

## DOCUMENT RESUME

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Survey of VA's Priority for Construction of New and Replacement Hospitals. HUD-78-76; B-133044. March 15, 1978. 2 pp. + enclosure (7 pp.).

Report to Sen. William Proxmire, Chairman, Senate Committee on Appropriations: HUD-Independent Agencies Subcommittee; by Elmer B. Staats, Comptroller General.

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The Veterans Administration's (VA's) Department of Medicine and Surgery (DM&S) recently developed a methodology called the Space and Functional Deficiency Identification (SFDI) system which is intended to be an integral part of the decisionmaking process DM&S uses in establishing priorities for major construction projects. Such a system is needed so that DM&S can plan an orderly program for modernizing its aging facilities, but several modifications are needed to improve the system. The methodology could be improved if: all construction projects were ranked on the same basis rather than ranked within each construction category; and projected, rather than current, use of VA hospitals were considered. The SFDI system and the entire review process depends on the data gathered by medical district representatives. Because of the importance of the data gathered and scoring by district representatives, DM&S should closely monitor the scorings for any obvious irregularities. Decisions to fund projects in different order than that determined by the SFDI system should be documented. The Administrator of Veterans Affairs should develop a priority ranking for all construction projects, regardless of construction category, and include projected use of health care facilities as a factor in establishing priorities. (RRS)



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

B-133044

March 15, 1978

The Honorable William Proxmire  
Chairman, Subcommittee on  
HUD-Independent Agencies  
Committee on Appropriations  
United States Senate

Dear Mr. Chairman:

In discussions with your office on November 17, 1977, we were requested to report on the Veterans Administration's (VA's) new priority system for selecting construction projects. That request reflects your continuing concern over VA's construction program.

Enclosure I describes the results of our review of the process that VA has developed to determine priorities for its major construction program. The system is a major improvement over the previous way in which decisions were made to replace hospitals. We believe, however, that several modifications are needed to improve the system.

Accordingly, we are recommending that the Administrator of Veterans Affairs

- develop a priority ranking for all construction projects, regardless of construction category, and
- include projected use of health care facilities as a factor in establishing priorities.

We also recommend that VA (1) closely monitor the scoring of hospital deficiencies and (2) document all decisions on which projects to fund. The timely implementation of these modifications could greatly improve VA's major construction program.

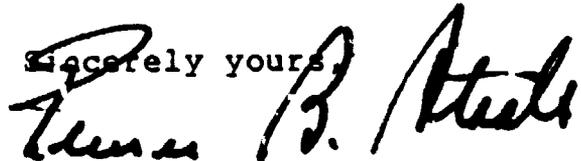
Written comments were not obtained from VA. However, the contents of this report have been discussed with VA officials, and their comments have been included as appropriate.

HRD-78-76  
(40142)

B-133044

We are sending copies of this report today to the Chairmen, House and Senate Committees on Appropriations, House Committee on Government Operations, Senate Committee on Governmental Affairs, and House and Senate Committees on Veterans' Affairs; to the Administrator of Veterans Affairs; and to the Acting Director, Office of Management and Budget.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Thomas B. Steud". The signature is written in a cursive style with a large initial "T" and "S".

Comptroller General  
of the United States

Enclosure

REVIEW OF VA'S SPACE AND  
FUNCTIONAL DEFICIENCY IDENTIFICATION SYSTEM

INTRODUCTION

We have reviewed the process the Veterans Administration's (VA's) Department of Medicine and Surgery (DM&S) has developed to determine priorities for its major construction program. DM&S has recently developed a methodology called the Space and Functional Deficiency Identification (SFDI) system, which is intended to be an integral part of the decisionmaking process DM&S uses in establishing priorities for major construction projects. We believe that such a system is needed so that DM&S may plan an orderly program for modernizing its aging facilities. However, several modifications are needed to improve the system.

BACKGROUND

The DM&S medical care system has 172 hospitals (149 general medical and surgical hospitals and 23 psychiatric hospitals) with over 93,000 operating beds that treated over 1,179,000 patients during fiscal year 1976. In addition, DM&S has 228 outpatient clinics, 90 nursing homes, and 16 domiciliaries. Many of these facilities are old and technically obsolete.

The DM&S hospital program was begun more than 50 years ago; many of the original buildings and sites were transferred from other Federal agencies. Half of the current hospitals were constructed before 1950--the oldest, in 1888. Many of the older hospitals were actually intended to be temporary facilities. As shown by the following table, about 41 percent of DM&S hospitals are more than 29 years old.

Age Distribution of DM&S Hospitals, 1975

<u>Age of hospitals</u>	<u>General hospitals</u>		<u>Psychiatric hospitals</u>		<u>All hospitals</u>	
	<u>No.</u>	<u>Percent of beds</u>	<u>No.</u>	<u>Percent of beds</u>	<u>No.</u>	<u>Percent of beds</u>
Under 10 years	18	15	0	0	18	11
10 to 19 years	11	11	4	21	15	14
20 to 29 years	63	40	6	21	69	34
Over 29 years	49	34	20	58	69	41
Total	<u>141</u>	<u>100</u>	<u>30</u>	<u>100</u>	<u>171</u>	<u>100</u>

Between 1945 and 1966 there was a surge of construction, during which 66 new hospitals were built and 6 hospitals were replaced or relocated. Between 1966 and 1975, 19 hospitals were constructed either as replacement or relocated facilities. Seven replacement hospitals are currently planned to be built at an estimated cost of about \$749 million. Although plans are not yet firm, DM&S will probably soon enter into another surge of construction, in view of the age and condition of many of its facilities. Because of the increased age and technical obsolescence of the health care facilities and because of inflationary pressures, competition is keen for DM&S's construction budget. Thus, it is increasingly important that DM&S have an objective system to determine construction priorities.

#### DM&S'S PROGRAM FOR ESTABLISHING CONSTRUCTION PRIORITIES

The age of a facility is not the sole determinant of how satisfactory it is, since a certain amount of remodeling can usually be done. However, some of the older hospitals are one- or two-story buildings with very long corridors and basic design defects that do not lend themselves to remodeling. Because of the concern over deficiencies in both space and functional layout of its hospitals, DM&S appointed a special task force in 1975 to study resource allocation and priority determination for the construction program. Among other objectives, the task force was charged with reviewing the process used for establishing priorities, examining alternative methods of establishing priorities, and recommending changes in the process. The task force recommended implementing the SFDI system.

#### Old system

DM&S, before developing the methodology discussed below, did not have an objective system for establishing construction priorities. During 1976 hearings before the House Veterans' Affairs Committee, VA's Chief Medical Director noted that he did not know how the currently planned hospitals had been selected.

Construction projects usually were submitted by the individual hospitals and passed through various review processes at the VA central office. As a result of these reviews, the projects were assigned priorities. However, there was little objectivity to this process. Parochial interests frequently influenced which projects were funded.

New system

To objectively identify projects that should have the highest priority, DM&S developed the SFDI system. The system uses the following criteria: physical adequacy, quantitative adequacy of space, functional adequacy of space, and the implications of medical school affiliations. Data on each of these elements was gathered at all VA hospitals during fiscal year 1977 by medical district representatives. After data was collected and analyzed on each element, projects were given numerical evaluations. The higher the numerical evaluation, the greater the deficiency. Following is a description of each data element.

Space criteria

Each functional area of a hospital has a recommended space allocation, as set forth in VA's Office of Construction Handbook H-08-9, "Planning Criteria for Medical Facilities."

Square footage

This is the square footage currently being used by each service.

Variance of space criteria  
and actual-in-use space

Current staffing and workload is compared to VA's space criteria requirements and to the amount of square footage in use. This comparison indicates how much space the hospital has in excess or in a deficient status.

Medical school affiliation

Hospitals affiliated with medical schools require additional space for such needs as teaching rooms and residents' office space. The maximum space allowed through this data element is given to hospitals assisting in the development of new medical schools and to hospitals with strong affiliations with existing medical schools.

Onsite functional evaluation

This data element, composed of the results of a survey by medical district representatives, is the evaluation of the functional efficiency service area of the hospital, based on established criteria.

Building, code, and  
utilities evaluation

This data element is the medical district representatives' evaluations of the adequacy of the buildings and utilities. This includes deficiencies noted in inspections by the Joint Commission on Accreditation of Hospitals.

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The SFDI system numerically scores each service within a hospital and assigns an overall score to each hospital in the VA system. The scores quantify the space and functional deficiencies of the health care facilities.

In addition to the SFDI data, consideration is given to the hospital's 5-year plan, medical district plan, cost estimate review, and comments of various local health systems agencies. These considerations are part of the decision-making process that incorporates the SFDI scores and ultimately establishes priorities for construction projects.

DM&S's Construction Review Board, after considering all of these factors, assigns priorities to the submitted projects. The projects are divided into the following nine primary construction categories, and priorities are assigned within each category.

- Replacement and modernization.
- Clinical improvements.
- Outpatient improvements.
- Medical facilities improvements.
- Nursing home care.
- Domiciliary.
- Research and education.
- General.
- Technical.

## ANALYSIS OF SFDI SYSTEM

The SFDI system assigns priorities to projects more objectively than the old system. However, VA should implement several modifications to further improve the system.

### Preallocation of budget funds

The stated purpose of the SFDI system is to improve resource allocation and priority determination for the construction program. To be objective and fulfill its purpose, this system should consider all proposed construction projects on the same basis and establish priorities for the entire construction program. However, DM&S is using the SFDI system to establish priorities within nine different categories of construction. Each category has its own priority list. DM&S officials believe a balanced construction program is desirable.

DM&S has a 5-year construction plan, which identifies the approximate number of the different types of health care construction projects planned during that period. DM&S then, in its annual construction planning process, decides to fund about one-fifth of the projects in each category in a given year. Thus, before the priorities are established, DM&S knows approximately how many projects in each category will be funded. DM&S then assigns priorities under the SFDI system to the submitted construction project requests within each category until the previously determined number of projects is reached.

These category groupings restrict the benefits of the new priority system since a project's ranking has relevance only within its own construction category. We believe the system should establish priorities for all projects without regard to categories.

### Projected use

An important consideration in determining whether or not to replace a hospital is the future workload. If the patient census is declining, the decision of whether or not to replace a hospital may be different than if the census were constant or increasing. The SFDI system uses only current workload in its analysis. No consideration is given to projected workload. Officials in various health agencies indicated that great emphasis is placed on projected use of hospital beds in deciding on hospital replacement. Also, since

the leadtime for hospital construction is about 5 years, we believe that future workload is more important than current workload.

DM&S does make demographic studies, including projected use 10 years into the future, on projects selected to be funded. However, this is after priorities are established. Projecting workload at this point helps determine the size of the hospital to be built, but is too late to affect the construction priorities.

#### Additional matters for consideration

The numerical ratings for the SFDI system are assigned within each medical district by a district representative. These representatives receive instructions from the VA central office on what information to obtain from hospitals and on how to score this data. Since the scoring depends partly on how these individuals perceive the deficiencies of hospitals in their districts, some subjectivity is inherent in the system. To preclude any bias we believe that the VA central office should carefully monitor the hospital scores for obvious geographical trends.

Variance from SFDI-assigned priorities may also occur. The SFDI system is only one factor in the process of deciding which construction projects to fund. It is, however, the only quantified input. Whenever variance with the SFDI-assigned priority occurs, we believe this variance should be supported by justification by the health care facility, medical district, or VA central office to allow for post-decision evaluation.

#### CONCLUSIONS

DM&S has improved its method of assigning priorities to construction projects. However, we believe that the new methodology could be improved if

- all construction projects were ranked on the same basis rather than being ranked within each construction category and
- projected, rather than current, use of VA hospitals were considered.

The SFDI system and the entire review process by the Construction Review Board depends on the data gathered by medical district representatives. Because of the importance

of the data gathered and scoring by the medical district representatives, we believe DM&S should closely monitor the scorings for any obvious irregularities. Also, decisions to fund projects in different order than that determined by the SFDI system should be documented.

RECOMMENDATIONS TO THE  
ADMINISTRATOR OF VETERANS AFFAIRS

We recommend that the SFDI system for establishing priorities for construction projects be reviewed and changed to (1) have a priority ranking for all construction projects, regardless of construction category, and (2) include projected use of health care facilities as a factor in establishing priorities. We also recommend that DM&S closely monitor the scoring of hospital deficiencies and that all decisions to fund projects in an order different from that assigned by the SFDI system be supported by justification by the health care facility, medical district, or VA central office.