

GAO

Report to the Chairman, Subcommittee
on Military Personnel and
Compensation, Committee on Armed
Services, House of Representatives

September 1990

DEFENSE HEALTH CARE

Potential for Savings by Treating CHAMPUS Patients in Military Hospitals





United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-240715

September 7, 1990

The Honorable Beverly B. Byron
Chairman, Subcommittee on Military
Personnel and Compensation
Committee on Armed Services
House of Representatives

Dear Madam Chairman:

In response to your request, this report discusses the potential for savings by adding staff and other resources at military hospitals to treat more patients, rather than paying for their care under CHAMPUS. We are making recommendations to the Secretary of Defense to identify military hospitals and medical specialties in which it would be most cost-effective to expand services to treat patients whose care is now funded under CHAMPUS.

We are sending copies of this report to the Secretary of Defense, appropriate congressional committees, and other interested parties.

This report was prepared under the direction of David P. Baine, Director, Federal Health Care Delivery Issues, who may be reached on 275-6207 if you or your staff have any questions. Other major contributors are listed in appendix III.

Sincerely yours,

A handwritten signature in cursive script that reads 'Lawrence H. Thompson'.

Lawrence H. Thompson
Assistant Comptroller General

Executive Summary

Purpose

The military hospital system has considerable unused physical capacity primarily because of staff shortages. When beneficiaries cannot receive medical services from military hospitals, they may seek treatment from civilian medical providers. A substantial portion of such treatment is paid for by the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Between fiscal year 1985 and fiscal year 1989, CHAMPUS costs increased from about \$1.4 billion to about \$2.5 billion; they now represent nearly 20 percent of total Department of Defense (DOD) health care expenditures.

Concerned about the unused capacity and the dramatic increase in CHAMPUS costs, the Chairman, Subcommittee on Military Personnel and Compensation, House Committee on Armed Services, asked GAO to determine whether savings could be achieved if military facilities used their available capacity (with added staff or other resources) to accommodate some of the workload now being referred to civilian providers. The Chairman asked that GAO base its determination on facilities as they currently exist, that is, without facility renovation or replacement.

Background

In fiscal year 1988, military hospitals had an overall occupancy rate of 45 percent based on designed capacity. At the same time about 70 percent of the CHAMPUS costs were being incurred near military hospitals.

DOD has several initiatives underway to increase military hospital capability and treat more of the CHAMPUS workload in its hospitals and plans to expand some of the initiatives in fiscal year 1991. DOD plans to evaluate these initiatives to determine whether they improve health care services to beneficiaries and whether they enable DOD to provide those services more cost-effectively. However, because most of the initiatives are relatively new, DOD has not completed its evaluations on any of them.

GAO performed its review at six hospitals and developed a methodology for estimating the costs of treating additional patients in military facilities compared to treatment costs under CHAMPUS.

GAO focused on four specialties: psychiatry, orthopedics, obstetrics, and gynecology. These were selected, in part, because GAO expected that they had a high likelihood of savings. In each specialty, GAO's analysis focused on identifying the costs of treating additional patients under three staffing alternatives—the military, civilian government, and contractors.

Results in Brief

DOD can potentially save money by adding staff and equipment at military hospitals to treat more patients, rather than paying for their care under CHAMPUS. This conclusion tends to support expansion of military hospital capability in the manner now being tested under several DOD health care initiatives.

However, potential savings vary significantly by medical specialty and hospital; the savings could be substantial in some specialties and in some locations but negligible in others.

Many factors influence whether savings can be achieved by expanding military hospital capability. Among these is the prospect that, because military hospital care is essentially free, eligible persons who previously did not seek care or paid for part of their care in the civilian sector would seek care in the expanded military facilities. Savings could also be reduced if needed staff were in short supply so that recruiting additional staff produced significantly higher personnel costs.

GAO believes that DOD should identify facilities and specialties in which expansion of treatment capability is most likely to be cost-effective before it expands the current initiatives. GAO's methodology should be useful to DOD in targeting such expansion efforts.

Principal Findings

Overview of Savings

GAO estimated savings ranging from \$18 million to \$21 million if resources at the hospitals reviewed were increased to care for CHAMPUS patients. The estimates show that military hospital care for such patients would cost from 43 to 52 percent less than CHAMPUS-funded care. Savings estimates vary due to the differing costs of adding military, civilian, or contractor staff, and by hospital, type of care, and other factors. (See p. 18.)

Savings are the highest when considering the addition of civilian government personnel, and lowest when considering the use of contractors. A hospital would probably have to acquire personnel from a combination of the sources in order to accommodate large increases in workload. (See p. 20.)

Table 1 shows savings estimates, expressed both as dollars and as a percentage of fiscal year 1988 CHAMPUS costs, based on adding contract staff at the six hospitals.

Table 1: Estimated Savings by Hospital and Medical Specialty, Contract Staffing Option

Dollars in thousands; percents of CHAMPUS costs

Hospital	Obstetrics/ gynecology	Psychiatry	Orthopedics
Evans Army	\$2,424 (40%)	•	\$20 (3%)
Jacksonville Navy	485 (25%)	•	7 (1%)
Nellis Air Force	585 (29%)	•	•
Pendleton Navy	3,037 (50%)	•	•
San Diego Navy	3,721 (41%)	\$4,308 (70%)	•
Walter Reed Army	•	3,101 (72%)	•
Total estimated savings	\$10,252 (41%)	\$7,409 (71%)	\$27 (2%)

Note. GAO did not analyze each of the four medical specialties at each hospital

Factors Affecting Potential Savings

The magnitude of potential savings is influenced by several factors, such as the size and complexity of the CHAMPUS workload in the area; the hospital's unused physical capacity; the cost of medical care in the community; the hospital's efficiency; the type, availability, cost, and source of additional staff; possible increases in demand when more free care becomes available; and the type of beneficiary served. (See p. 18.)

The extent to which potential savings are affected by these various factors is not known. However, aggregate DOD data show that while military hospital capability is no longer decreasing overall, CHAMPUS usage continues to increase. (See p. 26.)

For example, the overall military hospital system workload (inpatient admissions and outpatient visits) stopped declining in fiscal year 1989, stemming a downward trend, which seems to reflect DOD's efforts to begin bolstering its hospital capability. However, CHAMPUS workload continued to increase. More analysis is necessary to determine the extent to which CHAMPUS costs can be reduced by increasing military hospital capability. (See p. 26.)

Need to Target Expansion Efforts

Rarely would it be cost-effective to treat the entire CHAMPUS workload in a hospital's surrounding area. For example, it would not be prudent for small or medium-sized hospitals to add all of the sophisticated equipment and staff needed to treat a relatively few open heart surgery cases.

Therefore, local hospital commanders must be able to identify those medical specialties that offer the most potential for savings. (See p. 30.)

Recommendations

The need to focus the enhancement of military facilities' treatment capabilities will become increasingly important as DOD begins to identify additional locations in which to implement its ongoing cost containment initiatives. Accordingly, GAO recommends that as DOD proceeds with these efforts, the Secretary of Defense direct the secretaries of the military departments to identify, using either the methodology GAO developed or a similar one, the hospitals and medical specialties in which it would be most cost-effective to expand services to care for patients whose care is now funded under CHAMPUS. Once this is done, GAO recommends that, where warranted, the services proceed to increase hospitals' capabilities. (See p. 31.)

Agency Comments

DOD agreed with the report's findings and recommendations, but said that the estimated dollar benefits—preferring to call this “cost avoidance” rather than “savings”—may be reduced or offset if eligible persons who previously did not use military health care sought care at hospitals with enhanced capabilities. GAO recognizes that although such a demand for care could reduce potential savings, whether and to what extent it might occur is unknown. (See p. 31.)

Contents

Executive Summary		2
Chapter 1		12
Introduction	CHAMPUS Portion of DOD Medical Care Costs Has Risen Significantly	13
	Objectives, Scope, and Methodology	14
Chapter 2		18
Using Available Capacity in Military Hospitals to Treat CHAMPUS Beneficiaries Offers Savings Potential	Overview of Savings	18
	Savings Estimates	20
	Cost Components	24
	Increased Demand for Care Could Diminish Savings	26
	Other Effects of Accommodating the CHAMPUS Workload	27
	Barriers to Acquiring More Staff in Military Hospitals	28
	DOD Initiatives to Accommodate More CHAMPUS Workload	29
	Conclusions	30
	Recommendations	31
	Agency Comments	31
Appendixes	Appendix I: GAO Methodology for Determining the Costs of Treating Additional Patients in Military Hospitals	32
	Appendix II: Profiles of Six Military Hospitals Reviewed by GAO	36
	Appendix III: Major Contributors to This Report	57
Tables	Table 1: Estimated Savings by Hospital and Medical Specialty, Contract Staffing Option	4
	Table 1.1: CHAMPUS Beneficiary Cost-Sharing Provisions	13
	Table 1.2: Hospitals and Specialties Reviewed by GAO	17
	Table 2.1: Estimated Savings in Fiscal Year 1988, by Hospital and Medical Specialty, Under Contract Staffing Option	22
	Table 2.2: Types of Medical Personnel Needed to Accommodate CHAMPUS Workload	25
	Table I.1: Average Costs of Medical Staff, by Staff Category, From Three Staffing Sources	34

Table II.1: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics/Gynecology and Orthopedics, and the Portion That Evans Army Community Hospital Could Accommodate With Additional Resources	37
Table II.2: Estimated Cost of Accommodating Increased Obstetrics/Gynecology Workload Under Three Staffing Alternatives—Evans Army Community Hospital, Fiscal Year 1988	39
Table II.3: Estimated Cost of Accommodating Increased Orthopedics Workload Under Three Staffing Alternatives—Evans Army Community Hospital, Fiscal Year 1988	39
Table II.4: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics/Gynecology Workload at Evans Army Community Hospital During Fiscal Year 1988, Under Three Staffing Alternatives	39
Table II.5: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Orthopedics Workload at Evans Army Community Hospital During Fiscal Year 1988, Under Three Staffing Alternatives	39
Table II.6: Fiscal Year 1988 CHAMPUS Workload and Costs in Gynecology and Orthopedics, and the Portion That Naval Hospital Jacksonville Could Accommodate With Additional Resources	41
Table II.7: Estimated Cost of Accommodating Increased Gynecology Workload Under Three Staffing Alternatives—Naval Hospital Jacksonville, Fiscal Year 1988	43
Table II.8: Estimated Cost of Accommodating Increased Orthopedics Workload Under Three Staffing Alternatives—Naval Hospital Jacksonville, Fiscal Year 1988	43
Table II.9: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Gynecology Workload at Naval Hospital Jacksonville During Fiscal Year 1988, Under Three Staffing Alternatives	43
Table II.10: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Orthopedics Workload at Naval Hospital Jacksonville During Fiscal Year 1988, Under Three Staffing Alternatives	43

Table II.11: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics/Gynecology and the Portion That Nellis Air Force Hospital Could Accommodate With Additional Resources	44
Table II.12: Estimated Cost of Accommodating Increased Obstetrics/Gynecology Workload Under Three Staffing Alternatives—Nellis Air Force Hospital, Fiscal Year 1988	46
Table II.13: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics/Gynecology Workload at Nellis Air Force Hospital During Fiscal Year 1988, Under Three Staffing Alternatives	46
Table II.14: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics and Inpatient Gynecology, and the Portion That Naval Hospital Camp Pendleton Could Accommodate With Additional Resources	47
Table II.15: Estimated Cost of Accommodating Increased Obstetrics/Inpatient Gynecology Workload Under Three Staffing Alternatives—Naval Hospital Camp Pendleton, Fiscal Year 1988	49
Table II.16: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics/Inpatient Gynecology Workload at Naval Hospital Camp Pendleton, Under Three Staffing Alternatives	49
Table II.17: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics and Psychiatry, and the Portion That Naval Hospital San Diego Could Accommodate With Additional Resources	50
Table II.18: Estimated Cost of Accommodating Increased Obstetrics Workload Under Three Staffing Alternatives—Naval Hospital San Diego, Fiscal Year 1988	52
Table II.19: Estimated Cost of Accommodating Increased Psychiatry Workload Under Three Staffing Alternatives—Naval Hospital San Diego, Fiscal Year 1988	52
Table II.20: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics Workload at Naval Hospital San Diego During Fiscal Year 1988, Under Three Staffing Alternatives	52

Table II.21: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Psychiatry Workload at Naval Hospital San Diego During Fiscal Year 1988, Under Three Staffing Alternatives	53
Table II.22: Fiscal Year 1988 CHAMPUS Workload and Costs in Psychiatry, and the Portion That Walter Reed Army Medical Center Could Accommodate With Additional Resources	54
Table II.23: Estimated Cost of Accommodating Increased Psychiatry Workload Under Three Staffing Alternatives—Walter Reed Army Medical Center, Fiscal Year 1988	56
Table II.24: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Psychiatry Workload at Walter Reed Army Medical Center During Fiscal Year 1988, Under Three Staffing Alternatives	56

Figures

Figure 1.1: Fiscal Year 1988 Occupancy Rates	14
Figure 2.1: Fiscal Year 1988 Inpatient Workload and Potential Workload Increase	19
Figure 2.2: Fiscal Year 1988 Outpatient Workload and Potential Workload Increase	20
Figure 2.3: Estimated Savings by Medical Specialty and Staffing Option	21
Figure 2.4: Percentage Savings Under Contract Staffing Option	22
Figure 2.5: Beneficiary Savings by Medical Specialty	23
Figure 2.6: Cost Elements Associated With Increasing Hospital Workload	24
Figure 2.7: Number of Staff on Hand and Number Required to Accommodate CHAMPUS Workload	25
Figure 2.8: Change in Direct Care and CHAMPUS Workload, Fiscal Years 1984-89	27
Figure II.1: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Evans Army Community Hospital	38
Figure II.2: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Naval Hospital Jacksonville	42

Contents

Figure II.3: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload— Nellis Air Force Hospital	45
Figure II.4: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload— Naval Hospital Camp Pendleton	48
Figure II.5: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload— Naval Hospital San Diego	51
Figure II.6: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload— Walter Reed Army Medical Center	55

Abbreviations

CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
DOD	Department of Defense
GAO	General Accounting Office

Introduction

The Department of Defense's (DOD) health care system has both a wartime and a peacetime mission. The wartime mission is to provide medical support to active-duty military personnel in preparation for and during conflict. The peacetime mission is to maintain the health of the 2.3-million-member active-duty force and, to the extent that space, staff, and other resources are available, to provide medical care to about 6.5 million non-active-duty beneficiaries (dependents of active-duty members, retired members, their dependents, and survivors of deceased members). Care for active-duty members is comprehensive, guaranteed, and free.

The military services operate more than 500 military treatment facilities worldwide, ranging in size from small clinics with limited capabilities to large hospitals with extensive teaching programs. Of these facilities, 168 are military hospitals, 129 of which are in the United States.

Non-active-duty beneficiaries are also eligible for care from civilian hospitals and professional providers under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). However, beneficiaries who require inpatient care and reside within a 40-mile radius (called a catchment area) of a military hospital must first seek care at that hospital. If the military hospital is unable to provide the care sought, it issues a nonavailability statement authorizing the beneficiary to obtain the care under CHAMPUS. Nonavailability statements are not required for (1) emergency or outpatient care, (2) beneficiaries who reside outside the catchment area, or (3) beneficiaries who use health insurance other than CHAMPUS to pay a portion of the cost of their care.

Non-active-duty beneficiaries have a financial incentive to obtain care in military facilities rather than under CHAMPUS. In military facilities, these beneficiaries pay a daily fee—\$8.35 in fiscal year 1990—for inpatient care, but pay nothing for outpatient care. Under CHAMPUS, while the government pays much of the costs, beneficiaries are required to pay deductibles and copayments, as shown in table 1.1.

Table 1.1: CHAMPUS Beneficiary Cost-Sharing Provisions

Beneficiary type	Inpatient	Outpatient
Dependents of active-duty members	Each admission—\$25 or the cumulative amount charged for inpatient care in a military hospital (\$8.35 per day in fiscal year 1990), whichever is greater	(a) Annual deductible—\$50 per dependent or \$100 per family and, then, (b) 20 percent of allowable charge
Other beneficiaries	25 percent of billed hospital charges or \$235 per day (in fiscal year 1990), whichever is less, and 25 percent of other providers' allowable charges	(a) Annual deductible—\$50 per dependent or \$100 per family and, then, (b) 25 percent of allowable charges

Note: Beneficiaries annual copayment liability is capped at \$1,000 for dependents of active-duty members and at \$10,000 for all other CHAMPUS-eligible families

The Assistant Secretary of Defense (Health Affairs) is responsible for overall supervision and policy guidance for DOD medical care activities. Each military service's medical department is headed by a surgeon general, who is responsible for the service's health care system. The Office of CHAMPUS (a component of Health Affairs), located at Fitzsimons Army Medical Center near Denver, is responsible for administering CHAMPUS.

CHAMPUS Portion of DOD Medical Care Costs Has Risen Significantly

In July 1989 we reported that the CHAMPUS portion of DOD's medical care costs has risen much faster than have the rest of DOD's medical care costs.¹ In fiscal year 1989, DOD spent an estimated \$12.7 billion for care provided in its own facilities, under CHAMPUS, and for related medical activities. Between fiscal years 1985 and 1989, CHAMPUS costs increased about 79 percent, from \$1.4 billion to an estimated \$2.5 billion. During the same period, the rest of DOD's medical costs increased about 31 percent, from \$7.8 billion to \$10.2 billion. CHAMPUS costs now represent nearly 20 percent of total DOD health care expenditures.

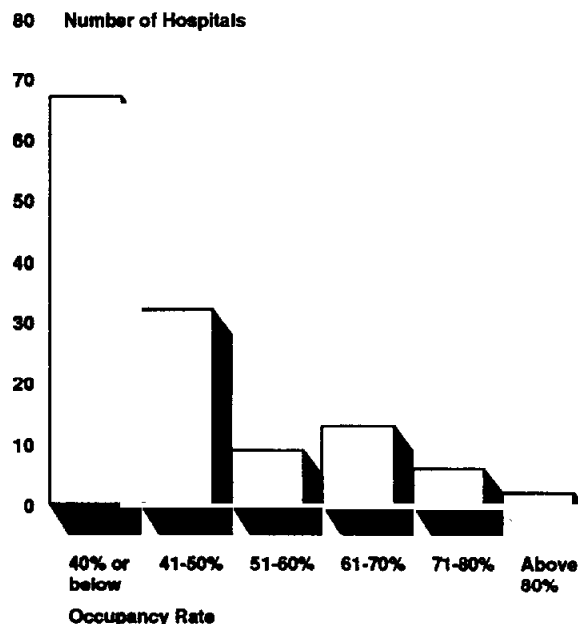
Military facilities have unused capacity primarily because of staff shortages. In fiscal year 1988, the overall occupancy rate in military hospitals was 45 percent (based on designed inpatient bed capacity²). Of the 129 military hospitals in the United States, 121 had occupancy rates

¹Defense Health Care: Workload Reductions at Military Hospitals Have Increased CHAMPUS Costs (GAO/HRD-89-47, July 10, 1989)

²Designed inpatient bed capacity, as we are defining it, represents the total number of beds that wards or rooms were designed to hold.

of 70 percent or below. At the same time military hospitals were experiencing these low occupancy rates, about 70 percent of CHAMPUS costs were being incurred within their catchment areas. Figure 1.1 shows fiscal year 1988 occupancy rates for military hospitals in the United States.

Figure 1.1: Fiscal Year 1988 Occupancy Rates



Objectives, Scope, and Methodology

In a letter dated February 16, 1988, the Chairman, Subcommittee on Military Personnel and Compensation, House Committee on Armed Services, requested us to determine whether savings could be achieved by adding staff or other resources to military treatment facilities as an alternative to referring patients to CHAMPUS. The Chairman expressed concern about the large increases in CHAMPUS costs and the unused capacity in military hospitals, noting that a significant portion of CHAMPUS costs are incurred in military hospitals' catchment areas.

The Chairman asked that we determine what effect an infusion of staff or other resources would have on facilities as they currently exist, that is, without facility renovations or replacements. She also asked that we not limit our examination to military staff, but also explore other means of acquiring staff, such as through contracting.

To determine whether savings could be achieved if military hospitals used their available capacity to accommodate the CHAMPUS workload, we developed a methodology for identifying the additional variable costs associated with an increase in military hospital workload. We then compared these added costs to CHAMPUS payments for similar care and services. We also identified barriers that prevent military services from treating more patients. Appendix I describes our methodology in detail.

We obtained workload and variable cost information for fiscal year 1988 from the military services' hospital expense reporting system.³ These data enabled us to project additional costs, such as for supplies, and staffing needs at various increases in workload. We also made a projection of increased staffing needs using military staffing standards, and we received estimates of staffing and equipment needs from department heads, chief nurses, and other hospital officials. Together with hospital officials we made final estimates of the additional staffing and equipment needs for various workload increases. The costs of additional equipment were factored into the analyses on an amortized basis.

To estimate the cost of acquiring the additional staff needed, we considered three sources: the military services, the civilian government, and contractual arrangements. For military and civilian government salary costs, we used DOD data showing the average pay, including fringe benefits and bonuses, for various health care personnel.

We also factored in other staffing-related costs. For example, because nearly all military physicians are acquired through either the Uniformed Services University of the Health Sciences or the Armed Forces Health Professions Scholarship Program, we added the educational costs from both sources. We also factored in the cost of residency training, which many military physicians receive while serving in the military. In addition, because the government assumes the liability for malpractice for both military and civilian government physicians, we added a factor for malpractice insurance based on the military's history of paid malpractice claims.

For contract personnel, we obtained data from all three military services on fiscal year 1988 and 1989 contracts covering personnel in the medical specialties that we studied. We used these data to compute national

³This standard system, the Medical Expense and Performance Reporting System, is used by hospitals of all three military services. It identifies costs for (1) direct patient care; (2) ancillary services, such as pharmacy and radiology, that, while generally not having direct responsibility for patient care assist physicians in treating patients; and (3) support services, such as housekeeping and laundry

average contract amounts. Contract amounts on a local or regional basis could vary from those we used. Also, we did not determine whether civilian government or contract personnel were available in the local job markets of the hospitals we studied.

To determine the portion of the total CHAMPUS workload that could be accommodated, and the associated costs, we obtained reports from the Office of CHAMPUS showing inpatient and outpatient claims and costs by hospital catchment area and specialty for the hospitals we reviewed. Of the total inpatient CHAMPUS claims, we considered only those associated with nonavailability statements as they best represented the CHAMPUS workload most likely to return to the military hospital. To make the military hospital and CHAMPUS case mix as comparable as possible, we eliminated CHAMPUS-paid admissions for diagnoses that hospital officials told us they could not treat even with additional staff. We did not make comparisons between the quality of care provided in military hospitals and that provided under CHAMPUS. Rather, we assumed that care provided in both settings meets DOD quality standards.

In selecting military hospitals for review, we matched information on unused hospital capacity, as indicated by occupancy rates, with CHAMPUS costs in the catchment area and ranked hospitals accordingly. The highest ranked hospitals had low occupancy rates and high CHAMPUS costs in their catchment areas. The six hospitals we selected for review were among those with high rankings and are not necessarily representative of the 129 military hospitals. We excluded hospitals that might require extensive renovation or replacement to accommodate additional workload. In selecting the medical specialties to study, we chose those that we believed had the highest likelihood for savings. These were specialties that (1) hospital officials considered most appropriate, (2) had a high number of nonavailability statements issued, and (3) had high CHAMPUS costs in the hospital's catchment area. Based on this information, we selected the hospitals and medical specialties shown in table 1.2.

**Table 1.2: Hospitals and Specialties
Reviewed by GAO**

Hospital	Specialty
Evans Army Community Hospital, Fort Carson, Colorado	Obstetrics/gynecology Orthopedics
Walter Reed Army Medical Center, Washington, D C	Psychiatry
Naval Hospital San Diego, California	Obstetrics Psychiatry
Naval Hospital Camp Pendleton, California	Obstetrics/gynecology
Naval Hospital Jacksonville, Florida	Gynecology Orthopedics
554th Medical Group, Nellis Air Force Base, Nevada	Obstetrics/gynecology

We conducted our review between April 1988 and May 1990 in accordance with generally accepted government auditing standards.

Using Available Capacity in Military Hospitals to Treat CHAMPUS Beneficiaries Offers Savings Potential

DOD can potentially save millions by treating more patients in military hospitals, rather than paying for their care under CHAMPUS. Overall, the estimated savings from treating a portion of the CHAMPUS fiscal year 1988 workload in the six military hospitals and three specialties we reviewed ranged from \$18 million to \$21 million. DOD paid \$37 million for the care under CHAMPUS. The potential for savings tends to support the expansion of military hospital capability, which is currently being tested around the country under several DOD health care initiatives.

However, the potential for savings varies significantly by hospital and medical specialty. Many factors influence whether and to what extent savings can be achieved. For example, costs associated with possible increased demand for care by beneficiaries using neither military facilities nor CHAMPUS, but who may seek care from military hospitals if their capabilities are enhanced, might offset any savings. Other factors include barriers to obtaining the staff needed to increase hospital capability and the extent of hospital unused capacity, the cost of medical care in the local community, and hospital efficiency.

We believe that DOD decisionmakers should identify the facilities and specialties in which expansion of treatment capability would be the most cost-effective. Being able to focus expansion efforts will become increasingly important as DOD begins to expand some of its current initiatives to accommodate additional CHAMPUS workload.

Overview of Savings

The overall savings potential of treating more CHAMPUS beneficiaries in military hospitals appears significant, but it is limited by such factors as the hospital's unused capacity; the size and complexity of the CHAMPUS workload; the cost of medical care in the local community; the hospital's efficiency; the type, availability, and source of additional staff needed; equipment needs; and possible increased demand because care in military hospitals is essentially free. Because military hospitals differ substantially, the savings estimates we developed vary significantly by hospital and medical specialty. Appendix II profiles the facilities we visited and shows the savings by facility and specialty.

Our savings estimates were based on the six hospitals' capability to increase their inpatient admissions overall by about 55 percent and to increase their outpatient visits by about 54 percent in the specialties studied. In fiscal year 1988, the hospitals had about 11,700 inpatient admissions and about 161,300 outpatient visits in the specialties studied; they had the capacity to increase their inpatient admissions by

**Chapter 2
Using Available Capacity in Military
Hospitals to Treat CHAMPUS Beneficiaries
Offers Savings Potential**

6,400 and their outpatient visits by about 87,700. Figures 2.1 and 2.2 show (for the specialties we studied) inpatient and outpatient workload and capacities by facility.

Figure 2.1: Fiscal Year 1988 Inpatient Workload and Potential Workload Increase

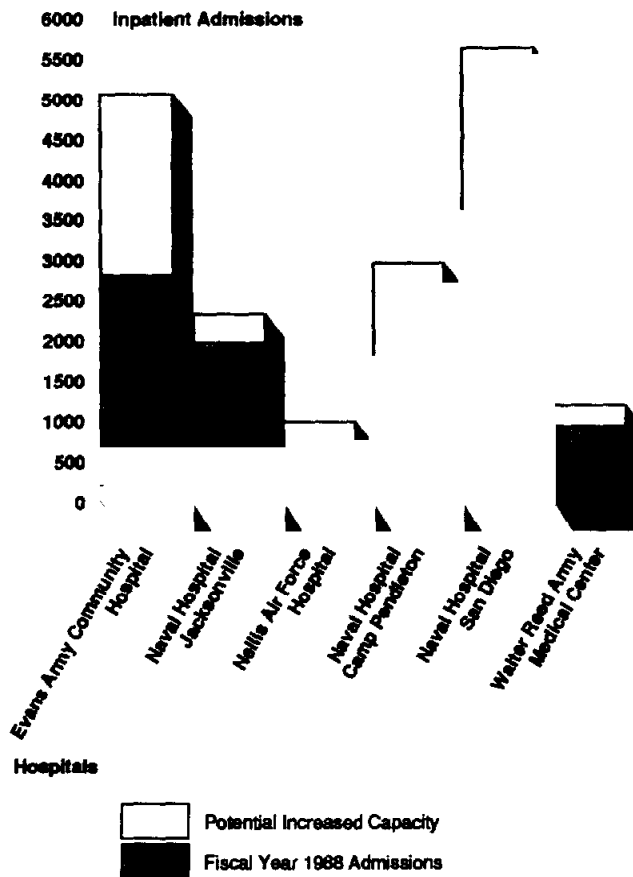
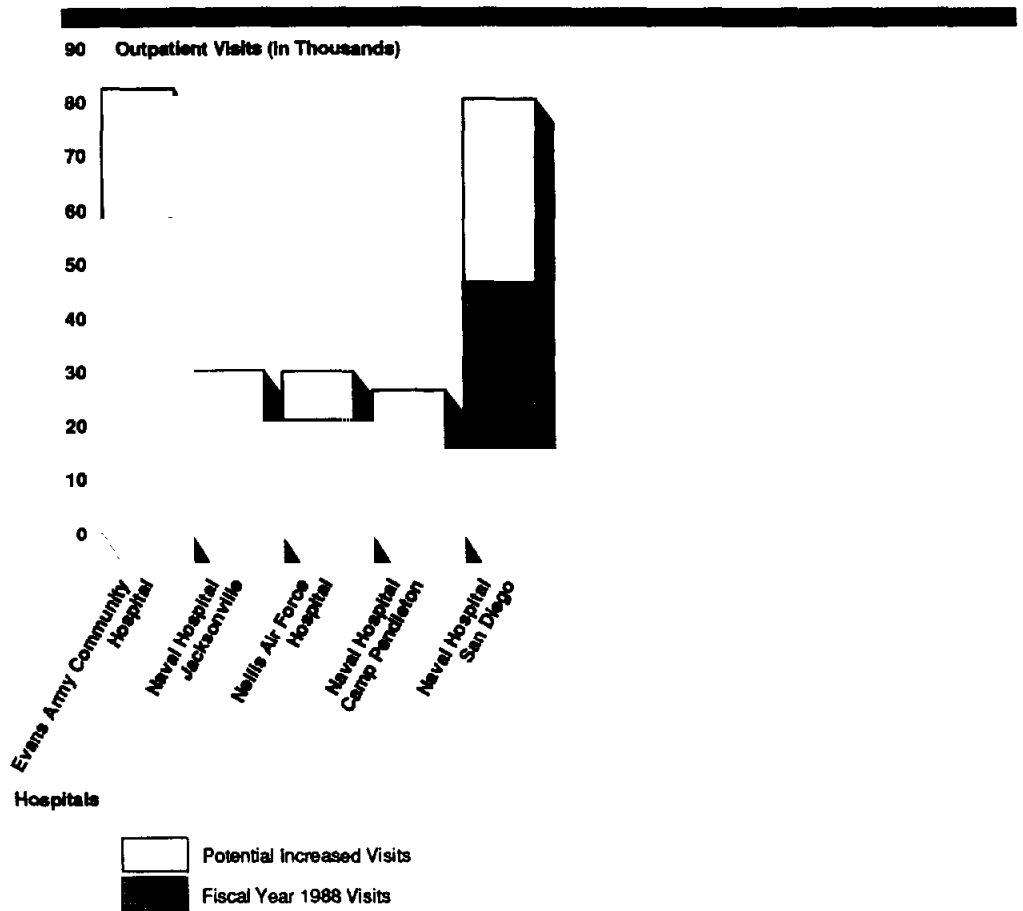


Figure 2.2: Fiscal Year 1988 Outpatient Workload and Potential Workload Increase



Note. Only inpatient workload was considered at Walter Reed Army Medical Center

In some cases there was a greater CHAMPUS workload in a catchment area than the hospital could potentially treat; in those cases the excess CHAMPUS workload could not be factored into our analysis. In other cases the military hospital's unused capacity exceeded the total CHAMPUS workload; in those cases we excluded only that care too complex for the hospital to treat.

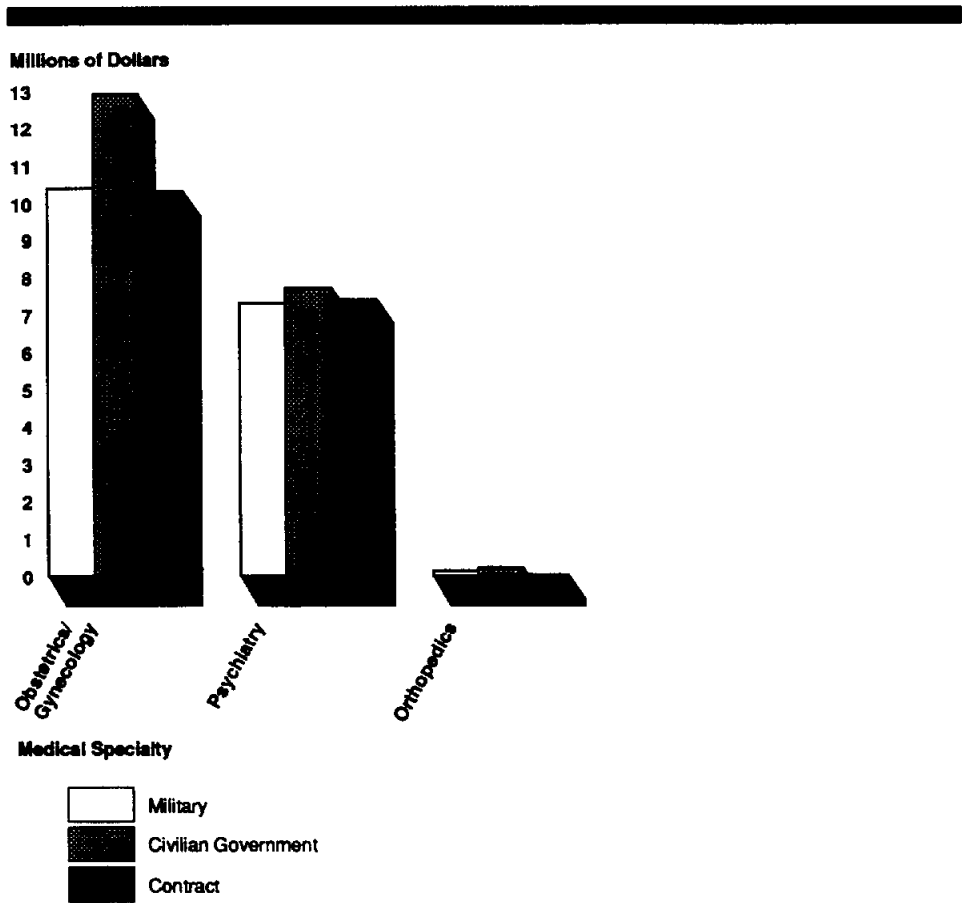
Savings Estimates

In the specialties we reviewed at the six hospitals, DOD paid \$37 million for CHAMPUS care in fiscal year 1988. That care would have cost an estimated \$16 million to \$19 million, using the hospitals' available capacity and added resources, resulting in savings ranging from \$18 to \$21 million. There is a range of savings because of the cost differences associated with the three sources of additional staffing that hospitals could

Chapter 2
Using Available Capacity in Military
Hospitals to Treat CHAMPUS Beneficiaries
Offers Savings Potential

employ to accommodate more CHAMPUS beneficiaries. The greatest potential for savings appears to be through acquiring additional civilian government personnel because the costs are less than for military or contract staff, although significant savings would still be achieved by acquiring staff from these other sources. It is likely that a hospital would have to acquire personnel from a combination of sources in order to accommodate increases in workload. Figure 2.3 shows the range of savings by staffing option and medical specialty.

Figure 2.3: Estimated Savings by Medical Specialty and Staffing Option



Savings also vary significantly by facility and medical specialty, as illustrated in figure 2.4 and table 2.1 for the contract staffing option.

Chapter 2
 Using Available Capacity in Military
 Hospitals to Treat CHAMPUS Beneficiaries
 Offers Savings Potential

Figure 2.4: Percentage Savings Under Contract Staffing Option

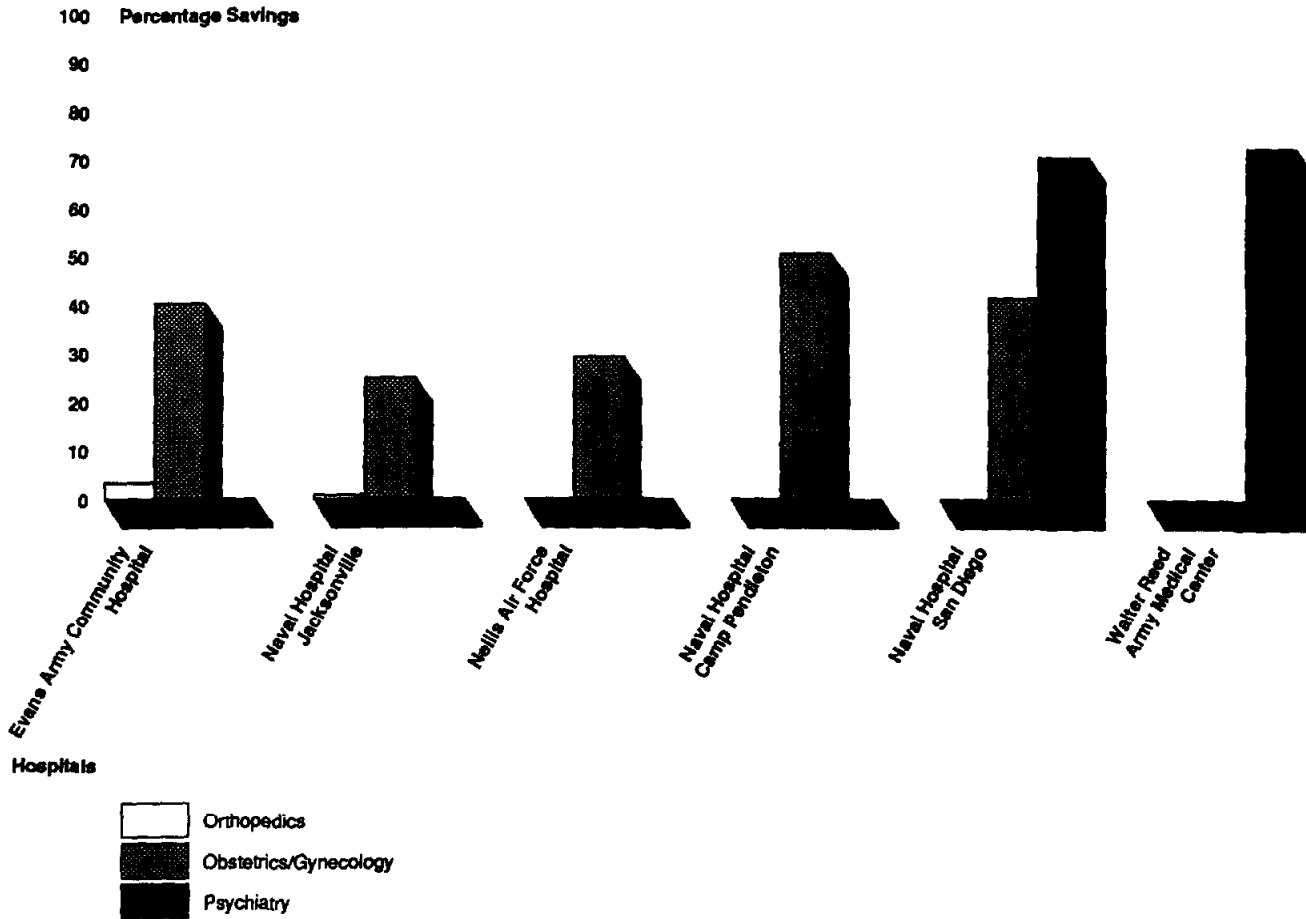


Table 2.1: Estimated Savings in Fiscal Year 1988, by Hospital and Medical Specialty, Under Contract Staffing Option

	Obstetrics/ gynecology	Psychiatry	Orthopedics
Evans Army Community Hospital	\$2,423,600	•	\$20,300
Naval Hospital Jacksonville	485,400	•	6,500
Nellis Air Force Hospital	584,900	•	•
Naval Hospital Camp Pendleton	3,037,400	•	•
Naval Hospital San Diego	3,720,700	4,308,400	•
Walter Reed Army Medical Center	•	3,100,900	•
Total estimated savings	\$10,252,000	\$7,409,300	\$26,800

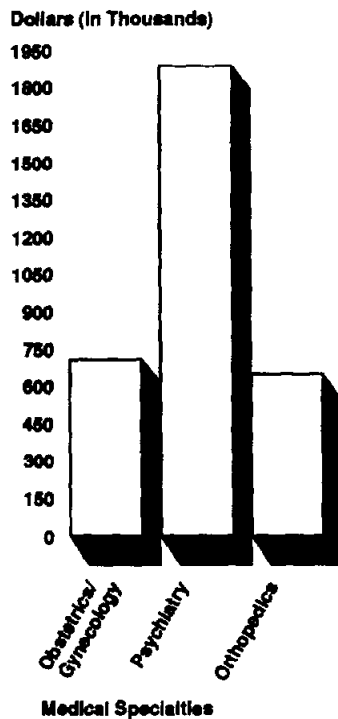
Note: We did not analyze each medical specialty in each hospital

Chapter 2
Using Available Capacity in Military
Hospitals to Treat CHAMPUS Beneficiaries
Offers Savings Potential

Treating more dependents of active-duty personnel in military hospitals would result in the greatest savings to DOD. This is because the government pays a larger share of these beneficiaries' medical payments under CHAMPUS than it does for other categories of beneficiaries and because dependents of active-duty personnel are also less likely to have other insurance—which by law must pay first. The savings estimates we developed are based on the cost of treating those beneficiaries that were treated under CHAMPUS in fiscal year 1988 in the specialties studied.

Those beneficiaries who do not have CHAMPUS supplemental insurance would also save money by receiving their care in military hospitals. Retirees, their dependents, and dependents of deceased service members would save the most because they pay the greatest copayments under CHAMPUS. For beneficiaries treated under CHAMPUS in fiscal year 1988 in the specialties studied, figure 2.5 shows the savings they would have realized by receiving their care in military hospitals.

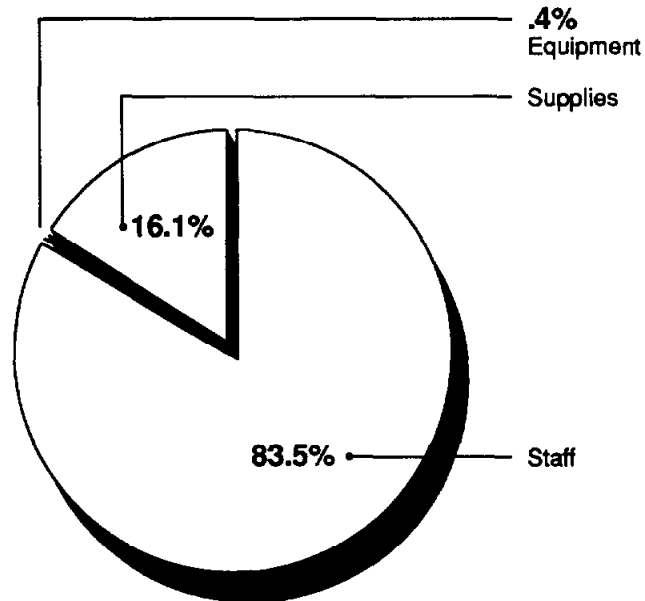
Figure 2.5: Beneficiary Savings by Medical Specialty



Cost Components

Most of the costs of treating more patients in military hospitals are staff related, that is, salaries and fringe benefits. These percentages vary only slightly between the various staffing options. Figure 2.6 shows the percentage breakdown of the various cost elements associated with increased hospital workload, calculated as the average for the three staffing options.

Figure 2.6: Cost Elements Associated With Increasing Hospital Workload



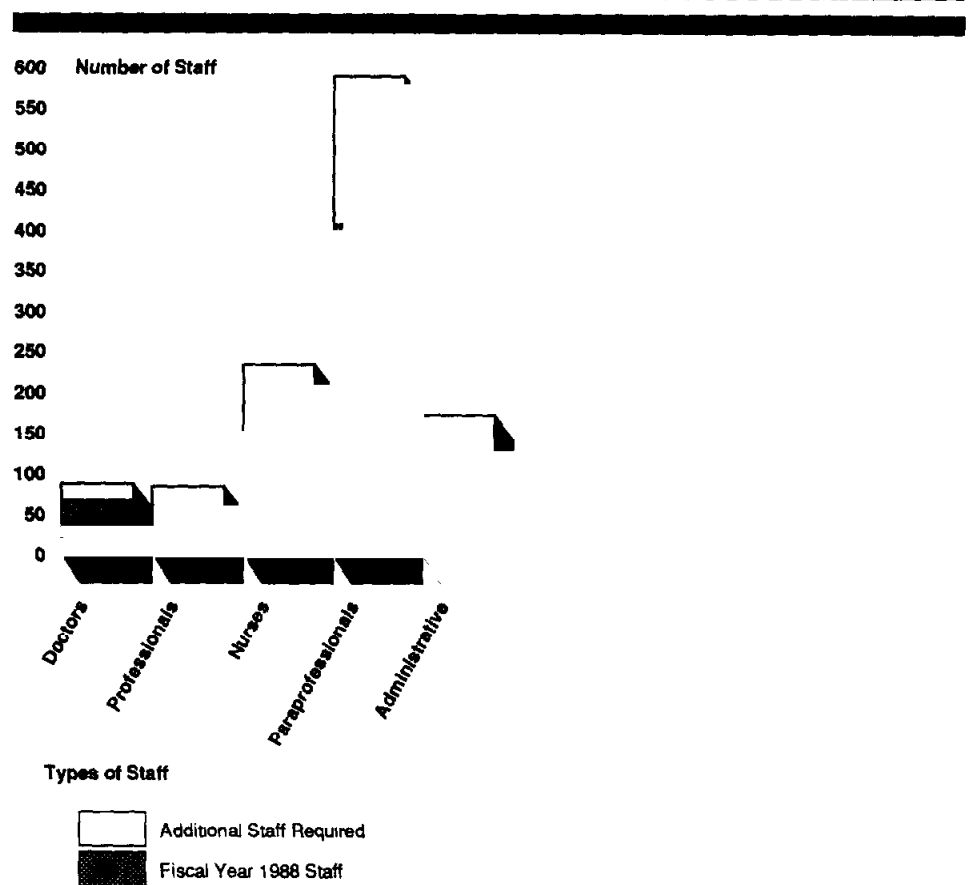
Many different types of medical personnel are needed to accommodate the CHAMPUS workload. Besides physicians and registered nurses, hospitals would need a variety of other professionals, paraprofessionals, and administrative staff, as shown in table 2.2 and figure 2.7.

Chapter 2
Using Available Capacity in Military
Hospitals to Treat CHAMPUS Beneficiaries
Offers Savings Potential

Table 2.2: Types of Medical Personnel Needed to Accommodate CHAMPUS Workload

Physicians	Allied health professionals	Registered nurses	Paraprofessionals	Administrative
Obstetrician/gynecologists	Psychologists	Surgical nurses	Licensed nurses	Ward clerks
Orthopedic surgeons	Nurse practitioners	Clinical nurses	Ward corpsmen/technicians	Appointment clerks
Anesthesiologists	Nurse anesthetists		Laboratory technicians	Secretaries
Psychiatrists	Nurse midwives		Pharmacy technicians	
Radiologists	Pharmacists		Radiology technicians	

Figure 2.7: Number of Staff on Hand and Number Required to Accommodate CHAMPUS Workload



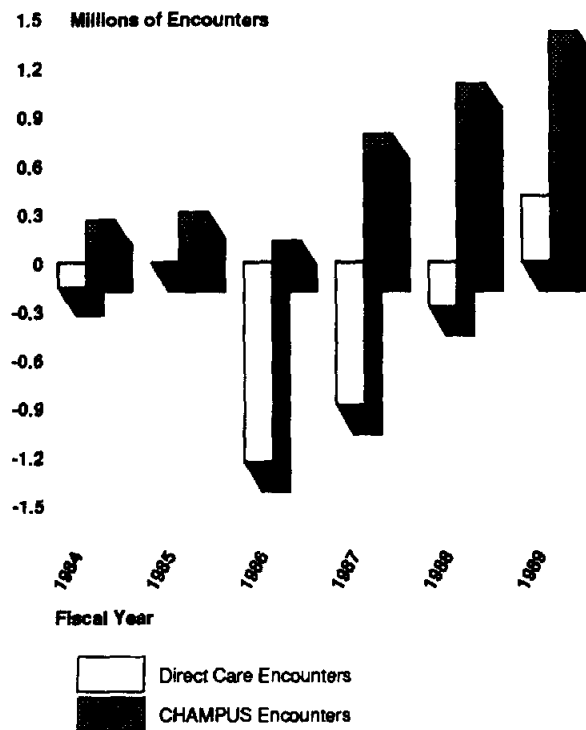
Increased Demand for Care Could Diminish Savings

The savings we have estimated are based on the military hospitals' capacity to accommodate most or all of the fiscal year 1988 CHAMPUS workload in certain medical specialties. However, if hospitals augment their staff and resources to use their available capacities, they may attract more patients than make up the present CHAMPUS workload. These would be people eligible for treatment at military hospitals or reimbursement under CHAMPUS who, for various reasons, have not sought either. To the extent that such beneficiaries seek treatment from the military hospitals, savings would decrease. If the number of those patients is great enough, DOD health care costs could increase. DOD data show that CHAMPUS workload continues to increase, despite the fact that military hospital workload is no longer declining.

We did not estimate how much the demand for care in military hospitals might increase above the current CHAMPUS workload. However, a January 1988 Congressional Budget Office study suggests that as more care becomes available in military hospitals, more people rely on these facilities for care. Also, a 1984 Rand Corporation study found that people whose medical care cost was fully covered seek nearly 25 percent more care than those paying a 25-percent copayment.

Workload data provided by DOD show that increased activity on the part of the direct care system may not result in completely corresponding reductions in CHAMPUS workload. As shown by figure 2.8, direct care workload stopped declining in fiscal year 1989, stemming a downward trend seen since fiscal year 1983, which seems to reflect DOD's efforts to begin bolstering its hospital capability. However, even though the military health services system beneficiary population remained fairly constant, CHAMPUS workload has continued to increase over the same period.

Figure 2.8: Change in Direct Care and CHAMPUS Workload, Fiscal Years 1984-89



Note 1. Encounters are the sum of admissions and outpatient visits

Note 2: The number of direct care admissions decreased in 1989. The increase in direct care encounters is due solely to increased direct care outpatient visits.

Other Effects of Accommodating the CHAMPUS Workload

Treating more CHAMPUS beneficiaries in military hospitals could produce other benefits, such as increased medical proficiency and improved graduate medical education programs. Civilian health care providers located near military hospitals may see their business reduced.

Medical staff in military hospitals would gain better experience from treating larger numbers and types of patients and a greater diversity of medical conditions. In March 1990 we reported that military doctors viewed the importance of having a diverse case mix as a key ingredient in decisions on whether to pursue a medical career in the military.¹

¹Defense Health Care: Military Physicians' Views on Military Medicine (GAO/HRD-90-1, Mar. 22, 1990).

Graduate medical education programs, an attractive feature of DOD's recruitment strategy, might improve if military hospitals treated more patients. When understaffed military hospitals turn away beneficiaries, the hospitals' physicians lose opportunities to obtain needed training experience. Some military graduate medical education programs have been criticized by their residency review committees for being understaffed.

Officials of private hospitals located near military hospitals said that the loss of CHAMPUS patients would adversely affect their business, but in varying degrees depending on the size of their CHAMPUS patient population.

The cost of certain medical personnel to the military could potentially increase as a result of the increased demand for staff to accommodate CHAMPUS workload. Recruiting and retaining larger numbers of medical personnel that are in short supply could mean having to offer bonuses or other financial inducements, and this could reduce the potential for savings.

Barriers to Acquiring More Staff in Military Hospitals

Three principal barriers to acquiring the medical staff that would be needed to accommodate the CHAMPUS workload in military hospitals are

- active-duty personnel ceilings, which limit the number of medical personnel that can be acquired;
- federal civilian salaries, which are not competitive with those in the private sector; and
- the slow and cumbersome process of acquiring staff through contracting.

The annual congressionally imposed limits on the number of active-duty personnel result in requests for medical personnel being weighed against requests for other types of personnel. Any increase in medical personnel would come at the expense of other units, and vice versa, including operational units; this makes increases in medical personnel difficult.

Also, military hospitals are finding it increasingly difficult to fill civilian staff vacancies of all types, primarily because of the disparity between federal and private sector salaries. Civilian government employees are an important part of the overall military hospital staffing mix because, among other things, they offer continuity in an environment in which military staff are often transferred.

Contracting for medical staff, a third way of adding personnel resources to military hospitals, was described to us by hospital and headquarters officials as slow and cumbersome, the least acceptable way of increasing staffing, and one that should be used only as a short-term solution. Officials pointed out that personnel brought in under contracts are often paid more than the military and civilian government staff already in place, which can create resentment and morale problems. Several hospital officials told us of cases in which active-duty or civilian government staff members have quit their positions in order to return as contract employees earning more money for handling the same or even lighter workloads.

DOD Initiatives to Accommodate More CHAMPUS Workload

DOD has several initiatives underway to demonstrate the feasibility of treating more of the CHAMPUS workload in its hospitals. A major initiative is Project Restore, under which there are several efforts. One is the Partnership Program, in which local community civilian providers treat CHAMPUS patients in military hospitals at a discount from their normal charge. DOD also avoids hospital charges that it would have incurred had the care been provided in a civilian hospital. As of May 1990, about 1,300 partnership agreements had been signed with civilian providers.

Another effort under Project Restore is the Alternate Use of CHAMPUS Funds Test, under which each military service can use up to \$50 million of its CHAMPUS funds for projects that use military hospitals to treat CHAMPUS patients. As of March 31, 1989, 40 projects were approved—20 in the Army, 19 in the Air Force, and 1 in the Navy. These projects normally involve using contracting strategies to increase medical staffing. The services estimate that CHAMPUS costs will be reduced by about \$43 million in fiscal year 1990 after an expenditure of about \$25 million on the projects.

Other major initiatives, directed by the Congress, involve testing managed-care concepts. Two large managed-care models are being tested: the CHAMPUS Reform Initiative and Catchment Area Management.

The CHAMPUS Reform Initiative, being tested in California and Hawaii, provides comprehensive health care to beneficiaries who enroll in a health plan administered by a private contractor. The contractor has assembled a network of participating medical providers, including physicians and hospitals. Enrollees choose a primary care physician from whom they must receive their care or be referred by this physician for specialty care. There is only nominal cost sharing. We have testified

three times and reported once on the Initiative's implementation.² In March 1990 we testified that it was still unclear whether the Initiative was saving money.

Catchment Area Management, being tested at five locations around the nation, places responsibility on hospital commanders for managing the local CHAMPUS and direct care budgets. In other words, hospital commanders receive a specified amount of money each year from which they have to provide or arrange care for all the beneficiaries in their catchment area. (At nontest locations, hospital commanders do not control the CHAMPUS budget.) Emphasis is being placed on increasing the military hospital capability, so that more patients can be served. DOD plans to expand the program nationwide beginning in mid-fiscal year 1991.

DOD plans to evaluate these initiatives to determine whether they improve health care services to beneficiaries and whether they enable DOD to provide these services more cost-effectively. However, because most of the initiatives are relatively new, DOD has not completed its evaluations on any of them.

Conclusions

The potential exists for savings if resources—principally staff—were added to military hospitals to treat beneficiaries whose care is now funded under CHAMPUS. These potential savings, however, vary significantly by hospital and medical specialty. It would rarely be cost-effective for a military medical facility to add resources sufficient to treat all of the workload in its catchment area. For example, it would not be prudent for small or medium-sized hospitals to add all of the sophisticated equipment and staff needed to treat relatively few open heart surgery cases. It is important, therefore, that military hospital commanders be able to (1) identify the workload that could be accommodated in medical specialties that offer the greatest potential for savings and (2) determine the feasibility of obtaining the resources for treating this workload.

²Defense Health Care: CHAMPUS Reform Initiative: Unresolved Issues (GAO/HRD-87-65BR, Mar. 4, 1987); CHAMPUS Reform Initiative: Unresolved Issues (GAO/T-HRD-87-4, Mar. 12, 1987); Implementation of the CHAMPUS Reform Initiative (GAO/T-HRD-89-17, Apr. 18, 1989); Potential Expansion of the CHAMPUS Reform Initiative (GAO/T-HRD-90-17, Mar. 15, 1990).

Recommendations

We recommend that as DOD proceeds with efforts to identify additional locations in which to implement its cost containment initiatives, the Secretary of Defense direct the secretaries of the military departments to identify, using either the methodology we developed or a similar one, the hospitals and medical specialties for which it would be most cost-effective to expand capability to care for patients whose care is now funded under CHAMPUS. Once this is done, we further recommend that, where warranted, the services proceed to increase hospitals' capabilities.

Agency Comments

DOD agreed with the report's findings and recommendations and agreed that savings are possible by treating in military hospitals patients whose care is now funded under CHAMPUS. DOD officials preferred to characterize the potential dollar benefits as "cost avoidance" rather than "savings," however, since such benefits likely would be expended elsewhere in the services' medical care program. Also, these officials said that the estimated benefits could be reduced or offset if eligible persons who previously did not use military health care should seek care at hospitals with enhanced capabilities.

We believe the term "savings" appropriately characterizes the cost reductions that would accrue to CHAMPUS by treating patients formerly funded under CHAMPUS in military hospitals. Moreover, we recognize in the report that potential savings could be reduced if eligible persons who had not used military health care sought care at hospitals with enhanced capabilities. Whether and to what extent this might occur, however, is not known.

GAO Methodology for Determining the Costs of Treating Additional Patients in Military Hospitals

We developed a methodology for estimating the incremental costs that would be incurred by military hospitals if they accommodated some or all of the CHAMPUS workload in selected medical specialties in their catchment areas. We excluded fixed costs because they are part of the current costs of operating military hospitals and would not change with additional workload. The methodology considers costs for

- additional staff,
- additional equipment and supplies, and
- malpractice claims.

The cost estimates can be compared to CHAMPUS payments that were made to treat this workload to determine whether using military hospitals' available capacity to accommodate the CHAMPUS workload would save money.

Costs for Additional Staff

Developing costs for additional staff involves (1) estimating the number and type of staff needed to accommodate the CHAMPUS workload and (2) then calculating costs for this additional staff.

Estimating Number and Type of Additional Staff Needed

We determined the number of additional staff needed for many different types of positions, represented in the following broad categories:

- physicians;
- registered nurses;
- allied health professionals, such as pharmacists, nurse practitioners, nurse anesthetists, and nurse midwives;
- paraprofessionals, such as corpsmen, laboratory technicians, and radiology technicians; and
- administrative personnel, such as appointment clerks, ward clerks, and secretaries.

To estimate the number and type of staff needed, we used three sources:

1. Workload and staff data from each hospital's Medical Expense and Performance Reporting System.¹ This system identified (1) the number of people working in the specific direct care area(s) being studied and

¹The system is used by all military hospitals to track workload, staffing, and costs associated with the provision of medical care, including the workload, staffing, and costs in non-direct care areas, such as ancillary, support, and administrative functions. This system allocates figures for non-direct care areas to direct care cost centers based on the workload measures assigned to each area

(2) the portion, based on workload allocations, of people in ancillary and support areas dedicated to the studied area(s). We projected an increase in staffing in direct proportion to the direct care workload increase being considered.

2. DOD-wide manpower standards. We applied standards both to actual fiscal year 1988 workload levels and to the workload levels that would have been needed if the CHAMPUS workload in question had been brought into the military hospital. The difference between the two represented the additional staff required to handle the additional workload.

3. Discussions with senior personnel in each area of the hospital that would be affected by the additional workload. The purpose of these discussions was to obtain the staff members' best estimates of the additional staff required to handle the additional workload in their area using the results of the first two sources as the basis for discussion. We presented this information to a senior hospital official, such as the facility commander or medical director. Minor changes suggested by these officials were incorporated into the final estimate of staff requirements, while more significant changes were followed up by additional discussions with area-level personnel.

Estimating Costs for Additional Staff

Costs for additional staff were estimated on the basis of acquiring them from three different sources—all military, all civilian government, and all contractor.

For each military and civilian government position needed, we computed costs based on fiscal year 1988 average salary data supplied by the Army's Health Services Command. The data include fringe benefits and, for physicians, bonuses.

For contractor personnel costs, we used data supplied by each of the three services based on contracts in effect during fiscal years 1988 and 1989. In a few medical specialties, the services had only limited numbers of personnel under contract, and therefore the data are less precise.

We did not consider whether additional staff in short supply would lead to the need for new financial incentives to recruit and retain these people.

Table I.1 summarizes, by staff category, the salary data we obtained for each occupation and source of staff.

Appendix I
GAO Methodology for Determining the Costs
of Treating Additional Patients in
Military Hospitals

Table I.1: Average Costs of Medical Staff, by Staff Category, From Three Staffing Sources

Staff category	Personnel option		
	Military	Civilian	Contract
Physicians	\$86,042	\$91,337	\$137,917
Allied health professionals	56,781	42,022	49,460
Registered nurses	52,439	36,311	46,593
Paraprofessionals	26,727	26,953	32,346
Administrative	21,997	21,997	21,997

Because the military services provide scholarships and training for military physicians, we factored the costs of these elements into our estimate of the costs of using military physicians. We used data from a January 1988 DOD report on the cost of physician accessions² to identify the total cost of bringing them into the service. We divided this cost by the average length of service of all military physicians. We calculated the overall average education cost per year per military physician to be \$17,100. This cost was added to the salary and fringe benefit cost of military physicians when calculating the costs of adding this type of physician.

Costs for Additional Equipment and Supplies

Equipment needs relating to providing care to more patients were described and itemized by hospital officials. To determine these costs, we consulted hospital equipment price lists obtained from hospital officials or we obtained estimates from senior hospital staff. We calculated first-year costs by amortizing the total equipment costs over 8 years, which hospital financial personnel said is the figure used in their accounting calculations.

Supply costs were obtained by projecting the actual supply costs for each area of the hospital that would be affected by the workload increase being considered. Projections were based on the percentage increase in workload.

Cost for Malpractice

The government is the liable party in cases of medical malpractice by military and civilian government physicians. We developed an estimate of potential malpractice payments by DOD using the services' historical information on malpractice payments, through either judgment or settlement, per inpatient admission over a 3-year period. During fiscal years

²The Cost of Physician Accessions, prepared for the Senate Committee on Armed Services, Office of the Assistant Secretary of Defense (Health Affairs), January 1988.

**Appendix I
GAO Methodology for Determining the Costs
of Treating Additional Patients in
Military Hospitals**

1986-88, \$193,806,941 in costs were incurred by DOD. Over the same period, the services reported 2,733,977 inpatient admissions—about \$71 per inpatient admission. This cost per admission was applied to the inpatient admissions we projected that would be brought in if the military hospitals accommodated the CHAMPUS workload being considered.

Profiles of Six Military Hospitals Reviewed by GAO

During fiscal year 1988, each of the six military treatment facilities we reviewed had unused capacity and a large CHAMPUS workload in its catchment area. Aside from that similarity, the facilities differed in size, workload, and the types of medical specialties in which unused capacity existed. Following are profiles of the six facilities.

Evans Army Community Hospital, Fort Carson, Colorado

Evans Army Community Hospital has a capacity of 195 inpatient beds, 108 of which were staffed as of December 1988. In fiscal year 1988, an average of 88 beds were occupied daily (an occupancy rate of 81 percent for staffed beds and 45 percent for total beds). In fiscal year 1988, inpatient admissions numbered about 8,500; of these, about 36 percent were active-duty personnel and 64 percent were non-active-duty beneficiaries. Outpatient visits numbered about 447,000 in fiscal year 1988.

Evans' unused capacity was primarily due to shortages of staff, especially nurses and ancillary staff. One 32-bed ward had never been opened, and five of the nine operating rooms were unused, as were three of the nine labor and delivery rooms and 12 beds in a 19-bed recovery room. Facility officials said that, with augmented staffing, the facility could have accommodated much of the catchment area CHAMPUS workload in obstetrics/gynecology and orthopedics.

Obstetrics makes up a large part of the CHAMPUS workload in the Fort Carson catchment area. In fiscal year 1988, CHAMPUS costs to the government in the catchment area totaled about \$27.2 million for both inpatient and outpatient care. Of this amount, about \$8.6 million was for obstetrics/gynecology and about \$0.9 million was for orthopedic care. In fiscal year 1988, the facility issued 2,013 nonavailability statements authorizing beneficiaries to receive care under CHAMPUS. Of these statements, 1,332 (66 percent)—or about 111 per month—were for obstetric care.

Table II.1 shows the fiscal year 1988 CHAMPUS workload and government costs for obstetrics/gynecology and orthopedics in the Fort Carson catchment area and the portion of this workload and estimated costs that Evans had the capacity to accommodate with additional resources.

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

Table II.1: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics/Gynecology and Orthopedics, and the Portion That Evans Army Community Hospital Could Accommodate With Additional Resources

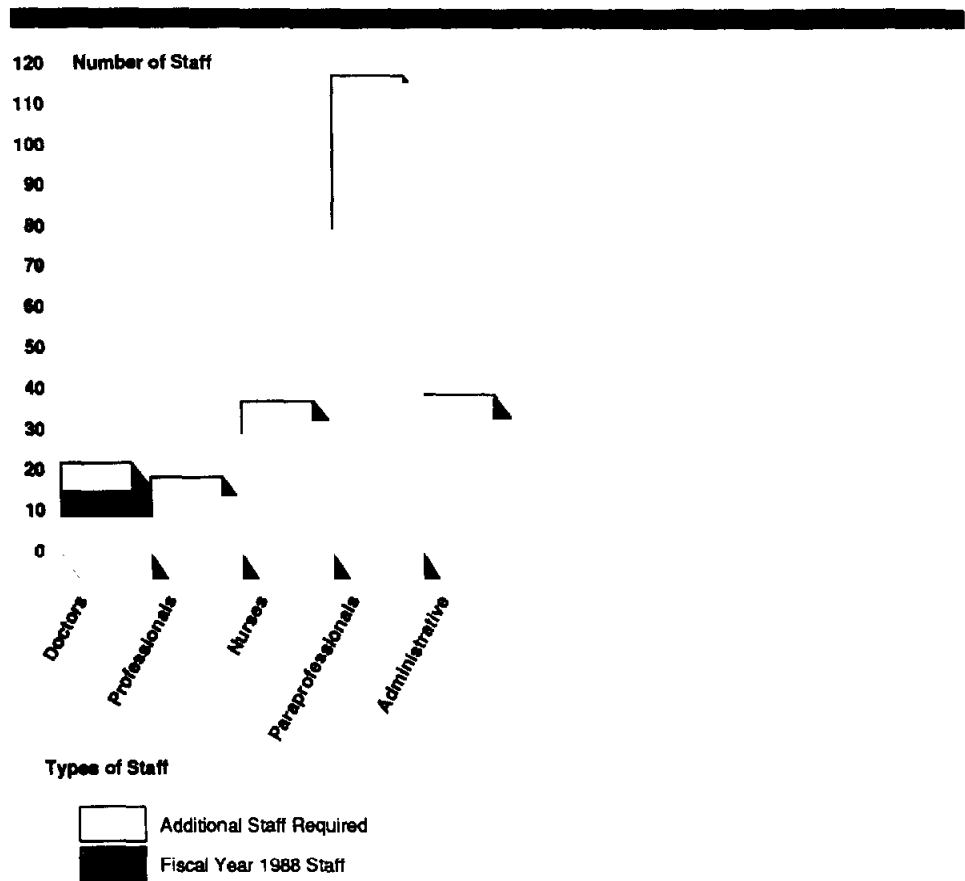
	Obstetrics/gynecology		Orthopedics	
	Workload	Government cost	Workload	Government cost
Total FY 1988 CHAMPUS				
Inpatient admissions	2,975	\$8,493,300	79	\$416,600
Outpatient visits	1,499	150,100	6,459	518,600
Actual government cost		\$8,643,400		\$935,200
Potential workload increase				
Inpatient admissions	2,230	\$5,972,000	33	\$139,600
Outpatient visits	405	38,300	6,000	481,700
Government cost		\$6,010,300		\$621,300

Notes. The potential workload includes only those cases that required a nonavailability statement; it excludes cases that the hospital would have been unable to treat regardless of staff and equipment increases. The hospital capacity exceeds the CHAMPUS workload in inpatient orthopedics; we used the smaller number (CHAMPUS cases) for our calculations.

With additional staffing, Evans could have accommodated much of the available CHAMPUS workload in the specialties reviewed. For obstetrics, the facility averaged about 58 deliveries per month during fiscal year 1988. Hospital officials said that, with additional staffing, the facility could handle about 77 more deliveries per month in the catchment area (approximately 38 fewer than the deliveries paid each month under CHAMPUS during fiscal year 1988). On the other hand, Evans officials said the facility could handle all of the remaining CHAMPUS gynecology workload with additional staffing.

During fiscal year 1988, Evans provided orthopedic services (inpatient and outpatient) only to active-duty personnel. With additional staffing, facility officials said it could serve non-active-duty beneficiaries as well. Of the 79 CHAMPUS admissions for orthopedic surgery in the Ft. Carson catchment area, 36 required a nonavailability statement. Officials said that, with additional staff, 33 of these admissions could have been brought into the facility. Officials also said that the facility had the capacity to increase its orthopedic surgery workload beyond the number of cases paid for under CHAMPUS. The facility also could handle nearly all of the available CHAMPUS orthopedic outpatient workload (about 6,000 of the 6,459 fiscal year 1988 visits). Figure II.1 shows the hospital's fiscal year 1988 staffing and the additional staff resources that would have been required to bring in this additional workload.

Figure II.1: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Evans Army Community Hospital



Note: Fiscal year 1988 staff figures represent only those staff in the direct care areas being increased and the portion of ward, ancillary, and support staff dedicated to those areas.

By augmenting its staff and other resources to accommodate the CHAMPUS workload in the two specialties, we estimate that the facility could have saved the government between \$2.4 and \$3.3 million in fiscal year 1988, depending on the staffing option used. Tables II.2 and II.3 show the estimated cost of handling the additional workload at Evans under the three staffing options, and tables II.4 and II.5 show the estimated savings that could have accrued from accommodating this CHAMPUS workload.

**Appendix II
Profiles of Six Military Hospitals Reviewed
by GAO**

Table II.2: Estimated Cost of Accommodating Increased Obstetrics/Gynecology Workload Under Three Staffing Alternatives—Evans Army Community Hospital, Fiscal Year 1988

Hospital cost category	Obstetrics/gynecology		
	Military	Civilian	Contract
Salaries	\$2,683,100	\$2,231,800	\$3,140,700
Scholarship/training	68,200	0	0
Malpractice claims	158,100	158,100	0
Supplies	437,000	437,000	437,000
Equipment	9,000	9,000	9,000
Cost of increase	\$3,355,400	\$2,835,900	\$3,586,700

Table II.3: Estimated Cost of Accommodating Increased Orthopedics Workload Under Three Staffing Alternatives—Evans Army Community Hospital, Fiscal Year 1988

Hospital cost category	Orthopedics		
	Military	Civilian	Contract
Salaries	\$435,700	\$436,400	\$503,400
Scholarship/training	34,100	0	0
Malpractice claims	2,300	2,300	0
Supplies	97,600	97,600	97,600
Equipment	0	0	0
Cost of increase	\$569,700	\$536,300	\$601,000

Table II.4: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics/Gynecology Workload at Evans Army Community Hospital During Fiscal Year 1988, Under Three Staffing Alternatives

	Obstetrics/gynecology		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$6,010,300	\$6,010,300	\$6,010,300
Cost of hospital workload increase	3,355,400	2,835,900	3,586,700
Savings with hospital workload increase	\$2,654,900	\$3,174,400	\$2,423,600

Table II.5: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Orthopedics Workload at Evans Army Community Hospital During Fiscal Year 1988, Under Three Staffing Alternatives

	Orthopedics		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$621,300	\$621,300	\$621,300
Cost of hospital workload increase	569,700	536,300	601,000
Savings with hospital workload increase	\$51,600	\$85,000	\$20,300

The Army is conducting one of its two catchment-area demonstration projects at Evans. Begun in late 1989, this project is exploring ways to accommodate the CHAMPUS workload in such specialties as obstetrics and psychiatry. Major characteristics of the project include efforts to (1) augment staffing through the CHAMPUS partnership program, (2) enroll beneficiaries in the system, (3) assist beneficiaries in finding a health care provider, and (4) reduce copayments for beneficiaries using preferred civilian providers.

Naval Hospital Jacksonville, Florida

Naval Hospital Jacksonville has a capacity of 385 inpatient beds, 176 of which were staffed as of March 1989. In fiscal year 1988, an average of 97 beds were occupied daily (an occupancy rate of 55 percent for staffed beds and 25 percent for total beds). Inpatient admissions totaled 10,079 in fiscal year 1988; of these, about 38 percent were active-duty personnel and 62 percent were non-active-duty beneficiaries. Over 267,000 outpatient visits were made to the hospital in fiscal year 1988.

Hospital officials told us that Jacksonville had unused capacity primarily due to staff shortages. As of April 1989, the facility had 458 filled positions and 125 vacancies. Most of the vacant positions were for nurses and ancillary and support staff.

At the time of our study, six patient wards, which contained a total of 194 beds, were closed or converted to office space. Of the hospital's six operating rooms, two were inactive (but available).

Hospital officials said that the facility had unused capacity in seven inpatient medical specialties: surgery, internal medicine, pediatrics, intensive care, orthopedics, ear/nose/throat, and gynecology. It also had unused capacity in 10 outpatient services, including dermatology, internal medicine, family practice, psychiatry, and obstetrics/gynecology. For some specialties, such as orthopedics, the facility was able to treat only active-duty personnel.

Of the \$47.2 million in fiscal year 1988 CHAMPUS expenditures in the Jacksonville catchment area, \$2.5 million was for gynecology services and \$2.8 million was for orthopedic services. We selected gynecology and orthopedic surgery for review because the facility has the capacity to handle additional patients in these specialties. Although other medical specialties (such as obstetrics, cardiology, and general surgery) constituted greater shares of the total CHAMPUS costs, hospital officials did not view them as good candidates for increased workload because of facility capacity limitations.

Table II.6 shows the fiscal year 1988 CHAMPUS workload and government costs for gynecology and orthopedics in the Jacksonville catchment area and the portion of this workload and estimated costs that the hospital had the capacity to accommodate with additional resources.

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

Table II.6: Fiscal Year 1988 CHAMPUS Workload and Costs in Gynecology and Orthopedics, and the Portion That Naval Hospital Jacksonville Could Accommodate With Additional Resources

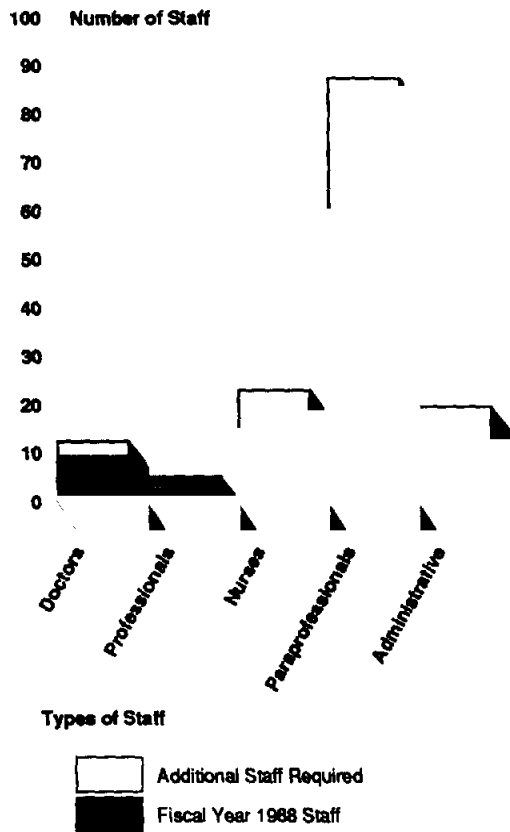
	Gynecology		Orthopedics	
	Workload	Government cost	Workload	Government cost
Total FY 88 CHAMPUS				
Inpatient admissions	319	\$1,512,600	185	\$1,091,900
Outpatient visits	6,454	970,300	18,795	1,695,700
Actual government cost		\$2,482,900		\$2,786,600
Potential workload increase				
Inpatient admissions	290	\$1,357,200	61	\$338,100
Outpatient visits	4,000	601,400	5,500	496,200
Government cost		\$1,958,600		\$834,300

Notes: The potential workload includes only those cases that required a nonavailability statement, it excludes cases the hospital would have been unable to treat regardless of staff and equipment increases. The hospital capacity exceeds the CHAMPUS workload in orthopedics and inpatient gynecology, we used the smaller number (CHAMPUS cases) for our calculations

With additional staffing, Jacksonville could have used its capacity to accommodate much of the available CHAMPUS workload in the two specialties reviewed. In gynecology the facility handled 646 inpatient admissions and 8,636 outpatient visits during fiscal year 1988. In orthopedics, the facility handled 1,312 inpatient admissions and 11,985 outpatient visits. Hospital officials said that the facility could double its inpatient gynecology caseload and increase its inpatient orthopedic admissions by about 120. However, because not all 185 orthopedics cases in the catchment area required nonavailability statements and others could not have been brought into the hospital, our calculations are based on only the 61 cases that could have been accommodated. For outpatient visits, hospital officials estimated that even with additional staff and resources, the facility could not handle all the CHAMPUS workload but could perform an additional 4,000 gynecology outpatient visits and an additional 5,500 orthopedic outpatient visits. Figure II.2 shows the hospital's fiscal year 1988 staffing and the additional staff resources that would have been required to bring in this additional workload.

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

Figure II.2: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Naval Hospital Jacksonville



Note: Fiscal year 1988 staff figures represent only those staff in the direct care areas being increased and the portion of ward, ancillary, and support staff dedicated to those areas.

By adding staff and other resources to accommodate available catchment area CHAMPUS workload in the two specialties, we estimate that Jacksonville could have saved the government between \$492,000 and \$907,000 during fiscal year 1988, depending on the staffing option used. Tables II.7 and II.8 show the estimated cost of handling the additional workload at Jacksonville under the three staffing options, and tables II.9 and II.10 show the savings that could have accrued from accommodating this CHAMPUS workload.

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

Table II.7: Estimated Cost of Accommodating Increased Gynecology Workload Under Three Staffing Alternatives—Naval Hospital Jacksonville, Fiscal Year 1988

Hospital cost category	Gynecology		
	Military	Civilian	Contract
Salaries	\$1,183,700	\$1,019,700	\$1,327,500
Scholarship/training	17,100	0	0
Malpractice claims	20,600	20,600	0
Supplies	140,700	140,700	140,700
Equipment	5,000	5,000	5,000
Cost of increase	\$1,367,100	\$1,186,000	\$1,473,200

Table II.8: Estimated Cost of Accommodating Increased Orthopedics Workload Under Three Staffing Alternatives—Naval Hospital Jacksonville, Fiscal Year 1988

Hospital cost category	Orthopedics		
	Military	Civilian	Contract
Salaries	\$612,800	\$601,100	\$733,100
Scholarship/training	34,100	0	0
Malpractice claims	4,300	4,300	0
Supplies	94,700	94,700	94,700
Equipment	0	0	0
Cost of increase	\$745,900	\$700,100	\$827,800

Table II.9: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Gynecology Workload at Naval Hospital Jacksonville During Fiscal Year 1988, Under Three Staffing Alternatives

	Gynecology		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$1,958,600	\$1,958,600	\$1,958,600
Cost of hospital workload increase	1,367,100	1,186,000	1,473,200
Savings with hospital workload increase	\$591,500	\$772,600	\$485,400

Table II.10: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Orthopedics Workload at Naval Hospital Jacksonville During Fiscal Year 1988, Under Three Staffing Alternatives

	Orthopedics		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$834,300	\$834,300	\$834,300
Cost of hospital workload increase	745,900	700,100	827,800
Savings with hospital workload increase	\$88,400	\$134,200	\$6,500

Hospital officials are taking actions to control CHAMPUS costs. For example, the orthopedics department director said that the facility was negotiating a partnership agreement under which an outside physician would be allowed to perform surgery on CHAMPUS beneficiaries at Jacksonville. Additionally, the Navy's Bureau of Medicine and Surgery was planning to provide the hospital with special funding to perform one hip replacement surgery per month for CHAMPUS beneficiaries. The orthopedics department director said that CHAMPUS costs for a hip replacement

were about \$20,000 to \$25,000, whereas the principal variable cost to Jacksonville would be about \$3,000, the cost of the prosthesis.

Nellis Air Force Hospital, Nevada

The Nellis Air Force Base hospital—the 554th Medical Group—has a capacity of 65 inpatient beds, 35 of which were staffed as of June 1989. In fiscal year 1988, an average of 24 beds were occupied daily (an occupancy rate of 69 percent for staffed beds and 37 percent for total beds). Inpatient admissions numbered about 2,660; of these, about 41 percent were active-duty personnel and 59 percent were non-active-duty beneficiaries. Also, nearly 186,000 outpatient visits were made to the hospital during the fiscal year.

Officials told us that the hospital had unused capacity primarily due to shortages of medical staff—physicians, nurses, and ancillary staff. Officials said that, with additional staff, the hospital could have accommodated much of the CHAMPUS workload in two medical specialties—obstetrics and gynecology. Aside from these two specialties, the hospital had limited capacity to accommodate other workload increases. The total CHAMPUS costs to the government in the catchment area were about \$23.6 million in fiscal year 1988.

Table II.11 shows the fiscal year 1988 CHAMPUS workload and government costs for obstetrics and gynecology in the Nellis catchment area and the portion of this workload and estimated costs that Nellis had the capacity to accommodate with additional resources.

Table II.11: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics/Gynecology and the Portion That Nellis Air Force Hospital Could Accommodate With Additional Resources

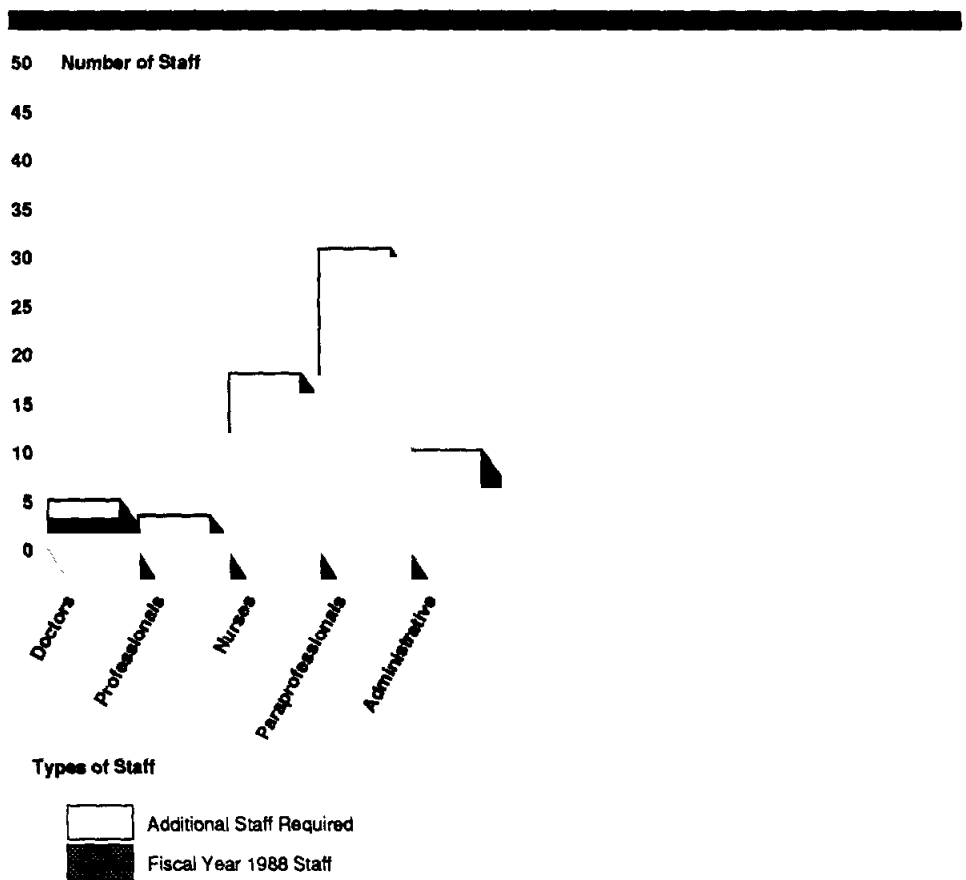
	Obstetrics/gynecology	
	Workload	Government cost
Total FY 88 CHAMPUS		
Inpatient admissions	813	\$2,446,700
Outpatient visits	3,092	304,900
Actual government cost		\$2,751,600
Potential workload increase		
Inpatient admissions	334	\$1,703,800
Outpatient visits	3,092	304,900
Government cost		\$2,008,700

Notes: The potential workload includes only those cases that required a nonavailability statement. It excludes cases the hospital would have been unable to treat regardless of staff and equipment increases. The hospital capacity exceeds the CHAMPUS workload in these specialties; we used the smaller number (CHAMPUS cases) for our calculations.

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

The hospital handled about 640 obstetrics admissions in fiscal year 1988. With additional staff, hospital officials estimate they could handle about 360 additional deliveries a year—more than the 334 obstetrics cases paid under CHAMPUS in fiscal year 1988. Hospital officials said that Nellis could maintain its level of inpatient gynecology admissions while increasing gynecology outpatient visits by about 6,000 visits each year—about double the number of visits paid by CHAMPUS in fiscal year 1988. In fiscal year 1988, Nellis handled 351 gynecology inpatient admissions and 9,530 gynecology outpatient visits. Figure II.3 shows the hospital's fiscal year 1988 staffing and the additional staff resources that would have been required to bring in this additional workload.

Figure II.3: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Nellis Air Force Hospital



Note: Fiscal year 1988 staff figures represent only those staff in the direct care areas being increased and the portion of ward, ancillary, and support staff dedicated to those areas

Appendix II
Profiles of Six Military Hospitals Reviewed
 by GAO

We estimate that by augmenting its staff levels and other resources to accommodate available catchment area CHAMPUS workload in the two specialties, Nellis could have saved the government between \$584,900 and \$923,800 in fiscal year 1988, depending on the staffing option used. Table II.12 shows, by staffing option, the estimated cost of handling the additional workload at Nellis, and table II.13 shows the savings that could have accrued from increasing staff levels to accommodate the CHAMPUS workload.

Table II.12: Estimated Cost of Accommodating Increased Obstetrics/Gynecology Workload Under Three Staffing Alternatives—Nellis Air Force Hospital, Fiscal Year 1988

Hospital cost category	Obstetrics/gynecology		
	Military	Civilian	Contract
Salaries	\$1,048,800	\$878,600	\$1,241,200
Scholarship/training	34,100	0	0
Malpractice claims	23,700	23,700	0
Supplies	177,600	177,600	177,600
Equipment	5,000	5,000	5,000
Cost of increase	\$1,289,200	\$1,084,900	\$1,423,800

Table II.13: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics/Gynecology Workload at Nellis Air Force Hospital During Fiscal Year 1988, Under Three Staffing Alternatives

	Obstetrics/gynecology		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$2,008,700	\$2,008,700	\$2,008,700
Cost of hospital workload increase	1,289,200	1,084,900	1,423,800
Savings with hospital workload increase	\$719,500	\$923,800	\$584,900

At the time of our study Nellis was exploring several ways to accommodate the CHAMPUS workload through partnership agreements. Officials said that the hospital had entered into several partnership agreements under which civilian doctors will provide care at Nellis. As of June 1989, partnership agreements were in effect for the primary care clinic and the pediatrics department. Also, agreements were being negotiated for the ear, nose, and throat department and the neurology department. The hospital is also exploring a partnership agreement that would allow a military doctor to use contracted facilities to provide psychiatric care to both active-duty personnel and CHAMPUS beneficiaries.

Naval Hospital Camp Pendleton, California

Naval Hospital Camp Pendleton has a capacity of 584 inpatient beds, 135 of which were staffed as of March 1989. In fiscal year 1988, an average of 118 beds were occupied daily (an occupancy rate of 87 percent for staffed beds and 20 percent for total beds). Inpatient admissions totaled 8,658 in fiscal year 1988; of these, about 42 percent were active-duty personnel and 58 percent were non-active-duty beneficiaries. Outpatient visits totaled about 369,000 in fiscal year 1988.

Officials told us that Camp Pendleton had unused capacity primarily due to staff shortages in all categories: physicians, nurses, technicians, and support staff. At the time of our study, the hospital had 9 operating rooms, 2 of which were inactive but available, and 12 recovery rooms, 6 of which were inactive but available.

Of the approximately \$30.2 million in fiscal year 1988 CHAMPUS government costs in the Camp Pendleton catchment area (for both inpatient and outpatient care), about \$7.3 million was for obstetrics/gynecology care. Facility officials said that obstetrics and gynecology offer good potential for accommodating CHAMPUS workload. Table II.14 shows the fiscal year 1988 CHAMPUS workload and government costs for obstetrics and inpatient gynecology in the Camp Pendleton catchment area and the portion of this workload and estimated costs that Camp Pendleton had the capacity to accommodate with additional resources.

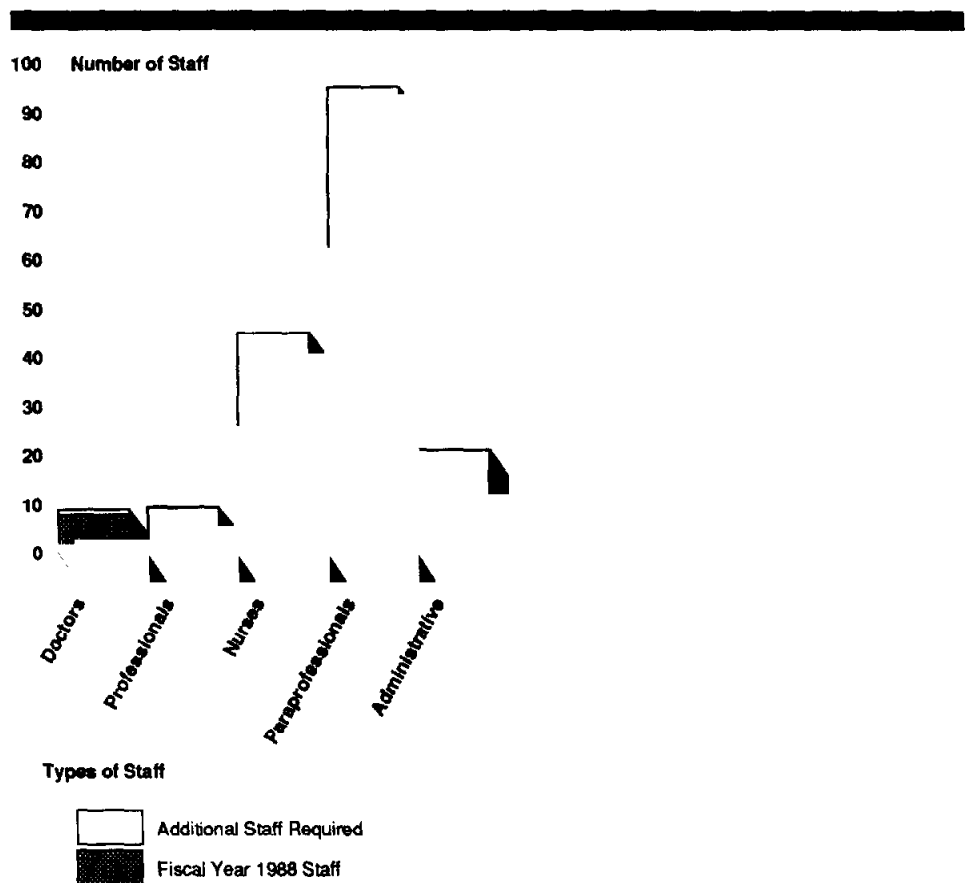
Table II.14: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics and Inpatient Gynecology, and the Portion That Naval Hospital Camp Pendleton Could Accommodate With Additional Resources

	Obstetrics/inpatient gynecology	
	Workload	Government cost
Total FY 88 CHAMPUS		
Inpatient admissions	2,512	\$6,878,900
Outpatient visits	3,335	378,500
Actual government cost		\$7,257,400
Potential workload increase		
Inpatient admissions	1,151	\$6,007,800
Outpatient visits	272	18,900
Government cost		\$6,026,700

Note: The potential workload includes only those cases that required a nonavailability statement; it excludes cases the hospital would have been unable to treat regardless of staff and equipment increases.

With additional staff, Camp Pendleton could have accommodated much of the catchment area CHAMPUS workload in obstetrics and inpatient gynecology. In fiscal year 1988, the facility handled 1,487 obstetrics admissions and 301 gynecology admissions. With additional staff, hospital officials estimate that Camp Pendleton could handle 1,151 of the 2,313 obstetrics/gynecology admissions in the Camp Pendleton catchment area that required a nonavailability statement. Figure II.4 shows the hospital's fiscal year 1988 staffing and the additional staff resources that would have been required to bring in this additional workload.

Figure II.4: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Naval Hospital Camp Pendleton



Note: Fiscal year 1988 staff figures represent only those staff in the direct care areas being increased and the portion of ward, ancillary, and support staff dedicated to those areas.

We estimate that by increasing its staff levels and other resources to accommodate catchment area CHAMPUS workload in the two specialties, Camp Pendleton could have saved the government between \$2.9 and

\$3.5 million in fiscal year 1988, depending on the staffing option used. Table II.15 shows the estimated cost of handling the additional workload at Camp Pendleton under three staffing options, and table II.16 shows the savings that could have accrued from accommodating this CHAMPUS workload.

Table II.15: Estimated Cost of Accommodating Increased Obstetrics/Inpatient Gynecology Workload Under Three Staffing Alternatives—Naval Hospital Camp Pendleton, Fiscal Year 1988

Hospital cost category	Obstetrics/inpatient gynecology		
	Military	Civilian	Contract
Salaries	\$2,650,300	\$2,005,600	\$2,585,900
Scholarship/training	17,100	0	0
Malpractice claims	81,600	81,600	0
Supplies	369,900	369,900	369,900
Equipment	33,500	33,500	33,500
Cost of increase	\$3,152,400	\$2,490,600	\$2,989,300

Table II.16: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics/Inpatient Gynecology Workload at Naval Hospital Camp Pendleton, Under Three Staffing Alternatives

	Obstetrics/inpatient gynecology		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$6,026,700	\$6,026,700	\$6,026,700
Cost of hospital workload increase	3,152,400	2,490,600	2,989,300
Savings with hospital workload increase	\$2,874,300	\$3,536,100	\$3,037,400

At the time of our study, Camp Pendleton was pursuing two efforts to accommodate the CHAMPUS obstetrics workload. In early 1989, hospital officials said the obstetrics/gynecology department was delivering approximately 20 additional babies per month with existing staff by, among other things, decreasing gynecology admissions. Hospital officials also said that about 50 additional deliveries per month will be brought in by using physicians supplied by the CHAMPUS Reform Initiative contractor.

Naval Hospital San Diego, California

Naval Hospital San Diego has a capacity of 743 inpatient beds, 539 of which were staffed as of April 1989. The hospital began to occupy its newly built facility early in 1988. In fiscal year 1988, an average of 347 beds were occupied daily (an occupancy rate of 43 percent for staffed beds and 31 percent for total beds).¹ At the time of our study, facility officials were making efforts to fully use the new facility. During fiscal year 1989, San Diego had 566 staffed operating beds and an average

¹Occupancy rates were computed based on a combination of the beds in the previous facility and those in the new facility

daily patient load of 373 (a 66-percent occupancy rate). Of the 23,260 inpatient admissions in fiscal year 1988, 44 percent were active-duty personnel and 56 percent were non-active-duty beneficiaries. Outpatient visits numbered nearly 510,000.

At the time of our study, San Diego had unused capacity due in part to shortages of staff, especially nurses and ancillary and support staff, and a 39-bed surgery ward was closed. The hospital had 14 operating rooms, 4 of which were inactive but available, and 15 recovery rooms, 5 of which were inactive but available.

The two medical specialties we reviewed, obstetrics and psychiatry, make up a considerable portion of the catchment area CHAMPUS workload. In fiscal year 1988, CHAMPUS costs to the government in the San Diego catchment area totaled about \$109 million—the highest in the nation. Of this amount, about \$13.7 million was for obstetric care and about \$30.5 million was for psychiatric services related to mental illnesses.² Additionally, of the nonavailability statements that San Diego issued in fiscal year 1988, 52 percent were for obstetric care, and 18 percent were for psychiatric care. Table II.17 shows fiscal year 1988 CHAMPUS workload and government costs for obstetrics and psychiatry in the San Diego catchment area and the portion of this workload and estimated costs that the hospital had the capacity to accommodate with additional resources.

Table II.17: Fiscal Year 1988 CHAMPUS Workload and Costs in Obstetrics and Psychiatry, and the Portion That Naval Hospital San Diego Could Accommodate With Additional Resources

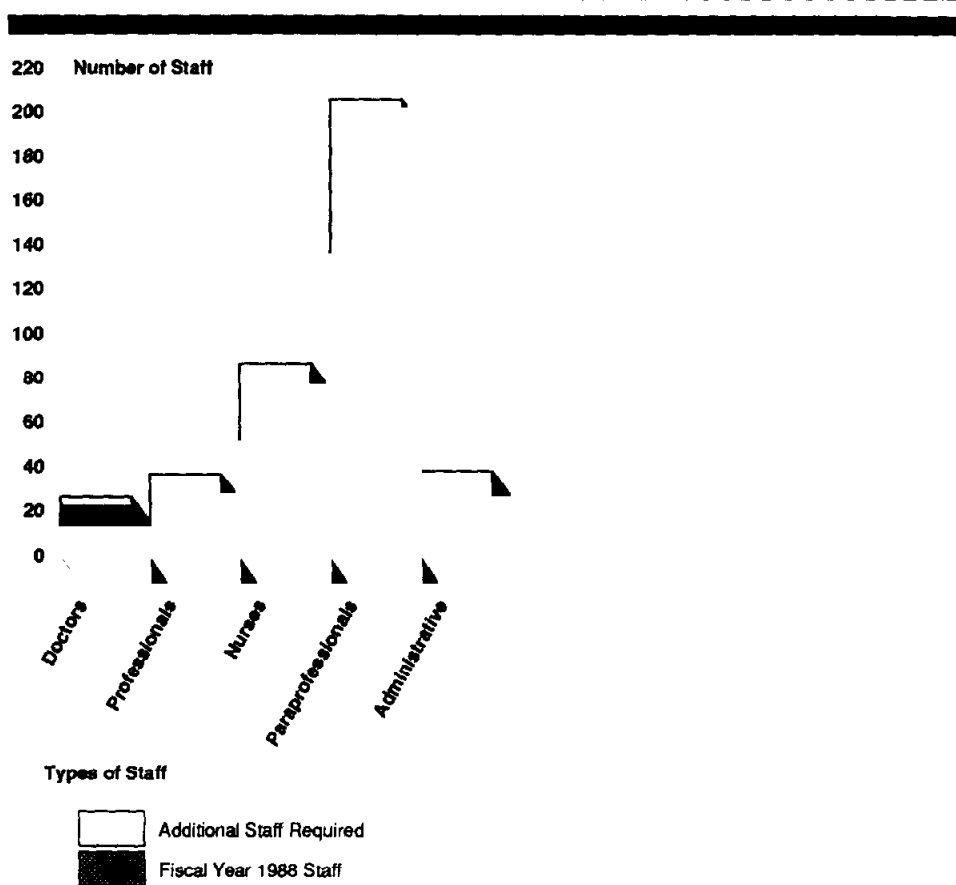
	Obstetrics		Psychiatry	
	Workload	Government Cost	Workload	Government Cost
Total FY 88 CHAMPUS				
Inpatient admissions	5,309	\$13,633,100	1,508	\$22,072,200
Outpatient visits	900	40,400	111,245	8,450,200
Actual government cost		\$13,673,500		\$30,522,400
Potential workload increase				
Inpatient admissions	1,666	\$8,941,400	361	\$5,163,700
Outpatient visits	680	30,500	12,600	957,700
Government cost		\$8,971,900		\$6,121,400

Note. The potential workload includes only those cases that required a nonavailability statement; it excludes cases the hospital would have been unable to treat regardless of staff and equipment increases.

²Does not include dependency treatment, such as drug or alcohol rehabilitation

Hospital officials told us that, at the time of our review, San Diego was already handling most of the local CHAMPUS workload in other than obstetrics and psychiatry. During the last half of fiscal year 1988 (after the hospital moved into its new facility), the hospital handled about 199 obstetrics admissions a month and about 89 psychiatric inpatient admissions a month. Officials said that, with additional staff, the facility could handle another 150 deliveries and about another 60 psychiatric admissions each month. Figure II.5 shows the hospital's staffing for the last 6 months of fiscal year 1988 and the additional staff resources that would have been required to bring in this additional workload.

Figure II.5: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Naval Hospital San Diego



Note. Fiscal year 1988 staff figures represent only those staff in the direct care areas being increased and the portion of ward, ancillary, and support staff dedicated to those areas

By adding staff levels and other resources to accommodate the catchment area CHAMPUS workload, we estimate the San Diego facility could

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

have saved the government between \$7.7 and \$9.0 million a year, depending on the staffing option used. Tables II.18 and II.19 show the estimated cost of handling the additional workload, and tables II.20 and II.21 show the savings that could have accrued from accommodating this workload.

Table II.18: Estimated Cost of Accommodating Increased Obstetrics Workload Under Three Staffing Alternatives—Naval Hospital San Diego, Fiscal Year 1988

Hospital cost category	Obstetrics		
	Military	Civilian	Contract
Salaries	\$3,989,500	\$3,023,300	\$3,919,600
Scholarship/training	21,300	0	0
Malpractice claims	118,100	118,100	0
Supplies	1,320,600	1,320,600	1,320,600
Equipment	11,000	11,000	11,000
Cost of increase	\$5,460,500	\$4,473,000	\$5,251,200

Table II.19: Estimated Cost of Accommodating Increased Psychiatry Workload Under Three Staffing Alternatives—Naval Hospital San Diego, Fiscal Year 1988

Hospital cost category	Psychiatry		
	Military	Civilian	Contract
Salaries	\$1,707,000	\$1,469,700	\$1,672,900
Scholarship/training	51,200	0	0
Malpractice claims	51,300	51,300	0
Supplies	140,100	140,100	140,100
Equipment	0	0	0
Cost of increase	\$1,949,600	\$1,661,100	\$1,813,000

Table II.20: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Obstetrics Workload at Naval Hospital San Diego During Fiscal Year 1988, Under Three Staffing Alternatives

	Obstetrics		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$8,971,900	\$8,971,900	\$8,971,900
Cost of hospital workload increase	5,460,500	4,473,000	5,251,200
Savings with hospital workload increase	\$3,511,400	\$4,498,900	\$3,720,700

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

Table II.21: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Psychiatry Workload at Naval Hospital San Diego During Fiscal Year 1988, Under Three Staffing Alternatives

	Psychiatry		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$6,121,400	\$6,121,400	\$6,121,400
Cost of hospital workload increase	1,949,600	1,661,100	1,813,000
Savings with hospital workload increase	\$4,171,800	\$4,460,300	\$4,308,400

Note: The savings estimates for psychiatry are based on the assumption that CHAMPUS patients brought into the facility would have the same average length of stay as that experienced by patients who received care in private hospitals for reimbursement under CHAMPUS (24.6 days). However, psychiatric patients treated by Naval Hospital San Diego during this same period had an average length of stay of only 12 days. If we base our calculations on the larger number of patients that could be accommodated assuming this shorter average length of stay figure, the number of additional patients that could have been accommodated increases from 361 to 723 and the CHAMPUS cost of the workload to be brought in increases to \$11,299,800. The savings increase to \$9,350,200 (military staffing option) \$9,638,700 (civilian staffing option), and \$9,486,800 (contract staffing option).

San Diego is exploring ways to accommodate some of this CHAMPUS workload in its catchment area. For example, under a CHAMPUS Reform Initiative nurse-midwifery contract with the University of California, San Diego, the hospital planned to bring in approximately 100 to 150 deliveries per month. Under the contract, the university provides certified nurse-midwives and other support staff, while the hospital provides the facilities and the medical, nursing, laboratory, and anesthesia support. The first patients were treated under this contract in August 1989. Also, under the Reform Initiative, the hospital was exploring resource sharing in the psychiatry department, which would allow the Initiative's contractor to provide staff to work in the hospital's psychiatric clinics.

Walter Reed Army Medical Center, Washington, D.C.

Walter Reed Army Medical Center has a capacity of 878 inpatient beds, 759 of which were staffed as of March 1989. In fiscal year 1988, an average of 654 beds were occupied daily (an occupancy rate of 86 percent for staffed beds and 74 percent for total beds). Inpatient admissions totaled 268,942 in fiscal year 1988; of these, about 34 percent were active-duty personnel and 66 percent were non-active-duty beneficiaries. The facility had about 1,088,404 outpatient visits in fiscal year 1988. At the time of our study, officials told us that Walter Reed had some unused capacity primarily because of shortages of staff, especially nurses.

The medical specialty we reviewed, psychiatry, makes up about 30 percent of the total CHAMPUS workload in the Walter Reed catchment area. In fiscal year 1988, CHAMPUS costs to the government in the catchment area totaled about \$21.9 million; of that, about \$10.3 million was for psychiatric care (both inpatient and outpatient). Table II.22 shows the

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

fiscal year 1988 CHAMPUS workload and government costs for psychiatry in the Walter Reed catchment area and the portion of this workload and estimated costs that the medical center had the capacity to accommodate with additional resources.

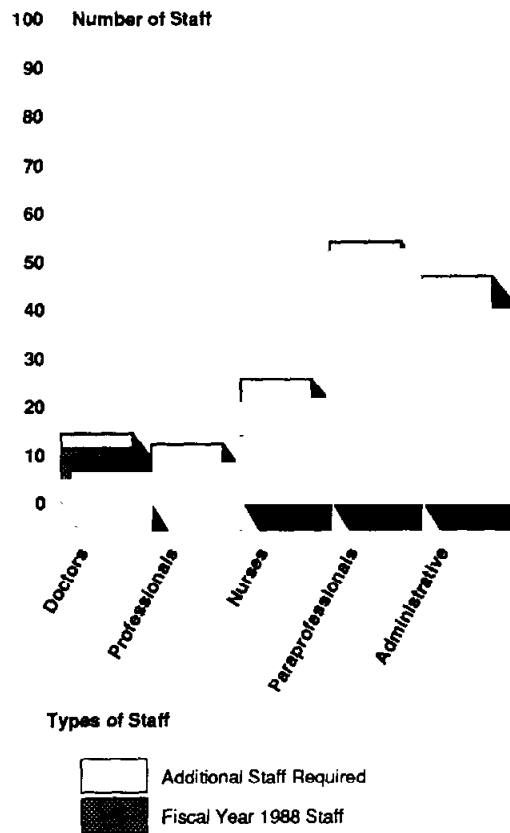
Table II.22: Fiscal Year 1988 CHAMPUS Workload and Costs in Psychiatry, and the Portion That Walter Reed Army Medical Center Could Accommodate With Additional Resources

	Psychiatry	
	Workload	Government cost
Total FY 88 CHAMPUS		
Inpatient admissions	373	\$7,397,400
Outpatient visits	53,974	2,878,600
Actual government cost		\$10,276,000
Potential workload increase		
Inpatient admissions	259	\$4,278,100
Outpatient visits	0	0
Government cost		\$4,278,100

Notes: The potential workload includes only those cases that required a nonavailability statement, it excludes cases the hospital would have been unable to treat regardless of staff and equipment increases. The hospital inpatient capacity exceeds the CHAMPUS workload in psychiatry we used the smaller number (CHAMPUS cases) for our calculations

Officials told us that, with additional staff, Walter Reed could handle more than the total number of CHAMPUS psychiatric admissions in its catchment area. In fiscal year 1988, the facility handled 914 psychiatric inpatient admissions. Officials said that the facility could handle another 507 psychiatric admissions a year with additional staff. However, our calculations are based on only the 259 (out of 373) fiscal year 1988 CHAMPUS psychiatric admissions that required a nonavailability statement. Figure II.6 shows the hospital's fiscal year 1988 staffing and the additional staff resources that would have been required to bring in this additional workload.

Figure II.6: Fiscal Year 1988 Staffing and Additional Staff Required to Accommodate CHAMPUS Workload—Walter Reed Army Medical Center



Note. Fiscal year 1988 staff figures represent only those staff in the direct care areas being increased and the portion of ward, ancillary, and support staff dedicated to those areas

By increasing its staff levels and other resources to accommodate the available catchment area CHAMPUS psychiatric workload, we estimate Walter Reed could have saved the government between \$3.1 and \$3.2 million a year, depending on the staffing option used. Table II.23 shows the estimated cost of handling the additional workload, and table II.24 shows the savings that could have accrued from accommodating the CHAMPUS workload.

Appendix II
 Profiles of Six Military Hospitals Reviewed
 by GAO

Table II.23: Estimated Cost of Accommodating Increased Psychiatry Workload Under Three Staffing Alternatives—Walter Reed Army Medical Center, Fiscal Year 1988

Hospital cost category	Psychiatry		
	Military	Civilian	Contract
Salaries	\$992,900	\$884,400	\$1,041,300
Scholarship/training	51,200	0	0
Malpractice claims	18,400	18,400	0
Supplies	135,900	135,900	135,900
Equipment depreciation	0	0	0
Cost of increase	\$1,198,400	\$1,038,700	\$1,177,200

Table II.24: Comparison of Actual CHAMPUS Costs With Costs of Accommodating Additional Psychiatry Workload at Walter Reed Army Medical Center During Fiscal Year 1988, Under Three Staffing Alternatives

	Psychiatry		
	Military	Civilian	Contract
Actual cost of CHAMPUS workload	\$4,278,100	\$4,278,100	\$4,278,100
Cost of hospital workload increase	1,198,400	1,038,700	1,177,200
Savings with hospital workload increase	\$3,079,700	\$3,239,400	\$3,100,900

Major Contributors to This Report

**Human Resources
Division,
Washington, D.C.**

Stephen P. Backhus, Assistant Director, (202) 708-4228
William A. Hightower, Assignment Manager
David L. Lewis, Evaluator

**Atlanta Regional
Office**

Anita L. Lenoir, Evaluator

**Denver Regional
Office**

Donald C. Hahn, Evaluator-in-Charge

**Los Angeles Regional
Office**

Darryl W. Dutton, Program Manager
Marie E. Cushing, Evaluator

Ordering Information

The first five copies of each GAO report are free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20877

Orders may also be placed by calling ~~(202) 275-6241~~

**United States
General Accounting Office
Washington, D.C. 20548**

**Official Business
Penalty for Private Use \$300**

**First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100**

