DEPARTMENT OF DEFENSE

JOINT AUDIT REPORT

Military Health System Utilization Management Program at Medical Centers

Report No. 98-136

May 22, 1998

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Acronyms

AMC	Army Medical Center
ASD(HA)	Assistant Secretary of Defense (Health Affairs)
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
DRG	Diagnostic-Related Group
FTE	Full Time Equivalent
MC	Medical Center (Air Force)
MEDCEN	Medical Center
MRI	Magnetic Resonance Imaging
NMC	Naval Medical Center
OASD(HA)	Office of the Assistant Secretary of Defense (Health Affairs)
UM	Utilization Management

INSPECTOR GENERAL
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May 22, 1998

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (HEALTH AFFAIRS)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Joint Audit Report on the Military Health System Utilization Management Program at Medical Centers (Report No. 98-136)

We are providing this audit report for review and comment. This audit was requested by representatives from the Office of the Assistant Secretary of Defense (Health Affairs) and the Military Surgeons General and was performed as a joint effort by the Office of the Inspector General, DoD; Army Audit Agency; Naval Audit Service; and Air Force Audit Agency.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. Because the Assistant Secretary of Defense (Health Affairs) did not comment on a draft of this report, we request that management provide comments on the final report by July 22, 1998.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Michael A. Joseph, email <mjoseph@dodig.osd.mil>, or Mr. Sanford Tomlin, email <stomlin@dodig.osd.mil>, at (757) 766-2703. See Exhibit F for the report distribution. The joint audit team members are listed inside the back cover.

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Joint Audit Planning Group for Health Care

Report No. 98-136 **May 22, 1998**
(Project No. 7LF-3005.01)

Military Health System Utilization Management Program at Medical Centers

Executive Summary

What We Audited

This audit covers utilization management (UM) of health care delivered in the 15 DoD medical centers (MEDCENs). UM is a program designed to ensure that medical services are provided in a timely and cost-effective manner at the most appropriate level of care. This audit topic was the result of a coordinated effort by the Joint Audit Planning Group for Health Care and representatives from the Office of the Assistant Secretary of Defense (Health Affairs) (OASD[HA]) and the Military Surgeons General to develop TRICARE-related audit plans. (TRICARE is DoD's managed health care program.) OASD(HA) and Military Departments selected UM as the number one priority for audit coverage. This audit was performed as a joint effort by the Office of the Inspector General, DoD; Army Audit Agency; Naval Audit Service; and Air Force Audit Agency.

Objectives and Conclusions

The overall objective of this audit was to determine whether the 15 MEDCENs had established an effective and efficient UM program. Exhibit A lists the 15 MEDCENs. We performed detailed analysis at six of the MEDCENs. Many innovative practices were in place (see Exhibit B), and progress was made in implementing UM as is evidenced by reductions from FY 1994 through FY 1996 in ambulatory visits (8.6 percent), average daily occupied bed days (20.7 percent), average length of stay (days) (15.0 percent), and inpatient dispositions* (6.7 percent). However, we found areas that need to be addressed before benefits from

* Disposition is the removal of a patient from a hospital's census by discharge, transfer, death, or other termination of inpatient care.

the UM program can be enhanced. Specific objectives, developed based on a request for coverage from OASD(HA) and the Offices of the Surgeons General, are shown below along with conclusions for each objective.

Objective: Determine the status of Military Department implementation of OASD(HA) UM policy guidance.

Conclusions: The reductions from FY 1994 through FY 1996 in ambulatory visits, average daily occupied beds, average length of stay, and dispositions, demonstrate that progress was made in implementing UM policy. Five of the six MEDCENs visited were at least partially meeting all UM requirements. However, implementation varied among the MEDCENs. Implementation could be enhanced through policy revisions that (1) require consideration of cost when deciding to use contracted or in-house personnel and (2) increase the MEDCEN commander's flexibility on how to use UM personnel. In addition, development of general staffing guidelines would help commanders in the early stages of implementing UM. Improving contract surveillance and reporting procedures would also enhance the benefits available from implementing UM. See the Finding for details on implementation.

Objective: Evaluate the controls that ensure UM does not have a negative effect on quality of care.

Conclusions: Controls were in place to monitor and compare the quality of care provided at the 15 MEDCENs. The primary control to monitor the quality of care delivered at MEDCENs is the Military Health System Performance Report Card. It was developed as a corporate level management tool that would measure MEDCEN performance on health care access, quality, utilization, and the health status of beneficiaries. This mechanism focuses on and sets standards for quality of care issues and allows for comparisons of performance with various standards and between MEDCENs.

Objective: Determine if effective use was made of patient care assets made available by implementation of UM.

Conclusions: We could not determine if effective use was made of UM savings because information was not available to isolate the impact of UM from the other management initiatives such as capitation budgeting.

Additionally, General Accounting Office report number NSIAD-97-83BR, "Defense Health Program: Future Costs Are Likely to Be Greater Than Estimated," February 21, 1997, stated that the OASD(HA) did not have a formal methodology for estimating UM savings.

DoD may not be able to realize UM savings comparable to the civilian community despite the program enhancements that will be achieved from policy revisions, staffing guidelines, and improved contractor surveillance and reporting requirements. To the extent that readiness requirements exceed peacetime requirements, DoD cannot make staffing and infrastructure reductions that could be made in the civilian community. Until readiness requirements are defined, full UM savings may not be realized. See the Finding for details on the limitations on UM savings.

Objective: Review the management control program as it applies to UM.

Conclusions: We identified material management control weaknesses as defined by DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, related to the implementation of UM at the six MEDCENs visited, as discussed in the Finding. Controls did not ensure UM costs were properly considered and contract surveillance and reporting were adequate. The OASD(HA), the Surgeons General of the Military Departments, and the audited MEDCENs did not provide coverage on UM in their management control programs. Therefore, they did not identify the control weaknesses discussed in this report. A copy of the report will be provided to the senior official responsible for management controls in the OASD(HA), Army, Navy, and Air Force.

Objective: Determine the consistency of data reporting.

Conclusions: We did not evaluate the consistency of health care data reporting because such an objective would require significant audit resources and would best be covered by a separate, dedicated audit.

Section A
General Information

Background

Audit Request

The audit resulted from a coordinated effort by the Joint Audit Planning Group for Health Care, the Office of the Assistant Secretary of Defense (Health Affairs) (OASD[HA]), and the Offices of the Surgeons General to develop TRICARE audit plans. Attaining OASD(HA) targeted managed care utilization management (UM) savings was designated the number one priority issue for audit coverage. A point paper provided jointly by OASD(HA) and the Offices of the Surgeons General identified four specific UM issues to be audited:

- military departments' implementation of OASD(HA) policy guidance,
- guidelines/safeguards in place to ensure UM doesn't negatively affect quality,
- effective use of patient care assets made available by implementation of UM, and
- consistency of data reporting.

This audit covers implementation of policy guidance, quality guidelines/safeguards, and use of savings made available by implementation of UM.

Although we concluded that DoD can enhance its UM program, information was not available to identify the specific cost savings resulting from UM. The OASD(HA) projected total Defense Health Program savings from UM of 5 percent, later revised to 7 percent, from FY 1997 through FY 2003. Due to anticipated savings from UM, OASD(HA) reduced the Military Departments' direct patient FY 1998 operation and maintenance budgets by 1.5 percent of the total direct patient care cost. Direct patient care costs consist of operation and maintenance and military personnel funds. The positive effects of UM on overall Medical Center (MEDCEN) efficiency cannot be separated from the effects of other management initiatives, such as capitation budgeting. Under capitation budgeting, military treatment facilities receive a fixed amount of funding per capita (beneficiary), creating an incentive to eliminate unnecessary workload. General Accounting Office report number NSIAD-97-83BR, "Defense Health Program: Future Costs Are Likely to Be Greater Than Estimated," February 21, 1997, stated that OASD(HA) did not have a formal methodology for estimating UM savings.

Because of the inability to isolate the effect of UM and the lack of a verifiable methodology, we were not able to evaluate the savings targets or determine whether the targets were attained.

Also, we did not evaluate the consistency of health care data reporting because such an objective would require significant audit resources and would best be covered by a separate, dedicated audit. Health care data within the Military Health System comes from a variety of automated systems, such as the Defense Medical Information System, the Medical Expense and Performance Reporting System, and the Retrospective Case-Mix Analysis System. We did not evaluate the accuracy and consistency of the data included in these sources, nor the input processes associated with each source.

UM

Assistant Secretary of Defense (Health Affairs) (ASD[HA]) Responsibilities. The responsibilities, functions, and authorities of the ASD(HA) are contained in DoD Directive 5136.1, "Assistant Secretary of Defense for Health Affairs," May 27, 1994. The ASD(HA), as the principal staff assistant and advisor for all DoD health policies, programs, and activities, is responsible for the effective execution of the Department's medical mission. This mission includes providing medical services and support to members of the Armed Forces, their dependents, and others entitled to DoD medical care. In carrying out these responsibilities, the ASD(HA) shall establish policies, procedures, and standards that govern DoD medical programs and prepare a unified medical program and budget. However, the ASD(HA) may not direct a change in the structure of the chain of command within a Military Department with respect to medical personnel.

TRICARE. TRICARE is DoD's managed health care program and includes direct health care available through military treatment facilities and health care provided by contract. TRICARE uses 7 managed care support contracts to provide services that are not readily or economically available through the direct care system for DoD's 12 health care regions. The seven contracts, awarded for 5 years (1 year and 4 option years), are in various stages of implementation. All the contracts reflect basic core TRICARE requirements. In addition to the core requirements, lead agents can add contract requirements in other areas, such as UM. The lead agent functions as the focal point for health services and collaborates with the other military treatment facility commanders in the region to develop an integrated plan for the delivery of health care for their beneficiaries. In seven regions, many of the MEDCENs use contractor personnel to perform UM. The MEDCENs in five regions are performing UM in-house.

UM. The OASD(HA) issued a memorandum, "Utilization Management (UM) Activities in the Direct Care System under TRICARE," November 23, 1994, that established DoD policy on UM. The policy set forth standard UM practices, both

in care that is purchased and care provided in the direct care system. UM consists of prospective, concurrent, and retrospective reviews, as well as case management and discharge planning (see Exhibit C). The goal of UM is to maximize appropriate care and minimize or eliminate inappropriate care. This consistency in decision making about when and where care should occur helps to ensure uniformity of benefit and allows for comparing utilization patterns across military treatment facilities and regions, and against national norms.

MEDCEN commanders implement the OASD(HA) policy through regional UM plans developed by TRICARE lead agents. MEDCENs are large hospitals that provide a broad range of health care services, serve as referral centers within a geographical area of responsibility, and conduct, as a minimum, a surgical graduate medical education program. DoD has 15 MEDCENs. The UM policy allows the lead agents to tailor UM plans to meet the specific needs of each region and provide additional guidance to the MEDCENs, providing that the minimum policy requirements are met. The MEDCENs can implement UM policy using Government personnel or contractor UM personnel available through the TRICARE managed care support contracts. In some regions, the TRICARE contracts are not yet in effect; therefore, the MEDCENs had to implement the policy using available Government personnel. TRICARE contracts will be effective in all regions by the end of June 1998. Prior to TRICARE, DoD purchased care that could not be provided through direct care from the civilian sector, primarily through the Office of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), an OASD(HA) activity.

Audit Scope and Methodology

The audit reviewed the implementation of UM policy at the 15 DoD MEDCENs. We performed the economy and efficiency audit in accordance with generally accepted government auditing standards. We conducted our audit from November 1996 through February 1998. We evaluated trends in performance and cost data from FY 1994 through FY 1996.

During the audit, we:

- reviewed applicable DoD guidance,
- sent UM questionnaires to the 15 DoD MEDCENs to obtain data on the status of UM, method of implementing UM procedures, and cost and workload statistics,
- selected a total of six MEDCENs (see Exhibit A) to review based on responses to the questionnaires. Our selection criteria included two MEDCENs each from the Army, Navy, and Air Force, with

representation of various stages of UM implementation. Also, we selected MEDCENs to obtain a variety of methods used to implement UM, including both Government and contract personnel,

- obtained and analyzed cost data from the Medical Expense and Performance Reporting System and health care data from the Retrospective Case-Mix Analysis System. We did not validate this or other computer-processed data because such a validation would have required separate and significant audit efforts,
- evaluated lead agent and MEDCEN guidance for compliance with DoD policy,
- judgmentally sampled 30 medical records at each of the selected MEDCENs to assess compliance with DoD, lead agent, and MEDCEN policy. We selected medical records for which OASD(HA) policy required UM review. The sample was not statistical and we did not attempt to project sample results,
- evaluated contract requirements for compliance with DoD policy where UM procedures were performed by contract personnel,
- evaluated contract surveillance procedures for UM services at the MEDCENs and lead agents. We also reviewed contractor performance for compliance with contract UM requirements, and
- evaluated management controls over the implementation of UM.

Section B
Finding and Recommendations

Finding
Increasing Utilization Management Benefits

Synopsis

Although MEDCENs have significantly reduced ambulatory visits (8.6 percent), average daily occupied bed days (20.7 percent), average length of stay (15.0 percent), and inpatient dispositions (6.7 percent) from FY 1994 through FY 1996, the implementation of UM varies among MEDCENs. Implementation could be enhanced through policy revisions that require consideration of cost when deciding to use contracted or in-house personnel for required UM reviews, and that increase the MEDCEN commanders' flexibility to shift prospective review personnel to more beneficial areas. In addition, development of general staffing guidelines would help commanders in the early stages of implementing UM. Improving contract surveillance and reporting procedures would also enhance the benefits available from implementing UM. As a result of the varied implementation, DoD did not realize maximum benefits of the UM program. Moreover, DoD may not be able to realize full savings from the program because of inherent readiness requirements.

Discussion of Audit Results

This section discusses four basic areas: (1) MEDCEN workload; (2) varied implementation of OASD(HA) policy guidance; (3) potential enhancements through policy revisions, staffing guidelines, and improved contract surveillance and contractor reporting requirements; and (4) limitations of savings achieved through UM.

MEDCEN Workload

From FY 1994 through FY 1996, the 15 MEDCENs significantly reduced the number of ambulatory visits, average lengths of stay, dispositions, and occupied bed days. Although UM was a factor in these reductions, data was not available for us to determine the portion of the reductions that may be due to UM or other management initiatives, such as capitation budgeting. Table 1 shows the change in workload of the 15 MEDCENs. It is noteworthy that this reduction occurred along with a reduction in the workload of health care purchased through the TRICARE contractors or through CHAMPUS, as shown in Table 2.

Table 1. Operational Statistics for the 15 Military Health System MEDCENs FY 1994 through FY 1996

Metrics	FY 1994	FY 1996	Difference Amount	Difference Percent
Ambulatory Visits	13,093,708	11,962,949	(1,130,759)	(8.6)
Average Daily Occupied Beds	3,641	2,888	(753)	(20.7)
Average Length of Stay	4.88	4.15	(0.73)	(15.0)
Dispositions	272,369	254,146	(18,223)	(6.7)
Average Case Mix Index*	1.0985	1.0807	(0.0178)	(1.6)
Catchment Area Population	1,719,037	1,706,827	(12,210)	(0.7)

* Average Case Mix Index is a method of measuring the resources consumed in providing health care. Generally, the higher the average case mix index the more complex the care being provided.

Table 2. TRICARE/CHAMPUS Workload in the 15 MEDCEN Catchment Areas FY 1994 through FY 1996

Metrics	FY 1994	FY 1996	Difference Amount	Difference Percent
Ambulatory Visits	289,589	211,500	(78,089)	(26.9)
Dispositions	28,574	20,318	(8,256)	(28.9)

At 6 of the MEDCENs, we compared the average lengths of stay and cost in FY 1994 and FY 1996 for 10 high volume diagnostic-related groups (DRGs) and 6 common clinical specialties (see Exhibit D) to determine the changes since UM policy issuance. DRGs are classifications of diagnoses in which patients demonstrate similar resource consumption and length-of-stay patterns. We recognize that some UM procedures were in place at the MEDCENs before the UM policy was formalized and improvements in the metrics had already begun. The average length of stay for the 10 high-volume DRGs decreased in 53 of 60 (88 percent) instances reviewed, and the costs per DRG disposition decreased for 37 of 53 (70 percent) instances. Similarly, the average length of stay was reduced in 35 of 36 (97 percent) clinical specialties reviewed, and the cost per clinical disposition decreased in 23 of 35 (66 percent) clinical specialties. Although these performance indicators show improvement, varied implementation of UM policy prevented MEDCENs from realizing the full monetary benefits from UM.

Varied Implementation

The six MEDCENs included in our review were at varying stages of implementing the OASD(HA) UM policy. Table 3 shows the status of implementation of the key elements of UM as required by OASD(HA) policy.

Although five of the six MEDCENs had at least partially met the policy requirements, implementation within prospective and concurrent reviews varied significantly as discussed below.

Table 3. UM Function

MEDCEN	Prospective Review	Concurrent Review	Retrospective Review	Case Management	Discharge Planning
Brooke Army Medical Center 1/	P	P	E	F	F
William Beaumont Army Medical Center 1/	P	P	F	F	F
Naval Medical Center Portsmouth 2/	N	F	E	F	F
Naval Medical Center San Diego 2/	F	P	E	F	F
Keesler Medical Center 1/	P	P	E	F	F
Wilford Hall Medical Center 1/	P	P	E	F	F

1/ Responsibility for UM of direct care was split between the contractor and in-house personnel.
2/ In-house personnel responsible for all UM of direct care.
E – MEDCEN exceeded OASD(HA) policy requirements.
F – MEDCEN fully implemented OASD(HA) policy requirements.
N – MEDCEN did not perform UM function.
P – MEDCEN partially implemented OASD(HA) policy requirements.

Prospective Reviews. Naval Medical Center (NMC) San Diego fully complied with the OASD(HA) policy requirement to perform prospective reviews on adjunctive dental care (care where the primary diagnosis is not dental but results in a need for a dental procedure), cataracts, magnetic resonance imaging (MRI) procedures, mental health, and pregnancy. Prospective reviews were not being performed in accordance with OASD(HA) policy at five of the six MEDCENs we visited. A prospective review determines whether the severity of a patient's illness warrants an inpatient hospitalization or outpatient services. Prospective reviews reduce costs by avoiding unnecessary admissions and visits and help ensure appropriate care is provided.

UM personnel at NMC Portsmouth focused their resources on the other UM functions and were not performing prospective reviews. The utilization review personnel had developed prospective review procedures and intended to implement the procedures concurrent with the TRICARE services contract. The contract became effective May 1, 1998, after the audit field work was completed. We did not verify whether UM personnel began performing prospective reviews after May 1, 1998.

Utilization review personnel at Brooke Army Medical Center (AMC), Keesler Medical Center (MC), and Wilford Hall MC were not performing prospective

reviews for non-CHAMPUS eligible patients. These patients include active duty, civilian emergency, and MEDICARE-eligible patients. At Brooke AMC, William Beaumont AMC, Keesler MC, and Wilford Hall MC, we found instances in which contractor-required prospective reviews for CHAMPUS eligible patients were not performed by the contractor. In-house personnel at Keesler MC were duplicating contractor prospective reviews on mental health inpatients. We brought the duplication to the attention of MEDCEN personnel during our on-site exit briefings.

Concurrent Reviews. Although utilization review personnel performed concurrent reviews at each of the six MEDCENs, the reviews were not performed in accordance with OASD(HA) policy at five of the six MEDCENs. NMC Portsmouth fully complied with the OASD(HA) policy to perform concurrent reviews to evaluate care while it was being provided. Concurrent reviews determine whether continued treatment is needed and ensure that the appropriate care is being provided.

UM personnel at Brooke AMC did not perform concurrent reviews on non-CHAMPUS eligible patients; they focused most of their efforts on contract surveillance. UM personnel at San Diego NMC reviewed the admitting diagnosis for each inpatient admission, but were performing complete chart reviews only for those cases with complex or relatively long length of stay diagnoses. UM personnel at Wilford Hall MC performed concurrent reviews on non-CHAMPUS eligible patients for only those admissions that had relatively long length of stay diagnoses.

Contractor utilization review personnel at William Beaumont AMC began performing concurrent reviews on all medical/surgical cases but, contrary to the UM policy, later limited the reviews to only those cases subject to prospective reviews. This resulted in the number of concurrent reviews decreasing from 400 in one month to 70 in the next month. At Keesler MC, the contractor was not performing concurrent reviews on mental health outpatients as required.

In-house UM personnel duplicated concurrent reviews done by the contractor for inpatient mental health patients at Keesler MC and for medical/surgical inpatients at William Beaumont AMC. We brought the duplication to the attention of personnel at each MEDCEN during our on-site exit briefings.

Retrospective Reviews, Case Management, and Discharge Planning. All six MEDCENs either fully met or exceeded policy requirements for retrospective reviews, case management, and discharge planning.

Potential Enhancements

Although UM implementation currently varies, it could be enhanced through policy revisions that require consideration of cost when deciding to use contracted or in-house personnel, and that increase the MEDCEN commanders' flexibility on how to use prospective review personnel. In addition, general staffing guidelines would assist commanders in developing UM programs. Improving contract surveillance and reporting requirements would also increase the benefits available from implementing UM.

Policy Revisions

Cost Estimate. The UM policy did not require that cost estimates be prepared when deciding whether to obtain UM services through contract or in-house sources. Without the preparation of cost estimates, the MEDCENs could not determine the most cost-effective method of obtaining UM services. In a June 1994 memorandum to the Commander of Wilford Hall MC, the ASD(HA) stated using contractor-furnished UM services was "the most cost effective and efficient method for serving the needs of Region Six and the military communities." This statement suggests that analysis wasn't necessary.

The 15 MEDCENs used 3 different approaches to providing UM services:

- use of in-house personnel,
- region-wide contract support for UM at all military treatment facilities, and
- specific contract requirements designed for each military treatment facility.

For the six MEDCENs visited, none of the five lead agents attempted to quantify the in-house cost to perform UM (Brooke AMC and Wilford Hall MC are in the same region and therefore are served by the same lead agent). Only two of the lead agents (Southwest and Central Regions) attempted to estimate contract costs but their estimates were not accurate. With the implementation of TRICARE, lead agents and military treatment facility commanders will play a larger role in managing the total health care budget. Cognizance over costs associated with both in-house and contract options is necessary for decision making.

We believe policy should be revised to require that cost be one consideration when deciding whether to implement UM with in-house or contractor personnel. Additionally, such a requirement will necessitate clear delineation of responsibility.

It was not clear from our discussions with various administrators at different levels who would be responsible for preparing estimates and conducting cost analyses for additional contract requirements. For example:

- TRICARE Support Office personnel told us that lead agents should be responsible for the added requirements and should estimate the costs and conduct the analysis,
- lead agent personnel told us that the MEDCEN commanders should estimate the costs, and
- MEDCEN personnel told us that they didn't have the resources or the expertise to conduct the analysis; it was a lead agent responsibility.

We believe lead agents have a clear responsibility to prepare cost estimates for lead agent-specific requirements. Contracting Officers at the TRICARE Support Office have a responsibility to review the estimates. MEDCEN commanders have the responsibility to know what these activities cost and how they compare to the costs of performing the activities in-house.

Flexibility. The OASD(HA) policy did not provide the MEDCEN commanders with the flexibility necessary to shift personnel performing required prospective reviews to procedures where prospective reviews would be most effective. The policy requires prospective reviews for specific procedures, such as adjunctive dental care, cataract removals, mental health, MRIs, and pregnancy excluding active labor and cesarean section. However, these procedures may not be the most appropriate procedures because the workload and local procedures vary among the MEDCENs. MEDCEN personnel frequently expressed concerns over the need and cost effectiveness of performing all the mandated prospective reviews.

Prospective reviews for MRIs are a good example of why flexibility is needed in the UM policy. NMC San Diego prepared an economic analysis that showed it was not cost effective to do prospective reviews on all MRIs. The analysis showed that about $4,000 would be saved annually if MRI procedures that failed the prospective review were not performed, but the cost of reviewing all MRI procedures was about $39,000 annually. The MEDCEN would experience a net savings of about $35,000 by not performing the reviews, allowing the UM resources to shift to other areas needing attention. However, William Beaumont AMC performed a similar analysis and found that it was more cost effective for them to continue with the prospective reviews. We reviewed each analysis and agreed with the conclusions. The contradictory results from the MEDCEN studies indicate the need to customize the application of UM to each site. Additionally, Wilford Hall MC UM personnel stated they did a cost analysis and determined it was not cost effective to perform prospective reviews for non-CHAMPUS eligible patients. We requested a copy of the analysis but it could not be located.

The UM policy should provide flexibility to ensure that prospective reviews are concentrated on the procedures where the reviews are needed. In the initial stages of UM, high volume and high cost procedures are probably where prospective reviews are needed the most. However, as practice patterns change and the UM program matures, prospective review procedures need to be refined to meet local requirements.

General Staffing Guidelines

The audit showed that the staffing of UM functions varied significantly among the six MEDCENs reviewed. We determined the number of personnel at the six MEDCENs spending at least 25 percent or more of their time performing UM functions. We converted the total time personnel spend performing UM into full-time equivalents (FTEs).

A comparison showed a significant variation in the number of personnel performing the UM functions at the similar size MEDCENs. For example, at NMC San Diego and NMC Portsmouth, where all UM functions were performed in-house, NMC San Diego had 24.7 and NMC Portsmouth had 10.7 FTEs performing discharge planning. At Brooke AMC and Wilford Hall MC, with the same UM functions under contract, Brooke AMC had 1.5 FTEs performing contract surveillance and Wilford Hall MC had 3.0 FTEs. At William Beaumont AMC and Keesler MC, 3.4 FTEs from the UM in-house staff were dedicated to performing prospective, concurrent, and retrospective reviews. However, William Beaumont AMC had contracted out all prospective, concurrent, and retrospective reviews. In contrast, Keesler MC in-house personnel were responsible for doing the reviews for non-CHAMPUS eligible patients.

The primary cost driver in performing UM was personnel costs. Therefore, when estimating in-house UM cost, it is important that MEDCENs have some basis for estimating personnel requirements. General staffing guidelines would provide a starting point for developing cost estimates necessary for determining the best option of providing UM services. General staffing guidelines would also help to ensure MEDCENs dedicate sufficient personnel to ensure the UM policy is fully implemented.

Contract Surveillance and Contractor Reporting Requirements

Implementation of UM could be enhanced by improving contract surveillance plans and by coordinating the development of reporting and data requirements levied on contractors. At Brooke AMC, William Beaumont AMC, Keesler MC, and Wilford Hall MC, many UM services were included in TRICARE contracts.

Surveillance Plans. Surveillance plans at the four MEDCENs above did not contain sufficient methodology or delineate responsibilities for reviewing UM performed under contract. For example, the surveillance plan in the Southwest

Region where Brooke AMC is located simply identified all the appropriate UM line items in the contract for review. The plan did not provide a method for conducting surveillance but simply stated "check for compliance." We believe at a minimum, surveillance plans should specify the sampling technique, size, frequency, and whether the sample must be statistically valid. Plans at the four MEDCENs were also not specific as to who would perform the sample. Although lead agents stated MEDCEN personnel had to conduct most of the surveillance, this was not always practical because in some regions contractor personnel performing prospective and case management reviews were not located near the MEDCEN. The execution of definitive surveillance plans would have identified the problems discussed in the varied implementation section of this report regarding contractors not performing some prospective reviews and concurrent reviews.

Reporting Requirements. The UM data and reports provided by contractors at three of the four MEDCENs frequently did not provide MEDCEN management with the information needed to monitor UM results and affect change. Lead agents and MEDCEN personnel did not have a good understanding of the information needed to monitor UM prior to including UM data and reporting requirements in TRICARE contracts. For example, at one MEDCEN, the contracting officer's technical representative showed us a cabinet full of contractor reports, many of which were unopened. The representative told us that managers did not have any use for the reports, but because the contract required the reports, the contractor kept providing them. In another region, the Government asked the contractor to produce 145 separate reports related to UM and quality management activities. After the first year of the contract, the lead agent identified 67 reports that could be deleted.

Contractors, lead agents, and MEDCEN UM personnel were aware that much of the UM data and reports being provided were not useful and were making efforts to correct this problem. Their efforts, however, were not well coordinated. The Gulf South, Southwest, and Central Regions were involved in separate efforts to develop a "data warehouse" which would identify the necessary data elements and give lead agents and medical treatment facilities the ability to access all pertinent data in self-designed reporting formats. Lead agent personnel in the Gulf South Region stated they were aware of a similar effort ongoing in the Southwest Region but the two regions were not coordinating their efforts. Due to the duplication of efforts to develop reporting requirements for UM performed under contract, a Joint Service Working Group coordinated by the lead agents is needed in this area.

Limitations on Savings Achieved Through UM

Program enhancements achieved by policy revisions, staffing guidelines, and improved contract surveillance and contractor reporting requirements will provide DoD with opportunities to increase the effectiveness and cost savings associated

with the UM program. However, even with the program enhancements, the Military Health System may not be able to realize the full UM savings available in the civilian community because of readiness requirements. Although there was a significant reduction in utilization at the 15 MEDCENs from FY 1994 through FY 1996 (see Table 1), Table 4 shows there was not a corresponding decrease in operating costs. For example, although the average length of stay decreased 15 percent and the number of dispositions decreased by 6.7 percent, the cost per disposition only decreased by 0.8 percent after adjustment for inflation.

Table 4. Cost Data for the 15 Military Health System MEDCENs FY 1994 through FY 1996

Metrics	*FY 1994	FY 1996	Difference Amount	Difference Percent
Cost per Ambulatory Visit	$100.05	$114.35	$14.30	14.3
Cost per Bed Day	$1,085.23	$1,266.86	$181.63	16.7
Cost per Disposition	$5,295.18	$5,254.77	($40.41)	(0.8)
Total Operating Costs	$3,515,761,247	$3,411,829,847	($103,931,400)	(3.0)

* FY 1994 costs are inflated to FY 1996 dollars for comparability.

In the civilian sector, to realize the savings associated with workload reductions of the magnitude experienced by the MEDCENs, hospital staffing would be reduced and possibly some hospitals would be closed. In DoD, staffing and infrastructure must be maintained to support contingency requirements, even if peacetime requirements are less. We performed a detailed analysis of staffing and selected infrastructure cost accounts at six MEDCENs to determine why the workload reductions did not result in comparable cost reductions.

MEDCEN Staffing. Table 5 shows the workload decreased at the six MEDCENs from FY 1994 through FY 1996.

Table 5. Operational Statistics for the Six MEDCENs Visited FY 1994 through FY 1996

Metrics	FY 1994	FY 1996	Difference Amount	Difference Percent
Ambulatory Visits	6,300,838	5,826,093	(474,745)	(7.5)
Average Daily Occupied Beds	1,647	1,263	(384)	(23.3)
Average Length of Stay	4.73	3.70	(1.03)	(21.7)
Dispositions	127,084	124,639	(2,445)	(1.9)

Although the workload decreased, total military staffing increased by 4 percent (547) and civilian staffing decreased by 6 percent (359) for a net staffing increase of 1 percent (188) (see Exhibit E, Table 1).

Exhibit E (Table 2) further shows that military staffing increased between 4 percent and 11 percent at four of the six MEDCENs and only the Army MEDCENs experienced a reduction in military staffing. The Army MEDCEN with the greatest reduction in military staffing -- 237 (20 percent) -- also experienced reductions in cost per disposition and total operating costs of 12 and 6 percent, respectively. This was the only MEDCEN with a reduction in both categories. This does not imply that the Army MEDCEN was more cost effective in providing health care. It is simply intended to highlight the relationship between staffing and cost reductions.

Detailed analysis of FY 1996 operating costs disclosed that military salaries ranged from 41 to 61 percent of the total budgets at the six MEDCENs, as shown in Table 6.

Table 6. Summary of FY 1996 Military and Operation and Maintenance Budgets

	Military Pay		Operation and Maintenance		
MEDCEN	Amount	Percent	Amount	Percent	Total Budget
Brooke AMC	$ 99,007,029	43.9	$126,242,597	56.1	$ 225,249,626
William Beaumont AMC	62,243,916	43.5	80,977,915	56.5	143,221,831
NMC Portsmouth	149,793,000	40.8	217,338,000	59.2	367,131,000
NMC San Diego	153,675,000	41.6	215,931,000	58.4	369,606,000
Keesler MC	75,949,715	60.8	48,877,000	39.2	124,826,715
Wilford Hall MC	152,700,211	51.1	146,232,000	48.9	298,932,211
Total	**$693,368,871**	**45.4**	**$835,598,512**	**54.6**	**$1,528,967,383**

Therefore, it is difficult to significantly reduce MEDCEN operating costs without decreasing military medical staffing. It is especially difficult to reduce operating costs when workload is reducing but staffing is increasing. Discussions with Naval MEDCEN personnel disclosed the staffing increases at Naval MEDCENs were attributable in part to hospital closures and downsizing during the FYs 1993 and 1995 Base Realignment and Closure. For example, when one Naval MEDCEN was closed during Base Realignment and Closure 1995, military medical personnel as well as medical training programs were reassigned to other Naval MEDCENs.

Infrastructure Costs. Although workload went down at the six MEDCENs, selected infrastructure cost accounts did not reflect a corresponding decrease (see Table 7). To determine the effect that workload reductions had on MEDCEN operating costs, we analyzed six infrastructure costs accounts from FY 1994 through FY 1996.

Table 7. Infrastructure Costs at MEDCENs Visited

	FY 1994 Expenses*	FY 1996 Expenses	Difference Amount	Difference Percent
Housekeeping Contract	$19,449,406	$22,241,585	$ 2,792,179	14.4
Laundry Service	6,486,279	5,830,069	(656,210)	(10.1)
Minor Construction	5,977,165	13,705,532	7,728,367	129.3
Patient Food Service	20,666,164	15,630,380	(5,035,784)	(24.4)
Real Property Maintenance	15,330,216	21,458,703	6,128,487	40.0
Utilities	20,155,535	19,330,625	(824,910)	(4.1)
Total	**$88,064,765**	**$98,196,894**	**$10,132,129**	**11.5**

* FY 1994 expenses were inflated to FY 1996 dollars for comparability.

After adjusting for inflation, costs directly related to patient care decreased as bed occupancy and the associated workload decreased. For example, patient food services and laundry costs were reduced by 24 and 10 percent, respectively. However, costs for real property maintenance, minor construction, and housekeeping increased by 40, 129, and 14 percent, respectively, and utilities costs decreased by only 4 percent. During FY 1996, housekeeping, minor construction, real property maintenance, and utilities, comprised from 3 percent to 6 percent of the operating costs at the six MEDCENs. Because staffing and infrastructure combined cost composes between 46 percent and 64 percent of the six MEDCENs' operating costs, significant UM cost savings will not be recognized without cuts in staffing and infrastructure. Accordingly, we do not believe DoD should base budget reductions on UM savings until readiness requirements are well defined.

733 Study. DoD has a study ongoing of its medical readiness requirements. Section 733 of the National Defense Authorization Act for FYs 1992 and 1993 directed DoD to conduct an analysis of the size of the military medical system. One objective of the study was to determine the size and composition of the medical system needed to support the armed forces during a war or lesser conflict in the post-Cold War era. A second objective was to determine what adjustments should be made to the medical system to enhance the cost effectiveness of peacetime health care. Classified and unclassified versions of the study were published in April 1994.

During Congressional testimony in April 1994, the Under Secretary of Defense (Comptroller), Program Analysis and Evaluation Directorate, summarized the unclassified results of the 733 study. The study concluded that to maintain an adequate training, sustainment, and rotational base for contingencies, DoD needed

6,300 active duty physicians and 9,000 beds in the Continental United States. This is about 50 percent of the active duty physicians and one-third of the military treatment facilities' bed capacity programmed for FY 1999.

The Military Departments' Surgeons General strongly disagreed with the physician strength figures in the 733 study and requested a follow-on study. Specifically, the Surgeons General believed the 733 study understated augmentation requirements and casualty rates. A follow-on study being performed by a team including members from the Surgeons General and chaired by the Under Secretary of Defense (Comptroller), Program Analysis and Evaluation Directorate, was scheduled to be completed by March 1996. As of April 1998, this follow-on study had not been completed. An official in the Office of the Under Secretary of Defense (Comptroller), Program Analysis and Evaluation Directorate, stated that reaching agreement on the total number and specialty mixture of physicians needed for readiness was still the main obstacle to completing the follow-on study. The official also stated that there is general agreement that DoD has excess capacity in the number of physicians and beds needed for readiness. However, the magnitude of the excess has not been determined. Further evidence that capacity exceeds peacetime requirements is shown in the number of unoccupied operating beds at the six MEDCENs. Operating beds are hospital beds that are set up with supporting equipment, staff, and space to provide all aspects of patient care. The six MEDCENs averaged only a 58 percent bed occupancy rate during FY 1996, and two had a bed occupancy rate of less than 50 percent. Maintaining and staffing beds that are not utilized is very cost inefficient. We were advised that there were reductions in operating and occupied beds during FY 1997, but complete FY 1997 data was not available at the time of our audit. We recognize that readiness requirements must be determined before operating beds can be reduced.

Management Action

The UM policy analyst at OASD(HA) recognized that the policy needed revising and has been revising the UM policy since 1995. We reviewed a draft revision in September 1997. This draft, prepared in coordination with Military Department personnel, requires prospective reviews to be focused on selected high cost, high volume, and problem DRG categories. In addition, this draft policy provides the suggested DRG categories to use as initial sources for the prospective reviews, and further suggests that the categories be modified as needed. We believe the changes proposed in the draft policy provide the flexibility needed at the local level to focus prospective reviews where most beneficial and appropriate. The draft policy does not require the preparation of cost estimates for performing UM in-house and under contract which we believe are needed for determining the most cost-effective method of performing UM. Subsequent to our review, revised policy was issued that incorporated the draft provisions discussed above.

Recommendations for Corrective Actions

We recommend that the Assistant Secretary of Defense (Health Affairs):

1. Issue revised policy that includes the increased flexibility for prospective reviews as well as:

   a. requires cost estimates for the alternatives of implementing utilization management prior to making decisions on how to obtain utilization management services,

   b. delineates responsibilities for performing the cost estimate,

   c. requires that surveillance plans, for monitoring utilization management performed under contract, specify the sampling technique, size, frequency and whether the sample must be statistically valid, and

   d. delineates responsibilities for developing surveillance plans.

2. Chair a Joint Service Working Group to coordinate the development of:

   a. general staffing guidelines for performing utilization management in-house, and

   b. reporting requirements for utilization management performed under contract.

Management Comments Required

The Assistant Secretary of Defense (Health Affairs) did not comment on a draft of this report. We request that the Assistant Secretary provide comments on the final report by July 22, 1998.

Exhibit A
DoD MEDCENs

The following 15 DoD medical treatment facilities are identified as MEDCENs.

Army

Brooke AMC, Fort Sam Houston, Texas*
Eisenhower AMC, Fort Gordon, Georgia
Madigan AMC, Fort Lewis, Washington
Tripler AMC, Fort Shafter, Hawaii
Walter Reed AMC, Washington, DC
William Beaumont AMC, Fort Bliss, Texas*
Womack AMC, Fort Bragg, North Carolina

Navy

National NMC, Bethesda, Maryland
NMC Portsmouth, Portsmouth, Virginia*
NMC San Diego, San Diego, California*

Air Force

David Grant MC, Travis Air Force Base, California
Keesler MC, Keesler Air Force Base, Mississippi*
Malcolm Grow MC, Andrews Air Force Base, Maryland
Wilford Hall MC, Lackland Air Force Base, Texas*
Wright-Patterson MC, Wright-Patterson Air Force Base, Ohio

*MEDCENs visited during the audit

Exhibit B
UM Innovations

Ideas, practices, and innovative techniques need to be shared DoD-wide. During our review, we noted the following "best practices" that if shared would assist the MEDCENs in implementing UM and helping beneficiaries obtain better health.

- **UM Committees.** Our review showed that 10 of 15 MEDCENs established UM Committees. The committees identified and reported clinics that were not adhering to InterQual, Inc. criteria. The committee meetings discussed specific medical procedures that were not meeting InterQual, Inc. criteria and how the clinics could improve health care practices, thus reducing the number of failed reviews. InterQual, Inc. criteria provides medical guidelines for patient care, such as length of stay standards and minimum admission requirements for specific medical diagnoses.

- **Physician Advisor Program.** NMC San Diego initiated a physician advisor program that had senior staff physicians performing second level reviews of cases which did not meet InterQual, Inc. prospective, concurrent, and retrospective review criteria during the first level review. Each medical department selected a senior physician to be the physician advisor. The physician advisor received specific InterQual, Inc. training to review those cases that did not pass first level review. The determinations made by the physician advisors can only be overruled by the MEDCEN Commander. Performing second level reviews with physician advisors who are senior staff physicians appears to be an effective way of changing provider practices. The providers are more likely to follow the practices outlined by a senior staff physician than the practices outlined by a physician independent of the MEDCEN.

- **Avoidable Bed Day Reports.** Brooke AMC, NMC Portsmouth, NMC San Diego, and Wilford Hall MC were preparing avoidable bed day reports. This report, based on the results of UM reviews, identifies inappropriate admissions or continued stays and the resultant number of avoidable bed days. The report educates providers and shows them the positive benefits of UM. NMC San Diego reduced its average monthly avoidable bed days from 117 days in FY 1995 to 76 days in FY 1997 through the use of this report.

Exhibit B. UM Innovations (Continued)

- **Medical Holding Units.** Brooke AMC, NMC Portsmouth, and NMC San Diego used medical holding units to house patients who do not require acute care, but for reasons unique to DoD health care, the patients cannot be discharged from MEDCENs. The medical holding unit provides temporary lodging and can provide subsistence and minimal nursing care. The patient essentially takes care of his/her own basic needs and the MEDCEN expends less resources than for a patient requiring acute care. An example of this situation is patients who arrive and depart on medical evacuation flights. The MEDCEN has limited control over patient arrivals and departures because of the medical evacuation flight schedule. Brooke AMC maintained data that showed it incurred an average of 212 avoidable beddays per month because of patients using medical evacuation transportation, and estimated a savings of about $963,000 during a 120-day period due to the establishment of the medical holding unit.

- **Health Care Information Lines.** Brooke AMC, NMC San Diego, and Wilford Hall MC operated information lines to answer patients' routine questions regarding medical illness or injuries. These health care information lines were staffed with registered nurses. The nurses furnished instructions for home health care and directed the callers to their primary care manager for more definitive treatment. MEDCEN personnel associated with the health care information lines stated that this service was established to reduce the demand for medical services.

- **Health Promotion Programs.** Programs were in place to reinforce good health practices and influence individuals to manage their own health. Brooke AMC, William Beaumont AMC, NMC San Diego, and Wilford Hall MC offered smoking cessation classes to encourage beneficiaries to stop smoking. Wilford Hall MC reported cost savings of $1.3 million attributable to basic trainees who stopped smoking. Brooke AMC had a breast self-examination program which included an informative video about breast cancer, a waterproof self examination shower card, and a simulative breast with a lump. Brooke AMC also educated individuals about reading food labels, planning nutritious meals, and eating healthy. These programs were designed to prevent illnesses and promote better health.

- **Same Day Chemotherapy.** NMC Portsmouth uses this program to perform chemotherapy on approximately 200 patients a month on an outpatient basis. The majority of these patients were previously

admitted to the MEDCEN. The only time a patient is admitted as an inpatient is when the patient is receiving other treatments or blood transfusions.

- **Home Intravenous Antibiotics.** NMC Portsmouth administers intravenous antibiotics on an outpatient basis or in the home for a select patient population. NMC Portsmouth personnel stated that they avoided 1,447 beddays in 1996 with an estimated savings of about $2.2 million.

- **Self Care and Health Classes.** At Brooke AMC, a registered nurse held classes twice a month to provide beneficiaries with information on improving their health. Attendees were provided a reference volume called "Taking Care of Yourself" that contains guidelines to avoid unnecessary visits to the emergency room and health clinics. Attendees were also provided a personalized identification card that was used to track attendance. After 1 year, Brooke AMC personnel reported that beneficiaries who attended the classes averaged 3.4 fewer visits to the emergency room and health clinics than beneficiaries who did not attend the class.

Exhibit C
UM Procedures

Utilization Review. Utilization Review is a systematic evaluation of the necessity, appropriateness, and efficiency of the use of health care services, procedures, and facilities. The types of reviews are categorized based on when they are performed.

- **Prospective.** A prospective review determines whether the severity of a patient's illness warrants an inpatient hospitalization or outpatient services. The policy requires prospective reviews for the following inpatient treatments:

  - adjunctive dental care,
  - cataracts,
  - mental health, and
  - pregnancy excluding active labor or scheduled cesarean section.

  In addition, the prospective reviews are required for the following outpatient treatments to determine if outpatient treatment is required:

  - adjunctive dental care,
  - cataracts,
  - MRI procedures, and
  - all mental health (subsequent to eighth visit).

- **Concurrent.** A concurrent review evaluates care while it is being provided. Inpatient concurrent review consists of three separate components:

  An **admission review** is conducted within 24 hours of admission to verify the appropriateness and medical necessity of the hospitalization. Documentation in the medical record must justify the admission and show a correlation between the necessity for hospitalization and the plan of care.

  A **continued stay review** is conducted regularly throughout a patient's hospitalization to assess the patient's need for continued inpatient treatment.

Exhibit C. UM Procedures (Continued)

A **discharge review** is conducted to ensure patients are discharged only when they are medically stable. Procedures will also include provisions for identifying beneficiaries for whom case management services (see definition below) would be appropriate.

Outpatient concurrent review procedures should include provisions to identify beneficiaries for whom case management services would be appropriate.

- **Retrospective.** A retrospective review takes place after a patient is discharged, or after outpatient treatment is provided, to determine trends and patterns in either under-utilization or over-utilization of resources. It also is a performance review of the UM process. The policy requires quarterly focused reviews be conducted on at least a 1 percent sample of medical records. The focused reviews should assess the accuracy of information provided during the prospective review, determine the medical necessity and quality of care provided, and validate the review determinations made by the review staff. The lead agent is responsible for determining the sample criteria.

The UM policy requires that InterQual, Inc. criteria be used for medical and surgical care reviews, and Health Management Strategies International criteria be used for mental health care reviews. The criteria are published by commercial enterprises and widely used in the civilian sector.

Each type of review has two levels of consideration. First level review is a screening process that determines the medical necessity and appropriateness of care. The first level review must use the approved criteria, and all cases that do not meet the criteria are required to undergo a second level review. The second level review determines the medical necessity of care based on the medical expertise of the reviewer. The decision of the second level review is limited to either approving or denying the care and the decision must be documented.

DoD policy established minimum qualifications for personnel involved in UM processes. The policy requires first level reviewers to be physicians, certified physician assistants, or registered nurses. Second level reviewers must be licensed and board certified physicians with an active practice in the major clinical area being reviewed.

Case Management. Case management is a collaborative process that assesses, coordinates, evaluates, implements, monitors, and plans options and services to meet a patient's complex health needs through communication and available resources to promote quality cost-effective outcomes. Identification of

candidates for case management and referrals for case management services can originate from any source. Lead agents are responsible for establishing a case management process.

The policy requires case managers to be licensed registered nurses and/or licensed social workers. Case managers must have at least 2 years clinical experience in the specialty for those patients being case managed, or qualify by DoD regulation as advance practice nurses in the appropriate specialty.

The policy requires the following types of cases be case managed:

- bone marrow transplant patients,
- head trauma,
- Human Immunodeficiency Virus (HIV-AIDS),
- major burns,
- neoplasms,
- newborns requiring intensive care unit services, and
- spinal cord injuries.

Discharge Planning. Discharge planning is a process to decrease or eliminate barriers that disrupt patients' timely discharge from the hospital, or release from care, and facilitate their smooth transition into the post-discharge environment. The policy requires that the UM process will incorporate mechanisms to ensure that planning for patient discharge is initiated as soon as possible in the course of treatment. The lead agent is responsible for specifying in the UM plan how the discharge process will relate to the case management component.

Exhibit D

DRGs and Clinical Specialties Reviewed

10 MEDCEN High Volume DRGs Reviewed

Back and Neck
Bronchitis and Asthma
Chest Pain
Circulatory Disorder
Hernia
Knee Procedures
Lens Procedures With or Without Vitrectomy
Normal Newborns
Uterus and Adnexa Procedures
Vaginal Delivery

6 MEDCEN Clinical Specialties Reviewed

Cardiology
General Surgery
Gynecology
Internal Medicine
Obstetrics
Orthopedics

Exhibit E

Summary of Staffing at the Six MEDCENs Visited

Table 1. Total Staffing

	FY 1994	FY 1996	Difference Amount	Difference Percent
Officer	5,073	5,220	147	3
Enlisted	8,538	8,938	400	5
Total Military	**13,611**	**14,158**	**547**	**4**
Civilian	6,237	5,878	(359)	(6)
Total	**19,848**	**20,036**	**188**	**1**

Table 2. Military Staffing

MEDCEN	FY 1994	FY 1996	Difference Amount	Difference Percent
Brooke AMC	1,619	1,512	(107)	(7)
William Beaumont AMC	1,200	963	(237)	(20)
NMC Portsmouth	2,850	3,150	300	11
NMC San Diego	3,236	3,536	300	9
Keesler MC	1,647	1,707	60	4
Wilford Hall MC	3,059	3,290	231	8
Total	**13,611**	**14,158**	**547**	**4**

Exhibit F
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Exhibit F. Report Distribution (Continued)

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