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

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HUMAN RESOURCES



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NOVEMBER 29, 1979

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The Honorable Herbert E. Harris II House of Representatives

Dear Mr. Harris:

Subject: Inpatient Care at Quantico Naval Hospital Should Not Be Resumed (HRD-80-26)

This is in response to your July 26, 1979, letter concerning the Department of the Navy's plan to discontinue inpatient care at the Quantico Naval Hospital, Quantico, Virginia. Specifically, you asked that we determine the cost effectiveness of the Navy's planned action by assessing

- -- the accuracy of the Navy's estimate of cost savings expected to result from discontinuing inpatient care,
- -- the increased costs of Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) coverage for the use of nonmilitary medical facilities,
- -- the worktime lost by patients and attendants in traveling to other facilities, and
- -- the increased costs of gasoline consumed by ambulances and private automobiles having to travel farther distances.

In addition, you asked that we determine the adequacy of emergency facilities at Quantico.

Inpatient care was discontinued at the Quantico Naval Hospital on June 15, 1979, and the facility renamed the Naval Regional Medical Clinic, Quantico. The emergency paddy room was closed on September 3, 1979.

(101029)

On September 13, 1979, we briefed you on the results of our review and advised you that resuming inpatient care at Quantico did not appear to be cost effective. This letter summarizes the information presented in that briefing and provides additional information you requested on the willingness and ability of Dewitt Army Hospital, Fort Belvoir, Virginia, to provide care to Quantico beneficiaries.

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BACKGROUND

The Quantico Naval Hospital was constructed in 1939 and established as a naval hospital in July 1941. In 1978, the facility served a population of about 38,000 including about 9,400 active duty military personnel. The hospital building is located on the Marine Corps Base, Quantico, which serves as a major training facility for Marine Corps officers. In addition to the main hospital building, a branch clinic was located at Mann Hall and dispensaries were operated at individual field training camps located on the Quantico reservation.

Two factors affecting the overall military health care system—declining inpatient workloads and physician shortages—have had a major impact on the Quantico Naval Hospital. Between fiscal year 1968 and fiscal year 1978, Quantico's average daily patient load (ADPL) decreased from 90 to 17.

Officials from the Navy's Bureau of Medicine and Surgery attribute overall decreases in inpatient workloads to nation-wide changes in the pattern of medical care. Patients are no longer being admitted with minor illnesses, but rather are being treated on an outpatient basis. They said also that the average length of stay is declining even in complicated cases, resulting in decreased ADPLs.

Also contributing to Quantico's decline in ADPL was a decrease in the number of physicians assigned there. The number of doctors assigned to Quantico between December 1973 and June 1978 decreased from 27 to 11. In some cases there was a direct relationship between loss of physicians and decline in number of inpatients. For example, when Quantico lost its two orthopedic surgeons in June 1978, it stopped admitting orthopedic patients. In fiscal year 1977, 14 percent of Quantico admissions had been orthopedic patients.

In our recent report to the Congress "Military Medicine Is In Trouble: Complete Reassessment Needed" (HRD-79-107, Aug. 16, 1979) we listed (pp. 25 to 29) reductions in services at Quantico and other military hospitals which hospital officials said were caused by physician shortages.

In a December 12, 1978, feasibility study, the Navy's Bureau of Medicine and Surgery concluded that discontinuing inpatient care at Quantico would result in yearly savings to the Government of about \$439,000. The study cited the low inpatient workload and availability of alternate military and civilian sources of health care to support its recommendations that

- -- inpatient care be discontinued,
- --outpatient care be consolidated with the Mann Hall Clinic workload in a portion of the existing hospital structure, and
- -- the rest of the hospital building be used for other purposes.

RESUMPTION OF INPATIENT CARE NOT WARRANTED

Although we identified many deficiencies in the Navy's feasibility study, we believe a reevaluation of the cost effectiveness of the Navy's action would yield the same conclusion about discontinuing inpatient care at Quantico because

- -- the ADPL declined further after the Navy study,
- --most Quantico beneficiaries are able to obtain care at Dewitt Army Hospital, and
- --correcting some of the deficiencies noted in the Navy study would increase the estimated cost savings.

Further decline in ADPL

The Navy feasibility study was based on the Quantico hospital's fiscal year 1978 ADPL of 17. However, the closing of the maternity ward in April 1978 coupled with the loss of both orthopedic surgeons in June 1978 caused the ADPL to

decline to less than 7 during the hospital's last year of operation. During fiscal year 1977, maternity patients accounted for about 41 percent and orthopedic patients about 14 percent of Quantico's admissions. Because it is unlikely that maternity and orthopedic care would be restored if the hospital were reestablished, the ADPL would probably not increase much above 7.

According to an official from the Navy's Bureau of Medicine and Surgery, the Navy has less than 50 percent of its authorized number of orthopedic surgeons. He said that since the Navy places its limited resources in locations such as the National Naval Medical Center, Bethesda, Maryland, where they could best be used, an orthopedic surgeon would not be assigned to Quantico even if the facility were to again admit inpatients.

A Bureau of Medicine and Surgery official said that maternity care is a costly service for a hospital to offer because 24-hour staffing is needed and that the patient load at Quantico would not support a maternity ward.

Availability of care at Dewitt Army Hospital

Although the Navy feasibility study assumes that Quantico beneficiaries will obtain inpatient care at the National Naval Medical Center in Bethesda or at civilian hospitals under CHAMPUS, Dewitt Army Hospital, Fort Belvoir, Virginia, is willing and able to provide care to Quantico beneficiaries. Bethesda is about 50 miles from Quantico and takes over an hour to reach. By contrast, Dewitt Army Hospital is only 22 miles from Quantico—about a half-hour drive.

According to its executive officer, Dewitt Army Hospital had 117 operating beds (plus 16 bassinets) and an ADPL of 100 to 105 in September 1979. He said that Dewitt could care for all active duty patients and most dependents and retirees previously treated at Quantico. Enclosure I summarizes the services available at Dewitt Army Hospital as of September 1979.

The commanding officers at <u>Dewitt Army Hospital</u> and the <u>Naval Regional Medical Clinic</u>, <u>Quantico</u>, have taken effective action to lessen the impact from discontinuation of inpatient care at Quantico. Specifically,

- --buses are available to take patients from the Naval Regional Medical Clinic at Quantico to Dewitt Army Hospital or to the National Naval Medical Center,
- --Dewitt Army Hospital sends an obstetrician to the Quantico clinic one day a week to see maternity patients planning to deliver at Dewitt,
- --Quantico physicians were given authority to admit and follow up on patients at Dewitt,
- --a direct telephone line was installed connecting the Quantico clinic to the emergency room at Dewitt,
- --full-time Marine Corps and Navy liaison officers have been stationed at Dewitt, and
- --Quantico clinic personnel were given a tour of Dewitt Army Hospital and introduced to Dewitt personnel.

Dewitt's executive officer expressed a willingness to send other specialists to the Quantico clinic on a part-time basis to see patients prior to their admission to Dewitt or to follow up on Quantico beneficiaries after their discharge from Dewitt. Quantico physicians could also use the operating rooms and other facilities at Dewitt if certified to practice there. According to the executive officer, Quantico physicians should have no trouble obtaining certification.

The commanding officer at the Quantico clinic said that he has worked closely with his counterpart at Dewitt Army Hospital to ensure the availability of care for Quantico beneficiaries at Dewitt. He said that most Quantico beneficiaries are referred to Dewitt Army Hospital rather than to the National Naval Medical Center. In January 1978—before Quantico closed its maternity ward and lost its orthopedic surgeons—the total Navy— or Marine Corps—related admissions at Dewitt were about 14 percent and outpatient visits about 10 percent. However, during August 1979, the total of those admissions increased to about 28 percent and outpatient visits to about 18 percent.

We discussed with a Bureau of Medicine and Surgery official the possibility of physicians, such as orthopedic surgeons and obstetricians, from the National Naval Medical

Center being assigned to the Quantico clinic part time to see patients on an outpatient basis. Such assignments would supplement the actions taken to share resources between the Quantico clinic and Dewitt Army Hospital. The official said that an arrangement had been made to send an orthopedic surgeon from the National Naval Medical Center to the Naval Hospital, Patuxent River, Maryland, one day a week and that similar arrangements could be made to improve services at Quantico.

Correction of study deficiencies could increase as well as decrease estimated cost savings

The Navy's feasibility study predicts savings to the Government from discontinuing inpatient care at Quantico to be \$439,000, as shown in the following table.

Gross savings from discontinuing inpatient care at Quantico

\$2,343,000

Less: Cost of providing care for

Quantico beneficiaries at other

military facilities -1,082,000

Less: Cost of providing care for

Quantico beneficiaries at

civilian facilities under CHAMPUS -822,000

Net savings to the Government from discontinuing inpatient care at Quantico

\$ 439,000

Our review of the Navy's feasibility study identified deficiencies in the methods for calculating (1) the gross savings from discontinuation of inpatient care and (2) the cost of providing care at other military and civilian facilities. Many of the deficiencies, however, would result in an understatement rather than an overstatement of the potential cost savings.

The gross savings from discontinuing inpatient care at Quantico may have been:

- --Overstated for savings resulting from a reduction in the number of military personnel assigned to Quantico because some of the positions reduced were primarily outpatient related.
- -- Understated because savings resulting from vacating the Mann Hall Clinic were not considered.
- --Overstated for savings resulting from a reduction in operating costs because the study assumed only a portion of the hospital building would be used for the reconfigured clinic whereas the entire building will be used. A Bureau of Medicine and Surgery official estimated that an extra \$60,000 in operating expenses will be incurred in use of the entire building.
- -- <u>Understated</u> because the savings to the Government through transfer of equipment to other facilities was not considered.

The cost to the Government to provide care for Quantico beneficiaries at other military and civilian facilities may have been:

- --Overstated because the National Naval Medical Center has enough staff and operating beds available to handle the increased patient load. In fiscal year 1978, the Center had 496 operating beds and an ADPL of 403. In addition, the executive officer at Dewitt Army Hospital indicated that Dewitt could absorb the Quantico patients without additional resources.
- --Overstated because estimates of the increase in CHAMPUS costs appear excessive. Since many beneficiaries live within a 40-mile radius of Dewitt Army Hospital, they are not eligible for inpatient care under CHAMPUS unless such care is not available at Dewitt. A Dewitt Army Hospital official said that care is available to Quantico beneficiaries with few exceptions.

By overstating the cost to the Government of providing care at other facilities for Quantico beneficiaries, the Navy has underestimated savings to the Government from discontinuing inpatient care at Quantico.

Because the Navy's \$439,000 savings estimate was based on two assumptions—an ADPL of 17 and transfer of Quantico beneficiaries to the National Naval Medical Center—that are no longer valid, we did not attempt to quantify the effects of the study's deficiencies. The ADPL declined to less than 7 after completion of the study, and most Quantico beneficiaries were referred to Dewitt Army Hospital rather than the National Naval Medical Center. (See pp. 3 to 5.)

The availability of care for Quantico beneficiaries at Dewitt Army Hospital has lessened the impact of two other factors you asked us to consider—lost worktime and increased costs of gasoline because of beneficiaries' travel to Bethesda. Dewitt Army Hospital is about a 30-minute drive (22 miles), a much shorter distance than the trip from Quantico to Bethesda contemplated in the Navy study.

AVAILABILITY OF EMERGENCY CARE

Many of the Quantico Navy and Marine Corps personnel we spoke to were concerned about the availability of emergency medical care. They cited the risk of serious injuries, such as broken bones, heat stroke, and gunshot wounds, in the Marine Corps' rigorous officer training programs.

Although the emergency room at Quantico was closed on September 3, 1979, emergency care is available at Dewitt Army Hospital and three civilian hospitals within a 25-mile radius of the former Quantico hospital:

- -- Potomac Hospital, Woodbridge, Va. (12 miles).
- --Mary Washington Hospital, Fredericksburg, Va. (23 miles).
- -- Prince William Hospital, Manassas, Va. (25 miles).

In some cases, these hospitals may be more convenient to Quantico beneficiaries than the Quantico facility was. Ambulances and helicopters are available to transport patients, and a direct telephone line was installed between the Quantico clinic and the emergency room at Dewitt Army Hospital.

In fiscal year 1979 the Quantico facility served a beneficiary population of about 38,000, but only about 13,000 beneficiaries reside on or work at the Marine Corps base. Many beneficiaries reside in the Manassas, Woodbridge, or Fredericksburg areas and are closer to civilian hospitals than to Quantico. Additionally, the greatest potential for serious injury would be at the Quantico training camps. One of the training camps, Camp Upshur, is about 26 miles from the former Quantico hospital and may be closer to Prince William Hospital.

Ambulances are available at the Quantico clinic and each training camp in operation to transport emergency patients to other facilities. A new ambulance with sophisticated life-support equipment and a staff of highly trained medical corpsmen is stationed 24 hours a day at the clinic, and an additional ambulance may be added.

Helicopters are also available to transport patients, if needed. According to the commanding officer of the Quantico Marine Corps Base air facility, helicopters capable of search and rescue missions are available at Quantico but do not carry life-support equipment.

However, a medical evacuation helicopter with some life-support equipment is available at Davison Army Airfield near Fort Belvoir to assist Quantico in transporting emergency patients. An Army official from the Crash-Air Rescue Service at Davison said that the helicopter, used only for aeromedical evacuation, can be airborne within 2 minutes between 6 a.m. and 6 p.m. and within 25 minutes at night.

CONCLUSIONS

With the continuing decline of inpatient workload at the Quantico Naval Hospital and the availability of care for Quantico beneficiaries at Dewitt Army Hospital, we do not believe resuming inpatient care at Quantico would be cost effective. Although we identified several deficiencies in the Navy's feasibility study, many of the deficiencies would increase rather than decrease the savings.

In the past few years, we have issued several reports on opportunities to make more appropriate use of Federal

medical delivery capabilities by increasing either intraagency or interagency sharing. The actions initiated by the commanding officers at Dewitt Army Hospital and the Naval Regional Medical Clinic, Quantico, following the discontinuation of inpatient care at Quantico have provided for the availability of adequate care to Quantico beneficiaries while minimizing the inconvenience in obtaining care. We believe they should be commended for these actions.

We are sending copies of this report to the Secretary of Defense and the Secretary of the Navy.

Sincerely yours,

Philip A. Bernstein Acting Director

Enclosure

ENCLOSURE I ENCLOSURE I

MEDICAL SERVICES AVAILABLE AT DEWITT ARMY HOSPITAL

FORT BELVOIR, VIRGINIA, AS OF SEPTEMBER 1979

	Category of beneficiaries			
		Dependent		Dependent
	Active	of active		of
Service	duty	duty	Retiree	retiree
				
Acute minor illness	X	X	Х	Х
Allergy	X	X		
Allergy shots, immunizations	Х	X	X	X
Breast	X	X	· X	X
Chaplain	X	X	X	X
Community health nursing	Х	X	X	Y.
Community mental health	X	X	(a)	(a)
Dental	Х	(b)	(Ġ)	(a)
Dermatology	Х	X	X	X
Diabetic	X	X	X	X
Ear, Nose and Throat	x x	x x		~
Electrocardiogram	X	X	х	X
Electroencephalogram	x	x	X	x
Emergency room	(c)	(Ĉ)	(c)	(Ĉ)
Family practice	(d)	(d)	(d)	(d)
Gastroenterology	X	X	X	
Gynecology/Obstetrics	× x			X
Hearing conservation		X	X	X
	X	X	X	, X
Hypertension Internal Medicine	X	X	X	X
	X	X	X	X
Neurology	X	X	X	X
Nutrition	X	X	X	Х
Occupational health	(e)	(e)	(e)	· (e)
Ophthalmology	Х	X	X	X
Optometry	X	X		
Oral surgery	X :	(f)	. X	(f)
Orthopedics	X .	(f)	(f)	(f)
Pathology	Х	X	X	Х
Pediatrics		X		Х
Pharmacy	X	X	Х	X
Physical exam	(g)	(g)	(g)	(g)
Physical therapy	X	X	X	X
Podiatry	X	Х	X	X
Radiology	(h)	(h)	(h)	(h)
Rheumatology	X	X	X	X
Surgery	X	X	x x	X
Teen clinic		X	. ^	x
Urology	x	X	х	
VD investigation	X	X		X
Wart	X		X	X
Well baby/child	A	X	Х	X
METT DEDAY CHITTO		X		X

a/Emergencies and evaluation only.

b/Emergencies, fluoride, and cleaning only.

c/Any category of emergency.

d/Families enrolled in family practice.

e/Military and civilian at Ft. Belvoir.

f/Emergencies.

q/Work, college physicals; retiree screeings.

 $[\]underline{h}/\text{Referrals}$ from Dewitt Army Hospital physicians only.