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UNITED STATES GENERAL ACCOUNTING OFFICE 13-6463

WASHINGTON, D.C. 20548

MANPOWER AND WELFARE DIVISION

B-167656

FEB 20 1973

The Honorable Donald E. Johnson Administrator of Veterans Affairs

Dear Mr. Johnson:

We have reviewed the methodology followed by the Veterans Administration (VA) in projecting its hospital and nursing home bed needs. The review was performed in VA medical region 36--which includes VA hospitals in northern California and western Nevada--and at the VA Central Office.

At the time of our fieldwork, the latest projections of bed requirements for the region were those which were prepared in March 1971 and which forecasted bed requirements at 5-year intervals from 1975 through 1990. We believe that, although the methodology for estimating future bed requirements may be conceptually sound, the <u>data</u> base used for the projections can be improved.

VA's projection methodology incorporates a forecasted national prevalence ratel projected from 3 base years. This rate, applied to the estimated veteran population for a given period, results in a 1-day bed demand. This bed demand figure is adjusted for (1) anticipated changes in delivering health care and (2) a regional correction factor designed to adjust for those local social and economic factors which would affect the hospitalization pattern.

Our review of VA's projections of bed requirements for the region showed that:

- --Data supporting the determination of prevalence rates was not the most current.
- --Regional correction factors were limited to a 1-year base period.

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<sup>&</sup>lt;sup>1</sup>Relates the expected number of veterans institutionalized for medical care on a given day to the number of veterans on that day.

--Available community and State nursing home beds were not considered in forecasting nursing home care bed requirements.

These matters, discussed in detail below, are being brought to VA's attention because the methodology used in the region is used throughout VA.

## PREVALENCE RATES

Prevalence rates developed by VA in March 1971 were based on data for 1966 through 1968. We believe that using more current data would have given VA a better basis on which to develop its prevalence rates. For example, data for the period July 1, 1968, through March 31, 1971, showed a pronounced downward trend in use of hospital beds in the region, primarily because of significant increases in the use of nonacute health care resources available to VA, the improved efficiency of VA acute health care facilities and personnel, and the underuse of VA facilities.

In December 1971 officials of the Department of Medicine and Surgery, at our request, compared the prevalence rate they had projected for fiscal year 1971 (using the 1966-68 data), with the actual fiscal year 1971 prevalence rate. This comparison showed that the projected rate was overstated by 23 percent for the region. The following table shows the breakdown of the 23 percent by type of patient using the beds.

	Fiscal year 1971 prevalence rates Projected Actual		<u>Overp</u> Rate	rojected Percent
Hospital patients: Medical, surgical, and neurological Psychiatric Nursing home patients	124.9 121.7 <u>34.2</u>	$122.6 \\ 86.6 \\ 19.1$	2.3 35.1 15.1	2 41 79
Total	280.8	228.3	<u>52.5</u>	23

## REGIONAL CORRECTION FACTOR

To adjust for regional variation in bed use, VA computes a regional correction factor based on (1) a typical day's patient census and (2) discharges during a calendar year. The B-167656

census and discharge data are expressed as ratios; that is, regional census to national census and regional discharges to national discharges. The correction factor is obtained by averaging the two ratios. Separate correction factors are computed for each bed type; that is, for (1) the medical, surgical, and neurological and (2) the psychiatric type.

In March 1971 VA made its projections on the basis of a single day's census in 1969 and all calendar year 1969 hospital discharges. In our opinion, the use of historical patient census and discharge data expressed at single points of time is questionable because it does not allow time to sufficiently establish trends. Therefore, we believe that, as a minimum, a multiyear base period, sufficient to reflect trends evident in regional and national bed utilization, should be used.

## PROJECTION OF NURSING HOME BED NEEDS

VA provides nursing home care for eligible veterans in VA nursing homes and, through contracts, in community and State nursing homes. During fiscal years 1969 through 1971, approximately 60 percent of all VA nursing home bed needs were met by community and State nursing homes.

In its projections of nursing home bed requirements, VA did not consider community and State nursing home resources. Thus the need for VA-operated nursing home beds was overstated.

An official of the Department of Medicine and Surgery advised us in March 1972 that VA had revised its planning assumption that by 1980 all nursing home bed needs would be provided in VA facilities. A revised December 1971 VA bed projection indicated that a ratio of 70 percent VA nursing facilities to 30 percent contract nursing home care was being used for projections from 1975 to 1990. The revisions should provide VA with a more accurate projection of nursing home bed requirements in VA facilities.

A projected hospital and nursing home bed requirement could be affected by changes in methods of health care delivery and other factors, such as legislation. However, we believe that the accuracy of the projections could be increased and thereby provide management with better information on which to base decisions concerning the use of funds and personnel required to meet the medical needs of veterans. Therefore, we recommend that VA require that future projections (1) be made using the most current data available and (2) recognize B-167656

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identifiable trends in hospital bed use by veterans. We recommend also that regional correction factors be determined using a multiyear base period sufficient to reflect trends in regional bed use by veterans.

We are sending copies of this report to the Senate and  $> 639 \pm 6$ House Committees on Veterans' Affairs, the Senate and House  $> 639 \pm 6$ Committees on Appropriations, the Senate and House Committees  $> 6036 \pm 6$ on Government Operations, and the Director, Office of Manage-  $\pm 1500$ ment and Budget.

We appreciate the cooperation and courtesy extended to us by VA personnel during our review.

Sincerely yours, Tregny J Whart

Gregory J. Ahart Director