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Report to the Chairman, Subcommittee on Hospitals and Health Care, Committee on Veterans' Affairs, House of Representatives

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VA HEALTH CARE

Effects of Facility Realignment on Construction Needs Are Unknown

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Health, Education, and
Human Services Division

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November 17, 1995

The Honorable Y. Tim Hutchinson
Chairman, Subcommittee on
Hospitals and Health Care
Committee on Veterans' Affairs
House of Representatives

Dear Mr. Chairman:

As part of the fiscal year 1996 budget, the President requested that the Congress appropriate $514 million for Department of Veterans Affairs (VA) major construction projects.[1] These projects include the construction of two new VA medical facilities and major renovations at seven existing facilities.

This report responds to a request from your office for information about VA's nine proposed projects. It discusses how the projects are expected to benefit veterans and the relationships between the proposed projects and VA's recent efforts to realign all of its facilities into new service networks. This report also discusses the potential effects of funding delays on VA's construction contract award dates and costs.

To address these issues, we reviewed key VA documents, such as the fiscal year 1996 major construction budget justifications, the proposed realignment plan, and plans for future construction in the target area. We visited the seven medical centers with proposed renovation projects and the Northern California Health Care System (NCHCS), where we discussed the issues with VA officials and reviewed project-specific plans, budgets, and other documents.[2] In addition, we discussed the issues with officials at VA headquarters and its Western Region. We did our work between June and October 1995, in accordance with generally accepted government auditing standards. Appendix I presents additional details on the scope and methodology of our work.

[1]Major construction projects cost $3 million or more.

[2]NCHCS is the network of VA medical facilities that serves the area that will be served by one of the proposed new medical centers and that was formerly served by VA's Martinez, California, medical center before being closed in 1991 due to earthquake safety concerns. We used information gathered during recently completed audit work on another assignment to address the issues on the other proposed medical center.

Results in Brief

The nine proposed projects would enhance VA's inpatient care capacity for veterans within designated target areas. The two new medical centers would attract new users by improving veterans' accessibility to VA care. The seven renovation projects would primarily benefit current users by making fire, safety, patient environment, and efficiency improvements at existing medical centers. The renovation projects would not, however, correct all deficiencies at the seven medical centers; these centers estimate that they need an additional $308 million to correct the deficiencies.

VA officials did not rigorously consider available alternatives to construction. Alternatives that VA now expects medical center directors to consider were not analyzed, primarily because planned realignment criteria, such as merging services with nearby VA facilities, were proposed in August 1995 and have not been finalized. As a result, how application of these criteria would have affected VA's decisions about the proposed projects is uncertain. Moreover, construction of the proposed projects will likely limit future realignment decisions for the medical centers because the new or renovated facilities should be expected to have useful lives of 25 years or more on the basis of operating experiences of other VA hospitals.

Our analysis of project construction documents also indicates that VA's construction contract award dates and costs would likely be insignificantly affected if funding for the construction of the projects is delayed until fiscal year 1997. VA's construction contracts would slip by 3 months or fewer for all but two projects if design work continues. These short delays should have a minimal effect on such cost factors as inflation or potential savings attributable to expected improved service efficiency. If, on the other hand, funding for the projects is delayed for longer periods of time, the effects of the delays would likely be more significant. According to medical center officials, veterans will continue receiving health care regardless of how long project funding is delayed.

Background

VA's health care system was established in 1930 primarily to provide rehabilitation and continuing care for veterans injured during wartime. Now, VA's health care system serves about as many low-income veterans with medical conditions unrelated to wartime service as service-connected veterans.

VA's system comprises one of the nation's largest networks of direct delivery health care providers. It includes 173 hospitals, 376 outpatient clinics, 133 nursing homes, and 39 domicilaries. These facilities are organized into a system of medical centers that typically include one or more hospitals as well as some of the other types of health care facilities. These facilities provided care to about 2.2 million veterans at a cost of about $16 billion in fiscal year 1995.

VA Hospital Inpatient Usage Declining

VA has experienced a dramatic decline in its hospital inpatient workload. Over the past 25 years, the average daily workload in VA hospitals dropped by about 56 percent (from 91,878 in 1969 to 39,953 in 1994). VA reduced its operating beds by about 50 percent, closing or converting to other uses about 50,000 hospital beds.

A number of factors could lead to a continued decline in VA hospital inpatient workload. For example:

- The veteran population is estimated to decline by one-half over the next 50 years. The downsizing of the military will likely make the decline even more dramatic.
- The number of veterans with health insurance coverage is expected to increase, which will likely decrease demand for VA acute hospital care.
- The nature of insurance coverage is changing. For example, increased enrollment in health maintenance organizations—from 9 million in 1982 to 50 million in 1994—is likely to reduce the use of VA hospitals.
- VA hospitals too often serve patients whose care could be more efficiently provided in alternative settings. The major veterans service organizations noted in their 1996 Independent Budget that a recent study indicated that VA could reduce its hospital inpatient workload by up to 44 percent if it treated patients in more appropriate settings.

VA's Under Secretary for Health testified in April 1995 that it will not be that many years before acute care hospitals become primarily intensive care units taking care of only the sickest and most complicated cases, having switched all other medical care to other settings, including ambulatory care settings, hospices, and extended care facilities.[3]

[3]Statement of Dr. Kenneth W. Kizer, Under Secretary for Health, VA, before the Subcommittee on Hospitals and Health Care, House Committee on Veterans' Affairs, April 6, 1995.

VA's Construction Plans

For fiscal year 1996, VA medical centers proposed to headquarters more than $3 billion in funding requests for major construction projects. VA headquarters officials reviewed and prioritized these projects. In the fiscal year 1996 budget request, the President asked the Congress to appropriate $514 million for nine projects. The projects range in size from $9 million to renovate nursing units in one hospital to $211.1 million to build a new medical center, as shown in table 1.

Table 1: VA's Proposed Fiscal Year 1996 Major Construction Projects

Dollars in millions

Location	Scope	Gross square feet	Estimated cost	Requested funds	Estimated date of award
Travis, California	Build a new VA/Air Force joint medical center	685,952	$211.1[a]	$188.5	•
Brevard Co., Florida	Build new medical center/nursing home	850,410	171.9[a]	154.7	9/96
Boston, Massachusetts	Build ambulatory care addition	97,722	28.0	28.0[b]	7/96
Reno, Nevada	Replace hospital nursing unit/ambulatory care building	108,639	27.4[a]	20.1	1/96
Marion, Indiana	Replace building for psychiatric care	69,259	17.3	17.3[b]	9/96
Salisbury, North Carolina	Renovate hospital nursing units	106,871	17.2	17.2[b]	9/96
Perry Point, Maryland	Renovate psychiatric nursing units	73,028	15.1	15.1[b]	8/96
Marion, Illinois	Renovate hospital nursing units	49,157	11.5	11.5[b]	12/96
Lebanon, Pennsylvania	Renovate hospital nursing units	50,425	9.0	9.0[b]	8/96

[a]Includes funds previously appropriated for design.
[b]Design funds totaling $4 million for these six projects were requested as a separate item in fiscal year 1996 budget.

VA Plans to Restructure Health Care Delivery

On March 17, 1995, VA's Under Secretary for Health announced a plan called "Vision for Change" to restructure the Veterans Health Administration. Essentially, VA's central office and regional office structure would be replaced with veterans integrated service networks (VISN) supported by VA headquarters and such other infrastructures as management assistance councils. The plan calls for 22 VISNs, each headed by an accountable director and consisting of 5 to 11 medical centers. Each network would cover areas that reflect patient referral patterns and aggregations of patients and facilities to support primary, secondary, and tertiary care. The plan is designed to increase the efficiency of VA-provided health care by trimming unnecessary management layers, consolidating redundant medical services, and using available community resources. VA began implementing the plan on October 1, 1995.

On August 29, 1995, the Under Secretary requested input from top VA health officials and others on a draft paper containing criteria for use in realigning medical facilities and programs as well as for siting new VA health care facilities. The paper was developed to help VA management identify opportunities for efficiencies. For example, it suggests that medical center directors use community providers if the same kind of services of equal or higher quality are available either at lower cost or equal cost but in more convenient locations for patients. It also encourages medical center directors to use nearby VA facilities and to merge, integrate, or consolidate duplicative or similar services if doing so would yield significant administrative or staff efficiencies or projected demand for services is expected to significantly decrease.

Projects Primarily Benefit Veterans Needing Inpatient Care

The nine projects would, for the most part, benefit veterans needing VA inpatient care. The two new medical centers are intended to reduce veterans' travel distances or times to access VA care. The seven renovation projects are intended to improve delivery of veterans' health care at existing medical centers by correcting fire and safety deficiencies, improving patient environment, and increasing efficiency. The renovation projects would not correct all the deficiencies at the seven medical facilities. (See app. II for detailed project information.)

Improved Access to Care for New Users

The proposed medical centers in Brevard County, Florida, and at Travis Air Force Base in Fairfield, California, are intended to improve veterans' geographic access to VA health care in east central Florida and northern California, respectively. As we reported in August 1995, the Brevard

project, which includes a 470-bed hospital, a 120-bed nursing home, and an ambulatory care clinic, would improve access to VA health care facilities for many of the 258,000 veterans living in a six-county target area. The target area currently is served by VA medical centers in Gainesville, Tampa, Bay Pines (psychiatric care only), and West Palm Beach that are, respectively, 175, 125, 155, and 120 miles from the Brevard site.[4]

Our analysis of VA documents showed that the Travis project would provide VA with 243 hospital beds[5] and an outpatient clinic and is intended to improve access to VA health care facilities for many of the 447,000 veterans living in a 32-county target area. Veterans in the area currently receive outpatient care from NCHCS's clinics in Berkeley, Martinez, Oakland, Redding, and Sacramento; a day treatment facility in Martinez; and some inpatient care from the Travis Air Force Base Hospital, with which VA has negotiated for the use of 55 interim beds in anticipation of the Travis project. They also receive inpatient care from VA medical centers in San Francisco, Palo Alto, Livermore, and Fresno, California; and Reno, Nevada. NCHCS officials said that northern California veterans find these facilities difficult to access due to distance, congested highways, poor public transportation, and such geographic obstacles as the Sierra Nevada mountain range and San Francisco Bay.[6]

Two VA studies showed that inpatient utilization of northern California and northern Nevada VA medical centers has decreased since VA closed its Martinez medical center in 1991 for earthquake safety concerns.[7] The studies recognized that several factors could have influenced utilization but had no evidence to indicate the extent to which the decline in utilization was caused by the lack of access to VA facilities. NCHCS's acting

[4]In VA Health Care: Need for Brevard Hospital Not Justified (GAO/HEHS-95-192, Aug. 29, 1995), we discussed how converting the former Orlando Naval Hospital into a nursing home and constructing a new hospital and nursing home in Brevard County, Florida, was not the most prudent and economical use of VA resources.

[5]This includes 170 new beds and 73 existing beds that the Air Force would make available for VA use.

[6]In VA Health Care: Closure and Replacement of the Medical Center in Martinez, California (GAO/HRD-93-15, Dec. 1, 1992), we discussed factors that we believed VA should have considered in selecting a replacement facility for the Martinez medical center.

[7]VA Western Region studies titled Northern California Network Utilization Rate Comparisons and Patient Origin Data (May 1993) and Regional Special Purpose Site Visit Report Of the Bay Area Task Force (Jan. 31, 1994).

director believes, however, that the decline is significantly attributable to the lack of access.[8]

Enhanced Service Delivery Environment for Current Users

All seven renovation projects would enhance the delivery of health care for patients at existing VA medical centers in the seven target areas, as shown in table 2.

Table 2: Expected Benefits of Proposed VA Fiscal Year 1996 Major Construction Projects

Location	Improve access to VA care	Correct deficiencies		Improve patient environment			Improve efficiency
		Fire	Safety	Patient privacy	Handicap accessibility	Other	
Travis, California	X						
Brevard Co., Florida	X						
Boston, Massachusetts			X	X	X	X	X
Reno, Nevada		X	X	X	X	X	X
Marion, Indiana		X	X	X	X	X	X
Salisbury, North Carolina		X	X	X	X	X	X
Perry Point, Maryland			X	X	X	X	X
Marion, Illinois		X	X	X	X	X	X
Lebanon, Pennsylvania		X	X	X	X	X	X

Medical center officials said that all seven projects would correct safety deficiencies and five would correct fire deficiencies. For example, two projects would widen patient room doors that are too narrow for beds, thereby allowing bed-ridden patients to be easily evacuated in case of fire and transported for treatment and other services without the risk of being dropped when removed from their beds. Most projects also would install sinks in patient rooms, reducing the risk of spreading infection and disease. One project would extend fire stairs from the fourth to the top

[8]In September 19, 1995, correspondence to the Chairman of the Senate Subcommittee on VA, HUD, and Independent Agencies, Committee on Appropriations (GAO/HEHS-95-268R), we discussed VA's reasons for an increased cost estimate for the Travis project and VA's assessment of where veterans living in the proposed Travis project target area currently receive VA hospital care.

floor of a five-story hospital, providing an escape route for patients in case of fire.

Medical center officials told us that fire or safety deficiencies had been identified by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO)—the organization that assesses medical facilities' capabilities to provide quality care.

Officials in three centers said that their centers were not cited because they planned to correct the deficiencies with their proposed projects. Officials at three medical centers said that accreditation might be jeopardized if deficiencies are not corrected. According to one medical center director, losing JCAHO accreditation would make attracting medical staff difficult and could jeopardize the center's affiliation with its neighboring medical school. Officials at another medical center said that they would correct deficiencies with minor construction funds if the project is not funded.

Medical center officials also expected all the projects to improve patient environment. For example, all would increase patient privacy, primarily by converting patient rooms now containing as many as nine beds and congregate bath and toilet facilities to single and double rooms with private and semiprivate bathrooms. Five would improve handicapped accessibility by such modifications as installing hand and wheelchair rails and increasing the number of wheelchair-accessible bathrooms. And most would upgrade heating and air conditioning, improving air quality and increasing patient comfort.

Finally, all the projects are expected to increase the medical centers' efficiency. For example, officials at two medical centers said that nursing staff should save time and energy spent escorting patients to remote congregate bath and toilet facilities when such facilities are replaced with private and semiprivate bathrooms. Staff at two facilities should save time spent escorting patients to dining and treatment rooms in remote buildings when these rooms are relocated to the buildings where patients reside. In addition, staff at one medical center would no longer use intensive care beds for patients requiring only routine monitoring when monitoring equipment is installed in patient rooms.

Projects Would Not Correct All Deficiencies

Our analysis of VA documents shows that VA has identified major construction needs in addition to the proposed projects. We reported in

August 1995 that, along with the new Brevard medical center, VA plans to spend $14 million to convert a former Naval hospital into a VA nursing home for veterans in east central Florida.[9] VA studies indicate that, in addition to the new Travis medical center, VA plans to build a new 120-bed nursing home and a replacement outpatient clinic in Sacramento, California. Also, the 5-year facility plans[10] for the seven medical centers with proposed renovation projects show that, in addition to the proposed projects, the facilities need about $308 million for other major and minor projects. This includes almost $210 million for 20 major projects and about $98 million for 47 minor projects. The plans identify at least one major construction project for each of six medical centers and at least two minor construction projects for each of the seven centers, as shown in table 3.

Table 3: Future Construction Needs of VA Medical Centers With Planned Renovation Projects

Dollars in millions

	5-year facility plan			
	Major construction needs		Minor construction needs	
Project location	Projects	Costs	Projects	Costs
Boston, Massachusetts	4	$59.4	11	$28.9
Reno, Nevada	5	35.0	3	6.4
Marion, Indiana	1	9.0	3	3.5
Salisbury, North Carolina	5	51.8	6	11.8
Perry Point, Maryland	1	30.0	9	22.2
Marion, Illinois	•	•	2	4.2
Lebanon, Pennsylvania	4	24.3	13	21.2
Total	20	$209.5	47	$98.2

Relationships Between VA's Proposed Projects and Its Planned Realignment Efforts Uncertain

While it is too early to know the effects of VA's planned realignment efforts, most officials in the seven existing medical centers and NCHCS do not believe the plan would significantly affect the need for and scope of their projects. However, if VA's reorganization plan changes the medical centers' missions, their physical requirements would change. Moreover, if—as VA now contemplates under its realignment plans—alternatives to the nine projects had been rigorously analyzed as the project proposals were being developed, lower cost alternatives to construction may have been identified.

[9]VA assumed control of the former Naval hospital in Orlando, Florida, in June 1995.

[10]Medical centers' 5-year facility plans list intended major construction projects, minor improvements, and facility repairs needed or proposed to support their approved programs within their assigned medical care mission.

To the extent that the reorganization plan would change the missions and service populations of the nine VA medical centers, medical centers' physical requirements would change. The plan was announced in March and has not been fully implemented, so its effects are unknown. However, officials in most of the seven medical centers with proposed renovation projects and NCHCS believe that it should not significantly affect the need or scope of their proposed projects. Officials in the medical centers with proposed renovation projects believe that their medical centers will continue to provide the same health care services to veterans in the target areas and will continue to need renovation. NCHCS officials also believe that veterans in the proposed Travis target area continue to need better access to VA inpatient care.

Analysis of Service Delivery Alternatives Limited

Most VA officials said that the nine projects were developed without rigorously analyzing available alternatives, including the types of service delivery alternatives that the proposed criteria suggest be analyzed for realigning existing medical facilities and siting new ones. Had they, lower cost alternatives may have been identified.

In August 1995, we reported that building the new Brevard medical center is not the most prudent and economical use of VA's resources.[11] VA did not adequately consider the availability of hundreds of community nursing home beds and unused VA hospital beds or the potential decrease in future demand for VA hospital beds. VA could achieve its service goals for the target area by using existing capacity. For example, it could buy more convenient and less costly care from community nursing homes and use the former Naval hospital in Orlando for more accessible medical and psychiatric services.

Like Brevard, building the proposed Travis medical center also may not be the most cost-effective option available at this time. A VA task force study appropriately determined that it was the best option in June 1992, when a replacement for the closed Martinez medical center was being sought. However, circumstances have changed, creating an opportunity for more efficient or effective options. For example, using the Mather Air Force Base hospital in Sacramento to serve veterans could be a viable option. It would provide a 105-bed facility that is about 30 miles from the Travis site that could be more accessible to many veterans in the Travis medical center target area.

[11] VA Health Care (GAO/HEHS-95-192, Aug. 29, 1995).

The VA task force rejected the Mather Air Force Base hospital in Sacramento as a viable option for a joint VA and Department of Defense venture, but two of the factors that led to the rejection of that facility have now changed. First, although the Air Force had planned to use the Mather Hospital to serve McClellan Air Force Base beneficiaries,[12] the Department of Defense now plans to close McClellan. Second, the hospital at Mather was rejected because it was too small to meet VA's projected needs for a 243-bed facility. However, some of VA's needs are currently being met with 55 beds negotiated at the Travis Air Force Base hospital, and some needs could possibly be met with available community hospital space. Moreover, the demand for inpatient care in the target area will likely decline in the future as the veteran population in northern California declines as it is projected to do throughout the country.

The VA task force that selected the Travis site for the proposed VA medical center had ranked other options involving dual inpatient locations higher than the Travis option for veterans' access to health care but had rejected these options, in part, because they were too costly. Now, however, with the planned closing of McClellan and the possible availability of the Mather hospital for VA use, providing some inpatient care at the Travis hospital and some at the Mather hospital (or another northern California site) may provide veterans with better and more cost-effective access to VA health care than can be provided by a single Travis project.

VA also did not rigorously analyze available alternatives when developing the seven renovation proposals. Had criteria similar to that recently proposed by VA for realigning medical facilities and siting new ones been used, lower cost alternatives may have been identified. The need for the proposed projects was determined on the basis of the physical needs identified in the medical centers' facility development plans.[13] These plans indicate that some alternatives were considered, but officials at most of the seven medical centers told us that they did not conduct detailed studies or analyses of all available options. Some said, for example, that they did not thoroughly explore the possibility of using community and other VA medical facilities. They believe, however, that using other VA medical centers is infeasible, usually because the other VA centers are too far away or do not provide the needed medical services, and that use of

[12]The Department of Defense decided to close the Mather Air Force Base in 1988, but left the hospital open to serve McClellan Air Force Base beneficiaries.

[13]Medical centers' facility development plans are their master plan for the physical development over a long-range planning horizon based on the centers' approved mission and health care programs assigned for the veteran population projected now and in 2005.

community facilities is infeasible, usually because contracting for care is thought to be too expensive.

Effects of Delayed Project Funding Depend on Length of Delay

The effects of delaying the proposed projects on construction award dates and costs would depend on the length of the delay. Delaying project funding until fiscal year 1997 should have a negligible effect on construction award dates for the projects if current design schedules are met. Because construction schedules for all but two projects show that construction award dates would be July 1996 or later, the dates for starting construction would be delayed only 1 to 3 months; the Reno, Nevada, project would be delayed 11 months, and the Travis project has no single award date because it has several phases. Delaying the projects longer would extend the construction award dates. Moreover, VA headquarters officials expressed concern that, if delayed, the projects may not be selected for VA's fiscal year 1997 major construction budget because VA may identify other higher priority projects.

Most medical center officials believe that delaying the awards of construction contracts would increase costs due to inflation. However, delaying the awards until fiscal year 1997 would have minimal effects on costs because cost increases from inflation would involve time periods of fewer than 3 months for most projects. Similarly, savings expected from increased efficiencies would be lost for only a short time. In addition, VA would defer for a relatively short time the project activation costs, which are estimated at more than $100 million for the Brevard and Travis projects, and the costs associated with providing such new services as air conditioning. The effects on costs would increase if the project award dates slip beyond fiscal year 1997.

VA officials told us that veterans would continue receiving health care regardless of how long project funding is delayed.

Conclusions

Long-term commitments for any major construction or renovation of predominantly inpatient facilities in today's rapidly changing health care environment accompany high levels of financial risk. VA's recent commitment to a major realignment of its health care system magnifies such risk by creating additional uncertainty. For example, our assessment of the proposed Brevard project shows the potential for lower cost alternatives to new construction for meeting veterans' needs. In addition, we believe that analyzing such alternatives in connection with the other

major construction projects in VA's budget proposal is entirely consistent with VA's suggested realignment criteria. Delaying funding for these projects until the alternatives can be fully analyzed may result in more prudent and economical use of already scarce federal resources.

Matter for Congressional Consideration

The Congress may wish to consider delaying funding for all major VA construction projects until VA has completed its criteria for assessing alternatives to such projects and applied the criteria to projects that it proposes for congressional authorization and funding. If it wants to avoid significant delays of construction awards for projects that are ultimately justified under VA's pending assessment criteria, the Congress may wish to make design funds available in fiscal year 1996 for the proposed projects.

Agency Comments and Our Evaluation

We obtained comments on a draft of this report from VA officials, including the Deputy Under Secretary for Health.

VA officials disagree with our suggestion that the Congress may wish to consider delaying funding of all major construction projects until VA has completed and applied criteria for assessing alternatives to projects proposed for congressional authorization and funding. VA officials reiterated that the proposed new medical center in Brevard County, Florida, should not be delayed because they believe the facility is needed, as explained in comments on our report, VA Health Care: Need for Brevard Hospital Not Justified (GAO/HEHS-95-192, Aug. 29, 1995). They also said that the proposed replacement medical center at Travis Air Force Base should be fully funded in fiscal year 1996. In addition, they do not believe that the remaining seven projects should be delayed because the projects would correct fire, safety, and environmental deficiencies in some of VA's most antiquated facilities. They said that without needed attention, fire and safety code violations at these facilities could conceivably result in catastrophic consequences.

VA officials said that the inference in our report that the planned realignment creates uncertainty in construction needs is misleading. They recognize that the VISN concept is new but do not believe that the planned realignment will preclude the need to upgrade the facilities. Officials in the seven medical centers scheduled for renovation and NCHCS do not believe that the realignment will significantly affect the need for and scope of their projects. The VA officials told us that VA managers recently validated the projects' consistency with the needs of a network organization and with

anticipated facility missions and workloads. These officials believe that veterans will continue to be served at the facilities. They said that any uncertainty about construction needs is created by the uncertain future direction of health care in general, not by VA's planned realignment.

Despite these arguments, we continue to believe that the Congress should consider delaying funding for construction of major projects until VA has had time to implement its planned realignment efforts. This implementation is expected to include completing and applying criteria for assessing all alternatives for serving veterans, such as using community or other VA facilities. VA's planned realignment efforts have merit, and VISN directors need time to determine what changes should be made to improve the effectiveness and efficiency of VA health care delivery.

We believe that the planned realignment creates uncertainty because it appears to suggest that medical centers may not operate in the future as they do today. However, our review showed that VA determined the medical centers' construction needs on the basis of the assumption that the centers would continue to operate essentially as they do today. Our concern is that VA may determine, as part of the realignment effort, that services provided by one or more of the facilities could be provided more effectively or efficiently through sharing or contracting with other providers or consolidating with services of other VA medical centers. If the proposed construction projects are under way, VA may continue providing services as usual, even though doing so may be less effective or efficient than other potential service alternatives.

Delaying construction funding should provide VA the time needed to assess available alternatives to the proposed renovation projects and to reexamine the Travis project in view of the changed circumstances, such as the closure of McClellan Air Force Base in Sacramento. If the assessment shows that the facilities would operate for 25 or more years, the projects would be justified. Our position that the proposed Brevard project is unjustified remains unchanged.

VA officials are concerned that delaying project funding could significantly affect construction award dates. They said that design funds for most projects have already been delayed and have not been approved. Without congressional approval of design funding, no awards of construction document contracts will be made for fiscal year 1996. According to VA officials, this will delay project schedules for at least 1 year. We have revised our "Matter for Congressional Consideration" to clarify that the

Congress may wish to make design funds available in fiscal year 1996 for the proposed projects if it wants to avoid significant delays of construction awards for projects that are ultimately justified under VA's pending assessment criteria. Our observation that delaying project funding until fiscal year 1997 should have a negligible effect on construction award dates for projects if design schedules are met is based on the premise that design funds will be available for the projects in fiscal year 1996.

VA officials also said that the projects were not intended to correct all the deficiencies at the seven medical centers scheduled for renovation. They said that the size and number of projects in the fiscal year 1996 request were constrained by anticipated budget levels and that VA managers were instructed to limit the size of projects to address only the most pressing patient environment, ambulatory care, and infrastructure needs. Moreover, they said that the six projects involving renovation of inpatient areas purposely affect 50 percent or less of the total inpatient space at most facilities to recognize the downsizing of inpatient care capability.

We reported that the projects would not correct all deficiencies to discuss the projects in proper perspective—not to criticize VA for failing to make all corrections at once. Appendix II shows that the proposed projects would affect only a fraction of the inpatient beds in most of the facilities scheduled for renovation. While the renovation projects generally would reduce the number of upgraded inpatient beds, the fact remains that VA's fiscal year 1996 major construction budget focuses on inpatient care.

We are sending copies of this report to the Ranking Minority Member of the Subcommittee on Hospitals and Health Care; the Chairmen and Ranking Minority Members of the House and Senate Committees on Veterans' Affairs; the Chairmen and Ranking Minority Members of the House and Senate Subcommittees on VA, HUD, and Independent Agencies, Committees on Appropriations; and the Secretary of Veterans Affairs. Copies also will be made available to others on request.

Please call me at (202) 512-7101 if you or your staff have any questions about this report. Other contributors to this report are listed in appendix III.

Sincerely yours,

David P. Baine
Director, Health Care Delivery
and Quality Issues

Contents

Abbreviations

ADA	Americans With Disabilities Act
HUD	Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
NCHCS	Northern California Health Care System
VA	Department of Veterans Affairs
VISN	veterans integrated service networks

Scope and Methodology

To obtain information about the projects included in VA's fiscal year 1996 budget request, including a description of the projects and expected benefits, we reviewed key VA documents, such as VA's fiscal year 1996 major construction budget request and the facility development plans and 5-year facility plans for the seven medical centers where renovation projects are planned. We also visited the seven medical centers with proposed renovation projects and the NCHCS, where we interviewed VA officials and reviewed such project-specific documents as the architect and engineer plans, schematic drawings, and project space programs.[14] For the remaining project, we used information gathered during recently completed work on another assignment.[15] Further, we discussed the projects with officials in the medical centers and NCHCS. In addition, we discussed the Travis project; the Reno, Nevada, project; and VA construction procedures with officials in VA's Western Region and headquarters.

To assess the relationship between the proposed projects and VA's planned efforts to realign its medical facilities into 22 VISNs and the effect of delaying the projects, we reviewed the proposed plan; selected testimony of the Under Secretary for Health; and the August 29, 1995, draft paper containing criteria for realigning VA facilities and programs. We discussed how the construction budget would be affected by this plan with officials in VA Western Region and headquarters. We also discussed how individual projects would be affected by VA's planned restructuring with officials in the seven medical centers and NCHCS.

We conducted our review between June and October 1995, following generally accepted government auditing standards.

[14]After the Martinez, California, VA medical center was closed in 1991, the network of VA medical facilities that served the area formerly served by the Martinez center was renamed the Northern California System of Clinics and, subsequently, renamed the Northern California Health Care System. The proposed Travis project would serve this same area.

[15]Our review of the need for VA's proposed new medical center in Brevard County, Florida, was conducted between June 1994 and June 1995.

Proposed Projects in VA's Fiscal Year 1996 Major Construction Budget Request

This appendix contains information on the nine proposed projects in the President's fiscal year 1996 VA major construction budget request. For each proposed project, it provides a general description, including characteristics on the existing medical center or target service area, characteristics of the project, and information on additional construction plans for the target area. It also provides the expected veterans' health care benefits and VA costs, the relationship between the proposed project and VA's planned reorganization, and the potential effects of delayed project funding on veterans' health care and VA costs.

The planned reorganization, called "Vision for Change," was announced on March 17, 1995, by VA's Under Secretary for Health. Essentially, the Veterans Health Administration's central office and regional office structure would be replaced with VISNs supported by VA headquarters and such other infrastructures as management assistance councils. The plan calls for 22 VISNs, each headed by an accountable director and consisting of 5 to 11 medical centers. Each network would cover areas that reflect patient referral patterns and aggregations of patients and facilities to support primary, secondary, and tertiary care. The plan is designed to increase the efficiency of VA-provided health care by trimming unnecessary management layers, consolidating redundant medical services, and using available community resources. VA began implementing the plan on October 1, 1995.

On August 29, 1995, the Under Secretary requested input from top VA health officials and others on a draft paper containing criteria for use in realigning medical facilities and programs, as well as for siting new VA health care facilities. The paper was developed to help VA management identify opportunities for efficiencies. For example, it suggests that medical center directors use community providers if the same kind of services of equal or higher quality are available either at lower cost or equal cost but at more convenient locations for patients. It also encourages using nearby VA facilities and merging or consolidating duplicative or similar services if doing so would yield significant administrative or staff efficiencies or projected demand for services is expected to significantly decrease.

New Medical Center, Brevard County, Florida

The proposed Brevard project would construct a new medical center on 77 acres in Brevard County, Florida. The target service area would be six counties in east central Florida, where 258,000 veterans live. The new medical center would provide primary and secondary medical, surgical,

and psychiatric care and nursing home care. It also would be the psychiatric referral facility for all Florida VA medical centers. The center would have 470 hospital beds, including 195 medical, 45 surgical, 230 psychiatric beds, and 120 nursing home beds. It would not be affiliated with any medical school or have any agreements with Department of Defense or other medical institutions. The project includes 792,524 gross square footage of hospital and outpatient clinic space, and 57,886 gross square footage of nursing home space. The estimated cost is $171.9 million, of which $17.2 million was previously appropriated for design and other costs.

The Brevard target area is currently served by VA medical centers in Gainesville, Tampa, Bay Pines (psychiatric care), and West Palm Beach, which are, respectively, 175, 125, 155, and 120 miles from the Brevard site. When the Brevard medical center is opened, inpatient workload for these centers would decline, increasing their excess capacity.

Expected Benefits and Costs

Veterans' health care: The new Brevard medical center is designed to improve access to VA hospital care for veterans in east central Florida. As a state-of-the-art facility, it would comply with all fire, safety, and other requirements.[16]

VA costs: VA estimates that activation costs would be $34.9 million and recurring costs, $88.7 million, primarily for 1,329 staff; resources would be shifted from other medical centers to staff and operate this center.[17]

Potential Impact of VA's Planned Reorganization

The Brevard project manager in VA headquarters said that it is too early to know the effects of the planned reorganization on the proposed Brevard medical center or east central Florida veterans.

VA did not consider all available options when developing the Brevard proposal. In August 1995, we reported that converting the former 153-bed

[16]VA medical centers are subject to many requirements. For example, JCAHO prescribes standards for virtually all aspects of medical facility operations; the National Fire Protection Association and the National Building Code prescribe fire standards; the Uniform Federal Accessibility Standards set accessibility standards; the American Society of Heating, Refrigeration, and Air Conditioning Engineers set heating, ventilation, and air conditioning (HVAC) standards; and the Underwriters Laboratories prescribe lightening protection standards. VA has incorporated some of these standards into its requirements, prescribed space requirements, and issued draft guidance in 1994 with privacy goals.

[17]Activation costs include new equipment and nonrecurring costs; recurring costs include full-time equivalents, referred to as staff in this report.

Orlando Naval hospital to a nursing home and building a new hospital and nursing home in Brevard is not the most prudent and economical use of VA resources.[18] VA inadequately considered the availability of hundreds of community nursing home beds and unused VA hospital beds as well as potential decreases in future demand for VA hospital beds. VA could achieve its service goals by using existing capacity. For example, VA could purchase care from community nursing homes to meet veterans needs more conveniently and at lower costs ($106 verses $207 per patient day) and use the former Naval hospital to improve veteran's accessibility to medical and psychiatric care. VA could also use excess beds in its Gainesville, Tampa, and Bay Pines medical centers if necessary. Considering such alternatives would ensure that VA's planning strategy focuses on the most prudent and economical use of resources. Also, such lower cost alternatives would provide VA the opportunity to meet its service delivery goals in a more timely manner.

Potential Effects of Delayed Funding

Veterans' health care: East central Florida veterans would continue to receive care from community and other less convenient VA medical facilities.

VA costs: Project design is scheduled for completion in February 1996, construction award in September 1996, and construction completion in December 1999. The project manager said that if the project is delayed, inflation would increase construction costs; no estimates had been made. Also, the construction boom in Florida could have an even greater affect on costs because Disney World and the general housing market place a high demand on construction.

New Medical Center at Travis Air Force Base, Fairfield, California

The proposed Travis project, which is a joint venture with the Air Force, would be a major addition and alteration to the David Grant Medical Center at Travis Air Force Base. The target service area is 32 counties in northern California where 447,000 veterans live. The project would provide VA with 243 beds, including 170 new ones and 73 existing ones dedicated by the Air Force for VA use; add new ambulatory care space; and renovate existing radiology, dietetic, and other support space. The new medical center would provide primary and secondary medical, surgical, and psychiatric care. It would be affiliated with the University of California at Davis. The project includes 560,502 gross square footage of new construction and 125,450 gross square footage of renovation. The

[18]VA Health Care: (GAO/HEHS-95-192, Aug. 29, 1995).

estimated cost is $211.1 million, of which $22.6 million was previously appropriated for design and other costs.

Northern California veterans currently receive inpatient care from VA medical centers in San Francisco, Palo Alto, Livermore, and Fresno, California; and Reno, Nevada, which, according to NCHCS officials, are difficult to access due to distance, congested highways, poor public transportation, and such geographic obstacles as the Sierra Nevada mountain range and the San Francisco Bay. When the Travis medical center opens, inpatient workloads for these VA medical facilities will likely decline. VA plans to request funds for an outpatient clinic to replace a small antiquated clinic and for a new nursing home, both in Sacramento.

Expected Benefits and Costs

Veterans' health care: NCHCS officials said that the new Travis medical center would improve access to VA hospital care for northern California veterans. It would be a state-of-the-art medical facility. As a joint venture with the Air Force, the center would provide opportunities for savings, through shared equipment and specialties, and increased opportunities for education, training, and research.

VA costs: VA estimates activation costs would be $67.1 million and recurring costs, $72.5 million, primarily for 969 staff.

Potential Impact of VA's Planned Reorganization

NCHCS officials do not believe that VA's planned reorganization would significantly affect the need for the new Travis medical center. They said that NCHCS already extensively coordinates with the medical centers that would be in the proposed VISN and the need for a medical center to serve northern California would not change.

VA considered a number of options before selecting the Travis site as the best option to provide quality care to the largest number of veterans with the lowest life-cycle costs. In December 1992, we reported that in selecting the replacement site for the closed Martinez medical center, VA should consider the construction cost, the time needed to complete construction, effects on veterans' access to care, potential for affiliation with medical schools, environmental impact, capabilities of the replacement facility, and consistency with the long-range needs of VA and the Department of Defense beneficiaries in the target area.[19] We also noted that VA's basis for closing the Martinez facility on an emergency basis was unclear and that

[19]VA Health Care (GAO/HRD-93-15, Dec. 1, 1992).

analysis leading to a decision to locate the replacement facility in Davis, California, was flawed, biased against renovating the Martinez medical center, and did not adequately consider all available options. On the basis of an analysis by a second task force, VA announced on November 10, 1992, that the replacement facility would be located at Travis Air Force Base.

In addition to analyzing 10 potential siting options, the task report discussed opportunities for a sharing or joint venture at the David Grant Medical Center, Mather Air Force Base, and Letterman Army Medical Center. The task force rejected the Mather Air Force Base hospital as a viable option because the Air Force was planning to use the hospital to serve McClellan Air Force Base, it was too small (105 beds), and it had seismic and other safety problems.

Potential Effects of Delayed Funding

Veterans' health care: Northern California veterans would continue to receive services from community and other less convenient VA medical centers.

VA costs: Project design is scheduled for completion in February 1996 and construction completion in June 2000. If delayed, inflation would increase construction costs.

Ambulatory Care Addition, Boston Medical Center

The Boston medical center is a nine-building campus on 21 acres that serves the New England states.[20] It is affiliated with Boston University Medical and Dental, Tufts University Medical and Dental, and Harvard University Dental schools, and it has sharing agreements with the New England Baptist Hospital, the Shattuck Hospital, and the New England Organ Bank. It is the tertiary medical and surgical center for VA medical centers in New England and provides psychiatric care. In fiscal year 1994, the average number of operating hospital beds was 215 medical, 117 surgical, and 108 psychiatric; and the average daily census was 151, 93, and 71, respectively. The center admitted 9,156 patients and provided 355,437 outpatient visits, and about 94.3 percent of its patients were category A veterans, including 42.6 percent service-connected, 43 percent nonservice-connected low-income, and 8.7 percent nonservice-connected with special needs (4.6 percent were other veterans, and 1.1 percent were nonveterans).

[20]Most buildings are not used for patient care but for such activities as storage, laundry, heating boilers, and administrative offices.

This $28 million, 97,722-gross-square-foot ambulatory care project would add a three-story section to the main hospital to replace the existing operating, recovery, and emergency rooms. It would provide 130 new outpatient examination rooms; new operating, recovery, and emergency rooms; and a 170-space parking deck.

The project would not correct all the medical center's deficiencies. Boston's 5-year facility plan also includes $59.4 million for four major projects for a research addition, a hospital seismic renovation, and ward renovations and $28.9 million for 11 minor construction projects.

Expected Benefits and Costs

Veterans' health care: The Boston medical center would not serve any new types of patients or provide any new services. Medical center officials said that the project would correct safety deficiencies, improve patient environment, and increase efficiency. Expanding the emergency room would correct deficiencies cited by JCAHO for insufficient space provided for patient care and privacy. Colocating the operating and recovery room would correct infection control deficiencies cited by JCAHO. Increasing the number of specialty and general-purpose examination rooms would improve staff scheduling and reduce overcrowding and patient inconvenience in accordance with VA's policy to provide veterans an accessible modern environment; current outpatient space is adequate for about one-half the workload under VA space standards. Relocating the emergency room closer to the ambulance offload area would eliminate the need to transport patients through public corridors, reducing the time for treatment and increasing privacy. Modernizing the operating rooms would provide space to accommodate additional medical specialists and the latest equipment. Expanding the parking space would reduce crowding and provide weather protection for patients, increasing customer satisfaction. In addition, handicapped accessibility will be improved.

VA costs: VA estimates that activation costs would be $14.6 million and recurring costs, $3.1 million, partly for four additional staff. VA plans to offset some costs by consolidating Boston's outpatient clinics.

Potential Impact of VA's Planned Reorganization

The Boston medical center director did not believe that VA's planned reorganization would significantly affect the medical center because it should continue to be the tertiary center for the proposed VISN. Boston medical center would serve one fewer medical center than is currently served.

Medical center officials believe that no feasible alternative exists but conducted no formal studies or analyses. Using other VA medical centers would not be feasible because many do not have the expertise or equipment to provide the kinds of care provided by Boston, such as radiation therapy, intensive chemotherapy, and kidney transplants. Some, like the Brockton and Bedford medical centers, which primarily provide psychiatric outpatient care, cannot provide needed services; some are too far away, such as West Haven medical center, which is about 150 miles away—a 3-hour drive from Boston; and some, such as the West Roxbury medical center, are operating at capacity.

Using community facilities would be infeasible because contracting is prohibitively expensive; officials estimate that outpatient care in community facilities would be about $185 per visit versus their cost of about $69, and emergency room care would cost about $1,000 per visit versus their cost of about $166. Renovating the hospital would be infeasible because all hospital floors are being used, it would be too costly to move the existing support columns to make room for larger operating rooms, and there is no overhead space for needed utilities. Renovating other buildings would be infeasible because they are too small, used for research or other specific purposes, or too far from the hospital. Finally, segmenting the project would not be feasible because total costs could increase by up to $6 million; deleting the ambulatory care facility would render the current operating, recovery, and emergency rooms too small for outpatient clinics; and no nearby acreage is available for parking.

Potential Effects of Delayed Funding

Veterans' health care: Boston medical center officials said that the center would continue to provide ambulatory care in an increasingly constrained, outmoded physical plant; patient infection risk, scheduling, and privacy problems would continue; operations would continue to be performed in a suite that is not suited for current and future diagnostic and monitoring equipment or procedures; and parking would remain inadequate.

VA costs: Project design is scheduled for completion in December 1995, construction contract award in July 1996, parking lot completion in September 1996, and building construction completion in January 1999. If delayed, inflation would increase costs $1.25 million each year that the project is delayed, according to the chief of engineering services.

Nursing Unit and Ambulatory Care Replacement Building, Reno, Nevada

The Reno medical center is a 16-building campus on 14 acres that serves 23 counties in northern Nevada and northeast California. It is affiliated with the University of Nevada School of Medicine and has sharing agreements with the Nevada Army and Air National Guard and Sierra Army Depot. It provides primary and secondary medical and surgical care, psychiatric care, and nursing home care. During fiscal year 1994, the average number of operating beds was 58 medical, 22 surgical, 32 psychiatric, and 60 nursing home beds; and the average daily census was 40, 18, 17, and 54, respectively. The center admitted 3,796 inpatients and provided 122,044 outpatient visits and about 96 percent of its patients were category A veterans, including 35.3 percent service-connected, 51 percent nonservice-connected low-income, and 9.7 percent nonservice-connected with special needs (0.4 percent were other veterans and 3.5 percent were not veterans).

This $27.4 million ($7.3 million was previously appropriated for design), 108,639-gross-square-foot patient environment project would add a five-story medical, surgical, and psychiatric nursing unit to the main hospital to replace existing nursing units. It would replace four-bed rooms and congregate bath and toilet facilities with single and double rooms with private, wheelchair-accessible bathrooms; upgrade HVAC and other utility systems; install medical gases (oxygen and suction) and nurses' call systems in patient rooms; expand ambulatory care capabilities; relocate the loading dock, trash compactor, generator and research buildings, and bulk oxygen storage tanks; and demolish and replace existing engineering quonset huts. The project would decrease the number of beds from 112 to 110 and, according to VA headquarters officials, could be scoped down if demand for inpatient care decreases. It would not affect nursing home beds.

The project would not correct all the medical center's deficiencies. Reno's 5-year facility plan also includes $35.0 million for five major construction projects to build and expand the ambulatory care facilities, expand nursing home care, and replace HVAC in two buildings and $6.4 million for three minor construction projects.

Expected Benefits and Costs

Veterans' health care: The Reno medical center would not serve any new types of patients or provide any new services. Reno medical center officials said that the project would correct fire and safety deficiencies and improve patient environment. Installing a sprinkler system and adding in-wall medical gases and suction would correct JCAHO life and safety

standards and meet VA requirements. Adding isolation rooms designed for patients with such highly infectious diseases as tuberculosis and acquired immunodeficiency syndrome and installing sinks in every patient room would help decrease the spread of infection and disease. Replacing existing four-bed rooms and congregate bath and toilet facilities with single and double rooms with private bathrooms not only complies with VA privacy goals and JCAHO patient rights standards, it also improves staff efficiency and eliminates the need to close bathrooms when in use by the opposite sex. Widening doors and hallways complies with JCAHO environment-of-care requirements. Upgrading air conditioning would increase patient comfort.

VA costs: VA estimates that activation costs would be $5.6 million and recurring costs, $10.1 million; no staff changes are planned. Medical center officials believe that operating costs would increase due to the addition of air conditioning, but maintenance costs would decrease because of more efficient equipment and design; no cost estimates have been made.

Potential Impact of VA Planned Reorganization

Reno officials believe that the planned reorganization would have no significant affect on the medical center or the proposed project. Reno's relationship with other VA medical centers in the proposed VISN would remain essentially as it is now. For example, Reno would continue to send patients to San Francisco for cardiology and Palo Alto for psychiatric services.

Reno officials also believe that no feasible alternative exists but conducted limited cost studies when developing the proposed project. Using other VA medical centers would not be feasible because other facilities are too far away (the closest is over 200 miles away) and are too difficult to access, especially in the winter for patients who must cross the Sierra Nevada mountain range. Using community facilities would be infeasible because Reno's medical school affiliate does not have its own medical facility; the affiliation would be threatened because no opportunity would exist for resident training; the continuity of care would be disrupted because patients would be treated by physicians who do not follow them in both inpatient and outpatient care; and contracting for community care is believed to be too expensive—officials estimated that the annual cost of contracting for all inpatient care, excluding physician fees, would range between $34 million and $71 million. Acquiring an existing facility would not be feasible because ambulatory care would be provided at the existing medical center and inpatient care would be provided at the acquired

facility, requiring the transportation of patients, staff, and equipment between facilities, which would increase operational costs, inconvenience patients, and increase contract hospital costs. Renovating the facility would not be feasible because doing so would not eliminate narrow doors and hallways or correct certain other deficiencies and patients would have to be put into costly community facilities during the renovation. Finally, segmenting the project would be infeasible because building only two or three of the five floors would not allow Reno to meet all JCAHO standards and would likely increase costs due to inflation. No estimates were made. Moreover, no guarantee exists that funding would be available to complete the project.

Potential Effects of Delayed Funding

Veterans' health care: The Reno medical center would continue to provide inefficient care in facilities that do not meet industry standards. In addition, medical center management and VA Western Region officials believe that a funding delay could result in losing JCAHO accreditation after the upcoming October 1995 accreditation review. Medical center management believes that losing accreditation would result in losing affiliation with the University of Nevada, causing university doctors, nursing staff, and other professionals to refuse to practice in the nonaccredited facility; research opportunities and funding also could be lost.

VA costs: Design is scheduled for completion in November 1995, construction contract award in January 1996, and construction completion in January 1999, although the director believes that construction would be completed in late summer 1998. Cost estimates for funding delay have not been computed.

Psychiatric Care Replacement Building, Marion, Indiana

The Marion, Indiana, medical center is an 88-building campus on 151 acres that serves north central Indiana and northwestern Ohio. It is affiliated with Indiana University and four other state universities for education and training experience. It provides primary and secondary medical and surgical care, nursing home care, and tertiary psychiatric care for other VA medical centers in Indiana. For fiscal year 1994, the average number of operating beds was 124 medical, 320 psychiatric, and 69 nursing home; and the average daily census was 97, 285, and 65, respectively. The center admitted 2,037 inpatients and provided 54,701 outpatient visits, and about 93 percent of its patients were category A veterans, including 33.8 percent service-connected, 48.2 percent nonservice-connected low-income, and

11.2 percent nonservice-connected with special needs (3.1 percent were other veterans and 3.6 percent were nonveterans).

This $17.3 million, 69,259-gross-square-foot patient environment project would construct a new two-story psychiatric nursing care building to replace three existing buildings that would remain vacant. The project would replace rooms with up to four beds and congregate bath and toilet facilities with single and double rooms with private bathrooms (12 single rooms and 16 double rooms would be wheelchair-accessible); locate nursing stations on the same floor with patient rooms; and add dining facilities, elevators, and central heat and air conditioning to the building. The project would decrease acute psychiatric beds from 141 to 100. The project would not affect other buildings on the campus.

The project would not correct all the medical center's deficiencies. Marion's 5-year facility plan also includes a $9 million major construction project and $3.5 million for three minor projects.[21] Moreover, Marion received $45.8 million in fiscal year 1992 for a new 240-bed geropsychiatric facility.

Expected Benefits and Costs

Veterans' health care: The Marion, Indiana, medical center would not serve any new types of patients or provide any new services. Medical center officials said that the project would construct a modern building that would correct fire and safety deficiencies, improve patient environment, and improve efficiency. The buildings' attic floors currently do not meet fire code. Replacing existing four-bed rooms with single and double rooms with private baths would meet VA privacy goals. Increasing the number of handicapped-accessible rooms and installing elevators would meet VA accessibility criteria. Installing central heating and air conditioning would increase patient and staff comfort. Locating dining facilities and other support services in the patient building would save staff time transporting patients and traveling between buildings, and locating nursing stations on patient floors would improve patient monitoring and supervision. Providing all acute psychiatric care in one building saves staff time traveling between buildings. Strategically locating nursing stations allows more efficient patient monitoring.

[21]Three other minor projects would be required if the proposed project is not funded.

VA costs: VA estimates that activation costs would be $3.2 million and recurring costs, almost $800,000 annually, primarily for 12 additional staff.[22]

Potential Impact of VA's Planned Reorganization

Marion medical center officials believe that VA's planned reorganization would not significantly affect the medical center. They believe that Marion would be the psychiatric referral facility for the seven other VA medical centers that would be in the proposed VISN. Further, workload may increase, not only as a result of the plan but also because Indiana closed a large state mental health facility this year; Indiana state officials have already tried to place veterans in the Marion facility.

Marion officials also believe that no feasible alternative exists to the new center. Using other VA medical centers would not be feasible because the Fort Wayne medical center does not provide psychiatric care; the Indianapolis medical center, with only 20 acute psychiatric beds, has limited capacity; and psychiatric facilities in VA medical centers in Chillicothe, Cleveland, and Dayton, Ohio, are more than 4 hours away, and Indiana law prohibits referring patients with court-ordered treatment across state lines. Using community facilities would not be feasible because northern Indiana has no comparable community inpatient psychiatric facilities. Officials rejected renovating the existing buildings because doing so would be too expensive, but they had made no cost estimates. In addition, renovation would not correct patient privacy problems and would only partly improve inefficient operations—staff would continue to spend time transporting patients across the campus for treatment, meals, and other activities—and installation of elevators would reduce space available for patient rooms. Finally, segmenting a new building is not practical because an entire new building must be built.

Potential Effects of Delayed Funding

Veterans' health care: The Marion, Indiana, medical center would continue to provide inefficient care in facilities that do not meet industry standards. Medical center officials noted, however, that some deficiencies would be corrected by installing elevators and central heat and air conditioning with minor construction funds in fiscal year 1997. In addition, Marion officials are concerned that JCAHO accreditation could be lost if the project is not funded.

[22]Marion officials said that staff needs are calculated with a formula based on gross square footage, so the number of staff needed would increase because the project would increase gross square footage for the new building; no offsetting adjustments were made for the replaced buildings because no plans have been made for them.

VA costs: Project design is scheduled for completion in August 1995, construction award in September 1996, and construction completion in November 1998. If delayed, inflation would increase construction costs; no estimates have been made.

Nursing Unit Renovation, Salisbury, North Carolina

The Salisbury medical center is a 27-building campus on 155 acres that serves 17 counties in southern North Carolina. It is affiliated with eight institutions and has agreements with Bowman Gray School of Medicine for ophthalmology services and Rowan Memorial Hospital for treatment of patients when the VA system has no space or transferring patients to another VA facility is too risky. It provides primary and secondary medical and surgical care and nursing home care and is the psychiatric referral center for all VA medical centers in North Carolina. During fiscal year 1994, the average number of operating beds was 330 medical, 24 surgical, 235 psychiatric, and 93 nursing home beds; and the average daily census was 320, 22, 181, and 89, respectively. The center admitted 3,457 inpatients and provided 93,196 outpatient visits and about 95.3 percent of its patients were category A veterans, including 49.3 percent service-connected, 35.8 percent nonservice-connected low-income, and 10.2 percent nonservice-connected with special needs (4.5 percent were other veterans and 0.3 percent were nonveterans).

The proposed $17.2 million, 106,871-gross-square-foot patient environment project would renovate medical and surgical nursing units in one building. It would expand all three floors over the entrance; convert rooms with up to four beds and shared or congregate toilet and bath facilities to single rooms with private, handicapped-accessible bathrooms; upgrade air circulation, electrical, and plumbing systems; and expand the fire stairs at the end of the corridors from the fourth floor to the fifth floor. It would decrease the number of beds in the renovated area from 174 to 162. The project would not affect other buildings on campus.

The project would not correct all the medical centers' deficiencies. Salisbury's 5-year facility plan also includes $51.8 million for five major construction projects and $11.8 million for six minor projects. In addition, Salisbury received fiscal year 1987 funds for a geropsychiatric center and fiscal year 1993 funds for a new nursing home.

Expected Benefits and Costs

Veteran's health care: The Salisbury medical center would not serve any new types of patients or provide any new services. Medical center officials

said that the project would correct fire and safety deficiencies, improve patient environment, and increase efficiency. Extending the fire stairs up to the fifth floor to eliminate dead-end corridors would comply with the National Fire Protection Association and National Building Code standards. Upgrading plumbing and electrical systems would comply with Underwriters Laboratories, National Electrical Code, and National Fire Protection Association standards. Overhauling the fresh air exchange and replacing the fan coil system with an all-air system to eliminate potential risks associated with recirculating water-cooled air and improve indoor air quality would meet the American Society of Heating, Refrigeration, and Air Conditioning Engineers standards. Converting to single rooms with private, handicapped-accessible bathrooms would increase privacy, improve handicapped accessibility, decrease the risk of infectious disease, and eliminate the need for staff to carry patient waste to inconvenient congregate facilities. Increasing patient room space would make room for furniture and medical equipment so that mechanical lifts can be properly operated, reducing risk of injury to patients and staff. Relocating nurses' stations would provide better line of sight and improve the monitoring of the patients. Increasing storage space would allow halls and offices to be used as intended.

VA costs: VA estimates that activation costs would be $2.8 million and recurring costs would be $3.2 million annually, primarily for 52 added staff.

Potential Impact of VA's Planned Reorganization

Salisbury medical center officials said that it is too soon to know the effect of the planned reorganization, but they believe that it would have little effect on the medical center's operations. They do not think that the medical center's mission or the need for the project would change significantly; that is, the statewide VA network would remain intact, with the four VA medical centers in North Carolina continuing to function as in the past.

Medical center officials also believe that no feasible alternative exists but conducted no cost or feasibility studies. They believe that using other VA medical centers would not be feasible because the centers are more than 100 miles away. Leasing space, establishing sharing agreements, and contracting for community care would be infeasible because of the lack of available facilities or high cost. New construction would not be feasible because it would be too expensive. The project could be segmented, but

doing so would not be practical because patient floors would be disrupted for long periods of time and costs would be higher.

Potential Impact of Delayed Funding

Veterans' health care: The Salisbury medical center would continue to provide inefficient care in facilities that do not meet industry standards. In addition, Salisbury officials said that JCAHO accreditation could be jeopardized, although Salisbury has not received any citations in the past. They also said that veterans may choose not to seek care from Salisbury.

VA costs: Project design is scheduled for completion in August 1995, construction contract award in September 1996, and construction completion in December 1999. If delayed, the chief engineer said that deficiencies would be corrected with a series of smaller projects that would take longer and be less efficient and more costly; no estimates have been made.

Psychiatric Nursing Unit Renovation, Perry Point, Maryland

The Perry Point medical center is a 208-building campus on 478 acres that serves Maryland, the District of Columbia, and parts of Delaware, Pennsylvania, Virginia, and West Virginia. It is affiliated with the University of Maryland and Johns Hopkins University medical schools, has sharing agreements with the Department of Defense to provide cardiology services and Harford Memorial Hospital to provide specialized diagnostic testing, and provides training programs with over 20 colleges and universities. It provides primary and secondary medical care, long-term care, and tertiary psychiatric care. In fiscal year 1994, the average number of operating beds was 248 medical and 340 psychiatric, and the average daily census was 167 and 246, respectively. The center admitted 3,056 inpatients and provided 92,646 outpatient visits and about 92.2 percent of its patients were category A veterans, including 36 percent service-connected, 46.2 percent nonservice-connected low-income, and 10.1 percent nonservice-connected with special needs (7.5 percent were other veterans and 0.3 percent were nonveterans).

This $15.1 million, 73,028-gross-square-foot patient environment project would renovate psychiatric nursing units in two buildings. It would convert rooms with up to six beds and congregate bath and toilet facilities in single and double rooms with private and semiprivate handicapped-accessible bathrooms, relocate nursing stations; upgrade HVAC systems, add therapeutic support space to both buildings, remodel one cafeteria and relocate another, and correct basement flooding

problems. The number of beds in the two buildings would decrease from 160 to 108.

The project would not correct all the medical center's deficiencies. Perry Point's 5-year facility plan also includes $30 million for a major construction project to build a new nursing unit building and $22.2 million for nine minor construction projects for clinical improvements, patient environment improvements, and fire and safety deficiency corrections.

Expected Benefits and Costs

Veteran's health care: The Perry Point medical center would not serve any new types of patients or provide any new services. Perry Point officials said that the project would improve the patient environment and increase efficiency. JCAHO had identified deficiencies but had not cited Perry Point for violations because the deficiencies were to be corrected with the project. Relocating nursing stations and adding therapy space would improve patient observation and supervision. Replacing rooms with up to six beds and congregate bath and toilet facilities with single and double rooms with handicapped-accessible private bathrooms would correct privacy deficiencies and improve patient accessibility. Upgrading elevators and locating treatment space and cafeterias in the buildings would save staff time transporting patients. Locating supply rooms more conveniently should save nurse time. In addition, the director and chief of staff believe that the project would make Perry Point more competitive with community providers.

VA costs: VA estimates that activation costs would be $2.0 million and recurring costs, $0.5 million. Medical center officials estimate that upgrading HVAC would save about $2,000 a year in operations costs.

Potential Impact of VA's Planned Reorganization

Perry Point's director believes that the planned reorganization would have no significant impact on the medical center. Perry Point's mission would not change because it is the only VA medical center in the proposed VISN that would provide long-term psychiatric care. Under the realignment, however, three of the medical centers in the network—Perry Point, Baltimore, and Fort Howard—will be managed by one director.

Perry Point officials believe that they have no feasible options. Using other VA medical centers would be infeasible because they are too far away. The closest facility, Coatesville, does not have the capacity to handle the number of patients cared for by Perry Point. Using community facilities

would not be feasible because the affiliated facilities do not provide the tertiary care that Perry Point provides and others are prohibitively expensive. Renovation was selected over new construction because the existing buildings are structurally sound and management thought that this option would provide a better chance to get other needed construction at the center. Finally, segmenting the buildings is not feasible because all the buildings need renovation.

Potential Effects of Delayed Funding

Veterans' health care: The Perry Point medical center would continue to provide veterans with inefficient care in facilities that do not meet industry standards. In addition, officials said that the medical center would continue to be less attractive than community facilities in competing for patients.

VA costs: Project design was completed in September 1995, construction contract award is scheduled for completion in August 1996, and construction completion in February 1999. If delayed, Perry Point's chief engineer said that inflation would increase costs; no estimates had been made. Moreover, increased competition in the local construction industry could further raise costs.

Nursing Unit Renovation, Marion, Illinois

The Marion medical center is a 14-building campus on 76 acres that serves southern Illinois, southwest Indiana, and western Kentucky. It is affiliated with Southern Illinois University School of Medicine and colleges in Missouri, Kentucky, Indiana, and Illinois and has sharing agreements with Naval Reserve Fleet Hospital 500 and the Army Reserve 21st General Hospital. It provides primary and secondary medical and surgical care and nursing home care. During fiscal year 1994, the average number of operating beds was 123 medical, 26 surgical, and 60 nursing home beds; and the average daily census was 81, 17, and 60, respectively. The center admitted 4,784 inpatients and provided 58,007 outpatient visits and about 94.4 percent of its patients were category A veterans, including 21.2 percent service-connected, 62.6 percent nonservice-connected low-income, and 10.6 percent nonservice-connected with special needs (5.0 percent were other veterans and 0.6 percent were nonveterans).

This $11.5 million, 49,157 gross-square foot patient environment project would renovate medical and surgical nursing units on two floors and part of a third in a four-story hospital building. It would convert rooms with up to nine beds and congregate bath and toilet facilities to single and double

rooms with private, handicapped-accessible bathrooms; convert a first-floor hospital wing to patient rooms; move the existing outpatient clinic; modernize the intensive care unit; replace the electrical, heating, air conditioning, and plumbing systems; and modify the interior structure for seismic protection. Medical center officials said that the number of beds would not change.

The project would not correct all the medical center's deficiencies. Marion's 5-year facility plan includes no additional major construction projects but includes $4.2 million for two minor projects. In addition, a new $15.6 million outpatient clinic is under construction.

Expected Benefits and Costs

Veterans' health care: The Marion, Illinois, medical center would not serve any new types of patients or provide any new services. Medical center officials said that the project would correct fire and safety deficiencies, improve patient environment, and increase efficiency. They said that JCAHO had not cited the medical center for fire and life and safety violations because the project would correct the violations but noted that failure to complete the project in a timely manner would result in citations. Upgrading air conditioning would not only reduce the risk of airborne infection and improve patient comfort but also correct National Fire Protection Association code violations by reducing the threat of smoke inhalation from a fire. Upgrading electrical and medical gas systems would also correct code violations. Converting patient rooms to single and double rooms with private handicapped-accessible baths would meet VA space and handicapped accessibility criteria, Uniform Federal Accessibility Standards, and VA privacy goals. Removing asbestos from the building and making seismic improvements also would increase patients' safety. Expanding the nursing station space would reduce instances of transcription and medication errors and eliminate the crowding of administration and medical professionals. Increasing room space would eliminate the need to move beds when doors are opened or closed, patients are moved in or out of the room, or bedside treatment is given to patients. Adding waiting rooms for relatives and other visitors would increase customer satisfaction.

VA costs: VA estimates that activation costs would be $3.1 million and recurring costs would be $.3 million; no staff changes are planned. The senior engineer estimates that the project would save $146,000 in annual utility and maintenance and repair costs.

Potential Impact of VA's Planned Reorganization

The Marion, Illinois, medical center director believes that the proposed project complements VA's planned reorganization and that the reorganization would have no significant affect on the medical center. This is because the medical center would continue to provide basic health care in the new target area; support the Secretary's mandate to "put patients first;" and meet the VISN objective of ensuring patient satisfaction, access, quality, and efficiency.

The director also believes that no feasible alternative exists. Using other VA medical centers would not be feasible because the nearest VA hospital is 120 miles away and continuity of care would be disrupted. Renovating the hospital rather than constructing a new one is cost effective; but no studies have been done. Segmenting is not feasible because the utility systems need total replacement and the project would involve the entire hospital. When developing the project proposal, medical center officials determined that several options were infeasible. Using community facilities would be infeasible because renting bed space would increase costs by about $5.8 million per year and contracting for inpatient care would destroy the continuity of patient care and increase costs by about $6.6 million per year. Also, reducing the number of beds in existing rooms would fail to meet the Secretary's priority of comparable facilities, perpetuate deficiencies, and increase maintenance and repair costs.

Potential Effects of Delayed Funding

Veterans' health care: The Marion, Illinois, medical center would continue to provide veterans with inefficient care in facilities that do not meet industry standards.

VA costs: Project design is scheduled for completion in January 1996; construction contract award in December 1996; and construction completion by August 1999. If delayed for 3 years, the senior engineer estimates that inflation would increase construction costs by $1.8 million. In addition, a likely utility system failure would require increased repairs and interim upgrades costing $3.3 million.

Nursing Unit Renovation, Lebanon, Pennsylvania

The Lebanon medical center is a 31-building campus on 213 acres that serves south central Pennsylvania. It is affiliated with the Pennsylvania State University College of Medicine and 45 other colleges and universities and has several sharing agreements with the Department of Defense. It provides primary and secondary medical and surgical care and nursing home care. In fiscal year 1994, the average number of operating beds was

256 medical, 20 surgical, 193 psychiatric, and 177 nursing home beds; and the average daily census was 187, 10, 169, and 166, respectively. The center admitted 3,421 patients and provided 78,040 outpatient visits, and about 89 percent of its patients were category A veterans, including 41.1 percent service-connected, 38.7 percent nonservice-connected low-income, and 9.5 percent nonservice-connected with special needs (9.8 percent were other veterans and 0.9 percent were nonveterans).

This $9 million, 50,425 gross-square-foot patient environment project would renovate medical and surgical nursing units on three floors of one building. The project would replace rooms with up to four beds and congregate bath and toilet facilities with single and double rooms with private and semiprivate bathrooms; relocate and expand nursing stations and other support space; upgrade HVAC, electrical, medical gas, and other building systems; improve patient amenities; and establish a combined psychiatric and acute medical care unit. The number of beds in the renovated area would decrease from 128 to 110. The project would not affect the rest of the renovated building or any other buildings on the campus.

The project would not correct all the medical center's deficiencies. Lebanon's 5-year facility plan also includes $24.3 million for four major construction projects to develop a rehabilitation center for the blind, consolidate rehabilitation outpatient clinic and administrative services, renovate a nursing home facility, and expand ambulatory care facilities and $21.2 million for 13 minor projects.

Expected Benefits and Costs

Veterans' health care: The Lebanon medical center would not serve any new types of patients or provide any new services. Medical center officials said that the project would correct fire and safety deficiencies, improve patient environment, and increase efficiency. When doorways are widened, the medical center would comply with all fire code requirements; doorways are too narrow for gurneys. Increasing the number of handicapped-accessible patient rooms and bathrooms by installing hand and wheelchair rails and other modifications would meet JCAHO and Americans with Disabilities Act (ADA) space standards.[23] Installing sinks in patient rooms would eliminate the need for nurses, doctors, and patients to use remote congregate bathrooms to wash hands and dispose of patient waste and would address JCAHO's requirements for adequate infection

[23]ADA standards require 48 inches between beds, 4 inches from head of bed to the wall, 36 inches from side of bed to wall, and 48 to 60 inches from foot of bed to wall.

control. Converting most rooms to single and double rooms with private and semiprivate bathrooms would move toward VA's privacy goals (the goals would not be totally met because Lebanon obtained a waiver for several double rooms to share bathrooms because exterior wall construction would preclude building private bathrooms in some areas). Upgraded ventilation would improve indoor air quality. Upgrading heating and air conditioning should make patients more comfortable. Telephones and televisions would be installed in every room, improving patient comfort and satisfaction. In addition, efficiency would increase because nurses would spend less time on such routine tasks as disposing of human waste, bathrooms would not be closed to patients of the opposite sex, and intensive care units would not be used for routine patient monitoring because rooms are not equipped with monitoring devices. Finally, Lebanon should be able to better compete with private providers.

VA costs: VA estimates that activation costs would be $1.8 million and recurring costs would be $.4 million; no staff changes are planned. The executive assistant to Lebanon's director anticipates savings from reduced operating and maintenance costs for the renovated area; no estimates were made.

Potential Impact of VA's Planned Reorganization

The Lebanon medical center director said that it is too early to know how the reorganization would affect the project and medical center but believes that it would have little effect because the medical center would continue to serve veterans and continue to need renovation.

The medical center director also believes no feasible alternative exists, but no studies have been conducted. Using other VA medical centers would not be feasible because they do not provide acute care or are too far from Lebanon; the closest is about 75 miles away. Using community facilities would be infeasible because private hospitals do not want to serve veterans who do not have insurance or the income to pay for care because such veterans are viewed as high-cost risks—being generally older, sicker, and poorer and often having alcohol abuse and other social problems. Further, transferring medical and surgical functions to the Pennsylvania State University College of Medicine would be too expensive because a new building would have to be constructed at the University and too inconvenient because Lebanon nursing home patients would have to be transported 17 miles to the University if they would need medical or surgical services. Constructing a new building would be infeasible because new construction would be more expensive; no cost analysis has been

done. Finally, segmenting the project would be infeasible because plumbing and some other renovations are interrelated and require refurbishing all three floors.

Potential Effects of Delayed Funding

Veterans' health care: Lebanon medical center officials said that the center would continue to provide veterans with inefficient care in facilities that do not meet industry standards.

VA costs: Project design was completed in August 1995, construction award is scheduled for completion in August 1996, and construction completion in February 1999. If delayed, inflation would increase the cost of construction about 5 percent a year, according to the executive assistant. Moreover, the executive assistant believes that using minor construction funds to renovate the nursing units would lengthen the completion time and increase cost.

Major Contributors to This Report

Paul R. Reynolds, Assistant Director, (202) 512-7109
Byron S. Galloway, Assignment Manager
John A. Borrelli, Evaluator-in-Charge
Linda S. Bade
Ralph J. Dagostino
Sylvia Diaz Jones
Vincent J. Forte
John R. Kirstein
Thomas P. Monahan
Nancy T. Toolan

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