COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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The Honorable George H. Mahon
Chairman, Committee on
Appropriations
House of Representatives

Dear Mr. Chairman:

On April 21, 1976, the Subcommittee on Military Construction asked us to provide it with the results of our analysis of the size of the proposed Orlando Naval Hospital. Our final report, which will contain an analysis of all three military hospitals included in the Department of Defense fiscal year 1977 budget, should be completed by July 1976.

CRITERIA USED TO PLAN ORLANDO HOSPITAL

As planned by Defense, the new hospital at Orlando, Florida, would have 104 acute-care beds: 88 medical and surgical, 8 obstetrical, and 8 intensive and coronary care. The size estimate was based on Defense criteria of providing 4 beds per 1,000 active duty members, and 4 beds per 1,000 dependents of active duty members, plus an additional 5 percent to accommodate retirees and dependents of retired and deceased members.

We evaluated this criteria during our recent review of the proposed San Diego Naval Hospital. It did not reflect either actual or expected demand for medical care services. Our report, "Policy Changes and More Realistic Planning Can Reduce the Size of New San Diego Naval Hospital" (MWD-76-117), was issued on April 7, 1976.

We recommended that the Secretary of Defense withdraw the Defense hospital sizing criteria and instead use a hospital size

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planning model similar to the one we developed. Basically, our model would categorize the patient workload by diagnosis and age group for a military hospital, compare this with the average length of stay of comparable patients in civilian hospitals, and estimate the size of the military hospital based on the time that would be required to treat the military patient in a civilian hospital.

In commenting on our report, Defense said our model was a better measure of acute-care bed requirements than its criteria and, with certain adjustments, could be used throughout the Defense hospital system.

Enclosed is a copy of our report on the San Diego Naval Hospital. Chapter 3 explains, in detail, how our hospital size planning model works, the source and scope of our civilian hospital data base, and the details of Defense's position concerning our model.

RESULTS OF APPLYING HOSPITAL SIZING MODEL TO PROPOSED ORLANDO HOSPITAL

The table below compares the estimated number of acute-care beds needed at Orlando based on 1974 actual use data with the estimated number of beds needed in 1974 based on civilian hospital data from the southern portion of the United States.

	Beds needed in 1974 (note a)			
	Estimate based on civilian hospital data		Estimate based on actual use data	
Beneficiary category	Number	Percent	Number	Percent
Active duty	20	22	42	34
Dependents of active duty	11	12	11	9
Retirees	28	31	35	29
Dependents of retired deceased	28	31	32	26
Others	4	4	3	2
Total	91	100	123	100

a/ The estimates were calculated assuming an 80-percent occupancy rate. This is in accordance with Defense policy for hospital's having an average daily patient load over 90.

Our estimates assume that patients in military hospitals need to occupy acute-care beds for the same lengths of time, on the average, as civilian hospital patients with the same diagnosis, age, and other similarities. At the Orlando hospital in 1974, the average stay for active duty patients was about 13.5 days. Patients with comparable diagnoses stayed only an average of 6.4 days in civilian hospitals.

During 1975, Navy hospitals came under increasing criticism for having average lengths of stay about two times greater than Army and Air Force hospitals and three times greater than civilian hospitals. The Navy knows their average lengths of stay have been excessive and that the problem involves long stays by active duty patients. We did not evaluate in detail the reasons for excessive lengths of stay at Orlando. But, excessive lengths of stay at the San Diego Naval Hospital were due primarily to administrative delays and lack of light care facilities. (See pp. 16 to 18 of enc.)

The table on page 2 also shows that retirees and dependents of retired and deceased members made up about 55 percent of the hospital's inpatient workload. This high percentage is consistent with previous years. While this high use was possible at the Orlando hospital because space and staff were available, Defense policy states that only 5 percent of the beds provided for active duty members and their dependents in a new medical facility should be added for retirees and dependents of retired and deceased members. The 5 percent factor was established by Defense for non-teaching hospitals in 1967 in conjunction with the American Medical Association.

The bed needs shown on page 2, convert to beds per 1,000 by dividing the number of beds by the 1974 population for each beneficiary category as follows:

Beneficiary category	Population 1974	Beds needed per 1,000 population: Estimate based on civilian hospital data	Estimate based on actual use data
Active duty	7,835	2.6	5.4
Dependents of active duty	4,383	2.5	2.5
Retirees	12,970	2.2	2.7
Dependents of retired deceased	34,950	.8	.9
Others	1,688	2.4	1.8
Total	61,826	1.5	2.0

As shown in the previous table the 4 beds per 1,000 population criteria for active duty members and their dependents does not reflect either expected or actual use.

Once the acute-care beds per 1,000 population are determined, bed needs can be projected using future population estimates. Our projection of bed needs using Defense population figures for the Orlando hospital is shown below.

Beneficiary category	Defense projected population 1980	Estimated beds needed in 1980: Number	Percent
Active duty	13,982	36	30
Dependents of active duty	8,493	21	17
Retirees	13,694	30	25
Dependents of retired deceased	37,229	30	25
Others	1,690	4	3
Total	75,088	121	100

If the hospital was sized so that all beneficiaries could use the new hospital in the same ratios they have in the past, 121 acute-care beds would be needed. Beds for retirees and dependents of retired and deceased members would constitute about 50 percent of this requirement. If the Defense criteria of 5 percent additional beds for retirees and dependents of retired and deceased members were used, however, the acute-care beds needed would be reduced to 60.

According to officials from the East Central Florida Comprehensive Health Planning Council and the Florida Hospital Association, the area has about 300 excess beds. The latest projection--through calendar year 1980--indicated the excess capacity will continue. They also said that if civilian hospitals absorb up to 100 inpatients from the Orlando hospital the effect on such hospitals would be insignificant. Therefore, if the proposed hospital's size were reduced from 104 to 60 acute-care beds, civilian hospitals in the Orlando area should be able to absorb the additional patients. In fiscal year 1975, civilian hospitals provided inpatient care each day to an average of 68 military beneficiaries.

LIGHT CARE BED NEEDS

Our estimate assumes that patients will occupy acute-care hospital beds for the same lengths of time, on the average, as comparable civilian hospital patients. Civilian hospital patients are usually discharged to their home for family care. However, a corresponding military patient probably would not be discharged to a barracks environment because suitable care would not be available.

To provide care in these circumstances, light care facilities are needed to supplement the acute-care hospital beds. Officials at Orlando said that suitable quarters were being established for light care patients who were discharged from the hospital but could not return to full duty.

When operational, it will house about 3 to 10 patients daily. Since we did not evaluate the reasons for excessive lengths of stay

for active duty members, a precise number of light care beds needed cannot be determined. However, the hospital operates a dispensary which is suitable for continued use and is being reduced in size from 150 beds to 75 beds. According to Navy officials it will still have an average of 25 beds available daily when changes are complete. The dispensary could be used to meet the light care needs at Orlando.

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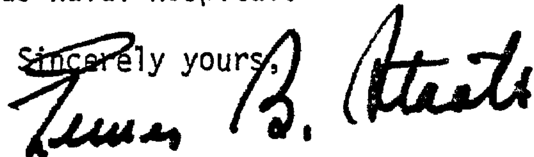
Regarding civilian hospitals, the basic data for use in this analysis was supplied by the Commission on Professional and Hospital Activities, Ann Arbor, Michigan. In this data, the identities of individual hospitals were not revealed in any way. Any analysis, interpretation, or conclusion based on this data is ours, and the Commission disclaims responsibility for any such analysis, interpretation, or conclusion.

We did not obtain formal written comments from Defense concerning the information discussed in this letter. However, Navy officials have had an opportunity to review it and their observations have been incorporated where appropriate.

We trust this information will be useful to the Committee in its consideration of the proposed Orlando Naval Hospital.

Sincerely yours,



Comptroller General
of the United States

Enclosure