

# PROJECTED ACUTE-CARE BED NEEDS OF VETERANS ADMINISTRATION HOSPITALS

*Staff Working Paper*

April 1977



Congressional Budget Office  
Congress of the United States  
Washington, D.C.

-----

PROJECTED ACUTE-CARE BED NEEDS  
of  
VETERANS ADMINISTRATION HOSPITALS

The Congress of the United States  
Congressional Budget Office



---

PREFACE

---

This study was requested by the staff of the Budget Committee of the House of Representatives. All costs were calculated on the basis of data available in July 1976 when the initial work on the project was completed. Dates refer to fiscal years unless otherwise stated.

Maureen S. Baltay of the Human Resources Division prepared the paper under the supervision of Stanley S. Wallack, Robert D. Reischauer, and C. William Fischer formerly with the Congressional Budget Office. Alan Fein of the Human Resources Division and Robert Meyer, formerly with CBO, provided assistance with the statistical analysis. The manuscript was edited by Johanna Zacharias and typed for publication by Toni Wright.

Alice M. Rivlin  
Director

April 1977



---

TABLE OF CONTENTS

---

	<u>Page</u>
Preface -----	iii
Summary -----	ix
Chapter I: Background -----	1
Chapter II: Efficiency of the VA Hospital System ----	3
Current Status of Length of Stay -----	4
Further Reduction in Length of Stay -----	6
Impact of the Change in Veteran Population ----	8
Chapter III: Estimated Impact of National Health Insurance -----	13
Chapter IV: Budget and Policy Implications -----	19





---

TABLES

---

1. Comparative Average Length of Stay for Males Ages 50 to 64, by Diagnosis -----	3
2. Actual and Projected Average Length of Stay of Medical and Surgical Patients in VA Hospitals -----	7
3. VA Bed Requirements Assuming Constant Number of Patients Treated and Decline in Length of Stay -----	8
4. Projected Shift in Age Composition of Veteran Population Between 1975 and 1990 -----	9
5. Projected Changes in Numbers of VA Medical and Surgical Beds Required -----	10
6. Percent of Veterans and Nonveterans with Private Health Insurance or Medicare, January - March 1976 --	13
7. Distribution of Hospitalized VA Pension and Compensation Recipients By Insurance Status and Hospital Type -----	14
8. Changes in VA Hospital Share of Veteran Discharges: Veterans Age 65 and Over -----	15
9. Estimated Number of VA Medical and Surgical Beds Required Under National Health Insurance (NHI), 1977 - 1981 -----	17
10. Estimated Net Savings from Reducing Length of Stay -----	20



---

## SUMMARY

---

The medical system of the Veterans Administration (VA) operates 172 hospitals with a total of almost 95,000 beds. It is the largest civilian medical system in the United States. In 1977, the cost of the VA system will reach an estimated \$4.8 billion -- roughly 25 percent of federal health outlays excluding medicare and medicaid -- which makes the VA system of considerable budgetary significance.

The efficiency and quality of the VA system's services have been matters of concern for many years. This paper examines the efficiency of the system and its future need for beds for medical and surgical patients. The possible impact of national health insurance on the future need for VA services is also discussed.

One commonly accepted measure of a hospital system's efficiency is average length of stay. Even though the length of stay in VA hospitals has been dropping steadily for years, it is still more than twice as high for VA general medical and surgical patients than for those in community hospitals. This relationship still holds true when the comparison is adjusted for age of the patient, diagnosis, and surgical procedure. Were VA to continue to reduce the average length of stay through better allocation of hospital resources and increases in outpatient treatment (as several independent studies have suggested), it could convert or discontinue use of 5,600 beds while meeting the demand for acute care. Closure of beds would result in a net savings of \$372 million between 1977 and 1981. The saving could be used to raise staff-to-patient ratios further, to expand long-term care, or to cover price increases.

If current trends prevail, by 1990, when the number of aged veterans will be near its peak and the demand for medical services potentially quite high, it is estimated that the VA will have 10,500 more beds for general medical and surgical purposes than needed to treat acutely ill patients. Moreover, national health insurance may offer financial freedom of choice to many veterans who now cannot afford care in community hospitals. The effect of this choice might be to divert an

additional 20 to 40 percent of the potential patients away from the VA system and, in turn, eliminate the need for another 8,500 to 16,900 acute-care beds by 1981.

Accelerating the pace of treatment can improve the quality of VA hospital care without increasing use of federal resources. But the accompanying reduction in requirements for VA hospital beds signals the need for a careful scrutiny of proposals to construct new VA hospital facilities.

In May 1976, President Ford authorized construction of eight VA hospitals at an estimated cost of \$825 million. This construction program will result in little or no overall reduction of medical and surgical beds. The potential impact of national health insurance heightens the importance of examining the type and number of beds to be provided by VA. Care should be taken that federal funds are committed to those sorts of capital investments that better align the type and number of VA beds with the expected need for them. It might be well to consider investment in alternative treatment settings, such as outpatient and long-term care facilities, rather than acute-care beds.

---

## CHAPTER I. BACKGROUND

---

The Veterans Administration (VA) medical program was started after World War I to provide treatment for war-wounded or otherwise service-disabled veterans. Care was later extended to other veterans (pensioners, veterans age 65 and over, and those declaring inability to pay for care) on a space-available basis. Today, VA operates 172 hospitals with a total of 95,000 beds, as well as outpatient clinics, nursing homes and domiciliaries; it also contracts for care in the private sector on a limited basis. At the end of fiscal year 1975, 60 percent of all VA hospital beds were located in medical and surgical bed sections of nonpsychiatric hospitals. These beds were occupied at an average of 82 percent of capacity. Of all nonpsychiatric discharges from VA hospitals, only 9 percent were for treatment of service-connected disabilities; 15 percent were for the treatment of other conditions of service-disabled veterans; and 76 percent were for the treatment of nonservice-disabled veterans.

The VA hospital system does not serve as the primary source of medical care for the problems of returning war-disabled veterans. Neither does it provide a major share of the treatment of nondisabled veterans partly because of the indigency requirement, which limits eligibility. Other contributing factors include the inaccessibility of VA facilities and the preference of many veterans for non-VA care. The VA has provided an average of 14 percent of veterans' hospitalization over the last 13 years. Only 12.8 percent of the general medical hospitalization of all veterans in calendar year 1974 was in VA hospitals.

While the VA system is the largest civilian medical complex under single management, its facilities account for less than 6 percent of the acute-care hospital beds in the United States and it provides less than 1 percent of all outpatient medical services. However, the VA system does constitute a significant proportion of federal resources for health services. In 1977, outlays for the administration, maintenance, and management of the system, and for ancillary

training and research activities are estimated to exceed \$4.8 billion. This sum equals roughly one-fourth of all federal outlays for health other than medicare and medicaid.

As long as the federal government remains committed to operating a separate medical system for veterans, it must be concerned that the system operate at least as effectively as the community hospitals, which are alternative sources of care for veterans. The government should also ensure that the capacity of the VA system corresponds to the present and future demands for services.

The discussion that follows examines the efficiency of the VA hospital system and the likely future demand for VA beds. The analysis is limited to the expected need for acute-care medical and surgical beds if the population eligible for VA care is not expanded by war (which would increase the number of veterans) or by changes in eligibility requirements. Bed needs are estimated both with and without the expected impact of national health insurance. The estimated cost savings are calculated on the basis of a more efficient allocation of VA resources, however, and do not include the impact of national health insurance. 1/

---

1/ Much of the data used in the analysis has been supplied by the Veterans Administration, which is itself engaged in a concerted effort to analyze the problems discussed in this paper and to devise solutions to them.

---

CHAPTER II.      EFFICIENCY OF THE VA HOSPITAL SYSTEM

---

One commonly accepted measure of the efficiency of hospital operations is average length of stay. Ten years ago, the average length of stay in a community hospital was 10 days; in VA hospitals, it was 35 days. The VA length of stay has dropped roughly 40 percent during the past decade, but it is still much higher than in community hospitals. In 1975, the overall length of stay for VA medical and surgical patients was 21.7 days. For adult males in non-VA hospitals, the comparable length of stay was roughly 9.7 days. Even when adjusted for age, diagnosis, and surgical procedure, the length of stay in a VA hospital is usually twice that in a community hospital (see Table 1).

Table 1. COMPARATIVE AVERAGE LENGTH OF STAY FOR MALES  
AGES 50 to 64, BY DIAGNOSIS: IN DAYS

Diagnosis	Length of Stay	
	Non-VA Hospitals	VA Hospitals
Cancer of Trachea, Bronchus, or Lung	11.5	20.6
Diabetes Mellitus	9.4	20.0
Cataract	5.0	11.0
Acute Myocardial Infarction	19.4	24.0
Chronic Ischemic Heart Disease	11.0	17.3
Congestive Heart Failure	12.5	18.5
Varicose Veins	5.6	15.9
Hemorrhoids	6.9	14.2
Chronic Bronchitis	9.0	16.3
Pulmonary Emphysema	9.9	19.2
Ulcer of Stomach	9.0	21.5
Ulcer of Duodenum	8.9	19.1
Inguinal Hernia	6.1	12.5
Cirrhosis of Liver	13.0	29.2
Gallstones	10.6	20.6
Enlarged Prostate	7.1	15.0

SOURCE: Adapted from a Special Study by the Commission on Professional Hospital Activities.

## CURRENT STATUS OF LENGTH OF STAY

A good many reasons for the greater VA length of stay have been advanced. Among these are:

- o Patient mix and other relatively uncontrollable factors such as a higher proportion of older and poorer patients than in community hospitals 1/; a higher proportion of chronic conditions such as alcoholism (the principal or associated diagnosis of almost one-fourth of the VA nonpsychiatric discharges); the longer work-up time required because many VA admissions are walk-in patients whose medical histories are unknown; and the difficulty of following up a patient on an outpatient basis because many patients live far from the hospital.
- o Management practices and resource allocation factors, such as operating room delays due to poor scheduling; delays in outplacing patients requiring extended care or misclassification of chronic care patients as general medical and surgical patients; delays in key diagnostic support services such as laboratory and radiology; a five-day work week in many hospitals; and a lack of motivation among physicians or administrators to shorten length of stay, exacerbated by legislative and budgetary actions that appear to place a premium on keeping beds filled. 2/

---

1/ The argument that higher numbers of older and lower-income veterans in VA hospitals (i.e., patient mix) preclude VA attainment of community hospital lengths of stay may be questioned. The average length of stay of medicaid recipients (i.e., poor) is 9 days and the average length of medicare recipients (aged and disabled) is 12 days.

2/ For example, VA permits absences from the hospital that are counted as days of care. In 1974, 15 percent of the VA medical and surgical discharges had at least one pass (leave of up to 96 hours) which lasted an average of 2.6 days. The Congress has also, in the past, enacted requirements for a minimum number of beds to be occupied, which encouraged keeping patients in bed longer than necessary.



While some of these factors may be uncontrollable because of special characteristics of the VA patient population or because certain facilities are not convenient to patients' homes, it appears that further improvement in management and resource allocation in the VA system could significantly reduce the average length of stay, even if not by as much as experienced in the last decade. The VA itself, in a study showing the effect of selected factors on length of stay, concluded that certain stays in VA hospitals are excessive. The VA study indicated that the length of stay could have been reduced 24 percent by increasing the use of outpatient treatment before hospitalization and after surgery. Scheduling admissions according to the availability of the operating room would have reduced length of stay by another 7 percent. Patients' age and marital status (i.e., the fact that many are single and have no alternative to hospitals for care during illness) increased patient days and average length of stay by 6 and 5 percent, respectively. 3/ These two factors are unlikely to diminish; hence, they offer no opportunity for cost savings. 4/

Two other studies of the VA system reached similar conclusions:

- o The General Accounting Office reported that eliminating inefficient practices in the six hospitals surveyed would have reduced patient days by 15 percent. 5/

---

3/ The percent reduction in length of stay is approximately equal to the percent reduction in patient days if discharges are held constant.

4/ Based on a VA study of the 1973 experience of 10,497 patients operated for hyperplasia of the prostate, senile cataracts, hemorrhoids, inguinal hernia, and varicose veins. The study results were contained in an internal staff paper dated January 1974.

5/ U.S. General Accounting Office, Better Use of Outpatient Services and Nursing Care Facilities Could Improve Health Care Delivery to Veterans, April 11, 1973.

- o McKinsey and Company, after an in-depth, on-site observation of two VA hospitals, reported that 30 to 50 percent of the inpatient days were avoidable, and that the bulk of unnecessary days were due to "physician-generated" delays and to unnecessary hospitalization (e.g., underutilization of outpatient treatment). 6/

#### FURTHER REDUCTION IN LENGTH OF STAY

An analysis by the Congressional Budget Office (CBO) indicates that it is not unreasonable to expect continued declines in length of stay in VA hospitals in future years. CBO looked at the impact of several variables (percent of patients over age 65, number of pre-bed and post-hospital outpatient visits, nursing home admissions, and medical and surgical staff-to-patient ratios) on the length of patient stay. The analysis showed a strong relationship between declines in average length of stay and increases in outpatient treatment during the period 1966 to 1975. The proportion of patients over 65 emerged as a moderating influence on the rate of decline. 7/ However, several other factors that probably influenced length of stay were not quantifiable or subject to statistical analysis. Some of these are management and budget techniques, perceptions about whether outpatient treatment is an acceptable alternative to long hospital stays, pressure on VA doctors from their peers, and public scrutiny. Consequently, the variable "time" was used to represent the combination of quantifiable and nonquantifiable factors that have influenced VA declines of average length of stay in past years. Projections based upon the past relationship between time and length of stay assume that these factors will continue to exert the same level of influence.

Under this assumption, between 1976 and 1981, the length of stay in VA hospitals would be reduced by 21 percent. Length of stay for patients under 65 is projected to fall to 15 days,

---

6/ McKinsey and Company, discussion drafts prepared for the Veterans Administration, 1974.

7/ Based upon multiple regression analysis. The remaining variables did not significantly affect length of stay.

and that of the elderly VA patients would fall to 24 days. The average stay of all patients is projected to be 17 days. The projected length of stay in 1981 is still 76 percent higher than that in non-VA hospitals in 1975. Table 2 displays actual and projected lengths of stay. Projections of combined average lengths of stay assume the 1975 age mix of patients. The same rate of decline through 1990 would still leave the VA with longer lengths of stay than those experienced in community hospitals. This is to be expected as long as the VA continues to have a higher proportion of older and poorer patients than community hospitals.

Table 2. ACTUAL AND PROJECTED AVERAGE LENGTH OF STAY OF MEDICAL AND SURGICAL PATIENTS IN VA HOSPITALS: BY PATIENTS' AGE; IN DAYS a/

Patients' Age	Actual							Projected						
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1990	
Under Age 65	24.1	23.1	21.8	20.7	19.4	19.3	18.5	17.7	16.9	16.2	15.5	14.8	9.9	
Age 65 and Over	34.0	33.6	33.3	32.1	33.0	29.2	28.3	27.5	26.7	25.9	25.1	24.3	18.5	
All Ages	26.5	25.5	24.5	23.3	22.6	21.7	20.9	20.1	19.3	18.5	17.8	17.1	12.0	

a/ Based on 1975 number and mix of patients.

Several policy changes are already being considered or implemented that should begin to improve the pace of patient care. The VA has issued new length-of-stay criteria to guide hospital directors. It is also reconsidering its policy on absences from the hospital and the classification of selected hospital patients as long term/intermediate rather than medical or surgical. Moreover, the Veterans Omnibus Health Care Act of 1976 (Public Law 94-581) permits dental treatment begun in the hospital to be completed on an outpatient basis.

A reduction in length of stay would have a substantial impact on the number of acute-care beds needed to treat the same number of patients. A projection of basic bed needs can be derived by holding medical and surgical patients treated at the 1975 level (almost 708,000) and using the projected lengths of stay. Table 3 illustrates the impact of increased efficiency on the need for beds. Roughly 11,400 fewer beds -- 23 percent of all nonpsychiatric beds -- would be needed in 1981 to

treat the same number and mix of patients as in 1975. In 1990, there would be an excess of 23,100 beds for medical and surgical patients.

Table 3. VA BED REQUIREMENTS ASSUMING CONSTANT NUMBER OF PATIENTS TREATED AND DECLINE IN LENGTH OF STAY: NUMBERS IN THOUSANDS

Bed Requirements	1975	Projected						
	Actual a/	1976	1977	1978	1979	1980	1981	1990
For Patients Under Age 65	34.1	32.1	30.8	29.4	28.1	26.9	25.7	17.2
For Patients Age 65 and Over	<u>16.4</u>	<u>15.6</u>	<u>15.1</u>	<u>14.7</u>	<u>14.3</u>	<u>13.8</u>	<u>13.4</u>	<u>10.2</u>
Adjusted Total	50.5	47.7	45.9	44.1	42.4	40.7	39.1	27.4

a/ Calculated from discharge data which excludes one-day hemodialysis discharges.

#### IMPACT OF THE CHANGE IN VETERAN POPULATION

The VA hospital workload will not be constant as assumed in the preceding projections. Between 1975 and 1990, if the United States does not engage in another war, the total number of veterans will decline, but the number of aged veterans will triple. The argument has been made that the aging of the veteran population will require an expansion of VA bed capacity rather than the contraction implied by increased efficiency of operations and a decline in the total number of veterans. This proposition is open to question.

The anticipated shift in the age composition of the veteran population (which was 29.9 million persons in 1975) is certainly substantial (see Table 4). The number of veterans under age 65 will drop by 7.2 million between 1975 and 1990; veterans age 65 and over will increase by 4.8 million. The average age of the total veteran population is now 45.9 years; in 1981, it will be almost 49 years; and in 1990, almost 53 years. The aged require more frequent hospitalization and, once hospitalized, experience longer lengths of stay than do younger people. How much the growing number of aged veterans with higher hospital utilization rates offsets the counter-vailing effects of the declining number of younger veterans and more efficient hospital operation will determine VA bed needs.

Table 4. PROJECTED SHIFT IN AGE COMPOSITION OF VETERAN POPULATION BETWEEN 1975 AND 1990: IN MILLIONS

Veterans' Age	1975	1977	1979	1981	1990
Under 65	27.5	27.4	27.1	26.6	20.3
65 and Over	2.4	2.6	2.9	3.4	7.2

SOURCE: Veterans Administration.

In order to estimate the impact of the expected shift in age mix on VA medical and surgical bed requirements, the CBO developed a projection of veterans' discharge rates. The bases of the estimates were VA projections of the veteran population, short-term general hospital discharge data from the American Hospital Association, data on the age/sex breakdown of discharges from the Health Interview Survey (HEW National Center for Health Statistics), and special veterans' tabulations from the Health Interview Survey. 8/

The impact of the shift in age composition on VA bed needs also depends upon what share of veterans' hospitalization the VA provides. The VA hospitals' share of discharges of veterans under 65 has fluctuated within a narrow range, but its share of the discharges of older veterans has been falling steadily. For projection purposes, the VA share was conservatively set at the 1974 level of 10.3 percent for the 65-and-over group; the 1970-1974 average of 12.6 percent was used for the under-65 group.

8/ Special tabulations from the Health Interview Survey, 1957-1961, 1970, 1971, 1972, and 1974. Discharges have been used instead of admissions as a proxy for demand, since the special veterans' tabulations are based upon discharges. Over time, admissions equal discharges plus deaths.

Under these assumptions, nonpsychiatric discharges of veterans from VA hospitals would increase 12 percent -- from 667,000 in 1976 to 746,000 in 1981. Assuming an average occupancy of 85 percent, projected VA bed requirements would be 44.9 thousand in 1981 and 40 thousand in 1990 (see Table 5).

Table 5. PROJECTED CHANGES IN NUMBERS OF VA MEDICAL AND SURGICAL BEDS REQUIRED: IN THOUSANDS

Number of Beds	1977	1978	1979	1980	1981	1990
Assumed Number of Existing Beds	50.5	50.5	50.5	50.5	50.5	50.5
Reduced Requirement (Due to Declining Length of Stay)	-4.6	-6.4	-8.1	-9.8	-11.4	-23.1
Net Increase (Due to Shift in Age and Increased Utilization)	+1.9	+2.8	+3.7	+4.8	+5.8	+12.6
Total Beds Required	47.8	46.9	46.1	45.5	44.9	40.0
Surplus Beds <u>a/</u>	2.7	3.6	4.4	5.0	5.6	10.5

a/ Computed against 1975 level of 50,500 beds.

The aging of the veteran population can be expected to increase the rate of admissions to VA hospitals and the age composition of hospital populations, and hence the average length of stay. While the aging of the VA patient load will increase bed requirements over the efficiency-adjusted total (from Table 3), it will still not raise them to the number actually devoted to medical and surgical patients in 1975. In 1990, when there will be 4.8 million more veterans over

age 65 and almost one-half of the VA hospital discharges will be over 65, it is estimated that there will be roughly 10,500 more acute-care beds than needed. With such a high number of aged hospital patients, the VA could well be short of long-term care beds but this question is beyond the scope of this report.





---

CHAPTER III. ESTIMATED IMPACT OF NATIONAL HEALTH INSURANCE

---

According to the National Center for Health Statistics, more than three-fourths of the entire U.S. population has some form of private health insurance. Of those over age 65, 87.4 percent are covered by medicare. Relatively few low-income veterans or nonveterans under age 65 have private health insurance, however, although they may receive state medicaid benefits (see Table 6). A smaller fraction of veterans with incomes below \$5,000 and veterans over age 65 have health insurance than do nonveterans in the same categories. These groups are among those eligible for VA medical care, which may be considered a substitute for insurance coverage.

Table 6. PERCENT OF VETERANS AND NONVETERANS WITH PRIVATE HEALTH INSURANCE OR MEDICARE, JANUARY - MARCH 1976: INSURED PERSONS GROUPED BY FAMILY INCOME, AGE, AND TYPE OF INSURANCE

Family Income	Percent Under 65 With Hospital Insurance		Percent Under 65 With Surgical Insurance		Percent Age 65 and Over With Medicare	
	Veterans	Non- Veterans	Veterans	Non- Veterans	Veterans	Non- Veterans
Less than \$3,000	26.4	38.0	25.3	35.8	83.0	89.9
\$3,000 - 4,999	29.7	38.9	28.5	38.2	88.5	92.2
\$5,000 - 9,999	65.2	62.4	63.5	60.8	80.6	87.8
\$10,000 - 24,999	91.7	89.0	90.5	87.8	82.0	81.4
\$25,000 or more	94.7	93.7	93.6	92.5	a/	a/

SOURCE: National Center for Health Statistics, 1976 Health Interview Survey.

a/ Sample of veterans too small to calculate veteran/nonveteran split. However, medicare coverage for both groups is 89.7 percent.

Little is known about the health insurance coverage of veterans using VA hospitals. Three surveys of compensation and pension recipients, conducted under the auspices of the House Veterans Affairs Committee, revealed that, while the majority of compensation and pension recipients had health insurance coverage, the majority of those using VA hospitals did not. Moreover, uninsured veterans were more likely to use VA hospitals and the insured, non-VA hospitals (see Table 7).

Table 7. DISTRIBUTION OF HOSPITALIZED VA PENSION AND COMPENSATION RECIPIENTS BY INSURANCE STATUS AND HOSPITAL TYPE a/: PERCENTS

Recipients	VA Hospitals	Non-VA Hospitals
<b>Pension Recipients</b>		
With Insurance	25	46
Without Insurance	26	8
<b>Compensation Recipients</b>		
With Insurance	14	57
Without Insurance	22	10

SOURCE: Survey of Veterans Health Insurance Coverage and Preference for Hospital and Outpatient Care, House Committee on Veterans Affairs, 1972.

a/ Numbers total more than 100 percent because some people were in both a VA and a non-VA hospital during the year of the survey.

The experience with medicare would indicate that the enactment of comprehensive health insurance is likely to influence many veterans not to use VA hospitals. As stated in the last chapter, the proportion of aged veterans hospitalized in VA hospitals has been declining (Table 8). After the enactment of medicare, the annual rate of decline more

than doubled. A drop in VA hospital use might also be expected after enactment of national health insurance since, according to a 1974 survey of one week's hospital admissions, 68 percent of all veterans admitted to VA hospitals have neither public nor private health insurance. <sup>1/</sup>

Table 8. CHANGES IN VA HOSPITAL SHARE OF VETERAN DISCHARGES: VETERANS AGE 65 AND OVER; CHANGES IN PERCENTS

Patients' Age	Calendar Year			
	1962	1966	1970	1974
65 and Over	30.0	23.1	16.0	10.3

SOURCE: National Center for Health Statistics, Health Interview Survey.

Comprehensive, universal insurance coverage would eliminate the financial deterrent from using community facilities which may be more conveniently located than VA hospitals. On the other hand, many VA hospital patients do have health insurance, and it has been speculated that these people use the VA system because of a preference for its care or because their illness is more complex, chronic, or costly than their insurance will absorb without substantial out-of-pocket expense. Therefore, the impact of insurance on the demand for VA care is a function of both the motivation of veterans using VA hospitals and the nature of the insurance benefits provided.

<sup>1/</sup> Unfortunately, none of the surveys distinguished between patients admitted for psychiatric versus nonpsychiatric care. In order to draw any conclusions from the data, one must assume that the uninsured are not principally psychiatric patients. This is not unreasonable, since only 15 percent of VA admissions in both 1971 and 1974 were to psychiatric bed sections.

For the purpose of estimating the probable impact of extended insurance coverage, users of VA hospitals may be grouped according to probable motivation as:

- o Veterans with no insurance coverage who either cannot afford it, or who do not desire it because they are eligible for VA care 2/ and
- o Veterans with health insurance who either prefer VA care, or who have insurance coverage that is inferior to VA care with respect to cost or services covered.

While national health insurance might well enrich the coverage of insured veterans using VA hospitals and cause some of them to use non-VA hospitals instead, the CBO estimate of the impact of national health insurance (NHI) assumes that NHI coverage is no better than that of the average veteran's insurance today. Therefore, the behavior of insured veterans for whom VA care is more comprehensive is assumed to be unaffected by a national health insurance program. Only the impact of NHI on those veterans who have no coverage at present and who currently use the VA system is estimated.

Were the currently uninsured users of VA hospitals to make the same choice between a VA or a non-VA hospital under national health insurance as their currently insured counterparts, use of VA hospitals by pensioners would drop 27 percent; use by compensation recipients would drop 43 percent. 3/ The combined drop for these two populations, which represent half of the hospital workload, would be 34 percent. Were the same behavior attributed to the total uninsured VA patient load, the drop in discharges would be about 40 percent.

---

2/ According to the 1976 National Health Interview Survey, 26 percent of the veterans without private health insurance cited the availability of military or veteran benefits as the reason for lack of coverage; 31 percent cited inability to afford the insurance premiums.

3/ Based upon data from Survey of Veterans Health Insurance Coverage and Preference for Hospital and Outpatient Care, House Committee on Veterans Affairs, 1972.

Among the uninsured users of VA hospitals are those who prefer VA care regardless of financial ability to secure non-VA care. Severely disabled persons, for example, might feel more comfortable in VA facilities, where they are considered top-priority patients and may receive specialized services not readily available elsewhere. The behavior of uninsured VA patients who prefer VA care to non-VA care may be unaffected by NHI. From survey data on hospital preference, the lower limit of the expected drop in demand can be determined. The drop in demand modified by preference for VA care appears to be about 20 percent. Table 9 illustrates the impact on the need for medical and surgical beds of a 20 percent, a 30 percent, and a 40 percent decline in demand for VA care resulting from national health insurance.

Table 9. ESTIMATED NUMBERS OF VA MEDICAL AND SURGICAL BEDS REQUIRED UNDER NATIONAL HEALTH INSURANCE (NHI), 1977 - 1981: IN THOUSANDS

Percent Reduction in Discharges	Beds Required				
	1977	1978	1979	1980	1981
None (No NHI) <u>a/</u>	47.8	46.9	46.1	45.5	44.9
40 percent	29.8	29.2	28.7	28.4	28.0
30 percent	34.3	33.6	33.0	32.7	32.2
20 percent	38.8	38.0	37.4	37.0	36.4

a/ Total beds required from Table 5.

These calculations are based on the premise that the most likely movement after NHI would be from VA hospitals to non-VA hospitals, not the reverse. The current national supply of short-term general hospital beds is considered adequate in the aggregate to meet any incremental demand for inpatient care related to the increased purchasing power provided by even the

most comprehensive health insurance plans. Thus, no widespread rationing of acute-care hospital beds is expected to force veterans now using community hospitals into VA hospitals to avoid queuing at community hospitals. 4/

---

4/ Estimates of induced inpatient demand related to national health insurance range from 5 to 20 percent increases. Occupancy rates are only 74-75 percent. The margin of unoccupied beds is sufficient to absorb an aggregate increase in admissions. Of course, while this is true in the aggregate, specific locations might experience an increase in demand that they would be unable to absorb in the short run.

While the above analysis cannot be definitive because of lack of more recent or complete data, it does point toward an alternative allocation of resources in the VA medical system that would improve its efficiency. The VA is heavily invested in acute-care hospital beds for a number of reasons, including legislative restrictions and initiatives. Barring another war, or a radical shift in overall hospital discharge rates or in the VA share of veteran discharges, the VA could substantially reduce its aggregate number of beds and still meet the demand for acute care.

This reduction in the number of hospital beds would be achieved by increasing the number of pre-bed and post-hospital outpatient visits and by shifting staff or funds to eliminate the specific hospital-generated causes of unnecessary lengths of stay. The estimated cost of the measures needed to reduce length of stay would be more than offset by the savings related to reducing the number of acute-care beds (see Table 10). The net five-year saving of \$372 million could be used to raise staff ratios further, convert unneeded hospital beds to long-term care beds, or cover price increases.

Increased efficiency can improve the effectiveness and quality of VA hospital care without raising the cost to the federal government. The accompanying reduction in requirements for VA hospital beds, however, signals the need for a careful look at proposals to build new VA hospitals or to replace old ones. The potential impact of national health insurance increases the importance of examining the type and number of beds to be built by the Veterans Administration.

More than \$1.6 billion has been obligated for the construction of VA hospitals over the past 10 years. In 1977, an estimated \$357 million will be obligated of which \$113 million is for major replacement and modernization of hospitals. Completing construction projects already started will call for

appropriations in future years of more than \$1 billion. 1/ Moreover, in May 1976, President Ford authorized construction of eight VA hospitals (seven replacement, one additional) at a preliminary total cost of \$825 million. As now planned, this undertaking will result in little or no reduction of beds for medical and surgical treatment. An effort should be made to commit federal funds to those sorts of capital investments that promise to bring the type and number of VA beds and the expected need for them more into alignment. At the same time, greater investment in alternatives to acute-care beds -- such as outpatient or long-term care facilities -- ought to be considered.

Table 10. ESTIMATED NET SAVINGS FROM REDUCING LENGTH OF STAY:  
IN MILLIONS OF DOLLARS

Savings	1977	1978	1979	1980	1981	5-year cumulative
Estimated Cost of Actions to Reduce Length of Stay <u>a/</u>	31.0	49.1	71.5	93.3	116.0	360.9
Estimated Savings from Bed Reductions <u>b/</u>	<u>73.5</u>	<u>110.6</u>	<u>145.4</u>	<u>182.5</u>	<u>220.6</u>	<u>732.6</u>
Net Savings <u>c/</u>	42.5	61.5	73.9	89.2	104.6	371.7

a/ Includes an expansion of pre- and post-hospital outpatient care at an annual average of 700,000 visits. This level was determined through the multiple regression analysis discussed earlier.

b/ Assumes that bed reduction is accomplished through ward or building closure and not through the closing of beds scattered throughout a hospital.

c/ Excludes any savings related to the impact of national health insurance.

1/ Excludes obligations for national cemeteries and computer centers.



The VA system faces questions similar to those confronting nonfederal hospitals: how to assure appropriate use of acute-care hospital beds and control costs, and still provide needed services. This short analysis of the future needs of the VA hospital system is limited to acute-care medical and surgical beds; it has not discussed broader needs or even the role of the VA itself in the general field of medical care. This gap will be filled by other reports. In addition to those commissioned by the VA itself, a study has been underway for almost three years in the National Academy of Sciences. This examination, required by the Congress in Public Law 93-82, should provide a firmer statistical base from which to make budget and policy decisions on all aspects of the VA system.