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This study was conducted to determine the most cost effective method of providing short term inpatient care to military health care beneficiaries in the Washington, D.C. catchment area. Three alternatives of providing the care were compared: issue Certificates of Nonavailability, contract the services, and expand existing facilities. The author found a clear cost advantage to providing care by expansion of existing facilities. Although his solution is not a short term fix, the eventual savings is well worth the investment.

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A Study of the Most Cost Effective Method
of Providing Short Term Inpatient Psychiatric
Care in the Washington, D.C. Catchment Area

By

Jeanne C. Roberts

Captain, MSC

A Graduate Research Project
Submitted in Partial Fulfillment
of the Requirements for the Degree
of
Master of Health Administration

June 1984

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Finally, the author is truly appreciative of Anne Roberts who was capable of translating many pages of manuscript into the finished typed product.

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CHAPTER I.

INTRODUCTION

Development of the Problem

In recent years, the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) has received a great deal of attention due to spiraling overall health costs and increasing shortfalls. On 15 September 1982, Mr. Frank C. Carlucci, Deputy Secretary of Defense, asked the Acting Assistant Secretary of Defense (Health Affairs) to explore the feasibility of limiting the CHAMPUS inpatient reimbursement in five selected military treatment facilities (MTF) catchment areas and establishing service wide goals on the number of certificates of nonavailability (CNA's) issued in FY83.[1]

The request was driven by the phenomenal growth in CHAMPUS costs and the Department of Defense's concern about the impact of these rapidly accelerating costs on the Defense Budget. The 1982 CHAMPUS budget of $1.106 billion was a 33% increase over the 1981 $825 million total budget. Two factors appear to be the main contributors to the problem: skyrocketing increases in private sector health care costs and increased utilization of the CHAMPUS program. The Cost Containment Subcommittee to the Uniformed Services Health Benefits Committee estimates that if the system remains unchanged, CHAMPUS cost growth through FY 88 could exceed $1.8 billion above current fiscal guidance for that period. This projected cost growth is attributed to the spiraling private sector

health care costs. "For example, while the FY 82 DoD health care budget was predicated on 8% private sector cost growth, actual growth was 17-22% in hospital costs and 10-12% in doctors fees. As a result, the CHAMPUS shortfall for FY 82 alone was $137 million."[2] Increasing use of CHAMPUS is another contributing factor. "While the FY 82 utilization increase was estimated at 6%, actual growth was 12%".[3] As a result of this exorbitant cost growth, CHAMPUS is receiving both internal and external mandates regarding its management options. The Defense Resources Board (DRB) espouses the position that CHAMPUS should be held to zero utilization and benefit growth over the next five years but that CHAMPUS benefits will not be reduced. The House Appropriations Committee (HAC) has indicated that it desires to view some strong evidence that efforts are being made to treat CHAMPUS eligibles in the less costly military treatment facilities (MTF) and to control CHAMPUS costs.

The Acting Assistant Secretary of Defense (Health Affairs) has acted by proceeding with a series of initiatives. First, continuity of care is to be eliminated as a reason for issuing the certificates of nonavailability. A DOD instruction is being rewritten to limit system-wide other reasons for issuance of certificates of nonavailability. Second, the feasibility, methodology and possible timetable for limiting CHAMPUS inpatient reimbursements in five selected medical treatment facility catchment areas is to be explored and a study initiated to determine the feasibility of requiring certificates of nonavailability for outpatient care.

Third, OCHAMPUS is to expand its effort to coordinate third-party payer benefits. Fourth, OCHAMPUS is to expand its program to contract for health care where medical treatment facilities cannot provide necessary services. Fifth, OCHAMPUS is to conduct an aggressive utilization review program in all payment areas. Sixth, medical treatment facilities are to increase the number of beneficiaries to whom they provide total care.[4]

Responding to the increased pressure from the Acting Assistant Secretary of Defense (Health Affairs) to provide more care for CHAMPUS beneficiaries from MTF, LTG Bernhard Mittemeyer, the Army Surgeon General, notes the gains in workload figures in Health Service Command's MTF. "Review of preliminary statistics indicates that workload in HSC MTF has increased steadily each year since 1978 for a total increase of 11.3% by the end of FY 81. Similarly, MTF workload attributable to CHAMPUS beneficiaries between FY 78 and FY 81 increased 30% for retired, 3.7% for active duty dependents, 15.7% for dependents of retired and 41.4% for others (civilian in emergency, designees of Secretary of the Army, etc.). Finally, nonavailability statement issuances have decreased nearly 21% over the same period. Although these statistics are impressive, they have, by themselves, been insufficient to contain CHAMPUS costs."[5]

Certain measures have been implemented to reduce the number of certificates of nonavailability issued. One such measure is the formation and implementation of the Washington, D.C. catchment area on 1 March 1983. The purpose is to insure maximum utilization of

OTSG and as the Army Patient Administration Consultant, COL William Tuten, stated, "Psychiatric care is the number one CHAMPUS expense in the Washington, D.C. catchment area."[7] The problem is not just isolated to the Washington, D.C. catchment area. According to figures obtained in an OASD(HA) booklet, Summary of FY 1982 CNA's Issued, psychiatric care amounted to 6.7% of the total number of CNAs issued Army-wide. Yet, this figure amounted to 9% of CHAMPUS FY 1982 expenditures or $109 million.

The material presented thus far suggests that the CHAMPUS Program has ballooned into a comprehensive yet costly project. Efforts to this point have explored many avenues to contain the expenditures without decreasing the health benefits. This effort will pursue the subject of cost effective methods of providing inpatient short term psychiatric care.

Statement of the Research Question

What is the most cost effective method of providing short term inpatient psychiatric care to CHAMPUS beneficiaries in the Washington, D.C. catchment area?

a. Issuance of certificates of nonavailability as presently being accomplished.

b. Contracting these services with a civilian facility.

c. Expand existing military capabilities by constructing additional wards.

Specific Objectives

The objectives which must be achieved to accomplish this research project are as follows:

1. Determine the number of certificates of nonavailability issued in the Washington, D.C. catchment area for short term psychiatric care from October 1981 to October 1983.
2. Determine the cost of the care provided to patients issued certificates of nonavailability for short-term psychiatric care in the Washington, D.C. catchment area.
3. Analyze data to establish trends in terms of an increase/decrease in the number of CNA given in the specific category and in the cost of care rendered using the appropriate statistical tool.

4. Determine the bed size requirements for a facility to provide short term inpatient psychiatric services to accommodate the number of patients as determined in 3 above.

5. Determine the cost of contracting with a civilian institution for this care.

6. Compare the alternatives for the most cost effective method.

Criteria

1. The alternatives will be evaluated in terms of the single most important criteria - less cost to the government.

2. The solution must address a long range plan.

3. The solution must be incorporated in a reasonable time frame (2-3 years).

4. The solution cannot be in contravention with stated CHAMPUS/DOD regulations.

5. The solution must not reduce the present quality of care and benefits.

Assumptions

1. The care presently rendered in civilian institutions is comparable in quality to the care rendered in a military medical facility.

2. The existing military medical institutions are operating at the maximum capacity for effective treatment of psychiatric care.

3. CHAMPUS will continue to include psychiatric care as a benefit and allow issuance of certificates of nonavailability.

4. Resources required to support recommendations which are developed as a result of this research effort and incorporated in the implementation plan can be obtained in a timely manner.

5. All figures received from outside agencies are assumed to be correct.

Limitations

1. Due to the number of medical conditions for which a statement of nonavailability may be issued, only short-term inpatient psychiatric care will be analyzed.

2. Only the Washington, D.C. catchment area (Bethesda, WRAMC, Kimbrough AH, DeWitt AH and Malcolm Grow) will be considered in the scope of this analysis. This grouping of military medical treatment facilities has been established through CHAMPUS.

3. The study will collect CNA data encompassing the October 1981 to October 1983 time frame.

4. The hospitals to be contacted for service contracting cost estimates are limited to those located in the Washington, D.C. catchment area.

5. The cost data for psychiatric care collected from the fiscal intermediary, Blue Cross/Blue Shield of South Carolina, is limited to the time frame January 1983-December 1983 due to changes in CHAMPUS regulations and available data.

6. The original research proposal utilized a cost benefit analysis

as step 7 in the research methodology section to determine the optimal alternative. Numerous factors have since been introduced which raise a question concerning the validity of this procedure as originally proposed. The original personnel contacted to determine the value of nonquantifiable benefits/costs in terms of importance and monetary value have since departed. When re-evaluating the process to brief the replacement personnel, a major flaw was discovered in the procedure. Realistically, the sample size is too small to provide accurate, valid figures for the cost analysis. The individuals named to place values on nonquantifiable benefits/costs are inexperienced in this process. The sample size is insufficient to "wash out" this inaccuracy, hence, the results would not provide helpful information.

Definitions

1. Catchment Area. The geographical area surrounding each Uniformed Services Medical Treatment Facility as specified in the Military Health Services System (MHSS) Catchment Directory except those portions listed in the directory as excluded because of geographic barrier.

2. Nonavailability Statements. In some geographic locations (or under certain special circumstances) it is necessary for a CHAMPUS beneficiary to determine whether the required medical care (primarily nonemergency, inpatient care) can be provided through a Uniformed Service facility. If the required medical care cannot be provided, the hospital commander (or a designee) will issue a

Nonavailability Statement (DD Form 1251). Except for emergencies, a Nonavailability Statement should be issued before medical care is obtained from a civilian source. Failure to secure such a statement may waive the beneficiary's rights to benefits under CHAMPUS.

3. Short term psychiatric care. Psychiatric treatment rendered to beneficiaries which require a hospitalization period of 60 days or less for each encounter. Alcohol and drug patient care is not included in this category.

Research Methodology

The research methodology is best described through a series of steps which develope the alternatives.

1. Identify the existing services in the five military medical facilities. This will be accomplished by contacting the program/department chief at each institution. Areas of interest include staffing, limitations for care, bed capacity, average ward census and waiting list length.
2. The Patient Administration Division of each institution will be contacted to determine the number of CNAs which have been issued since October 1981 to October 1983. A linear regression will be performed using the 24 months of data to forecast the expected number of CNAs for the next 5 years.

3. The fiscal intermediary for CHAMPUS, Blue Cross/Blue Shield of South Carolina will be contacted to obtain the following information:

a. Cost figures for short term inpatient psychiatric care rendered to CHAMPUS beneficiaries in the Washington D.C. catchment area from October 1981 to October 1983.

b. A listing of facilities where care was provided to include the average length of stay for the short term psychiatric patient, total cost per hospital encounter as well as the average cost per day by facility.

c. Negotiated reimbursement price between Blue Cross and the facilities listed in 3b for short term inpatient psychiatric care.

4. A 10% inflation factor will be applied to these costs to project the future costs of this type of care.

5. Using the number of cases forecasted (from step 2), determine the optimal size for a facility which would eliminate the need for issuing a CNA. This information will be obtained through the Health Facility Planning Agency (HFPA). A computer program has been written which establishes size, space and manpower requirements based on the type of unit and the number of beds. Additionally, a per square foot construction cost figure is available from HFPA for a designated year in the Washington D.C. area. This will provide the cost of construction figure. The estimated expense per day to operate this facility will be obtained by using the HSC average as shown in Uniformed Chart of Accounts Detail Unit Cost Report.

6. To determine the cost to the government for contracting inpatient psychiatric services, Health Care Finance Administration (HCFA) will be contacted to determine the allowable Medicare reimbursement rate for short term inpatient psychiatric care. This figure multiplied by the average length of stay and the projected number of CNA renders a range for the estimated cost of contracting the services with a civilian facility. It should be noted that the deductibles and additional costs to Medicare/Blue Cross patients will not be added back into total figures as this data is not available to the researcher.

7. Compare the alternatives on the basis of criteria specified in advance. The values of each alternative will be compared for the least costly alternative.

8. The findings will be presented and interpreted so that the reader can understand the conclusions and limitations of the analysis.

FOOTNOTES

[1]Carlucci Memorandum, Office of the Secretary of Defense, 8 November 1982. Report of the Cost Containment Subcommittee to the U.S. DoD Uniformed Services Health Benefits Committee, 15 October 1982, p.3.

[2]Ibid.

[3]Ibid.

[4]Memorandum thru Chief of Staff, Army, to Assistant Secretary of Defense (Health Affairs), Subject: Champus Utilization-Information Memorandum, LTG Bernard T. Mittemeyer, 1 July 1982, p.1.

[5]Information Paper, Subject: Washington, D.C. Catchment Area, 4 October 1983, p.1.

[6]Interview with Colonel William Tuten, Patient Administration Consultant, Army Surgeon General's Office Washington, D.C., 12 October 1983.

CHAPTER II

DISCUSSION

Military Medical Facilities Capabilities

There are five military medical facilities in the Washington, D.C. catchment area offering a combined total of 197 psychiatric beds. These beds are distributed as follows:

Walter Reed Army Medical Center	131
Bethesda Naval Hospital	20
Malcolm Grow Air Force Hospital	46
DeWitt Army Community Hospital	0
Kimbrough Army Hospital	0

Walter Reed Army Medical Center (WRAMC), the largest of the facilities, contains two acute care, 45 bed, wards. Additionally, there exists a 41 bed step down unit for individuals who are awaiting processing of medical evaluation boards. Often times, these individuals do not require intensive therapy or nursing care; however, they are not well enough to return to duty. WRAMC does not offer inpatient child and adolescent services. Additionally, patients who have been ordered by the courts to undergo psychiatric treatment as inpatients are not admitted to the WRAMC psychiatric wards.[1]

There are three staff psychiatrists currently charged with inpatient care. The teaching mission increases this number by nine: one intern, seven first year residents, and one chief resident, all of whom work in the inpatient arena. The average occupancy rate over the past year was 112. When the two psychiatric ward census reaches 80 patients or more, the unit is closed for admission except to active duty personnel. Likewise, the step down ward is restricted

to all but active duty personnel once the patient census reaches 30.[2] This policy was established to provide adequate beds for a possible influx of active duty personnel requiring psychiatric care.

Malcolm Grow Air Force Hospital, Andrews Air Force Base, has the second largest inpatient psychiatric bed capacity - 46 beds. This number will be augmented when the alcohol rehabilitation program, now occupying 15 beds, will be moved to another location next year. This action will increase the bed capacity to 61. As with other military hospitals, active duty Air Force personnel are the number one priority and rarely are dependents/retirees provided a bed on the ward. A limiting factor cited by Major Whittaker, the Ward Charge Nurse, is insufficient staffing. Major Whittaker stated he did not feel that the number of beds were as much of a problem as not having sufficient personnel to adequately provide the expected quality of care.[3]

Bethesda Naval Hospital is the third military medical facility in the catchment area which offers inpatient psychiatric treatment. The 20 bed psychiatric ward is presently situated in a temporary location, awaiting the completion of a new psychiatric unit. This temporary situation has been in existence for two years, and the staff anxiously anticipates completion of the ward renovation in approximately six months.[4]

The new psychiatric unit will consist of three 18 bed wards, for a total bed capacity of 54. The temporary ward, which is an open bay configuration, is totally unsatisfactory for a mixed patient load. In the event female patients are admitted to the psychiatric ward, three semi-private rooms can be made available.

The workload is high enough that active duty personnel keep the ward full and many times patients are referred to WRAMC for inpatient treatment.[5] The staff consists of one psychiatrist and three psychiatric residents.

As mentioned earlier, Kimbrough Army Hospital, Ft. Meade, Maryland and DeWitt Army Community Hospital, Ft. Belvoir, Virginia, do not possess inpatient psychiatric capabilities. Kimbrough Army Hospital is staffed with two military psychiatrists, while DeWitt Army Community Hospital has three military psychiatrists assigned. These individuals devote their time to the care and treatment of patients who are seen only on an outpatient basis.[6,7] Active duty personnel at Kimbrough and DeWitt Army Hospitals who require inpatient psychiatric care are referred to WRAMC. If there are no available beds at WRAMC, then Bethesda Naval Hospital and Malcolm Grow Hospital are contacted. Non-active duty personnel are accepted at these military facilities based on the percent occupancy. Normally referrals are made to civilian organizations under the auspices of CHAMPUS.

Upon scrutiny of the system, a common thread is seen at all of the facilities discussed. The psychiatric staff at each facility perceives that a shortage exists in the staffing of the wards in terms of nurses, corpsmen, and therapists.[8,9,10] This issue must be addressed at facilities undergoing expansion.

Also, if the services are to try to recapture some of the CHAMPUS inpatient psychiatric workload, then the decision should be made whether or not to provide adequate staffing in regards to the bed

capacity of each of the facilities. This specific matter has been discussed at length and the figures are interesting.

The Army Surgeon General Psychiatric Consultant compiled data on the utilization of Army Inpatient Psychiatric Facilities (Figure A-1).[11] One can easily see from the percent utilization figures that some facilities are being suboptimally staffed and utilized. Fortunately, WRAMC is adequately staffed to fully maximize its resources. These figures are somewhat misleading as they are derived from the relationship of average daily occupancy to the number of psychiatric beds. A truer picture of the bed utilization is seen if the relationship of the average daily occupancy to the staffing level for a certain number of beds is used. For instance, Womack Army Hospital, Ft. Bragg, N.C., has 26 psychiatric beds, and has an average daily occupancy of six patients for a percentage utilization of 23%. However, when the actual staffing is considered, another picture is painted. The psychiatric unit as previously stated contains 26 beds but is only staffed at 12 beds. The percentage of utilization using average daily occupancy and the staffing figures is now increased to 50%.

Certificates of Nonavailability

The CHAMPUS benefits advisor at each of the five facilities was contacted to determine the number of CNAs issued for psychiatric care during the period October 1981 thru September 1983. This data can be found in Figure B-1. A linear regression of the compiled data was calculated to determine if a linear relationship existed between time and the number of certificates of nonavailability issued for inpatient psychiatric care. A graphical representation of each total monthly CNAs issued month to month during the 24 month period studied is presented in Figure B-2. One can easily see there exists a wide fluctuation in the monthly figures. The far right of the graph depicts the predicted relationship of the variables for the later time from October 1983 thru September 1984. Figure B-3 displays the various statistical data generated from the use of a linear regression model. The important statistic to note is the value of the co-efficient of determination, R^2, which is .00138. This statistic indicates the percentage of variability in CNAs accounted for or explained by the element time. There is no set value which becomes an indicator of a strong relationship between variables, but one would sense an existing linear relationship when the R^2 value equals .75 or better. [12] In this case, the R^2 value of .00138 indicates to the researcher that the linear relationship between the number of CNAs issued and time is almost nonexistent. Therefore, the number of CNAs issued is rather unpredictable depending upon the availability of beds, a change of population and other undetermined factors. Because

of the nonexistent relationship, forecasting the number of CNAs for the next five years as planned in Chapter One would be meaningless.[13] A valid indicator to predict future issuance of CNAs becomes the mean value, 39.889 or rounded up 40. This simply indicates that for forecasting purposes, the value of 40 CNAs per month can be utilized.[14]

FACILITY SIZE DETERMINATION

Earlier in the discussion it was determined that the mean number of CNAs issued per month can be used as a valid forecasting indicator. This value was calculated as 40. An OCHAMPUS report of the top five psychiatric diagnoses for inpatient care provided under CHAMPUS in the ten high-cost catchment areas combined in FY 1983 estimates that the average length of stay (ALOS) in days is 54.2.[15] This ALOS is elevated to 58 days when the Washington, D.C. catchment area is scrutinized alone. This information is found in figures C-1 and C-2.[16]

The Army Surgeon General's Psychiatric Consultant has stated that 35 percent of the total psychiatric admissions were for children and adolescents under 19 years of age, yet they account for 66 percent of the cost.[17] Additionally, CHAMPUS information reveals that 60 percent of the hospital days for inpatient psychiatric care provided under CHAMPUS inside catchment areas in FY 1983 were utilized by beneficiaries in the age group 10 to 19 years of age (Figures C-3 and C-4).[18] This 35 percent estimate of the unfulfilled demand in the Washington, D.C., catchment area indicates that approximately 14 (35% x 40) beneficiaries per month fall into the 10 to 19 year age group. This type of patient receives different treatment from adult patients. Care is most commonly provided on separate adolescent wards which tailor treatment to the special needs of these younger patients.

Figure C-1 depicts that childhood behavior disorders are the top psychiatric diagnoses for inpatient care provided under CHAMPUS in the

ten high cost catchment areas combined in FY 1983. The 102.4 day ALOS indicates this care costs an average government cost/admission of $28,563.[19]

To determine the number of beds required to fulfill the inpatient psychiatric demand, two calculations must be made: (1) child and adolescent treatment; and (2) adult treatment. The first to be discussed is the unfulfilled adult treatment demand or approximately 26 patients per month.

For the purpose of this example, the 58 day ALOS will be considered as two months. This means that for a one month period, 26 patients would be admitted to the ward, each staying approximately 2 months. The second month, an additional 26 patients would be admitted to the ward bringing the census to 52. At the end of the second month, it is estimated that the first 26 patients would have been discharged. It should be noted that these figures are only estimates and patients may be discharged much sooner or later. Throughout the third month, 26 more patients will be admitted. It soon becomes obvious that the admission/disposition process elevates the required number of beds to 52.

To determine the number of beds required to fulfill the child and adolescent inpatient psychiatric demand, a similar calculation was made. The 102 day ALOS is equal to approximately 3.5 months. Using the figure of 14 adolescent patients admitted per month, multiplied by the ALOS (3.5 months) yields an estimated requirement of 49 beds (14 x 3.5).

As mentioned earlier, Bethesda Naval Hospital and Malcolm Grow Air Force Hospital are undergoing expansion and renovation projects which will increase the inpatient psychiatric bed capacity in the Washington, D.C. catchment area to 49. For this reason, it is

suggested that the proposed expansion projects will provide sufficient beds for adult psychiatric needs and that any future construction/expansion projects be dedicated to relieve the demand for adolescent psychiatric care. Furthermore, it is recommended that these services be consolidated at one medical treatment facility to optimize utilization of resources.

The Health Facility Planning Agency (HFPA) provided the researcher with a computerized planning guide used for facilities utilization and requirements studies (Figure C-5). The information contained in this guide indicates the number of rooms/spaces and net area required for a 28 bed psychiatric nursing unit. Two such wards are required to fulfill the estimated demand of 49 beds. Figure C-6 illustrates the calculations used to estimate the required square footage as well as the value of the proposed total construction request. The net area for one 28 bed ward is 8503 square feet. To obtain the total net area of the proposed two ward construction project, this figure is doubled to equal 17,006 ft. A conversion factor (1.67) is applied to the net footage to calculate the gross square feet as 28,400 ft. This conversion factor is approximated based on space required for categories such as mechanical (air conditioning ducts, crawl spaces, utilities closets, etc.), circulation (non-measurable type areas - corridors and areas not lobbies), walls and partitions, half areas (not totally enclosed - loading dock) and flexibility.

The earliest feasible time frame to budget and plan for the construction of such a facility is in fiscal year 1986, according to a HFPA representative. [20] The FY 86 construction cost per square

foot as estimated by the HFPA is $152.90.[21] This construction cost multiplied by the total gross square feet establishes the primary cost at $4,342,360. The primary cost is considered to be the basic construction cost, not including any other additional factors or expenses. The first additional expense is to provide for support facilities. This estimate accounts for items which are not considered a primary cost, but are necessary to the facility. Examples are water lines, sewage, electrical lines, utilities which extend beyond five feet from the building to the street. Parking, landscaping and sidewalks are also included in this category. A 20 percent factor is applied to the primary cost to yield an estimate of $868,472. As with most construction projects, unanticipated problems can cause fluctuations in the cost. In this construction estimate, a five percent (5%) factor is sufficient to compensate for these contingencies. This factor equates to 5% of the sum total of the primary and support facilities ($260,541). These three costs - primary, support facilities and the contingency factors comprise the total contract cost of $5,471,373. This is the dollar figure which the contractor actually receives as payment. Two additional costs must be incorporated into the final total request dollar figure - administration costs and category "E" equipment costs. The administration cost is the cost of the supervision of the contractors. This supervision responsibility is accomplished by the Army engineers. The administration cost is 5.5 percent of the total contract cost or $300,925. The category E equipment cost incorporates the Military Construction, Army (MCA) funded equipment. This includes installed equipment such as operating room lights and dental chairs. The

estimate used to obtain this figure is 7.5 percent of the primary cost for a total of $325,677. The sum of the total contract cost, administration cost, and category E equipment cost renders the total construction project request - $6,097,975.[22]

Once constructed the estimated expenses per day to operate these wards is determined by using the Army Health Services Command's average expenses per occupied bed day as shown in the Uniform Chart of Accounts FY 1983 Detail Unit Cost Comparison Report (Figure C-7). To allow for inflation, a factor of 10% is allowed per year. The FY 1986 daily cost per occupied bed day thus becomes $298.27 (Figure C-8).

To estimate the annual cost of providing care in the proposed expansion/construction 56 bed facility project, it is assumed that an average occupancy of 85% (48 beds) is maintained at an average cost per occupied bed day of $298.27. The following equation depicts the methodology used to determine the annual cost:

Number of Occupied Beds X FY 1986 cost per occupied bed day X 365 days per year = Annual Cost of Care

This equation yields a cost of $5,225,690.40 for fiscal year 1986.

COST OF CARE PROVIDED

As previously mentioned, five military medical facilities comprise the Washington, D.C. catchment area. Obtaining accurate cost figures for psychiatric care provided within this catchment area is difficult because of the methodology used in accounting for CNAs. CHAMPUS currently produces a Cost and Workload Report based on the five digit zip code of the beneficiaries' residence. This report accounts for care received within the catchment areas which are defined by the Military Health Service System (MHSS) Inpatient Catchment Area Directory. The Uniformed Services Medical Treatment Facility zip codes, as identified by the Catchment area directory, approximate a 40 mile radius within each catchment area. If an individual zip code falls within two separate catchment areas, and the two facilities are of the same branch of service, then that particular zip code will be assigned to only one of the facilities for reporting in this report. However, if that single zip code is contained in two facilities with different branches of service, the zip code will be assigned to both facilities creating an overlap condition in these reports.[23]

Since each of the three services (Army, Navy and Air Force) are represented in the Washington, D.C. catchment area, this overlapping condition presents a real problem. For instance, Walter Reed Army Medical Center and Bethesda Naval Medical Center are located approximately ten miles from each other. Figure D-1 illustrates that the respective facilities' 40 mile catchment area have zip codes common to both facilities. This brief scenario

emphasizes the problem. A beneficiary is issued a CNA from WRAMC and receives care from a provider located in zip code area 20074 (Washington, D.C.). This zip code is also located in the Bethesda catchment area. Subsequently, the total patient encounter cost would be counted in both the WRAMC and Bethesda cost reports. One can imagine the inflationary effect this has on the cost reports. Due to this problem, Blue Cross/Blue Shield of South Carolina, the fiscal intermediary for this area, was asked to provide cost data based on the number of claims submitted within the zip code catchment area for Washington, D.C. The cost data was not to be allocated to the specific military medical facilities issuing the CNAs, but rather the total dollar value of submitted claims was desired to eliminate this overlap condition. This will not incorporate double counting, but will provide for a more accurate and valid expense figure for the entire catchment area.

As stated in Chapter One, the specific information requested concerns the cost of inpatient psychiatric care rendered to CHAMPUS beneficiaries in the Washington, D.C. catchment area. Other information provided by this report was a listing of civilian facilities which provided inpatient psychiatric care, the ALOS, total charge to CHAMPUS per hospital encounter, and total amount allowed of charges paid tc facilities by CHAMPUS. The results can be found in figure D-2.

Before discussing these results, it is important to recognize the criteria and limitations cited by Ann Chapman. Ms. Chapman, is a Budget Analyst for CHAMPUS Utilization and Review Division, Blue

Cross/Blue Shield of South Carolina.

The considerations are listed below:

1. The facilities must provide psychiatric services on an inpatient basis.

2. The facilities were located based on zip codes:

20000 - 20013

20015 - 20020

20022 - 20024

20028, 20031, 20032, 20036, 20037, 20044, 20052, 20057, 20060, 20064, 20324

3. a. The services included those diagnosis codes 2900.0 - 3199 as listed in "The International Classification of Procedures in Medicine."

b. The dollar amounts include adjustments submitted to the original claim at a later date so that a minimal amount of overlap is included.

c. The professional component was not included in the cost report, however, the allowable charges do include ancillary services, room and medication charges.

d. Some institutions in the designated area were not included because they did not offer psychiatric services on an inpatient basis.

4. The number of patients were counted using the sponsor's social security number. This method presents two problems: a) If the sponsor's family had more than one beneficiary hospitalized in the same facility at the same time, then the visit is counted as one instead of two. The computer cannot distinguish between the family

members because only the sponsor's social security number is shown. b) If the beneficiary was in more than one facility during a certain time frame, then the individual is counted for each visit.

5. The number of days is calculated on the number of room charges submitted using the codes 59800, 59801, 59802, 59803, 59805 (i.e., private room, ward, semi-private room, etc).

The information provided by Blue Cross revealed that ten medical facilities in the Washington, D.C. area provided inpatient psychiatric care to CHAMPUS beneficiaries in calendar year 1983. They are listed in descending order in terms of CHAMPUS reimbursement costs.

1. Psychiatric Institute of Washington, D.C.
2. Childrens' Hospital
3. Providence Hospital
4. Washington Hospital Center
5. Greater South Eastern Community Hospital
6. George Washington University Hospital
7. Sibley Memorial Hospital
8. St. Elizabeth's Hospital
9. Georgetown University Hospital
10. D.C. General Hospital

It is very clear that the Psychiatric Institute of Washington, D.C. is the most frequently used facility by CHAMPUS beneficiaries. 223 patients were hospitalized for a total of 17,408 days, costing CHAMPUS $6,040,158.46. One should note the difference in the dollar values in Columns C and D of Figure D-2. According to Mr. Joe Rhame, Manager, CHAMPUS Field Service, Mid-Atlantic Region, Blue

Cross/Blue Shield of South Carolina, the difference in the charges versus the allowable reimbursable charges may be due to many factors determined on a case by case basis. However, the main factor is that CHAMPUS is not a primary insurance. In other words, a beneficiary insured by a commercial insurance company, such as Prudential, would submit a claim for the medical bill to Prudential first. Subsequently, the bill is submitted to CHAMPUS for the remaining allowable payment. As an example, the claim submitted from D.C. General Hospital in Figure D-2, indicates that the beneficiary did not possess additional health insurance, as CHAMPUS paid for the entire bill. However, there exists a $18,326.70 discrepancy between charges made to CHAMPUS by Sibley Memorial Hospital and the amount CHAMPUS paid for the two patients hospitalized. This could be due to the insurance issue or else their LOS exceeded the stated CHAMPUS benefits.

As mentioned earlier, the professional component was not included in the CHAMPUS cost figures. CHAMPUS will pay for one hour of psychotherapy per day per inpatient beneficiary up to five days per week. Using $60 per hour as an average cost for a psychotherapy session, multiplied by the five sessions allowed per week, yields a $300 cost estimate per week for the professional component per beneficiary.[24] Figure D-3 illustrates the methodology used to produce an estimated cost for the entire year. The total number of days (19,356) is divided by seven to obtain the number of weeks in which beneficiaries were hospitalized - 2765.14 weeks. This figure is multiplied by the cost estimate per week for the professional component to yield a yearly cost estimate for professional care of $829,542 (2765.14 weeks X $300/week). Recalculating using these figures, this expense increases the average allowable charge/day and

average charge/day by $42.85 to $305.95 and $349.85, respectively. This number was obtained by dividing the weekly professional component cost by 7 days per week (300 ÷ 7) equalling the $42.85 extra charge per day. The dollar value of the amount allowed of charges to CHAMPUS is increased by the professional component, $829,542, for a total of $7,250,458.60.

Comparing this figure to the total all care government cost for total psychiatry figure obtained from the CHAMPUS Inpatient Care in the Catchment Area report for Kimbrough AH, DeWitt AH, Bethesda Naval Medical Center, Malcolm Grow Medical Center and Walter Reed Army Medical Center, a substantial difference is seen (Figure D-4). The total value of care paid for by the government as stated in the reports found in Appendix E equals $16,993,468 versus the $7,250,458 as furnished by Blue Cross/Blue Shield of South Carolina. It must be noted that the $16 million figure does include other types of psychiatric treatment such as alcoholism and drug dependence which is not included in the Blue Cross figures. However, it is hard to overlook the enormous discrepancy of $9,743,010 in the reports. This is an indication of the inflationary effect of the overlapping accounting system used by CHAMPUS. One can only wonder what this value would expand to if the entire Continental United States (CONUS) area was scrutinized.

In the previous section, which discussed facility size determination, it was determined that with the completion of the proposed projects at Malcolm Grow Medical Center and Bethesda Naval

Medical Center, an additional 49 beds would be available for psychiatric patients.

These projects are estimated to provide sufficient beds for adult psychiatric needs. Therefore, to determine cost extimates for the remaining inpatient psychiatric care in future years, the demand for child and adolescent care will be addressed. The estimated number of CNAs issued per month equals 14.

Obtaining the estimated cost of having these services provided from a civilian facility is accomplished by the following formula:

Avg $ Allowed of Charges/Day x ALOS X Projected Number of CNA

The average $ amount allowed of charges/day was provided by Blue Cross/Blue Shield of South Carolina and calculated earlier to be $305.97. The average length of stay used in the equation was 102 days. The number of CNAs is 14.

Figure D-5 depicts the process utilized to compute the final FY 1986 cost estimate for obtaining care from civilian institutions based on the established demand for child and adolescent inpatient psychiatric care. The previously mentioned equation yields a figure of $436,925.16 which represents the cost for the first month of admissions. It should be noted that the ALOS is approximated as 3 months. This number is multiplied by 10 months representing the admissions from October thru July. Only in these 10 months will the patients admitted remain in the hospital and be discharged before the end of the fiscal year - 30 September. This 10 month calculation is $4,369,251.60. To account for the care rendered in the remaining two months (equivalent to three months of care -

August, September and then the September admissions) the $436,925.16 is utilized as it represents the estimated cost of care for a three month length of stay for 14 patients. The sum total of these figures approximate the cost to CHAMPUS using the present system for FY 1984.

To project the expense for FY 1985, 110% (using a 10% inflation factor) is multiplied by the FY 1984 expense to equal $5,767,412.10. The same process yields an estimated FY 1986 expense of $6,344,153.30.

COST OF CONTRACTING

To determine the cost to the government for contracting inpatient psychiatric services, a representative of the Health Care Financing Administration (HCFA) was contacted to determine the allowable Medicare reimbursement rate for short term inpatient care. Mr. Riesel, Office of Systems Data Management, HCFA, stated that psychiatric care was not incorporated into the prospective pricing system, therefore, hospitals continue to be reimbursed on the basis of reasonable charges.

Mr. Riesel queried his colleagues concerning the subject and responded that the best estimate would be to use the Blue Cross/Blue Shield cost data. He added that Blue Cross/Blue Shield acted as the fiscal intermediary for the government in many regions and would be a reliable source of information. To determine the average government cost per day for inpatient psychiatric care in the Washington, D.C. catchment area, an OCHAMPUS generated report was utilized. Essentially, this information equates the Blue Cross/Blue Shield rates. As mentioned earlier, Blue Cross/Blue Shield of South Carolina is the fiscal intermediary for the Washington, D.C. area and provides information to CHAMPUS which is then used to compile their reports.

The CHAMPUS Inpatient Care in the Catchment Area Reports for: Kimbrough AH; DeWitt AH; Bethesda Naval Medical Center; Malcolm Grow Medical Center; and Walter Reed Army Medical Center were used (Figure E-1). This report divides the costs into Emergency Care,

Non-Emergency Care and Total All Care for Psychiatry Groups I and II. This analysis will only use the cost figures as shown for total All Care/Total Psychiatry. These figures were averaged to produce an average government cost per day of $324 (Figure E-2).

Obtaining the estimated cost of contracting services from a civilian facility is accomplished by the following formula:

Average Cost to Government/Day	X	Average Length of Stay	X	Projected Number of CNAs
($324)		(102)		(14)

The average length of stay (ALOS) used in this equation is 102 days. This figure was obtained from data received from the ten top catchment areas for behavior disorders of childhood (Figure C-1).[25] It was determined earlier in this paper that adolescent care was the primary area of concern in Washington, D.C. in regards to cost because of the long ALOS, high numbers of beneficiaries requiring care, and the lack of military facilities available to date. The projected number of CNAs per month has been established as 14. (See Page 20).

Figure E-3 depicts the process utilized to compute the final FY 1986 cost estimate for contracting the established demand for child and adolescent inpatient psychiatric care. The previously mentioned equation yields a figure of $462,672 which represents the cost for the first month of admissions. It should be noted that the ALOS is 102 day or approximately three months. This number is multiplied by ten months prepresenting the admissions from October thru July.

Only in these ten months will the patients admitted remain in the hospital and be discharged before the end of the fiscal year - 30 September. This ten month calculation is $4,626,720. To account for the care rendered in the remaining two months (equivalent to three months of care - August, September, and then September admissions) the $462,672 is utilized as it represents the estimated cost of care for a three month length of stay for 14 patients. The sum total of these figures approximate the cost of contracting this care for FY 1984.

To project the expense for FY 1985, 110% (adding a 10% inflation factor) is multiplied by the FY 1984 expense of $6,107,270.40. The same process is used to estimate the FY 1986 expense except the FY 1985 expense is used. The FY 1986 projected expense for contracting the state care approximates $6,717,997.40.

Nonquantifiable Considerations

In choosing among several alternatives, the quantifiable factors such as costs and expenses assist the decisionmakers' task. However, in the situation discussed throughout this paper, other factors must be considered to insure the most appropriate choice is made. Quantifiable factors do not address issues such as the quality of care provided, beneficiary satisfaction, military readiness in terms of having adequately trained psychiatric staff on hand in the case of war, and lastly, the long range adequacy of care.

The quality of care issue has long been discussed in the health care arena. Other fields can increase costs and justify more output per input such as a textile manufacturer. If money is invested in a new, high technology piece of equipment, greater efficiency and higher productivity is seen. The manufacturer is becoming more efficient. In the health care arena, money is steadily being used by facilities to increase the quality of equipment, and improve the knowledge and training of professionals yet one must ask what are the returns on the investments. Psychiatric care is a prime example. More and more dollars are being paid by CHAMPUS for its beneficiaries, yet the numbers of beneficiaries treated are decreasing (Figure E-1)[26]. As the reimbursement rules change on the length of stay that will be paid for by CHAMPUS, so does the manner in which hospitals manage patients. For instance, presently CHAMPUS allows a beneficiary 60 days/year of inpatient psychiatric care with provisions for extended care as determined on a case by

case basis.[27] Civilian medical facilities are feeling the economic pressure of the new prospective payment system and must do whatever possible to insure that patients are monitored so that they can reap the maximum benefits of reimbursement. As an example, imagine a beneficiary with little or no insurance, who has been admitted as an inpatient at a civilian facility for psychiatric care. This individual is quickly approaching the termination of his/her CHAMPUS benefits. The hospital can only attempt to collect money from the patient because all the other insurances have been exhausted. Chances are the facility will discharge the patient prematurely based on the patient's monetary situation and not on a medical decision. This is only one aspect of the quality of care issue. Military facilities are not placed in this predicament and should therefore allow for the completion of treatment. If it appears that the patient will require long term care, the patient is treated by the Veterans Administration. Additionally. a military facility is more sensitive to the patient's background (moving frequently, military environment, etc.) and can make adjustments in treatment accordingly. A patient tends to be followed rather closely in the military system through the efforts of the Community Mental Health Service, Social Work Service, and the various military programs such as Family Advocacy and the Handicapped Children Program. When a family is relocated and problems still exist or have the potential to occur, the receiving station is notified of the situation as a flag.

COL Nicholas Rock, a former psychiatric consultant to the Army Surgeon General, discussed the psychiatric shortages within the Army in a Memorandum For the Surgeon General. COL Rock states that shortages in Psychiatry (60W) and Child Psychiatry (60U) are critical in both active duty and reserve forces. This shortfall of psychiatrists is affecting peacetime programs. A large percentage of CHAMPUS costs are high because of psychiatric needs and due to a lack of staff at various posts.[28] Additionally, COL Rock stresses that mobilization tasks will be difficult to meet with current staff. Civilian psychiatrists are trained in a non-military mode and cannot be counted on to fill the needs in the field.[29]

These sentiments were re-emphasized by the present Army psychiatric consultant, COL Jon Shaw, in a memorandum to the Surgeon General. "The Army Medical Department Career Activities Office (AMEDD/CAO) has to address the disproportionately small numbers of psychiatrists allocated to its Mental Health Programs. Currently, the AMEDD/CAO has recommended that 202 of the 5194 physician ceiling be psychiatrists. This represents only 3.9% of the AMEDD physician strength. This is clearly below the 217 minimal essential figure and the 250 reasonable goal established by the Consultant in Psychiatry to the OTSC. The Graduate Medical Education National Advisory Committee (GMENAC) has suggested that 10% of physician strength be represented by psychiatrists".[30]

These intangible factors are extremely important in the decision making process especially when one considers the uniqueness of the military mission.

Comparison of the Alternatives

The first alternative, issue CNAs as presently being accomplished, clearly is not an alternative of choice. In Chapter One, the point was clearly established that the present system was too expensive and not optimizing the less costly military treatment facilities. The cost estimate to provide care discussed earlier projected the FY 1986 cost to CHAMPUS to be $6,344,153. This estimate is greater than the cost of providing the same care "in house". The long range adequacy of keeping the present system is totally inadequate. The problem has been identified and keeping things the same is basically ignoring the situation. Criteria #3, which is to incorporate the solution in a reasonable time frame, is nonapplicable to this alternative. The benefits and quality of care are maintained at the same standards.

The second alternative, contract the services, is the most costly of the three alternatives. The FY1986 cost estimate for contracting care was calculated to be $6,717,997. It is recognized that this cost would fluctuate a great deal based upon the completeness of the contract and the institutions involved. This alternative does attempt to address long range plans by putting in writing what services will be provided, by whom, for what cost, and how all this will be administered. Contracting services for pre-paid medical care have certain legal implications which are discussed in a memorandum submitted by Mr. Frank A. Bartino, Assistant General Counsel (Manpower, Reserve Affairs and Environment) (Figure F-1). It appears that such a contract would pose no legal problems and would not be prohibited under the medical and dental

care provisions of the United States Code (10 U.S.C. § 1071-85).[31] Finally, the quality of care and benefits would remain essentially the same except the beneficiary would no longer have the freedom to choose the institution which provides care.

The final alternative, expand existing facilities, requires a one time construction cost of $6,097,975. This would expand the existing capabilities by two 28 bed wards. To operate this facility for one year period of time, based on FY 1986 cost figures, will cost approximately $5,225,690. When evaluating the cost of the two other options in regards to this construction option, it is seen that the estimate for providing care as presently being accomplished is $1,118,463 greater or $6,344,153. This difference in expenses illustrates that the one time construction cost would be repaid in approximately 5.5 years ($6,097,975÷$1,118,463). Likewise, the second option, to contract the services, would cost the government an estimated $6,171,997 (in FY 1986). This is $1,492,307 more than the cost of providing care "in house". Using these figures, the construction project would be repaid in 4.1 years ($6,097,975÷$1,492,307).

One must recognize that the option to expand existing facilities will not totally reduce CHAMPUS expenses for psychiatric care. The care is divided into two categories: emergency and non-emergency care. Emergency care which comprises approximately 16% of the total number of claims submitted, is very hard to recapture as the individual is admitted to the nearest medical

facility providing inpatient psychiatric care (Figure E-1). Non-emergency care is managable because the individual is identified at a military medical facility and a CNA is required for the beneficiary to seek care in a civilian facility.

This alternative does address a long range plan to reduce CHAMPUS costs and keep as many beneficiaries in the military system as possible. The probability of completing such a project in 2-3 years is low. However, the planning phase could be completed in approximately two years with construction process adding an additional one and a half years. This entire process might be completed within three and a half years using optimistic figures.[32] The quality of care and benefits will remain consistent with the existing system. Finally, the plan is not in contravention with DOD/CHAMPUS regulations.

FOOTNOTES

[1]Interview with LTC Robert Miller, Chief, Inpatient Psychiatry, Walter Reed Army Medical Center, Washington, D.C., February 1984.

[2]Ibid.

[3]Interview with MAJ Robert Whittaker, Charge Nurse, Inpatient Psychiatric Ward, Malcolm Grow Medical Center, Andrews Air Force Base, MD, March 1984.

[4]Interview with LCDR John Madison, Chief, Inpatient Psychiatry Bethesda Naval Medical Center, Maryland, March 1984.

[5]Ibid

[6]Interview with LTC Jack Kehoe, Chief, Community Mental Health Service, Kimbrough Army Hospital, Ft. Meade, Maryland, March 1984.

[7]Interview with COL Clyde Flanagan, Chief, Community Mental Health Service, DeWitt Army Hospital, Ft. Belvoir, VA, March 1984.

[8]Miller, February 1984.

[9]Whittaker, March 1984.

[10]Madison, March 1984.

[11]Memorandum for the Surgeon General, Subject: Policy Considerations for the Recapture of Inpatient CHAMPUS Psychiatric Costs, COL Jon A. Shaw, Undated 1984, Enclosure 2.

[12]Telephone conversation with LTC Arthur Badgett, Health Care Administration Division, Academy of Health Sciences, Ft. Sam Houston, Texas, April 1984.

[13]Ibid.

[14]Ibid.

[15]OCHAMPUS, Information Systems Division, Statistics Branch, Subject: Top Five Psychiatric Diagnoses for Inpatient Care Provided Under CHAMPUS in the Ten High-Cost Catchment Areas Combined in FY 1983, February 1984.

[16]Item, Subject: Top Ten Psychiatric High-Cost Areas Ranked by Average Length of Stay under CHAMPUS Inside Catchment Areas in FY 1983. February 1984.

[17]Memorandum for the Surgeon General, COL Jon A. Shaw, P3.

[18]OCHAMPUS, Information Systems Division, Statistics Branch, Subject: Percent of Hospital days for Inpatient Psychiatric Care Provided Under Champus Inside Catchment Areas in FY 1983, February 1984.

[19]Idem, Subject: Top Five Psychiatric Diagnoses for Inpatient Care Provided Under CHAMPUS in the Ten High-Cost Catchment Areas Combined in FY 1983.

[20]Interview with Edward Blodget, Space Programmer, Health Facility Planning Agency, Army Office of the Surgeon General, May 1983.

[21]Ibid.

[22]Ibid.

[23]OCHAMPUS, User's Guide for the CHAMPUS Cost and Workload Report, June 1983, P. 1.

[24]Interview with Joe Rhame, Manager, CHAMPUS Field Service, Mid-Atlantic Region, Blue Cross/Blue Shield of South Carolina, May 1984.

[25]OCHAMPUS, Subject: Top Five Psychiatric Diagnoses for Inpatient Care Provided Under CHAMPUS in the Ten High-Cost Catchment Areas Combined in FY 1983.

[26]OCHAMPUS Reports, Subject: CHAMPUS Inpatient Care in the Catchment Area for - DeWitt AH, Kimbrough AH, WRAMC, Bethesda Naval Hospital and Malcolm Grow Medical Center, 24 Oct 1983.

[27]Rhame, May 1984.

[28]Memorandum for the Surgeon General, Subject: Psychiatry and Child Psychiatry Shortages, COL Nicholas Rock, Undated 1982, p.1.

[29]Idem, Subject: Psychiatric Shortages, Undated 1982, p.1.

[30]Memorandum for the Surgeon General, COL Jon A. Shaw, p.2

[31]Memorandum for the Deputy Assistant Secretary of Defense (Health Resources and Programs), OASD (H and E), Subject: Prepaid Health Care Plan., Frank A. Bartimo, Assistant General Counsel, February 22, 1974.

[32]Interview with MAJ Terry Muldoon, Program and Analysis Branch, Health Facility Planning Agency, Army Office of the Surgeon General, May 1984.

CHAPTER III

Conclusion

The most cost effective method of providing for short term inpatient psychiatric care to CHAMPUS beneficiaries in the Washington, D.C. catchment area is to expand existing military capabilities by constructing two additional 28 bed wards. This decision is heavily based on the reduced cost to provide care and the short pay-back time for the cost of the construction of the facility. All the criteria were met with the exception of criteria #3 (incorporated in a reasonable time frame), however, this alternative's long range cost savings merits strong consideration.

Expanding existing facilities in order to provide psychiatric care "in house" is consistant with the nonquantifiable considerations such as quality of care and military readiness. Each nonquantifiable consideration would be enhanced and improvements realized by implementing this option. The military services could provide concerned quality care while maintaining military readiness by increasing the capacity and capabilities of the psychiatric services offered to the beneficiaries.

APPENDIX A

Utilization of Military Inpatient Psychiatric Facilities

TABLE II
FY 83
Utilization
of Military
Inpatient Psychiatric Facilities

	No. Beds Psychiatric Unit	Average Daily Occupancy	% Utilization	Est Psych Bed Capability based on current psychiatric Nursing TDA & Psych Nursing Staffing Guideline (Table 557-82:31)
WRAMC	131	97	74%	130
DDEAMC	95	67	71%	76
LAMC	51	25	49%	36
TAMC	64	48	75%	74
FAMC	46	25	54%	22
BAMC	47	20	43%	42
WBAMC	23	14	60%	25
MAMC	25	14	56%	20
Benning	25	10	40%	10
Bragg	26	6	23%	12
Campbell	20	9	45%	10
Dix	12	7	58%	12
Hood	38	18	47%	15
Jackson	28	14	50%	10
Knox	15	6	40%	10
L. Wood	14	7	50%	10
Ord	24	13	54%	10
Polk	16	6	38%	10
Riley	14	5	36%	10
TOTAL	714	411	58%	

Figure A-1

APPENDIX B

Certificate of Nonavailability Analysis

Inpatient Psychiatric Certificates of Nonavailability, FY 1982-1983
Washington, D.C. Catchment Area

TIME	WRAMC	Bethesda Naval	Malcolm Grow Andrews AFB	DeWitt AH Ft Belvoir	Kimbrough AH Ft Meade
Oct 81	7	2	9	7	6
Nov 81	5	7	7	6	6
Dec 81	5	3	13	6	5
Jan 82	14	3	11	6	5
Feb 82	13	5	19	9	5
Mar 82	11	7	11	8	8
Apr 82	8	8	20	6	6
May 82	15	2	22	13	1
Jun 82	18	0	20	7	9
Jul 82	8	2	12	10	2
Aug 82	9	3	16	8	4
Sep 82	10	9	10	7	1
Oct 82	12	3	7	10	7
Nov 82	7	1	13	5	4
Dec 82	9	3	9	4	3
Jan 83	9	2	15	7	8
Feb 83	4	1	9	7	9
Mar 83	8	1	16	3	9
Apr 83	6	4	13	5	4
May 83	12	5	18	6	2
Jun 83	7	0	16	2	6
Jul 83	14	2	10	13	5
Aug 83	9	1	12	14	7
Sep 83	14	2	15	15	5
Totals	246	76	325	184	127

Figure B-1

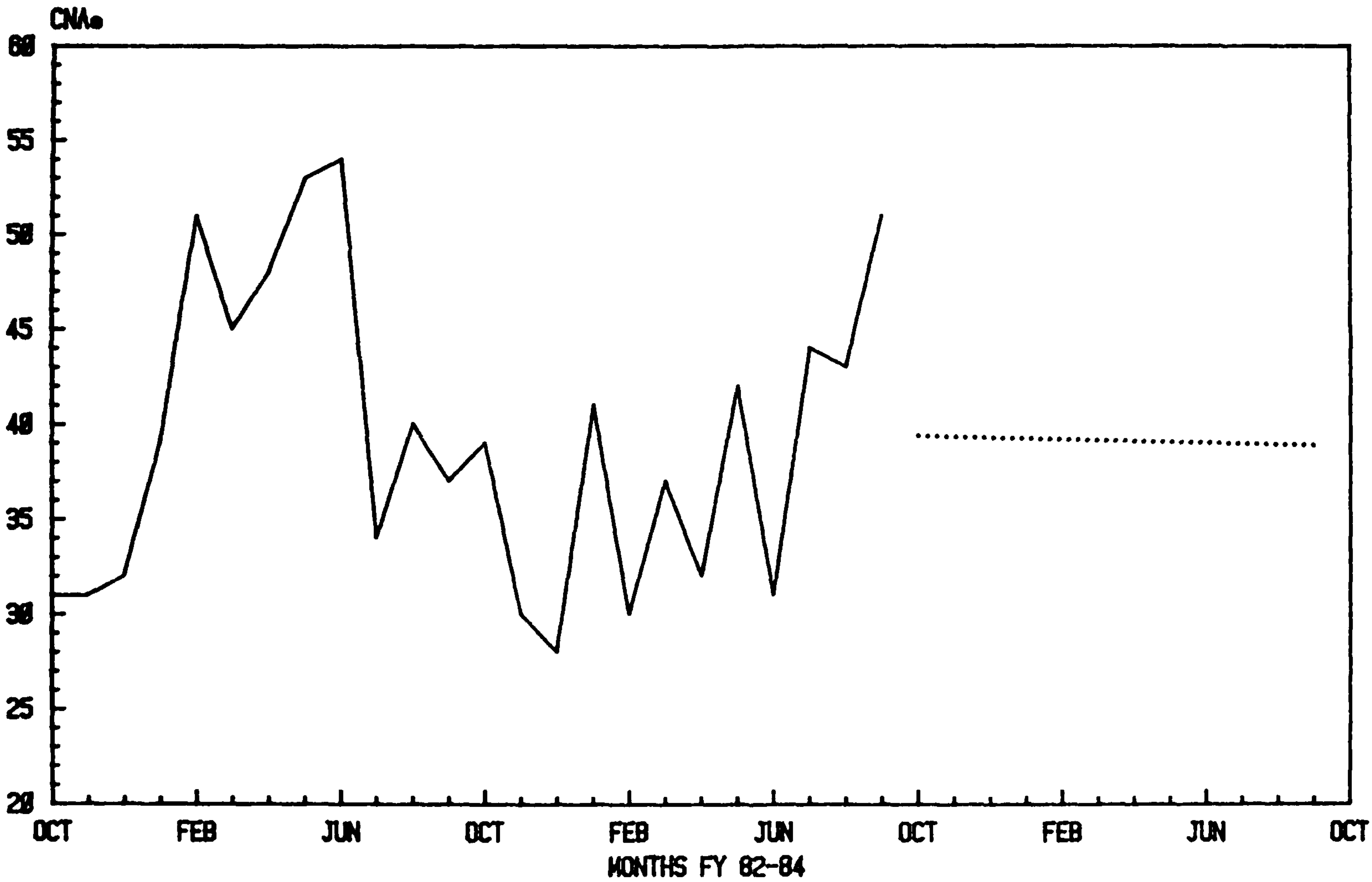


Figure B-2

Regression Analysis of CNAs

Month					Deseasonalized Values		Seasonalized Values	Deseasonalized Values		Seasonalized Values
OCT 81	31	N= 24	40.388	-9.638	OCT=	39.346	39.667	APR=	39.086	44.999
NOV 81	31	X MEAN= 12.5	40.344	-1.535	95% CI=	362.90		95%CI=	402.55	
DEC 81	32	Y MEAN= 39.889	40.301	.99814	UP LIM=	402.25	405.52	UP LIM=	441.63	508.44
JAN 82	39	Sxx= 1150	40.257	-6.400	LW LIM=	-323.6	-326.2	LW LIM=	-363.5	-418.4
FEB 82	51	Syy= 1566.8	40.214	21.218	NOV=	39.303	31.394	MAY=	39.042	49.285
MAR 82	45	Sxy= -49.90	40.171	4.6430	95% CI=	369.80		95%CI=	408.78	
APR 82	48	B est= -.0434	40.127	1.5656	UP LIM=	409.11	326.79	UP LIM=	447.82	565.31
MAY 82	53	A est= 40.431	40.084	1.9014	LW LIM=	-330.5	-264.0	LW LIM=	-369.7	-466.7
JUN 82	54	Y est="A+BX"	40.040	1.7359	DEC=	39.259	30.420	JUN=	38.999	50.410
JUL 82	34	R sqr= .00138	39.997	1.6958	95% CI=	376.58		95%CI=	414.92	
AUG 82	40	T.95,23 2.074	39.954	.94543	UP LIM=	415.84	322.21	UP LIM=	453.92	586.73
SEP 82	37	Sy/x= 71.118	39.910	-.2227	LW LIM=	-337.3	-261.4	LW LIM=	-375.9	-485.9
OCT 82	39	T.Sy/x= 147.50	39.867	-1.182	JAN=	39.216	45.173	JUL=	38.956	31.768
NOV 82	30		39.824	-2.266	95%CI=	383.24		95%CI=	420.97	
DEC 82	28		39.780	-3.644	UP LIM=	422.45	486.62	UP LIM=	459.93	375.06
JAN 83	41		39.737	-4.143	LW LIM=	-344.0	-396.3	LW LIM=	-382.0	-311.5
FEB 83	30		39.693	-3.557	FEB=	39.173	32.520	AUG=	38.912	38.057
MAR 83	37		39.650	-2.803	95%CI=	389.78		95%CI=	426.94	
APR 83	32		39.607	-11.81	UP LIM=	428.95	356.11	UP LIM=	465.85	455.61
MAY 83	42		39.563	-6.292	LW LIM=	-350.6	-291.1	LW LIM=	-388.0	-379.5
JUN 83	31		39.520	-15.54	MAR=	39.129	39.292	SEP=	38.869	36.237
JUL 83	44		39.476	14.479	95%CI=	396.21		95%CI=	432.82	
AUG 83	43		39.433	4.5336	UP LIM=	435.34	437.15	UP LIM=	471.69	439.74
SEP 83	51		39.390	15.315	LW LIM=	-357.1	-358.6	LW LIM=	-393.9	-367.3
			Y-Yest=	9E-10						

Figure B-3

APPENDIX C

Facility Construction Data

TOP FIVE PSYCHIATRIC DIAGNOSES FOR INPATIENT CARE PROVIDED UNDER CHAMPUS IN THE TEN HIGH-COST CATCHMENT AREAS COMBINED IN FY 1983

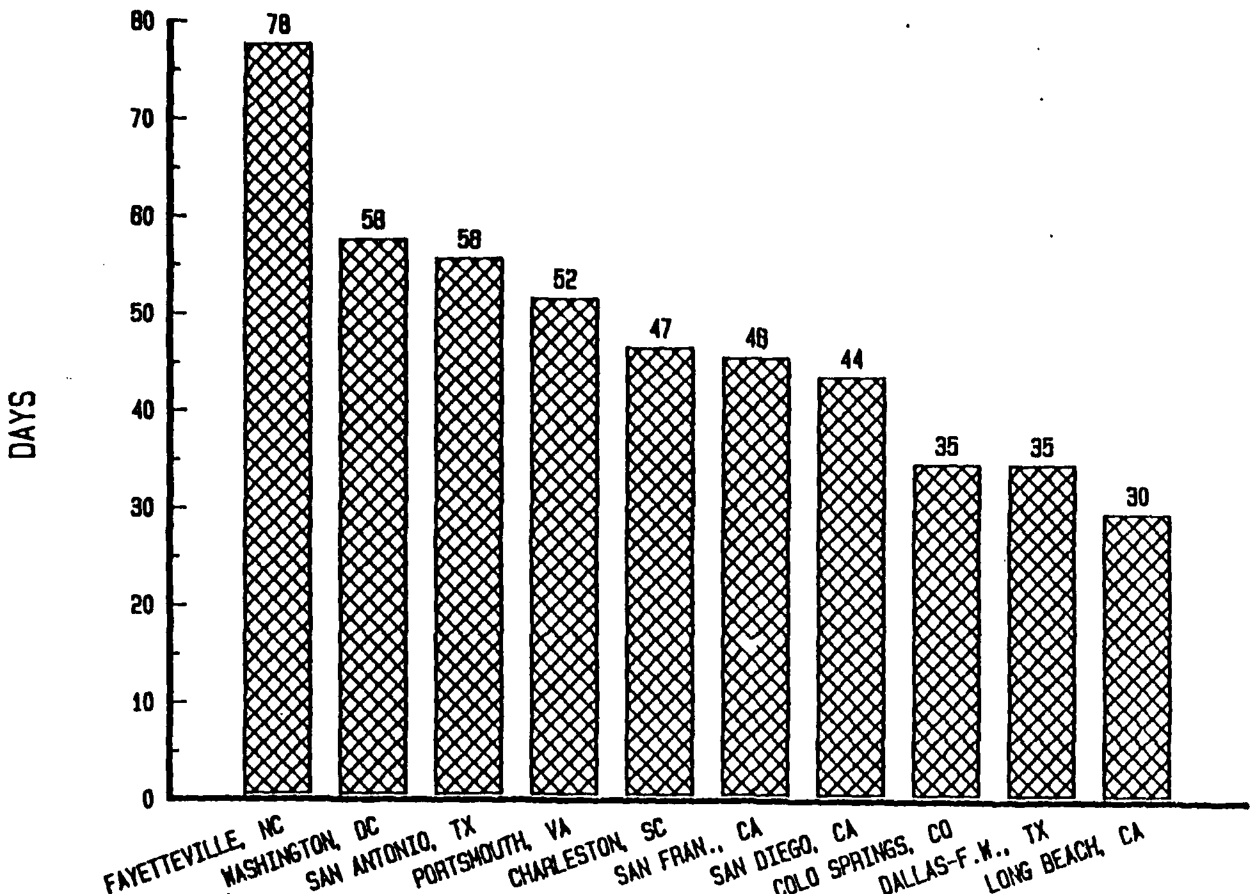
DIAGNOSIS	GOVERNMENT COST	AVERAGE GOVERNMENT COST / ADMISSION	AVERAGE LENGTH OF STAY (DAYS)
1. BEHAVIOR DISORDERS OF CHILDHOOD	$17,023,283	$28,563	102.4
2. NEUROSES	15,987,838	$14,521	47.3
3. AFFECTIVE PSYCHOSES	11,710,751	$11,326	33.8
4. SCHIZOPHRENIA	7,790,028	$12,667	46.6
5. TRANSIENT SITUATIONAL DISTURBANCES	4,858,352	$14,164	67.8
TOTAL TOP FIVE DIAGNOSES	$57,370,252	$15,552	54.2
TOTAL ALL HIGH-COST PSYCHIATRIC AREAS	$67,015,314	$13,360	47.6
TOP FIVE AS A PERCENT OF TOTAL ALL HIGH-COST PSYCHIATRIC AREAS	85.6%	–	–

NOTE: DATA BASED ON 5-DIGIT ZIP CODE OF BENEFICIARY RESIDENCE

OCHAMPUS
INFORMATION SYSTEMS DIVISION
STATISTICS BRANCH
FEBRUARY 1984

Figure C-1

TOP TEN PSYCHIATRIC HIGH-COST AREAS RANKED BY AVERAGE LENGTH OF STAY UNDER CHAMPUS INSIDE CATCHMENT AREAS IN FY 1983

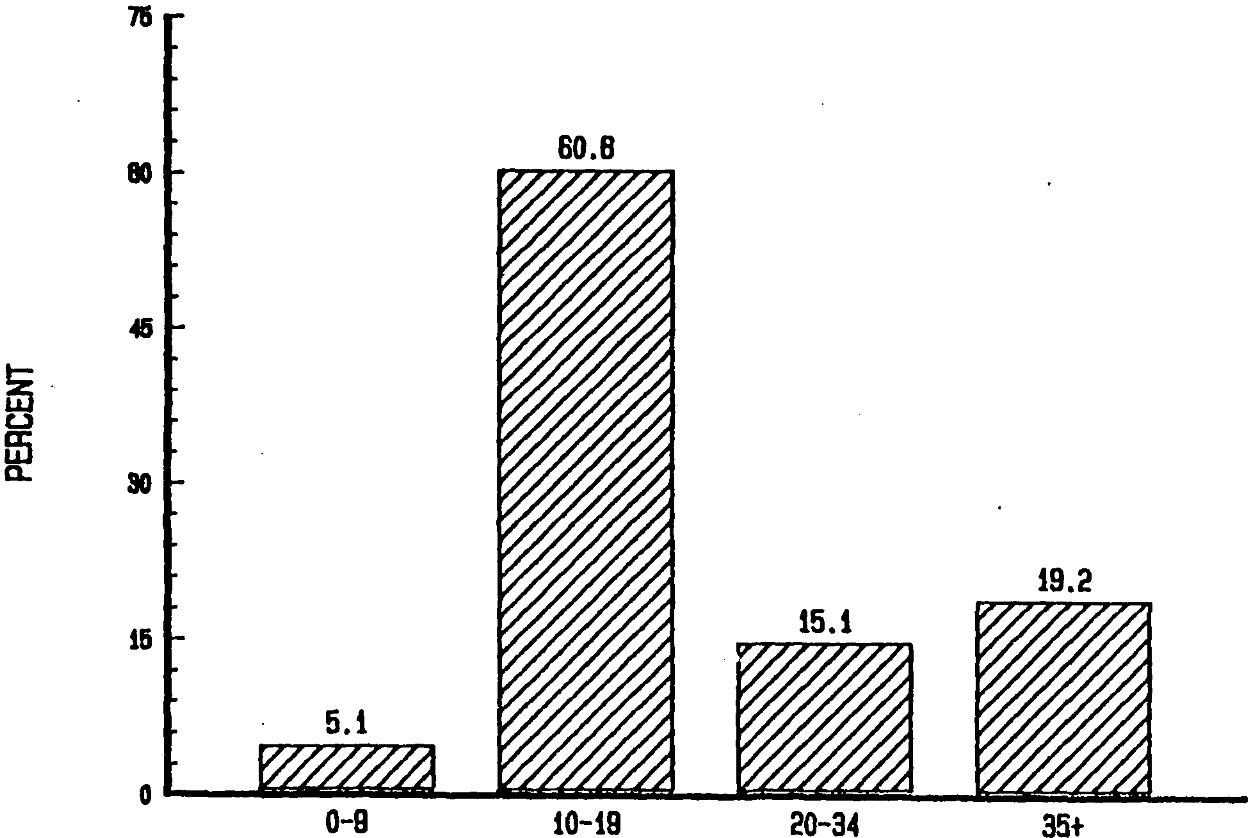


BASED ON 5-DIGIT ZIP CODE
OF BENEFICIARY RESIDENCE

OCHAMPUS
INFORMATION SYSTEMS DIVISION
STATISTICS BRANCH
FEBRUARY 1984

Figure C-2

PERCENT OF HOSPITAL DAYS FOR INPATIENT PSYCHIATRIC CARE PROVIDED UNDER CHAMPUS INSIDE CATCHMENT AREAS IN FY 1983



BY AGE GROUP
BASED ON 5-DIGIT ZIP CODE
OF BENEFICIARY RESIDENCE

OCHAMPUS
INFORMATION SYSTEMS DIVISION
STATISTICS BRANCH
FEBRUARY 1984

Figure C-3

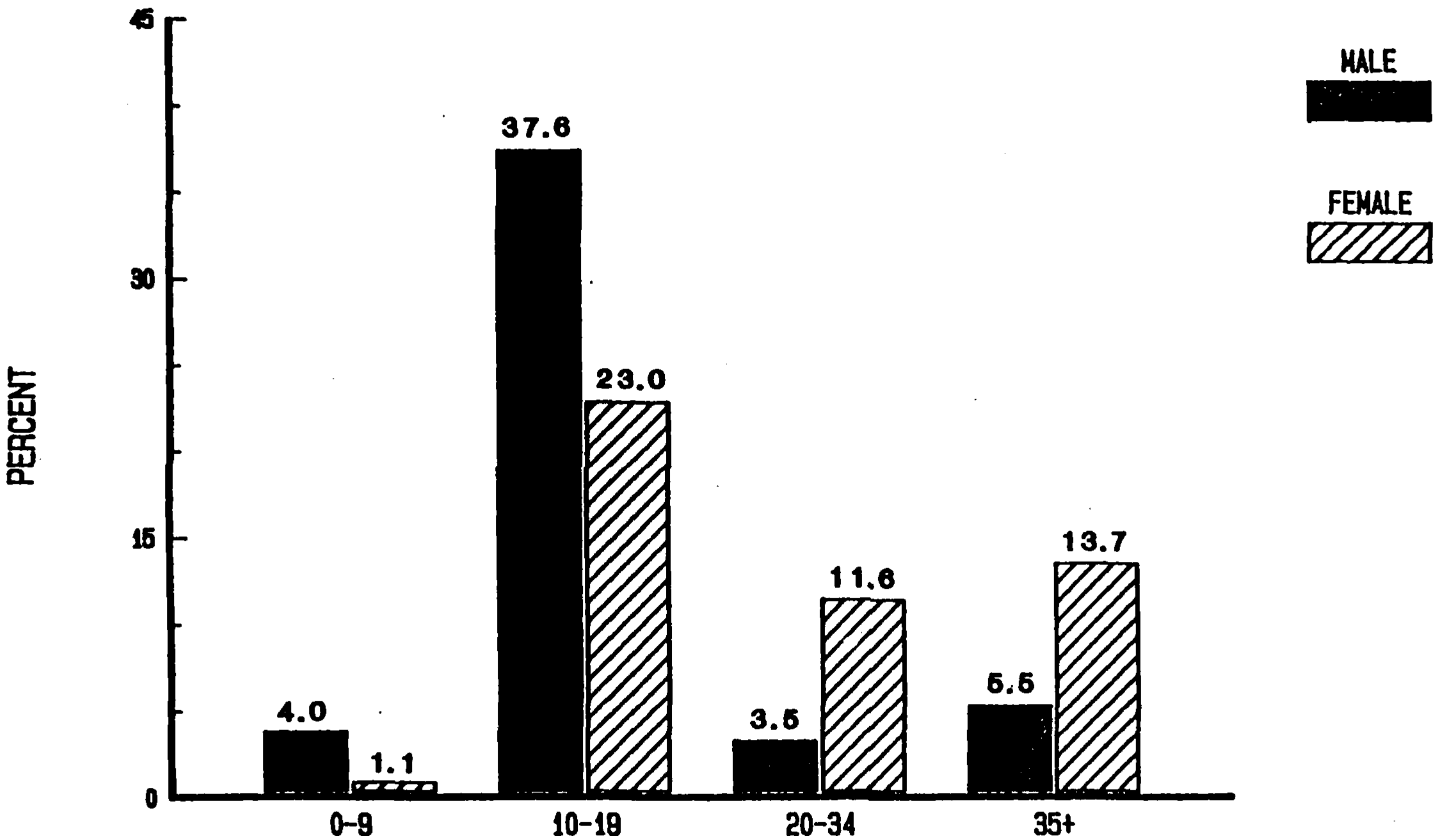


Figure C-4

790000 PSYCH NURSING UNIT

791100 PSYCH NURSING UNIT 1

Code	Room	Description	NO OF SPACES	UNIT AREA	NET AREA	GNR	GROSS AREA	# OF PERS	REMARKS
791101	WWWWW	COMMENT (SEE REMARKS)	1	0	0			0	
791102	PNBR4	FOUR BED ROOM	5	440	2200			0	
791103	PNPT4	TOILET/SHWR/LAV: 4 BR	5	65	325			0	
791105	PNBR2	TWO BED ROOM	3	245	735			0	
791107	PNPT2	TOILET/SHWR/LAV: 2 BR	3	50	150			0	
791113	PNIR1	SECLUSION ROOM	2	100	200			0	
791115	PNIT1	TOILET/LAV/SHWR: SECL	2	50	100			0	
791117	PNIA1	ANTEROOM W/LAV: SECL	2	50	100			0	
791119	HM000	NURSE SERVERS	28	6	168			0	
791121	NUTR1	TUB ROOM	1	100	100			0	
791125	XXXXX	CLOTHING WARDROBE	28	5	140			0	
791100		PSYCH NURSING UNIT 1	80		4218			0	

791300 TEAM CENTER, PSYCH

Code	Room	Description	NO OF SPACES	UNIT AREA	NET AREA	GNR	GROSS AREA	# OF PERS	REMARKS
791301	NUTC1	NURSING TEAM CENTER	1	150	150			0	
791303	NUCC1	CRASH CART ALCOVE	1	25	25			0	
791305	NUWR1	WORKROOM/CHARTING	1	150	150			0	
791307	MEDPR	MEDICATION PREP	1	90	90			0	
791309	T0110	STAFF TOILET	1	30	30			0	

Figure C-5

791700 OFFICES/CONFERENCE

			NO OF SPACES	UNIT AREA	NET AREA	GNR	GROSS AREA	# OF PERS	REMARKS
791701	OFF01	OFC: HEAD NURSE	1	100	100			1	
791703	OFF01	OFC: WARDMASTER	1	100	100			1	
791716	OFF01	OCC. THERAPY OFFICE	1	100	100			1	
791719	OFFSW	SOCIAL WORKER	1	100	100			1	
791721	OFFPN	CHIEF, PSYCH SERVICE	1	140	140			1	
791722		SECRETARY/WAITING	1	120	120			1	
791723	OFFPN	PSYCHIATRIST'S OFFICE	2	140	280			0	
791725		GROUP THERAPY	1	160	160			0	
791700 OFFICES/CONFERENCE			9		1100			6	

791900 STAFF FACILITIES

			NO OF SPACES	UNIT AREA	NET AREA	GNR	GROSS AREA	# OF PERS	REMARKS
791901	SL120	LOUNGE	1	120	120			0	
791903	LR013	STAFF LOCKERS - M	1	100	100			13	
791905	LR013	STAFF LOCKERS - F	1	100	100			13	
791907	T0110	TOILET - M	1	30	30			0	
791909	T0110	TOILET - F	1	30	30			0	
791900 STAFF FACILITIES			5		380			26	

Figure C-5

Proposed Construction Cost Worksheet

Total Net Square Feet for 28 Bed Ward = 8503

Total 84 beds 2 (28) bed wards = 17006 FT^2

- 17006 Net Ft^2 X 1.67 = 28,400 Gross Ft^2
- FY 86 $152.90/sq ft construction cost X 28400 = $4,342,360.00 Primary cost
- $4,342,360 X 20% = $868,472 (Support facilities: H_2O lines, sewage, electrical lines, Utilities, parking, sidewalk, landscaping, etc.)
- $5,210,832 x 5.0% = $260,541 Contingency Factor
- Primary Cost+Support Facilities+Contingency Factor=Total Contract

$4,342,360 + $868,472 + $260,541 = $5,471,373

Total Contract Cost

- $5,471,373 X .055 = #300,925 Administration Costs (Construction Supervision)

Primary Cost

- $4,342,360 X .075 = $325,677 Cat E Equipment Figure
- Total Contract Cost+Administrative Costs+Cat E Cost = Total Request

$5,471,373 + $300,925 + $325,677 = $6,097,975

TOTAL REQUEST $6,097,975

Figure C-6

DETAIL UNIT COST COMPARISON REPORT

PREPARED: 03 FEB 84
FROM 4TH QUARTER CUMULATIVE DATA

EXPENSE PER OCCUPIED BED DAY

PCN: NAA-Q22
PAGE: 03

	ACA GYNECO-LOGY	ACB OBSTET-RICS	ADA PEDIA-TRICS	ADB NEONAT. CARE	ADC NEONAT. ICU.	ADZ PEDIAT. NEC	AEA ORTHO-ORTHO-	AEB PODIATRY	AF PSYCHI-ATRIC
GROUP 1 -MEDCEN									
BROOKE	444.83	404.46	406.96	665.08	221.27		223.87	217.00	337.26
EISENHOWER	429.11	367.82	349.77	257.58			220.75	405.00	193.24
FITZSIMONS	271.44	272.89	330.62	279.62	322.56		180.47	1515.76	166.24
LETTERMAN	444.69	309.68	339.25	340.35	346.92		223.88		246.23
MADIGAN	310.93	274.82	357.18	171.60	215.22		253.89	135.92	164.14
TRIPLER	399.74	335.37	386.27	119.84	439.72		240.56		203.77
WALTER REED	337.63	337.70	318.50	397.88	519.01		279.77	1876.56	231.17
WM BEAUMONT	335.20	280.24	315.33	136.92	682.22		194.11	265.67	172.74
GROUP AVERAGE	362.02	314.40	350.27	246.03	382.46		225.76	277.37	213.63
GROUP 2 -LARGE MEDDAC									
PANAMA(GORGAS)	368.02	284.66	286.20	213.66			216.31		323.54
BELVOIR(DEWITT)	374.30	334.68	322.48	150.74			371.95	402.37	
BENNING(MARTIN)	375.70	351.38	359.23	136.08			173.84	156.05	187.99
BRAGG(WOMACK)	340.18	262.57	267.45	133.16			221.89	325.55	274.11
CAMPBELL	440.64	302.63	453.56	71.53			179.46	210.48	226.88
CARSON	455.05	297.90	456.21	172.51	170.77		217.84	286.28	355.67
DIX(WALSON)	464.02		243.72				220.25	306.17	281.84
HOOD(DARNALL)	394.10	253.32	300.13	238.22	195.53		227.67	310.35	151.38
JACKSON(MONCRIEF)	388.61	324.95	247.43	188.09			186.45	236.23	201.62
KNOX(IRELAND)	441.60	278.18	332.61	181.34			308.79	329.16	334.72
LEONARD WOOD(WOOD)	410.04	343.66	447.87	231.98			190.91	151.43	334.92
ORD(SILAS B. HAYS)	395.81	300.27	343.89	135.40			239.53	242.54	201.45
POLK	324.07	355.95	351.52	184.48			324.27	445.51	435.23
RILEY(IRWIN)	336.18	276.21	304.23	154.42			243.27	268.53	245.29
SILL(REYNOLDS)	402.32	284.69	381.10	122.57			286.41		154.46
GROUP AVERAGE	388.41	296.06	327.77	163.82	186.17		226.23	212.38	242.98

NO VALUE (BLANK) = NO ACTIVITY; * = COSTS W/O WORK UNITS; ** = WORK UNITS W/O COSTS.

Figure C-7

DETAIL UNIT COST COMPARISON REPORT

PREPARED: 03 FEB 84 — EXPENSE PER OCCUPIED BED DAY — PCN: NAA-022
FROM 4TH QUARTER CUMULATIVE DATA — PAGE: 03 CONT.

	ACA GYNECO-LOGY	ACB OBSTET-RICS	ADA PEDIA-TRICS	ADB NEONAT. CARE	ADC NEONAT. ICU.	ADZ PEDIAT. NEC	AEA ORTHO-ORTHO-	AEB PODIATRY	AF PSYCHI-ATRIC
GROUP 3 -MEDIUM MEDDAC									
ALASKA(BASSETT)	605.34	443.87	378.74	359.26			482.25		335.52
DEVENS(CUTLER)			297.43				340.48		317.94
EUSTIS(MCDONALD)	520.17		294.49				345.72	422.16	252.20
HARRISON(HAWLEY)			512.87						513.40
HUACHUCA(R.W.BLISS)	470.59	336.33	196.02	265.32			309.02		291.74
IRWIN(WEED)	1166.81	930.47	533.97	766.28	706.00		669.75		553.00
LEVENWORTH(MUNSON)	572.32	363.48	275.98	344.89			407.79		444.11
LEE(KENNER)	365.67						237.60		272.02
MCCLELLAN(NOBLE)	430.96	368.73	196.18	261.31			288.39		186.57
MEADE(KIMBROUGH)	433.34		709.93				286.94	405.66	
MONMOUTH(PATTERSON)	734.32		381.33				370.16	801.55	
REDSTONE(FOX)	566.58		229.31						181.01
RUCKER(LYSTER)	536.31	460.01	581.10	340.32					
STEWART	361.87	308.42	311.81	143.22			229.22	409.30	122.80
WEST POINT(KELLER)	559.53	422.21	266.10	375.17			358.38	354.07	419.55
GROUP AVERAGE	502.32	392.95	362.21	288.05	706.00		311.88	485.58	303.12
HSC AVERAGE	386.66	312.15	342.46	207.04	379.46		233.86	249.08	224.10

NO VALUE (BLANK) = NO ACTIVITY; * = COSTS W/O WORK UNITS; ** = WORK UNITS W/O COSTS.

Figure C-7

Inpatient Psychiatric
Average Expense Per Occupied Bed Day

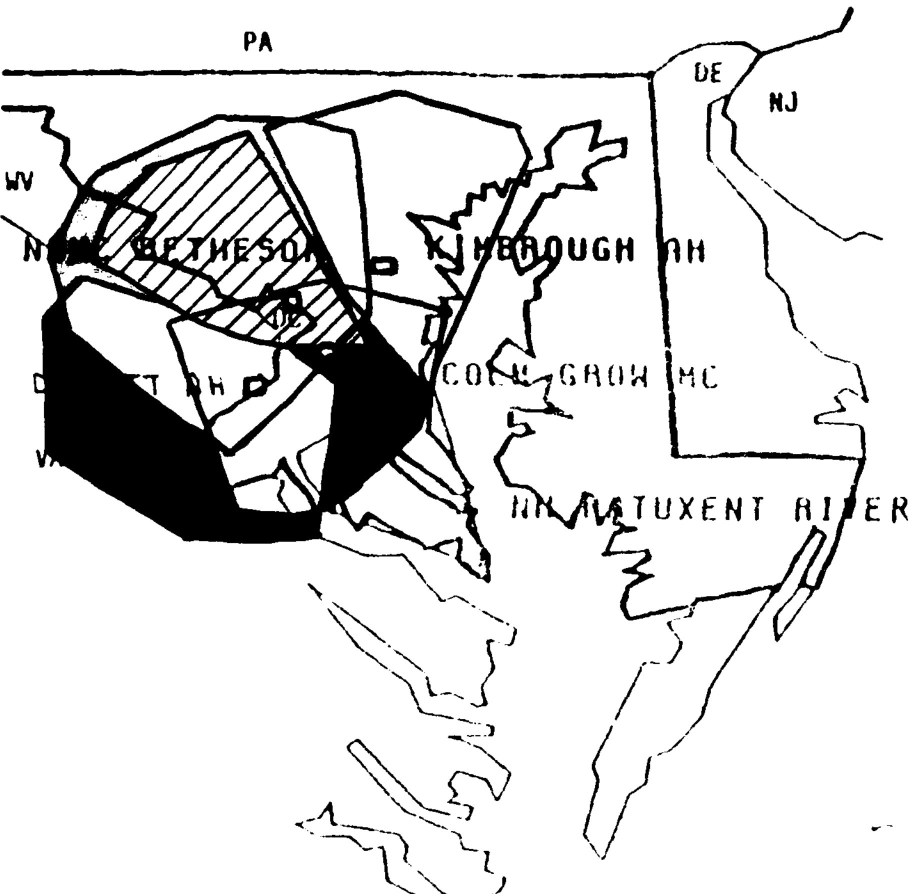
Fiscal Year	Inflation Factor	Estimated Cost
1983: $224.10	X 110.0%=	FY 1984: $246.51
1984: 246.51	X 110.0%=	FY 1985: 271.16
1985: 271.16	X 110.0%=	FY 1986: 298.27

FY 1986 Estimated Average Expense Per Occupied Bed Day = $298.27

Figure C-8

APPENDIX D

Blue Cross/Blue Shield Expense Input



Map

The map displays the approximate geographic representation of the catchment areas which are partially or completely included in the state. Each facility location is indicated by a symbol (□ = Army; △ = Navy; ○ = Air Force; ✱ = Coast Guard) which is linked to the name of the military hospital.

Color Chart

Yellow = Kimbrough AH
Blue - Malcolm Grow AF Hosp
Orange - Bethesda Naval Hosp
Pink - DeWitt AH
White - Areas of Overlap between catchment areas
Green Stripe - Walter Reed Army Medical Center
* Walter Reed Army Medical Center is totally engulfed by the Bethesda Naval Hospital Catchment Area

INPATIENT PSYCHIATRIC COST DATA FOR WASHINGTON, D.C.
CATCHMENT AREA AS PROVIDED BY BLUE CROSS/BLUE SHIELD OF SOUTH CAROLINA (January 1983-December 1983)

rovider ame (a)	Provider Number (b)	Total Charge to CHAMPUS (c)	Total $ Amount Allowed of Charges (d)	Number of Patients (e)	Number of Days (f)	Average Length of Stay (g)	Average Charge/ Day (h)	Average Allowed Charge/Day (i)
sychiatric nstitute of ashington, DC	520847356	$6,435,941.46	$6,040,158.46	223	17403	78	$369.82	$347.08
nildren's ospital	53019658002	$ 154,824.77	$ 136,696.67	3	305	102	507.52	448.19
eorge Washington niversity Hosp	53019658409	$ 51,972.67	$ 39,956.92	9	132	15	393.73	302.70
ibley Memorial ospital	53019660202	$ 27,758.65	$ 9,431.95	2	116	58	235.30	81.31
rovidence ospital	530196636	$ 76,490.12	$ 71,454.26	11	334	30	229.01	213.93
reater South astern Community ospital	530238460	$ 49,508.26	$ 40,747.20	6	350	58	141.45	116.42
ashington ospital Center	530239275002	$ 70,608.94	$ 61,263.34	11	406	37	173.91	150.89
.C. General ospital	536001131002	$ 4,054.42	$ 4,054.42	1	5	5	810.88	810.88
t. Elizabeth's ospital	536001131003	$ 18,195.44	$ 8,969.23	3	238	79	76.45	37.69
eorgetown niversity ospital	540549603001	$ 8,843.94	$ 8,184.24	2	67	33	132.00	122.11
otals		$6,898,198.60	$6,420,916.60	271	19,356	71.4	$307.00	$263.12

Figure D-2

PROFESSIONAL COMPONENT EXPENSE ESTIMATE FOR INPATIENT PSYCHIATRIC CARE (FY 1983)

\$60/hour/day X 5 days/week + \$300/week

19356 days ÷ 7 days/week = 2765.14 weeks

2765.14 weeks X \$300/week = \$829,542 Professional Care Cost Estimate for FY 1983

\$300/week ÷ 7 days/week = \$42.85 Daily Cost of Professional Care

\$307 (Avg Charge/day) + \$42.85 = \$349.85 Avg Charge/Day Including the Professional Component

\$263.12 (Avg Allowed Charge/day)+ \$42.85 = \$305.97 Avg Allowed Charge/ Day Including the Professional Component

\$6,420,916.60 Total \$ Allowed of Charges	+	\$829,542 Estimated Professional Component Expenses	=	\$7,250,458.60 Total \$ Allowed of Charges for 1983 - Including Professional Component

Figure D-3

TOTAL ALL CARE GOVERNMENT COST FOR TOTAL PSYCHIATRY FOR FY 1983
(As Provided by CHAMPUS Inpatient Care in the Catchment Area Reports)

Facility	Cost
Kimbrough Army Hospital, Ft. Meade, MD	$ 1,800,320
DeWitt Army Hospital, Ft. Belvoir, VA	3,780,294
Malcolm Grow Medical Center, Andrews AFB, MD	4,011,264
Bethesda Naval Medical Center, MD	4,508,798
Walter Reed Army Medical Center, D.C.	2,892,792
FY 1983 Total Government Cost for Total Psychiatry	$16,993,468

Figure D-4

COST OF CARE UTILIZING BLUE CROSS ALLOWED DOLLARS OF CHARGES
FOR CHILD AND ADOLESCENT PSYCHIATRIC CARE

Avg $ Allowed of Charges/Day	X	ALOS	X	Projected No CNAs	=	Total $ Allowed of charges for 1st Month of Admissions
$305.97		102		14		$436,925.16

$436,925.16 Allowed of Charges/ Mo of Admissions X 10 Months (Oct-July) = $4, 369,251.60

Admissions for August and September (equals three months of care provided) $ 436,925.16

Total Cost for One Year of Care (FY 1984) $5,243,101.92

Projected FY 85 Expense = 110% (inflation factor) X FY 84 Expense

$5,767,412.10 = 110% X $5,243,101.92

Projected FY 86 Expense = 110% (inflation factor) X FY 85 Expense

$6,344,153.30 = 110% X $5,767,412.10

Figure D-5

APPENDIX E

OCHAMPUS Psychiatric Cost Reports and Information

DATE OF RUN 10/24/83

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
KIMBROUGH ARMY HOSPITAL, FT. MEADE, MD
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	PSYCHIATRY GROUP I			PSYCHIATRY GROUP II		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
1. CLAIMS	30	67	123.3	8	14	75.0
2. GOVERNMENT COST	75,146	310,319	313.0	10,618	24,219	128.1
3. ADMISSIONS	13	24	84.6	5	5	0.0
4. AVG GOVERNMENT COST PER ADMISSION	5,780	12,930	123.7	2,124	4,844	128.1
5. HOSPITAL DAYS	413	989	139.5	47	97	106.4
6. AVG GOVERNMENT COST PER DAY	182	314	72.4	226	250	10.5
NON-EMERGENCY CARE						
1. CLAIMS	190	204	7.4	62	113	82.3
2. GOVERNMENT COST	591,258	886,883	50.0	136,950	578,899	322.7
3. ADMISSIONS	57	43	-24.6	12	23	91.7
4. AVG GOVERNMENT COST PER ADMISSION	10,373	20,625	98.8	11,412	25,170	120.5
5. HOSPITAL DAYS	3,023	2,709	-10.4	635	1,472	131.8
6. AVG GOVERNMENT COST PER DAY	196	327	67.4	216	393	82.4
TOTAL ALL CARE						
1. CLAIMS	220	271	23.2	70	127	81.4
2. GOVERNMENT COST	666,404	1,197,202	79.7	147,567	603,118	308.7
3. ADMISSIONS	70	67	-4.3	17	28	64.7
4. AVG GOVERNMENT COST PER ADMISSION	9,520	17,869	87.7	8,680	21,540	148.1
5. HOSPITAL DAYS	3,436	3,698	7.6	682	1,569	130.1
6. AVG GOVERNMENT COST PER DAY	194	324	66.9	216	384	77.7

Figure E-1

DATE OF RUN 10/24/83

CHAMPUS INPATIENT CAR_ IN THE CATCHMENT AREA FOR
KIMBROUGH ARMY HOSPITAL, FT. MEADE, MD
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	TOTAL PSYCHIATRY			SPECIAL PEDIATRICS		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
1. CLAIMS	38	81	113.2	16	66	312.5
2. GOVERNMENT COST	85,763	334,538	290.1	30,619	110,185	259.9
3. ADMISSIONS	18	29	61.1	7	21	200.0
4. AVG GOVERNMENT COST PER ADMISSION	4,765	11,536	142.1	4,374	5,247	20.0
5. HOSPITAL DAYS	460	1,086	136.1	65	195	200.0
6. AVG GOVERNMENT COST PER DAY	186	308	65.2	471	565	20.0
NON-EMERGENCY CARE						
1. CLAIMS	252	317	25.8	76	37	-51.3
2. GOVERNMENT COST	728,208	1,465,782	101.3	169,939	92,649	-45.5
3. ADMISSIONS	69	66	-4.3	18	10	-44.4
4. AVG GOVERNMENT COST PER ADMISSION	10,554	22,209	110.4	9,441	9,265	-1.9
5. HOSPITAL DAYS	3,658	4,181	14.3	365	188	-48.5
6. AVG GOVERNMENT COST PER DAY	199	351	76.1	466	493	5.8
TOTAL ALL CARE						
1. CLAIMS	290	398	37.2	92	103	12.0
2. GOVERNMENT COST	813,971	1,800,320	121.2	200,558	202,833	1.1
3. ADMISSIONS	87	95	9.2	25	31	24.0
4. AVG GOVERNMENT COST PER ADMISSION	9,356	18,951	102.6	8,022	6,543	-18.4
5. HOSPITAL DAYS	4,118	5,267	27.9	430	383	-10.9
6. AVG GOVERNMENT COST PER DAY	198	342	72.9	466	530	13.5

DATE OF RUN 10/24/83

CHAMPUS INPATIENT CAR[illegible] [illegible]N THE CATCHMENT AREA FOR
DEWITT ARMY HOSPITAL, FT. BELVOIR, VA
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	PSYCHIATRY GROUP I			PSYCHIATRY GROUP II		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
1. CLAIMS	164	123	-25.0	52	27	-48.1
2. GOVERNMENT COST	302,265	335,230	10.9	97,149	39,672	-59.2
3. ADMISSIONS	66	43	-34.8	24	11	-54.2
4. AVG GOVERNMENT COST PER ADMISSION	4,580	7,796	70.2	4,048	3,607	-10.9
5. HOSPITAL DAYS	1,262	1,402	11.1	473	187	-60.5
6. AVG GOVERNMENT COST PER DAY	240	239	-0.2	205	212	3.3
NON-EMERGENCY CARE						
1. CLAIMS	376	468	24.5	178	261	46.6
2. GOVERNMENT COST	1,300,000	2,149,906	65.4	626,146	1,255,486	100.5
3. ADMISSIONS	100	85	-15.0	56	64	14.3
4. AVG GOVERNMENT COST PER ADMISSION	13,000	25,293	94.6	11,181	19,617	75.4
5. HOSPITAL DAYS	4,848	6,152	26.9	2,544	4,537	78.3
6. AVG GOVERNMENT COST PER DAY	268	349	30.3	246	277	12.4
TOTAL ALL CARE						
1. CLAIMS	540	591	9.4	230	288	25.2
2. GOVERNMENT COST	1,602,265	2,485,136	55.1	723,295	1,295,158	79.1
3. ADMISSIONS	166	128	-22.9	80	75	-6.3
4. AVG GOVERNMENT COST PER ADMISSION	9,652	19,415	101.1	9,041	17,269	91.0
5. HOSPITAL DAYS	6,110	7,554	23.6	3,017	4,724	56.6
6. AVG GOVERNMENT COST PER DAY	262	329	25.5	240	274	14.4

CHAMPUS INPATIENT CA[illegible] [illegible] THE CATCHMENT AREA FOR
DEWITT ARMY HOSPITAL, FT. BELVOIR, VA

DATE OF RUN 10/24/83

FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	TOTAL PSYCHIATRY			SPECIAL PEDIATRICS		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
1. CLAIMS	216	150	-30.6	15	38	153.3
2. GOVERNMENT COST	399,414	374,902	-6.1	22,252	72,313	225.0
3. ADMISSIONS	90	54	-40.0	5	14	180.0
4. AVG GOVERNMENT COST PER ADMISSION	4,438	6,943	56.4	4,450	5,165	16.1
5. HOSPITAL DAYS	1,735	1,589	-8.4	113	172	52.2
6. AVG GOVERNMENT COST PER DAY	230	236	2.5	197	420	113.5
NON-EMERGENCY CARE						
1. CLAIMS	554	729	31.6	36	19	-47.2
2. GOVERNMENT COST	1,926,146	3,405,392	76.8	91,591	79,775	-12.9
3. ADMISSIONS	156	149	-4.5	18	7	-61.1
4. AVG GOVERNMENT COST PER ADMISSION	12,347	22,855	85.1	5,088	11,396	124.0
5. HOSPITAL DAYS	7,392	10,689	44.6	286	173	-39.5
6. AVG GOVERNMENT COST PER DAY	261	319	22.3	320	461	44.0
TOTAL ALL CARE						
1. CLAIMS	770	879	14.2	51	57	11.8
2. GOVERNMENT COST	2,325,560	3,780,294	62.6	113,842	152,088	33.6
3. ADMISSIONS	246	203	-17.5	23	21	-8.7
4. AVG GOVERNMENT COST PER ADMISSION	9,453	18,622	97.0	4,950	7,242	46.3
5. HOSPITAL DAYS	9,127	12,278	34.5	399	345	-13.5
6. AVG GOVERNMENT COST PER DAY	255	308	20.8	285	441	54.5

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
MALCOLM GROW MED CENTER, ANDREWS AFB, MD
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	PSYCHIATRY GROUP I			PSYCHIATRY GROUP II		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANC
EMERGENCY CARE						
1. CLAIMS	146	109	-25.3	53	31	-41.5
2. GOVERNMENT COST	225,074	323,315	43.6	112,052	72,556	-35.2
3. ADMISSIONS	48	39	-18.8	29	17	-41.4
4. AVG GOVERNMENT COST PER ADMISSION	4,689	8,290	76.8	3,864	4,268	10.5
5. HOSPITAL DAYS	1,010	1,326	31.3	515	388	-24.7
6. AVG GOVERNMENT COST PER DAY	223	244	9.4	218	187	-14.1
NON-EMERGENCY CARE						
1. CLAIMS	545	552	1.3	228	271	18.9
2. GOVERNMENT COST	2,166,868	2,404,701	11.0	834,808	1,210,691	45.0
3. ADMISSIONS	127	99	-22.0	72	69	-4.2
4. AVG GOVERNMENT COST PER ADMISSION	17,062	24,290	42.4	11,595	17,546	51.3
5. HOSPITAL DAYS	7,063	6,791	-3.9	2,782	3,788	36.2
6. AVG GOVERNMENT COST PER DAY	307	354	15.4	300	320	6.5
TOTAL ALL CARE						
1. CLAIMS	691	661	-4.3	281	302	7.5
2. GOVERNMENT COST	2,391,942	2,728,016	14.1	946,860	1,283,247	35.5
3. ADMISSIONS	175	138	-21.1	101	86	-14.9
4. AVG GOVERNMENT COST PER ADMISSION	13,668	19,768	44.6	9,375	14,921	59.2
5. HOSPITAL DAYS	8,073	8,117	0.5	3,297	4,176	26.7
6. AVG GOVERNMENT COST PER DAY	296	336	13.4	287	307	7.0

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
MALCOLM GROW MED CENTER, ANDREWS AFB, MD
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	TOTAL PSYCHIATRY			SPECIAL PEDIATRICS		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
. CLAIMS	199	140	-29.6	9	25	177.8
. GOVERNMENT COST	337,125	395,872	17.4	13,154	120,284	814.4
. ADMISSIONS	77	56	-27.3	5	10	100.0
. AVG GOVERNMENT COST PER ADMISSION	4,378	7,069	61.5	2,631	12,028	357.2
. HOSPITAL DAYS	1,525	1,714	12.4	13	230	1669.2
. AVG GOVERNMENT COST PER DAY	221	231	4.5	1,012	523	-48.3
NON-EMERGENCY CARE						
. CLAIMS	773	823	6.5	51	22	-56.9
. GOVERNMENT COST	3,001,676	3,615,392	20.4	96,360	41,285	-57.2
. ADMISSIONS	199	168	-15.6	21	8	-61.9
. AVG GOVERNMENT COST PER ADMISSION	15,084	21,520	42.7	4,589	5,161	12.5
. HOSPITAL DAYS	9,845	10,579	7.5	186	88	-52.7
. AVG GOVERNMENT COST PER DAY	305	342	12.1	518	469	-9.4
TOTAL ALL CARE						
. CLAIMS	972	963	-0.9	60	47	-21.7
. GOVERNMENT COST	3,338,802	4,011,264	20.1	109,514	161,569	47.5
. ADMISSIONS	276	224	-18.8	26	18	-30.8
. AVG GOVERNMENT COST PER ADMISSION	12,097	17,907	48.0	4,212	8,976	113.1
. HOSPITAL DAYS	11,370	12,293	8.1	199	318	59.8
. AVG GOVERNMENT COST PER DAY	294	326	11.1	550	508	-7.7

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
NRMC BETHESDA, MD
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	PSYCHIATRY GROUP I			PSYCHIATRY GROUP II		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHA
EMERGENCY CARE						
1. CLAIMS	195	132	-32.3	68	53	-22.1
2. GOVERNMENT COST	319,881	406,590	27.1	143,564	84,607	-41.1
3. ADMISSIONS	69	48	-30.4	33	23	-30.3
4. AVG GOVERNMENT COST PER ADMISSION	4,636	8,471	82.7	4,350	3,679	-15.4
5. HOSPITAL DAYS	1,367	1,647	20.5	639	417	-34.7
6. AVG GOVERNMENT COST PER DAY	234	247	5.5	225	203	-9.7
NON-EMERGENCY CARE						
1. CLAIMS	614	598	-2.6	271	325	19.9
2. GOVERNMENT COST	2,653,304	2,635,479	-0.7	1,048,047	1,382,123	31.9
3. ADMISSIONS	160	107	-33.1	90	97	7.8
4. AVG GOVERNMENT COST PER ADMISSION	16,583	24,631	48.5	11,645	14,249	22.4
5. HOSPITAL DAYS	8,771	7,843	-10.6	4,215	4,690	11.3
6. AVG GOVERNMENT COST PER DAY	303	336	11.1	249	295	18.5
TOTAL ALL CARE						
1. CLAIMS	809	730	-9.8	339	378	11.5
2. GOVERNMENT COST	2,973,185	3,042,069	2.3	1,191,611	1,466,729	23.1
3. ADMISSIONS	229	155	-32.3	123	120	-2.4
4. AVG GOVERNMENT COST PER ADMISSION	12,983	19,626	51.2	9,688	12,223	26.2
5. HOSPITAL DAYS	10,138	9,490	-6.4	4,854	5,107	5.2
6. AVG GOVERNMENT COST PER DAY	293	321	9.3	245	287	17.0

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
NRMC BETHESDA, MD
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	TOTAL PSYCHIATRY			SPECIAL PEDIATRICS		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANG
EMERGENCY CARE						
CLAIMS	263	185	-29.7	10	20	100.0
GOVERNMENT COST	463,445	491,197	6.0	14,098	47,383	236.1
ADMISSIONS	102	71	-30.4	4	10	150.0
AVG GOVERNMENT COST PER ADMISSION	4,544	6,918	52.3	3,525	4,738	34.4
HOSPITAL DAYS	2,006	2,064	2.9	16	111	593.8
AVG GOVERNMENT COST PER DAY	231	238	3.0	881	427	-51.6
NON-EMERGENCY CARE						
CLAIMS	885	923	4.3	40	31	-22.5
GOVERNMENT COST	3,701,351	4,017,601	8.5	164,250	93,782	-42.9
ADMISSIONS	250	204	-18.4	19	15	-21.1
AVG GOVERNMENT COST PER ADMISSION	14,805	19,694	33.0	8,645	6,252	-27.7
HOSPITAL DAYS	12,986	12,533	-3.5	292	218	-25.3
AVG GOVERNMENT COST PER DAY	285	321	12.5	562	430	-23.5
TOTAL ALL CARE						
CLAIMS	1,148	1,108	-3.5	50	51	2.0
GOVERNMENT COST	4,164,796	4,508,798	8.3	178,348	141,165	-20.8
ADMISSIONS	352	275	-21.9	23	25	8.7
AVG GOVERNMENT COST PER ADMISSION	11,832	16,396	38.6	7,754	5,647	-27.2
HOSPITAL DAYS	14,992	14,597	-2.6	308	329	6.8
AVG GOVERNMENT COST PER DAY	278	309	11.2	579	429	-25.9

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
WALTER REED ARMY MEDICAL HOSPITAL, DC
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	PSYCHIATRY GROUP I			PSYCHIATRY GROUP II		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
1. CLAIMS	85	73	-14.1	33	35	6.1
2. GOVERNMENT COST	120,843	246,650	104.1	66,838	71,078	6.3
3. ADMISSIONS	24	21	-12.5	16	17	6.3
4. AVG GOVERNMENT COST PER ADMISSION	5,035	11,745	133.3	4,177	4,181	0.1
5. HOSPITAL DAYS	470	900	91.5	238	372	56.3
6. AVG GOVERNMENT COST PER DAY	257	274	6.6	281	191	-32.0
NON-EMERGENCY CARE						
1. CLAIMS	353	387	9.6	179	193	7.8
2. GOVERNMENT COST	1,808,068	1,712,938	-5.3	759,801	862,126	13.5
3. ADMISSIONS	98	65	-33.7	57	56	-1.8
4. AVG GOVERNMENT COST PER ADMISSION	18,450	26,353	42.8	13,330	15,395	15.5
5. HOSPITAL DAYS	5,284	4,854	-8.1	2,934	2,535	-13.6
6. AVG GOVERNMENT COST PER DAY	342	353	3.1	259	340	31.3
TOTAL ALL CARE						
1. CLAIMS	438	460	5.0	212	228	7.5
2. GOVERNMENT COST	1,928,912	1,959,588	1.6	826,639	933,204	12.9
3. ADMISSIONS	122	86	-29.5	73	73	0.0
4. AVG GOVERNMENT COST PER ADMISSION	15,811	22,786	44.1	11,324	12,784	12.9
5. HOSPITAL DAYS	5,754	5,754	0.0	3,172	2,907	-8.4
6. AVG GOVERNMENT COST PER DAY	335	341	1.6	261	321	23.2

CHAMPUS INPATIENT CARE IN THE CATCHMENT AREA FOR
WALTER REED ARMY MEDICAL HOSPITAL, DC
FOR CARE RECEIVED IN FY 1982 AND FY 1983 AND PROCESSED AT OCHAMPUS BETWEEN
OCTOBER THROUGH SEP OF THE RESPECTIVE YEAR (BASED ON THE 5 DIGIT RESIDENCE ZIP CODE OF THE BENEFICIARY)

HOSPITAL DEPARTMENT

	TOTAL PSYCHIATRY			SPECIAL PEDIATRICS		
	1982	1983	PERCENT CHANGE	1982	1983	PERCENT CHANGE
EMERGENCY CARE						
1. CLAIMS	118	108	-8.5	4	10	150.0
2. GOVERNMENT COST	187,681	317,728	69.3	10,715	96,697	802.4
3. ADMISSIONS	40	38	-5.0	1	5	400.0
4. AVG GOVERNMENT COST PER ADMISSION	4,692	8,361	78.2	10,715	19,339	80.5
5. HOSPITAL DAYS	708	1,272	79.7	11	158	1336.4
6. AVG GOVERNMENT COST PER DAY	265	250	-5.8	974	612	-37.2
NON-EMERGENCY CARE						
1. CLAIMS	532	580	9.0	20	18	-10.0
2. GOVERNMENT COST	2,567,869	2,575,064	0.3	125,366	51,098	-59.2
3. ADMISSIONS	155	121	-21.9	12	9	-25.0
4. AVG GOVERNMENT COST PER ADMISSION	16,567	21,282	28.5	10,447	5,678	-45.7
5. HOSPITAL DAYS	8,218	7,389	-10.1	198	116	-41.4
6. AVG GOVERNMENT COST PER DAY	312	348	11.5	633	440	-30.4
TOTAL ALL CARE						
1. CLAIMS	650	688	5.8	24	28	16.7
2. GOVERNMENT COST	2,755,550	2,892,792	5.0	136,081	147,795	8.6
3. ADMISSIONS	195	159	-18.5	13	14	7.7
4. AVG GOVERNMENT COST PER ADMISSION	14,131	18,194	28.7	10,468	10,557	0.9
5. HOSPITAL DAYS	8,926	8,661	-3.0	209	274	31.1
6. AVG GOVERNMENT COST PER DAY	309	334	8.2	651	539	-17.2

AVERAGE GOVERNMENT COST/DAY FOR INPATIENT PSYCHIATRIC CARE

Kimbrough Army Hospital, Ft. Meade, MD	$ 342
DeWitt Army Hospital, Ft. Belvoir, VA	$ 308
Walter Reed Army Medical Center, D.C.	$ 326
Bethesda Naval Medical Center, MD	$ 334
Malcolm Grow Medical Center, Andrews AFB, MD	$ 309
Total Cost	$1619
	÷ 5
Average Government Cost/Day for Washington D.C. Area	$ 324

Figure E-2

COST OF CONTRACTING INPATIENT PSYCHIATRIC CARE
(CHILD & ADOLESCENT)

Avg Govt Cost/Day	X	ALOS	X	Projected No CNAs	= Total $ Allowed for first Month of Admissions
$324	X	102		14	$462,672.

$462,672 Mo of Admissions X 10 Months (Oct-July)	$4,626,720
Admissions for August and September (equals three months of care provided)	$ 462,672
Total Cost for One Year of Care (FY 1984)	$5,552,064

Projected FY 85 Expense = 110% (inflation factor) X FY 84 Expense

$6,107,270.40 = 110% X $5,552,064

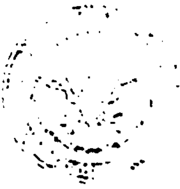
Projected FY 86 Expense = 110% (inflation factor) X FY 85 Projected Expense

$6,717,997.40 = 110% X $6,107,270.40

Figure E-3

APPENDIX F

Prepaid Health Care Plan



DEPARTMENT OF DEFENSE
OFFICE OF GENERAL COUNSEL
WASHINGTON, D. C. 20301

February 22, 1974

MEMORANDUM FOR The Deputy Assistant Secretary of Defense (Health Resources & Programs), OASD(H&E)

SUBJECT: Pre-Paid Health Care Plan

ISSUE

You have requested my views regarding the possible legal impediments to a contract entered into by either OSD or a Military Department with a Health Maintenance Organization for pre-paid medical care in facilities of the uniformed services.

CONCLUSION

If written and administered in light of the considerations below, I believe that such a contract would successfully withstand legal challenge.

DISCUSSION

Payment on a capitation basis under a contract with an HMO to provide medical care in Service hospitals would not be prohibited under the medical and dental care provisions of the United States Code (10 U.S.C. § 1071-85), and poses no legal problem.

However, a body of legal doctrine does exist which might render a contract of this sort illegal, depending upon the provisions of the specific contract and the fashion in which the contract were administered and performed. This area of law, which is embodied primarily in the federal personnel statutes and in opinions of the General Counsel of the U.S. Civil Service Commission interpreting the scope of these statutes, concerns the authority of executive agencies of Government to contract with the private sector to supply particular services required by them.

The General Counsel of the Civil Service Commission has stated that "personal services necessary to perform a Government function are for performance by regular employees of the Government appointed and

Figure F-1

compensated in accordance with the civil service and classification laws; and that in the absence of specific authority a Federal agency is not authorized to contract for personal services without regard to the personnel laws applicable to Federal employees generally."[1] Such unauthorized contracts, in the opinion of the Civil Service Commission, have an adverse impact upon the civil service system and tend to frustrate the purposes and national policies expressed by the personnel laws. The touchstone in establishing the legality of a proposed service contract is whether that contract creates what is tantamount to an employer-employee relationship between the Government and the employee of the contractor. If such a relationship is created, then, in the absence of specific statutory authority, the contract is illegal. In determining whether an employer-employee relationship exists, the most weighty criterion concerns the measure of Federal supervision of the contractor employees. To the extent that a Federal officer or employee reserves or exercises the right to direct or control how the employee performs his work, an employer-employee relationship will be found to exist. The continuing validity of the Commission's interpretation of the requirements of the Federal personnel laws in regard to service contracts has been recognized in a recent opinion of the U.S. District Court for the District of Columbia.[2]

The standards to which DoD contracts must adhere in order to conform with the law in this area are embodied in section XXII of the Armed Services Procurement Regulation (ASPR). This section of the ASPR prohibits "personal services" contracting, which it defines as "the procuring of services by contract in such a manner that the contractor or his employees are in effect employees of the Government." Although the ASPR provides no definitive formula for determining when services are "personal," and therefore prohibited, it lists a number of criteria to be considered in reaching a determination of legality.

The inherent characteristics of any contract with an HMO to provide medical care in Service hospitals would necessarily compare unfavorably with some of these criteria of legality. For example, the services of the HMO doctors under the contract would clearly represent the discharge of

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[1] Opinion of the General Counsel, Legality of Selected Contracts, Goddard Space Flight Center, National Aeronautics and Space Administration, October, 1967, p. 1.

[2] Lodge 1858, American Federation of Government Employees, et al. v. Administrator, National Aeronautics and Space Administration, et al., USDC, DDC, Civil Action No. 3261-67, November 30, 1973.

a Governmental function which, to a great extent, calls for the exercise of personal judgment and discretion on behalf of the Government; the requirement for services performed under such a contract would be continuing, rather than short-term or intermittent; and the Government would furnish the working space, facilities, equipment, supplies, and medical support necessary for contract performance. On the other hand, the inherent characteristics of such a contract would compare favorably with other of the criteria. It appears, for example, that DoD will not be able to obtain a sufficient number of doctors to staff Service hospitals from the military or civil service (under current status and pay provisions) unless it engages in contracts with the private sector; the services to be procured under a contract with an HMO could properly be defined as an end product, "medical care"; the contractor would undertake a "specific task" that is definable at the inception of the contract rather than having its work defined on a day-to-day basis; and payment under the contract would be for results accomplished rather than according to time worked.

Many characteristics of a proposed agreement with an HMO to provide medical care in Service hospitals, however, are not inherent, and any specific contract should be drawn and administered in order to comport with further criteria listed in section XXII. This area of contractual discretion involves the Government's measure of control over the contractor or its employees, and is probably the most important consideration in determining the legality of service contracts. In general, the ASPR finds incidents of supervision and control to the extent that the Government:

--specifies the qualifications of, or reserves the right to approve, individual contractor employees;

--reserves the right to assign tasks to and prepare work schedules for contractor employees during performance of the contract;

--retains the right (whether actually exercised or not) to supervise the work of the contractor employees, either directly or indirectly;

--reserves the right to supervise or control the method in which the contractor performs the service, the number of people he will employ, and similar details;

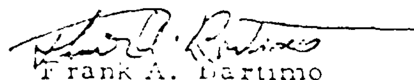
--reviews performance by each individual contractor employee, as opposed to reviewing a final product on an overall basis after completion of the work; and

--retains the right to have contractor employees removed from the job for reasons other than misconduct or security.

Attempts to avoid the above incidents of supervision and control in a contract with an HMO to provide medical care at a Service facility will, no doubt, come into conflict with the command responsibilities of the military officer in charge of the hospital. However, I think that compromises in hospital administration and in evaluation of HMO medical care can be reached which will satisfy both the ASPR criteria of legality and the responsibilities of a hospital commander.

A final ASPR criterion which should be considered in the administration of a contract with an HMO concerns the extent to which contractor employees are used interchangeably with Government personnel to perform the same functions. To the extent that HMO doctors work side by side with Government doctors (military or civil service) in dispensing medical care, the contract becomes more susceptible to the challenge that the HMO doctors are actually employees of the Government rather than employees of the contractor. Therefore, every effort should be made in the administration of the contract to establish and maintain the professional medical care function exclusively within the domain of the HMO physicians.

In conclusion, I beli_ve that a contract with an HMO for medical care in Service facilities could be written and administered in such fashion that it would comply with the requirements of section XXII of the ASPR and with the Federal personnel laws and Civil Service Commission opinions on which this ASPR section is based. However, in order for such a contract to successfully withstand challenge as a prohibited personal service contract, careful attention must be accorded to the considerations above.



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(Manpower, Reserve Affairs, Health & Environment)

Bibliography

United States Government Documents

U.S. Department of Defense. OCHAMPUS, CHAMPUS Handbook, CHAMPUS 6010.46-H. January 1983.

. OCHAMPUS, User's Guide for the CHAMPUS Cost and Workload Report, June 1983.

. OCHAMPUS, Psychiatric Care, Cost Utilization Under CHAMPUS-FY1983, February 1984.

. OCHAMPUS, Reports, Subject: CHAMPUS Inpatient Care in the Catchment Area for - DeWitt AH, Kimbrough AH, WRAMC, Bethesda Naval Hospital and Malcolm Grow Medical Center, 24 Oct 1983.

. Uniformed Services Health Benefits Committee. Cost-Containment Subcommittee First Interim Report, 15 October 1982.

. Deputy Secretary of Defense. Memorandum, Subject: CHAMPUS/Direct Care Utilization and Cost Reduction Initiatives, 8 November 1982.

. Assistant Secretary of Defense (Health Affairs). Special Washington, D.C. Catchment Area Committee Minutes, 27 April 1983.

. 24 August 1983.

. Civilian Health and Medical Program of the Uniformed Services. CHAMPUS News: "Zip Codes to Determine CHAMPUS Nonavailability Statement Requirement." 82-18 (6 Dec 82).

. Civilian Health and Medical Program of the Uniformed Services. CHAMPUS News: "60-Day Limit on Mental Health Services." 83-2 (2 Feb 83).

. Civilian Health and Medical Program of the Uniformed Services. Liasion Letter: "75% Rule." February 1983.

. Instruction 6015.19. Issuance of Nonavailability Statements. 10 June 1983.

. Instruction 6010.8-R. Civilian Health and Medical Program of the Uniform Services (CHAMPUS); Administration of. 10 January 1977.

. Office of General Counsel. Memorandum, Subject: Pre-Paid Health Care Plan. February 22, 1974.

U.S. Department of the Air Force. The Surgeon General. Letter, Subject: Washington, D.C. Catchment Area Work Group. 4 May 1983.

U.S. Department of the Army. The Surgeon General. Memorandum, Subject: CHAMPUS/Direct Care Utilization and Cost Reduction Initiative Decision Memorandum. 1 September 1982.

. The Surgeon General. Memorandum, Subject: Memorandum of Understanding on Establishment of Washington, D.C. Medical Catchment Area. 1 March 1983.

. The Surgeon General. Message, Subject: Termination of the Issuance of Non-Availability Statements (NAS) for the Reason of Continuity of Care. 25 October 1982.

. The Surgeon General. Memorandum, Subject: CHAMPUS-Utilization Information Memorandum. 1 July 1982.

. The Surgeon General. Memorandum, Subject: Psychiatric Shortages - Information Memorandum. Undated 1982.

. The Surgeon General. Information Paper, Subject: Washington, D.C. Catchment Area. 4 October 1983.

. The Surgeon General. Information Paper, Subject: Cost Containment. Undated.

. The Surgeon General. Memorandum, Subject: Policy Considerations for the Recapture of Inpatient CHAMPUS Psychiatric Costs.

INTERVIEWS

Barnett, Richard. Chief, Statistics Branch, Office of CHAMPUS, Aurora, Colorado. Telephone interview, 14 September 1983.

Blodget, Edward. Space Programmer, Health Facility Planning Agency, Army Office of the Surgeon General. Interview, October 1983.

Bolyard, Marshal, Major, Chief, Patient Affairs Branch, Patient Administration Division, U.S. Army Office of the Surgeon General. Interview, 12 October 1983.

Chapman, Ann, CHAMPUS Utilization and Reviews Division, Blue Cross/Blue Shield of South Carolina, May 1984.

Flanagan, Clyde, COL, Chief, Community Mental Health Service, DeWitt Army Community Hospital, Fort Belvoir, Virginia, March 1984.

Kehoe, Jack, LTC, Chief, Community Mental Health Service, Kimbrough Army Hospital, Fort Meade, Maryland, March 1984.

Madison, John, LCDR, Chief, Inpatient Psychiatry, Bethesda Naval Medical Center, Maryland, March 1984.

Miller, Robert, LTC, Chief, Inpatient Psychiatry, Walter Reed Army Medical Center, Washington, D.C., February 1984.

Muldoon, Terry, Major, Program and Analysis Branch, Health Facility Planning Agency, Army Office of the Surgeon General, May 1984.

Rhame, Joe, Manager, CHAMPUS Field Service, Blue Cross - Blue Shield of South Carolina, Columbia, South Carolina. Telephone interview, 16 September 1983.

Rock,Nicholas L., Colonel, Psychiatric and Neurology Consultant, Department of Army Surgeon General's Office. Interview, 12 October 1983.

Tuten, William, Colonel, Patient Administration Consultant, Department of Army Surgeon General's Office. Interview, 12 October 1983.

Vigna, John, Major, Chief, Patient Administration, DeWitt Army Community Hospital, Ft. Belvoir, Virginia. Interview. 7 September 1983.

Whittaker, Robert, Major, Charge Nurse, Inpatient Psychiatric Ward, Malcolm Grow Medical Center, Andrews Air Force Base, Maryland, March 1984.

Wu, Art, Major, U.S. Army Liason, Office of Civilian Health and Medical Program of the Uniformed Services, Aurora, Colorado. Telephone interview, 19 October 1983.