCE MEDICAL OFCR TRNG	STUDENTS (AVERAGE ON BOARD)
4651	HEARING CONSERVATION TRNG & RECERTIFICATION	STUDENTS (AVERAGE ON BOARD)
4652	PEST MANAGEMENT TRAINING	STUDENTS (AVERAGE ON BOARD)
4653	INDUSTRIAL HYGIENE TRAINING	STUDENTS (AVERAGE ON BOARD)
4654	DENTAL OFFICER REVIEW COURSES FOR BOARD EXAM	STUDENTS (AVERAGE ON BOARD)
4658	EXECUTIVE TRAINING PROGRAM	STUDENTS (AVERAGE ON BOARD)
4659	ALCOHOLISM ORIENTATION FOR HLTH CARE PROVIDER	STUDENTS (AVERAGE ON BOARD)
4660	SANITATION & FOOD SERVICE TRNG	STUDENTS (AVERAGE ON BOARD)
4661	INFECTIOUS DISEASE CONTROL TRAINING	STUDENTS (AVERAGE ON BOARD)
4662	ENTOMOLOGY TRAINING	STUDENTS (AVERAGE ON BOARD)
4663	FIELD MED/DEN TECHNICIAN TRAINING	STUDENTS (AVERAGE ON BOARD)
4EB1	TRNG OH SUPPORT - LEVEL II (EDUC & TRNG ACTIVITIES)	STUDENTS (AVERAGE ON BOARD)
4EB2	TRNG OH SUPPORT - LEVEL III (EDUC & TRNG ACTIVITIES)	STUDENTS (AVERAGE ON BOARD)
4FBM	MEDICALLY RELATED SERVICES	SUM OF # OF REFERRALS AND # OF ACTIVE IEPs
4FBB	PREVENTIVE MEDICINE	SURVEYS/INSPECTIONS COMPLETED
4FBD	RADIATION HEALTH	SURVEYS/INSPECTIONS COMPLETED

WORK UNITS

CAC DESCRIPTION

CA

4FBE	ENVIRONMENTAL HEALTH	SURVEYS/INSPECTIONS COMPLETED
4FBF	EPIDEMIOLOGY	SURVEYS/INSPECTIONS COMPLETED
7620	HEATING, OVER 3,500,000 BTU/HR	THOUSANDS OF BTU'S PER HOUR
7630	HEAT .75 TO 3.5 BTU	THOUSANDS OF BTU'S PER HOUR
7640	STEAM POWER	THOUSANDS OF BTU'S PER HOUR
7680	GAS MANUFACTURING PLANTS	THOUSANDS OF BTU'S PER HOUR
8790	PNEUMATIC POWER	THOUSANDS OF CUBIC FEET
87A0	PNEUM POWER DISTR	THOUSANDS OF CUBIC FEET (KCUBFT)
9230	REFUSE AND GARBAGE DISPOSAL	THOUSANDS OF CUBIC YARDS
7610	NON POT WATER STOR FACILITIES	THOUSANDS OF GALLONS PER DAY
8410	POTABLE WATER, PLANT	THOUSANDS OF GALLONS (KGAL)
8420	POT WATER, DISTR SYSTEMS	THOUSANDS OF GALLONS (KGAL)
8450	PUR POTABLE WATER - COMMERCIAL	THOUSANDS OF GALLONS (KGAL)
8460	PUR POTABLE WATER - NAVY	THOUSANDS OF GALLONS (KGAL)
8470	PUR POTABLE WATER - OTHER	THOUSANDS OF GALLONS (KGAL)
8520	SEWAGE DISTR SYSTEM	THOUSANDS OF GALLONS (KGAL)
8550	PUR SEWA TRET COMMERCIAL	THOUSANDS OF GALLONS (KGAL)
8560	PUR SEWA TRET NAVACT	THOUSANDS OF GALLONS (KGAL)
8570	PUR SEWA TRET OTHER	THOUSANDS OF GALLONS (KGAL)
8710	NONPOT WATER SYS	THOUSANDS OF GALLONS (KGAL)
8720	NONPOT WATER DISTR	THOUSANDS OF GALLONS (KGAL)
9210	CUSTODIAL SERVICE	THOUSANDS OF SQ. FT. OF FLOOR AREA
8610	PLANTS AC 5-25 TN	TONS CAPACITY
8620	PLANTS AR 100 AND OVER	TONS CAPACITY
8630	PLANTS AR 25-100 TN	TONS CAPACITY
8640	DISTR SYS 100 OVER	TONS CAPACITY
8650	DISTR SYS 25-100	TONS CAPACITY
8660	PURCHASED AIR CONDITIONING	TONS CAPACITY
4FB6	MEDICAL SURVEILLANCE PROG	TOTAL EXAMS
4EI2	SUBSISTENCE	TOTAL MEAL DAYS SERVED
4EIB	COMBINED FOOD OPERATIONS	TOTAL MEAL DAYS SERVED
4EIC	INPATIENT CLINICAL NUTRITION MANAGEMENT	TOTAL WEIGHTED INPATIENT NUTRITION PROCEDURES
2120	PACKING AND ISSUE	UNIT PACKS
99A1	NAVY EXCHANGES	VOLUME OF SALES
99B1	NAVY CONSOLIDATED PACKAGE STORES	VOLUME OF SALES

99B3	NAVY CIV CAF AND OTHER RESALE	VOLUME OF SALES
99E1	NAVY COMMISSIONED OFF MESS (OPEN)	VOLUME OF SALES
99E3	NAVY CHIEF PETTY OFF MESS (OPEN)	VOLUME OF SALES
99E4	NAVY PETTY OFCRS', ENL, AND CONSOL MESSES	VOLUME OF SALES
4FAA	AREA REFERENCE LABS	WEIGHTED PROCEDURES
4FAB	AREA DENTAL PROSTH LAB TYPE I	WEIGHTED DENTAL PROCEDURES
4DA2	HIV PHARMACY COSTS	WEIGHTED PROCEDURES
4DAA	PHARMACY	WEIGHTED PROCEDURES
4DB1	HIV LABORATORY TESTS	WEIGHTED PROCEDURES
4DB2	HIV WESTERN BLOT TESTS	WEIGHTED PROCEDURES
4DB3	HIV T-CELL TESTS	WEIGHTED PROCEDURES
4DB4	HIV LAB REAGENTS	WEIGHTED PROCEDURES
4DBA	CLINICAL PATHOLOGY	WEIGHTED PROCEDURES
4DBA	OCC HLTH CLINICAL PATHOLOGY	WEIGHTED PROCEDURES
4DBB	ANATOMICAL PATHOLOGY	WEIGHTED PROCEDURES
4DBC	BLOOD BANK	WEIGHTED PROCEDURES
4DBZ	OTHER PATHOLOGY SVCS NOT CLASSIFIED ELSEWHERE	WEIGHTED PROCEDURES
4DC2	HIV RADIOLOGY	WEIGHTED PROCEDURES
4DCA	DIAGNOSTIC RADIOLOGY	WEIGHTED PROCEDURES
4DCB	THERAPEUTIC RADIOLOGY	WEIGHTED PROCEDURES
4DCZ	OTHER RADIOLOGY SVC NOT CLASSIFIED ELSEWHERE	WEIGHTED PROCEDURES
4DDD	PULMONARY FUNCTION	WEIGHTED PROCEDURES
4DDE	CARDIAC CATHETERIZATION	WEIGHTED PROCEDURES
4DHA	INHALATION/RESPIRATORY THERAPY	WEIGHTED PROCEDURES
4DIA	NUCLEAR MEDICINE CLINIC	WEIGHTED PROCEDURES
4EAC	DENTAL DEPRECIATION	\$ VALUE OF EQUIPMENT
4EAD	SPECIAL PROGRAMS DEPRECIATION	\$ VALUE OF EQUIPMENT
4EAE	MEDICAL READINESS DEPRECIATION	\$ VALUE OF EQUIPMENT
2830	QUALITY ASSURANCE	\$ VALUE OF MATERIAL INSPECTED AND RELEASED

Key: @ Changes for this fiscal year.

APPENDIX D

Expense Element	Title
U	Personnel Comp & Benefits
1	Readiness Labor (THCSSR)
C	Reserves Compensation
A	Military Compensation
E	Travel of Personnel
8	Travel of Personnel (PCS)
F	Transportation of Things (Military Air Command)
G	Transportation of Things (Commercial Air)
	Transportation of Things (Mil Sealift Command)
J	Transportation of Things (Inland Transportation)
K	Transportation of Things (QUICKTRANS)
L	Transportation of Things (Other)
M	Purchased Utilities
N	Communications
Y	Printing & Reproduction
D, P	Purchase Maint Equipment
Q	Purchased Services, Other
V	Other POL (fuel)
T	Medical/Dental Supplies
4	Pharmaceutical Supplies
W	Other Equipment
5	Depreciation
X	Other Expenses
Z	Service Transfer, Funded
6	Free Receipts

PERFORMANCE

	(METABOLISM) CLINIC	
	BAG GASTROENTEROLOGY CLINIC	
	BAH HEMATOLOGY CLINIC	
	BAI HYPERTENSION CLINIC	
	BAJ NEPHROLOGY CLINIC	
	BAK NEUROLOGY CLINIC	
	BAL NUTRITION CLINIC	
	BAM ONCOLOGY CLINIC	
	BAN PULMONARY DISEASE CLINIC	
	BAO RHEUMATOLOGY CLINIC	
	BAP DERMATOLOGY CLINIC	
	BAQ INFECTIOUS DISEASE CLINIC	
	BAR PHYSICAL MEDICINE	
BB SURGICAL CARE	BBA GENERAL SURGERY CLINIC	VISITS
	BBB CARDIOVASCULAR AND THORACIC SURGERY CLINIC	
	BBC NEUROSURGERY CLINIC	
	BBD OPHTHALMOLOGY CLINIC	
	BBE ORGAN TRANSPLANT CLINIC	
	BBF OTOLARYNGOLOGY CLINIC	
	BBG PLASTIC SURGERY CLINIC	
	BBH PROCTOLOGY CLINIC	
	BBI UROLOGY CLINIC	
	BBJ PEDIATRIC SURGERY CLINIC	
BC OBSTETRICAL AND GYNECOLOGICAL CARE	BCA FAMILY PLANNING CLINIC	VISITS
	BCB GYNECOLOGICAL CLINIC	
	BCC OBSTETRICS CLINIC	
	BCD BREAST CARE CLINIC	
BD PEDIATRIC CARE	BDA PEDIATRIC CLINIC	VISITS
	BDB ADOLESCENT CLINIC	
	BDC WELL BABY CLINIC	
BE ORTHOPEDIC CARE	BEA ORTHOPEDICS CLINIC	VISITS
	BEB CAST CLINIC	
	BEC HAND SURGERY CLINIC	
	BEE ORTHOTIC LABORATORY CLINIC	
	BEF PODIATRY CLINIC	
	BEZ ORTHOPEDIC CARE NOT ELSEWHERE CLASSIFIED	
BF PSYCHIATRIC CARE	BFA PSYCHIATRIC CLINIC	VISITS
	BFB PSYCHOLOGY CLINIC	
	BFC CHILD GUIDANCE CLINIC	
	BFD MENTAL HEALTH CLINIC	
	BFE SOCIAL WORK CLINIC	
	BFF SUBSTANCE ABUSE REHABILITATION	
BG FAMILY PRACTICE CARE	BGA FAMILY PRACTICE CLINIC	VISITS
BH PRIMARY MEDICAL CARE	BHA PRIMARY CARE CLINICS	VISITS
	BHB MEDICAL EXAMS CLINIC	
	BHC OPTOMETRY CLINIC	
	BHD AUDIOLOGY CLINIC	
	BHE SPEECH PATHOLOGY CLINIC	
	BHF COMMUNITY HEALTH CLINIC	
	BHG OCCUPATIONAL HEALTH CLINIC	
	BHH NAVCARE CLINIC	
	BHI IMMEDIATE CARE CLINIC	
BI EMERGENCY	BIA EMERGENCY MEDICAL	VISITS

	MEDICAL CARE	CLINIC	
	BJ FLIGHT MEDICINE CARE	BJA FLIGHT MEDICINE CLINIC	VISITS
	BK UNDERSEAS MEDICINE CARE	BKA UNDERSEAS MEDICINE CLINIC	VISITS
	BL REHABILITATION AMBULATORY SERVICES	BLA PHYSICAL THERAPY CLINIC BLB OCCUPATIONAL THERAPY CLINIC BLC NEUROMUSCULOSKELETAL SCREENING CLINIC	VISITS VISITS VISITS
C.DENTAL CARE	CA DENTAL SERVICES	CAA DENTAL CARE	CTV'S AND CLV'S
	CB DENTAL LABORATORY SERVICES	CBA DENTAL LABORATORY	CTV'S AND CLV'S
D.ANCILLARY SERVICES	DA PHARMACY	DAA PHARMACY	RAW & WTD PROCEDURES
	DB PATHOLOGY	DBA CLINICAL PATHOLOGY DBB ANATOMICAL PATHOLOGY DBC BLOOD BANK	RAW & WTD PROCEDURES
	DC RADIOLOGY	DCA DIAGNOSTIC RADIOLOGY DCB THERAPEUTIC RADIOLOGY	RAW & WTD PROCEDURES
	DD SPECIAL	DDA ELECTROCARDIOGRAPHY DDC ELECTROENCEPHALOGRAPHY DDD ELECTRONEUROMYOGRAPHY DDD PULMONARY FUNCTION DDE CARDIAC CATHETERIZATION	PROCEDURES PROCEDURES PROCEDURES WTD PROCEDURES WTD PROCEDURES
	DE CENTRAL STERILE SUPPLY/MATERIEL SERVICE	DEA CENTRAL STERILE SUPPLY DEB CENTRAL MATERIEL SERVICE	HRS OF SVC COST OF SUPPLIES AND MINOR PLANT EQUIPMENT ISSUED
	DF SURGICAL SERVICES	DFA ANESTHESIOLOGY DFB SURGICAL SUITE DFC POST ANESTHESIA CARE UNIT	MINUTES OF SERVICE & NUMBER OF PATIENTS MINUTES OF SERVICE & NUMBER OF CASES MINUTES OF SERVICE & NUMBER OF PATIENTS
	DG SAME DAY SERVICE	DGA AMBULATORY PROCEDURE UNIT DGB HEMODIALYSIS DGC HYPERBARIC MEDICINE DGD PERITONEAL DIALYSIS DGE AMBULATORY NURSING SERVICES	MINUTES OF SERVICE & NUMBER OF PATIENTS MINUTES OF SERVICE MINUTES OF SERVICE MINUTES OF SERVICE MINUTES OF SERVICE & NUMBER OF PATIENTS
	DH REHABILITATIVE SERVICES	DHA INHALATION/RESPIRATORY THERAPY	RAW & WTD PROCEDURES
	DI NUCLEAR MEDICINE	DIA NUCLEAR MEDICINE	RAW & WTD PROCEDURES
	DJ INTENSIVE CARE	DJA MEDICAL INTENSIVE CARE DJB SURGICAL INTENSIVE CARE DJC CORONARY CARE UNIT DJD NEONATAL INTENSIVE CARE DJE PEDIATRIC INTENSIVE CARE	HOURS OF SERVICE HOURS OF SERVICE HOURS OF SERVICE HOURS OF SERVICE HOURS OF SERVICE
E.SUPPORT SERVICES	EA DEPRECIATION	EAA INPATIENT DEPRECIATION EAB AMBULATORY DEPRECIATION EAC DENTAL DEPRECIATION EAD SPECIAL PROGRAMS DEPRECIATION EAE MEDICAL READINESS DEPRECIATION	QBD VISITS \$ VALUE OF EQUIP \$ VALUE OF EQUIP \$ VALUE OF EQUIP
	EB COMMAND	EBA COMMAND	FTEs

MANAGEMENT AND ADMINISTRATION	EBB SPECIAL STAFF	FTEs
	EBC ADMINISTRATION	FTEs
	EBD CLINICAL MANAGEMENT	FTEs
	EDE GRADUATE MEDICAL	FTEs
	EDF EDUCATION AND TRAINING SUPPORT	FTEs
	EBG PEACETIME EXERCISE/ DISASTER PREPAREDNESS	FTEs
	EBH THIRD PARTY COLLECTION ADMINISTRATION	# OF CLAIMS BY WORKCENTER
EC SUPPORT SERVICES (NON-REIMBURSABLE/ FREE RECEIPTS)	ECA PLANT MANAGEMENT	SQ FT
	ECB OPERATION OF UTILITIES	SQ FT
	ECC MAINTENANCE OF REAL PROPERTY	SQ FT/HRS OF SVC
	ECD MINOR CONSTRUCTION	HRS OF SVC
	ECE OTHER ENGINEERING SUPPORT	SQ FT
	ECF LEASE OF REAL PROPERTY	SQ FT LEASED
	ECG TRANSPORTATION	MILES DRIVEN
	ECH FIRE PROTECTION	SQ FT
	ECI POLICE PROTECTION	SQ FT
	ECJ COMMUNICATION	FTEs
	ECK OTHER BASE SUPPORT SERVICES	FTEs
ED SUPPORT SERVICES (FUNDED)/ REIMBURSABLE/ MTF-PROVIDED/ NON-MTF PROVIDED CONTRACTED)	EDA PLANT MANAGEMENT	SQ FT
	EDB OPERATION OF UTILITIES	SQ FT
	EDC MAINTENANCE OF REAL PROPERTY	SQ FT/HRS OF SVC
	EDD MINOR CONSTRUCTION	HRS OF SVC
	EDE OTHER ENGINEERING SUPPORT	SQ FT
	EDF LEASE AND RENTAL OF REAL PROPERTY AND FACILITIES	SQ FT LEASED
	EDG TRANSPORTATION	MILES DRIVEN
	EDH FIRE PROTECTION	SQ FT
	EDI POLICE PROTECTION	SQ FT
	EDJ COMMUNICATIONS	FTEs
	EDK OTHER MTF SUPPORT	FTEs
EE MATERIAL SERVICE	EBA MATERIAL MANAGEMENT	COST OF SUPPLIES AND SERVICES/PLANT EQUIPMENT ISSUED
EF HOUSEKEEPING	EFA HOUSEKEEPING - IN HOUSE	SQ FT CLEANED
	EFB HOUSEKEEPING - CONTRACT	SQ FT CLEANED
EG BIOMEDICAL REPAIR	EGA BIOMEDICAL EQUIPMENT REPAIR - IN HOUSE	HRS OF SERVICE
	EGB BIOMEDICAL EQUIPMENT REPAIR - CONTRACT	HRS OF SERVICE
EH LAUNDRY	EHA LAUNDRY - IN HOUSE	POUNDS PROCESSED
	EHB LAUNDRY - CONTRACT	POUNDS PROCESSED
EI DIETETICS	EIA PATIENT FOOD OPERATIONS	PATIENT MEAL DAYS SERVED
	EIB COMBINED FOOD OPERATIONS	MEAL DAYS SERVED
	EIC INPATIENT CLINICAL NUTRITION MANAGEMENT	WEIGHTED INPATIENT NUTRITION PROCEDURES
EJ INPATIENT AFFAIRS	EJA INPATIENT AFFAIRS	OBDS
EK AMBULATORY CARE	EKA AMBULATORY CARE ADMINISTRATION	OUTPATIENT VISITS
EL MTF TRICARE/ MANAGED CARE	ELA TRICARE/MANAGED CARE	FTEs
SPECIAL PROGRAMS	FAA AREA REFERENCE LABS	WTD PROCEDURES
	FAB AREA DENTAL PROSTHETIC LAB	WTD PROCEDURES

	FAC OPHTHALMIC FABRICATION AND REPAIR	SPECTACLES FABRICATED OR REPAIRED
	FAD DOD MILITARY BLOOD PROGRAM	N/A
	FAF DRUG SCREENING AND TESTING PROGRAM	MTD PROCEDURES
	FAH CLINICAL INVESTIGATION PROGRAM	N/A
	FAI PHYSIOLOGY TNG SUPPORT PROGRAM	N/A
	FAK STUDENT EXPENSES FOR CLASSROOM AND OTHER LEARNING EXPERIENCES	N/A
	FAL EXTERNALLY SPONSORED CONTINUING HEALTH EDUCATION	N/A
	FAZ SPECIFIED HEALTH RELATED PROGRAMS NOT ELSEWHERE CLASSIFIED	N/A
FB PUBLIC HEALTH	FBB PREVENTIVE MEDICINE	N/A
	FBC INDUSTRIAL HYGIENE	N/A
	FBD RADIATION HEALTH	N/A
	FBE ENVIRONMENTAL HEALTH	N/A
	FBF EPIDEMIOLOGY	N/A
	FBI IMMUNIZATIONS	IMMUNIZATIONS AND SCREENING TESTS
	FBJ EARLY INTERVENTION SERVICES (EFMP)	INDIVIDUAL FAMILY SERVICE PLANS (IFS)
	FBK MEDICALLY RELATED SERVICES (EFMP)	INDIVIDUALIZED EDUCATION PLANS (IEP)
	FBL MULTIDISCIPLINARY TEAM SERVICES	PTEs
FC HEALTH CARE SERVICES SUPPORT	FCA SUPPLEMENTAL CARE (Note: Only specific costs PURCHASED FROM are charged to this CIVILIAN SOURCES PCA account)	N/A
	FCB MILITARY/CIVILIAN GUEST LECTURER AND CONSULTANT PROGRAM	N/A
	FCC CHAMPUS BENEFICIARY SUPPORT	N/A
	FCD SUPPORT TO OTHER MILITARY ACTIVITIES	N/A
	FCE SUPPORT TO OTHER FEDERAL AGENCIES	N/A
	FCF SUPPORT TO NON- FEDERAL ACTIVITIES	N/A
	FCG SUPPORT TO NON-MEPRS REPORTING MEDICAL ACTIVITIES	N/A
	FCH A/D EMERGENCY & REMOTE CARE AREA	N/A (ARMY AND AIR FORCE ONLY)
	FDB BASE OPERATIONS - MEDICAL INSTALLATIONS	N/A
	FDC NONPATIENT FOOD OPERATIONS	NONPATIENT MEAL DAYS SERVED
	FDD DECEDENT AFFAIRS	N/A
	FDE INITIAL OUTFITTING CONSTRUCTION	N/A
	FDG TDY/TAD ENROUTE TO A PCS	N/A
FD MILITARY UNIQUE	FDI IN-PLACE CONSEC OVERSEAS TOUR (COT) LEAVE	COT LEAVES FUNDED
	FDH MILITARY FUNDED EMERGENCY LEAVE	NUMBER OF EMERGENCY LEAVES PAID
	FDZ MILITARY UNIQUE MEDICAL ACTIVITY NOT ELSEWHERE CLASSIFIED	N/A
FE PATIENT MOVEMENT AND MILITARY	FEA PATIENT TRANSPORTATION	HRS OF SVC
	FEC TRANSIENT PATIENT CARE	OBDs BY TRANSIENT PATIENT
	FED MILITARY PATIENT	N/A

		PERSONNEL ADMIN FEE MILITARY PATIENTS (SALARIES) FEP AEROMEDICAL STAGING FACILITIES	N/A PATIENT MOVEMENTS
	PF VETERINARY SERVICES	FFA DEPUTY COMMANDER FOR VETERINARY SERVICES	FTEs
G. READINESS	GA READINESS PLANNING AND ADMIN	GAA DEPLOYMENT PLANNING AND ADMINISTRATION GAB OTHER READINESS PLANNING AND ADMINIS- TRATION	FTEs FTEs FTEs
	GB READINESS EXERCISES	GBA FIELD OR FLEET READINESS EXERCISES GBB OTHER READINESS EXERCISES	FTEs FTEs FTEs
	GC READINESS TRAINING	GCA READINESS TRAINING CONDUCTED LOCALLY GCB OTHER READINESS TRAINING	FTEs FTEs
	GD UNIT OR PERSONNEL DEPLOYMENTS	GDA UNIT OR PERSONNEL DEPLOYMENTS	FTEs
	GE READINESS LOGISTICS MANAGEMENT	GEA PREPOSITIONED WAR RESERVE GEB CONTINGENCY PATIENT CARE AREAS GEC CONTINGENCY BLOCKS/PACKS	\$ VALUE OF WRM MATERIAL MAINTAINED \$ VALUE OF MATERIEL MAINTAINED \$ VALUE OF MATERIEL MAINTAINED FTEs
	GF READINESS PHYSICAL TRAINING	GFA READINESS PHYSICAL TRAINING	FTEs FTEs
	GG NATIONAL DISASTER MEDICAL SYSTEM (NDMS)	GGA NATIONAL DISASTER MEDICAL SYSTEM (NDMS) PLANNING AND ADMINISTRATION GGB NATIONAL DISASTER MEDICAL SYSTEM (NDMS) EXERCISES	FTEs FTEs

APPENDIX F

NAVAL MEDICAL CENTER, SAN DIEGO COST CENTERS/SUB COST CENTERS FY - 97

Cost Center	SubCost Center	Name
01	AA	COM - Commander's Office
01	AB	COM - Legal
01	AC	COM - Public Affairs
01	AF	COM - Fleet Med Liaison
01	AH	COM - Patient Relations
01	AJ	COM - Command Master Chief
01	AW	COM - Marine Liaison
02	AM	DEPCOM - Managed Care
02	AN	DEPCOM - Deputy Comm Office
02	AP	DEPCOM - Professional Affairs
02	AS	DEPCOM - Office of Continuous Improvement
02	AT	DEPCOM - Medical Education Director
02	AU	DEPCOM - Graduate Education
02	AV	DEPCOM - CID
03	BA	DFA - DFA's Office
03	BB	ADO - ADO's Office
03	BF	ADO - Operations Management
03	BJ	DFA - IRMD - BCC
03	BL	DFA - MMAU
03	BM	DFA - IRMD
03	BN	DFA - IRMD - CHCS
03	BQ	ADA - ADA's Office
03	BU	ADA - Patient Administration
03	BV	ADA - Education & Training
03	BX	ADA - BEQ
03	BZ	ADA - Urinalysis
04	CB	MED - DMS
04	CC	MED - Int Med Rt Crd
04	CD	MED - Dermatology
04	CE	MED - Critical Care
04	CF	MED - Emergency Medicine
04	CG	MED - Pediatrics & EFMP
04	CH	MED - Psychiatry
04	CJ	MED - Psychology
04	CK	MED - Substance Abuse
04	CL	MED - Social Work
04	CM	MED - Family Advocacy
04	CN	MED - Family Practice
04	HA	DHP - DHP
04	HB	MED - Staff Sick Call
04	HC	DHP - Health Promotion Program

**NAVAL MEDICAL CENTER, SAN DIEGO
COST CENTERS/SUB COST CENTERS
FY - 97**

Cost Center	SubCost Center	Name
04	HD	DHP - Command Fitness Department
04	HE	DHP - DAPA
04	HF	DHP - Health Education
05	DB	SRG - DSS
05	DC	SRG - General Surgery
05	DE	SRG - Anesthesia
05	DG	SRG - Neurology
05	DH	SRG - Urology
05	DJ	SRG - Dental
05	DK	SRG - Obstetrics/Gynecology
05	DL	SRG - Ophthalmology
05	DM	SRG - Orthopedics
05	DN	SRG - Otorhinolaryngology
05	DQ	SRG - Optometry
06	EF	ANC - Physical/Occupational Therapy
06	EG	ANC - Breast Health Center
06	EB	ANC - DAS
06	EC	ANC - Pharmacy
06	ED	ANC - Laboratory
06	EE	ANC - Radiology
06	EG	ANC - Breast Care Center
07	FA	NRS - Director
07	FB	NRS - ADMACN
07	FC	NRS - Gen Med
07	FD	NRS - Med Spec
07	FE	NRS - Mental Health
07	FF	NRS - Emergency
07	FG	NRS - Critical Care
07	FK	NRS - ADOGPN
07	FL	NRS - Pediatrics
07	FM	NRS - Ambulatory Pediatrics
07	FN	NRS - Obstetrics/Gynecology
07	FP	NRS - Ambulatory Obstetrics/Gynecology
07	FQ	NRS - ADSN
07	FRA	NRS - Operating Room
07	FS	NRS - PACU
07	FT	NRS - Same Day Surgery
07	FU	NRS - Uniform Allowance (Civilian)
07	FV	NRS- Orthopedics
07	FW	NRS- General Surgery
07	FX	NRS- Sub Specialty

**NAVAL MEDICAL CENTER, SAN DIEGO
COST CENTERS/SUB COST CENTERS
FY - 97**

Cost Center	SubCost Center	Name
08	GA	DBC - Director
08	GB	DBC - NORIS
08	GC	DBC - NORIS-SCI
08	GD	DBC - El Centro
08	GE	DBC - NAVSTA
08	GF	DBC - NTC
08	GL	DBC - Miramar
08	GM	DBC - MCRD
08	GN	DBC - NAB Coronado
09	JW	DFA - Telcom
10	RA	DOR - DOR's Office
10	RB	DOR - Fiscal
10	RC	DOR - Resource Analysis
10	RD	DOR - Human Resource
11	BC	ADO - Materiel Management Dept
11	BD	ADA - Nutrition Mgt
12	LA	Pastoral Care
19	PF	DOHPM - Preventive Medicine
24	PA	DOHPM - Director
24	PB	DOHPM - Occupational Health
24	PB	DOHPM - Immunizations
24	PC	DOHPM - Indust Hygiene
24	PD	DOHPM - Audiology
24	PE	DOHPM - Occupational Medicine
24	PY	DOHPM - Safety
29	BW	ADA - Medical Library
9A	BG	ADO - Facilities
9E	BT	ADO - Housekeeping
9M	BE	ADO - MWR Pool & Gym
9M	BP	ADA - MWR - Station Library
9M	BR	ADO - Fisher House
9M	BS	ADO - Child Care
9V	BH	ADO - Security
9V	SB	ADO - Drug Test Program

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