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Closure and Replacement of the Medical Center in Martinez, California

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The Honorable Alan Cranston
Chairman, Committee on Veterans' Affairs
United States Senate

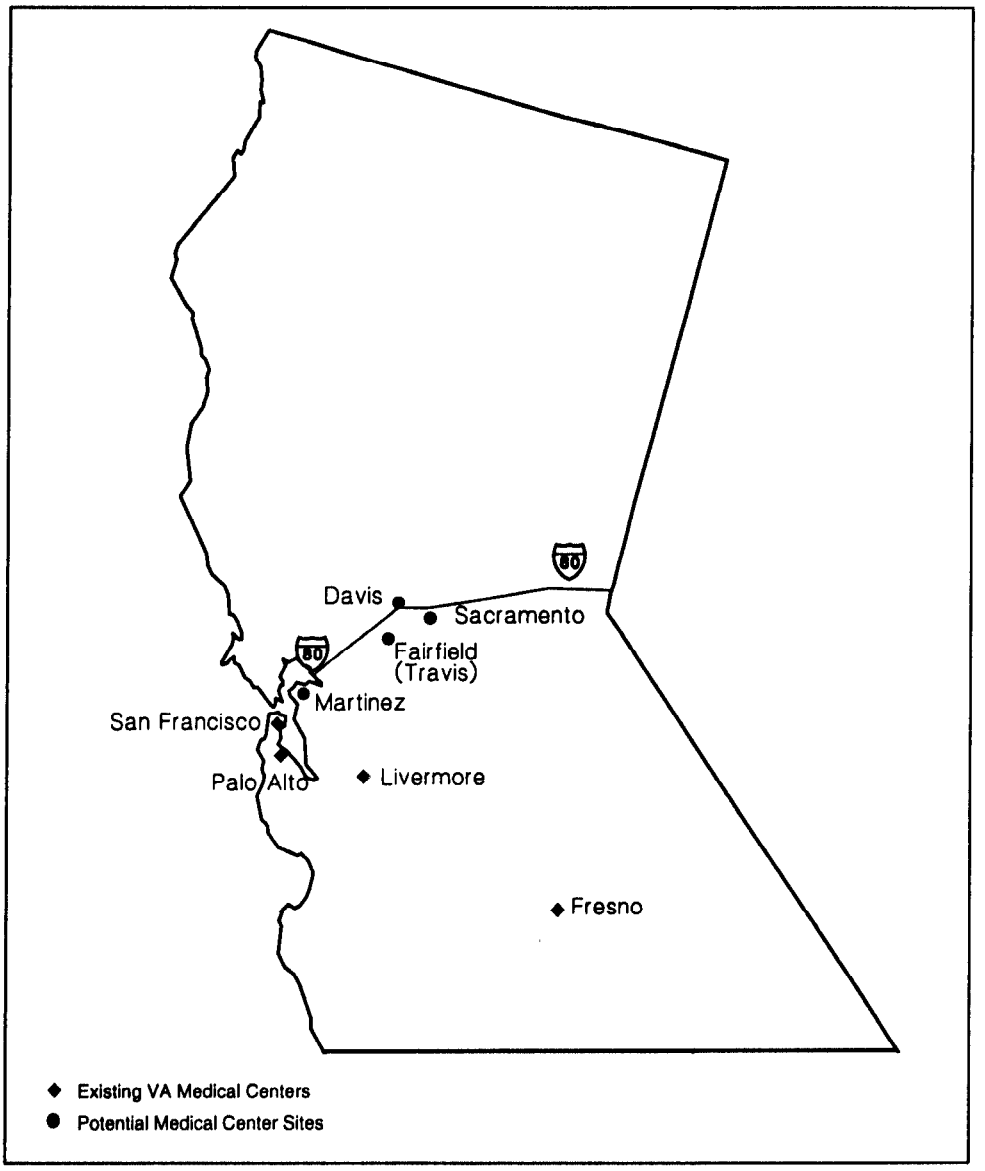
The Honorable George Miller
The Honorable Ronald Dellums
The Honorable Don Edwards
The Honorable Fortney (Pete) Stark
House of Representatives

On August 9, 1991, the Department of Veterans Affairs (VA) announced the emergency closure of its medical center in Martinez, California, because of concerns about the facility's safety in the event of a major earthquake. The Martinez medical center was a 359-bed, full-service hospital offering general and specialized medical care to over 400,000 veterans in northern California. In fiscal year 1991, the medical center had an average daily census of 235 hospital inpatients and provided about 100,000 outpatient visits. Although the medical center served veterans from much of northern California, most of the veterans served came from the East Bay (Oakland/Martinez) and Sacramento areas, which are about 70 miles apart.

As it closed the Martinez medical center, VA announced that rather than repair the facility, it would build a replacement facility on the campus of the University of California at Davis.

In March 1992, however, VA informed the Congress that it would reevaluate its decision to move to Davis. The options considered in the reevaluation included (1) constructing a medical center in Davis, (2) entering into a joint venture with the Air Force to add on to the David Grant Medical Center at Travis Air Force Base, Fairfield, California, (3) constructing a VA medical center in Sacramento, and (4) renovating the Martinez medical center (see fig. 1). On November 10, 1992, VA announced a new site selection, Travis Air Force Base.

Figure 1: Potential Martinez Replacement Sites and Existing VA Facilities in Northern California



This report, prepared at your request, summarizes our views on factors that should be considered in selecting the site(s) for the replacement medical center(s). To identify those factors, we reviewed (1) past site selection analyses done by the Martinez medical center, VA's Western Region, and others and (2) our prior reports relating to site selection and the sharing of medical facilities and services. At VA's request, we discussed

the factors with members of the site selection team in April 1992 so that they could consider our views in the reevaluation.

Appendix I summarizes and updates information we presented in February 5 and 6, 1992, briefings for VA officials and congressional requesters and their staffs on the results of our earlier work concerning the closure of the Martinez VA medical center and weaknesses in VA's original site selection analysis. It also describes the objectives, scope, and methodology for our work, which was conducted between November 1991 and May 1992 in accordance with generally accepted government auditing standards.

Overview of Site Selection Factors

Among the factors that should be considered in determining the location of the replacement medical center are (1) the costs of construction, (2) the time it will take to complete the construction, (3) the effects on veterans' access to care, (4) the potential for affiliation with a medical school, (5) the environmental impact, (6) capabilities of the replacement medical center, and (7) consistency with the long-range needs of VA and Department of Defense (DOD) beneficiaries in the East Bay/Sacramento area.

In addition, in analyzing the potential for renovating the existing Martinez medical center building, VA should consider options short of total renovation.

Construction Costs

An important factor in deciding where to put the replacement medical center should be the likely construction costs. In the initial site selection analysis, the cost data used were imprecise. For example, the cost estimates for a Davis medical center were based on extrapolations of cost estimates for a larger medical center under construction in Palm Beach, Florida. In addition, there was no life-cycle cost analysis.[1] Finally, the costs used in evaluating the Martinez options were overstated (see p. 28). Renovating the Martinez hospital or adding on to the David Grant medical center might have advantages in terms of construction costs.

The VA cost estimates for renovating the Martinez medical center were too high in the original site selection analysis because they were based on the assumption that the renovations would be done while the building was

[1]This involves evaluating costs based on the expected life of a facility, the projected costs associated with operating it, and the services the facility is expected to provide.

occupied. Officials from the firm that designed the renovation told us the cost to renovate an unoccupied hospital would have been much lower. Moving patients and using construction techniques that minimize dust and noise add to the costs of renovating an occupied hospital. The cost estimates for renovating the Martinez hospital in the original site selection were also overstated because they were based on constructing more hospital bed capacity than is needed. They were based on a 338-bed capacity rather than the 243-bed capacity VA calculated for the medical center using the VA hospital sizing model. In reevaluating the site selection, the costs for renovating an unoccupied Martinez hospital with a 243-bed capacity should be considered.

In addition, the costs of partially renovating the Martinez medical center, recognizing the trade-offs that would result from a less than total renovation, should be considered. In 1989, an architectural firm under contract with VA estimated that it would cost $15 million to seismically upgrade the medical center. The upgrade would have left VA with a functional, but less than ideal hospital. For example, it would have left the hospital out of compliance with VA patient room size criteria. In addition, the life safety code deficiencies that had threatened the medical center's accreditation for over 15 years would not have been corrected. In other words, fixing just the seismic deficiencies might be a viable short-term option until a permanent solution is resolved, but would not be a viable long-term solution.

Partially renovating the Martinez medical center to correct the seismic and life safety deficiencies and most serious functional limitations should, however, be considered as a possible long-term solution. VA estimated in 1990 that it would cost $92 million to seismically retrofit and totally renovate the main hospital building. Another $88 million was, VA estimated, needed for a clinical addition, parking garage, and new power plant. Thus, renovating the facility without adding a clinical addition or with a smaller clinical addition might be a viable option to reduce costs.

Adding a wing to the David Grant Medical Center at Travis Air Force Base would also likely be less expensive than constructing a new hospital. The medical center was designed to allow such expansion, which should reduce the cost of site work. In addition, under a joint venture, VA might be able to reduce construction costs by sharing existing Air Force equipment and services wherever such capability exists.

Time to Complete Project

Because the closure of the Martinez VA medical center left a catchment area of about 400,000 veterans with no VA hospital beds, the time it will take to get a replacement facility operational is an important factor. This is especially true because of the problems we identified in patient care following the emergency closure (see pp. 20-25). VA may be able to complete construction/renovation more quickly by renovating the empty Martinez medical center or by adding to the medical center at Travis Air Force Base. Renovating the Martinez facility would have an additional advantage in that the environmental impact requirements would likely be less time consuming.

Effects on Access to Care

Solutions that reduce costs and/or construction time are not necessarily viable options if they do not meet veterans' needs. Thus, the effects on veterans' access to care are another important factor that needs to be considered in selecting a location for the replacement medical center. Because there are two major population centers, Sacramento and the East Bay, in the catchment area, two smaller medical centers rather than one medical center in Martinez, Sacramento, or Davis might best meet the needs of veterans. Past studies by both the VA Western Region and the former Martinez medical center director recommended establishing two hospitals, one in Martinez and one in Sacramento, possibly as a joint venture with the Air Force at Mather Air Force Base. VA, however, has not pursued this possibility.

Assuming one medical center will be established to serve the entire catchment area, the site selection will likely improve access for some and reduce it for others. For example, if VA decided to locate the medical center in Sacramento, veterans from the East Bay area will have to travel more than 70 miles for care. While some veterans could use the San Francisco and Palo Alto medical centers, which are closer than Sacramento, they are difficult commutes from the East Bay.

Just as locating the replacement hospital at Davis or Sacramento would inconvenience East Bay veterans, locating it at Martinez, and to a slightly lesser extent, at Travis Air Force Base, would inconvenience veterans from the Sacramento area.

Because one of the two population centers will be inconvenienced, such things as the socioeconomic characteristics of veterans in the two centers should be considered. VA's initial site selection analysis was based on global veteran population estimates rather than population estimates of

veterans who are poor or have service-connected disabilities, who most frequently use VA hospitals. For example, veterans with incomes below $10,000 use significantly more VA health care than veterans with incomes above $10,000, and veterans receiving VA health care are substantially more likely to be without health insurance.

Potential for Medical School Affiliations

The potential for medical school affiliations should be assessed in evaluating alternative sites. Such affiliations generally enable VA to expand the capabilities of its medical centers and more readily attract high-quality staff. VA health care is highly dependent upon the professional services of qualified interns, residents, and fellows.

The potential for medical school affiliations appears to be the strongest for sites in Davis, in Sacramento, and at Travis Air Force Base, which are closer than Martinez to the University of California at Davis. The Dean of the University of California at Davis Medical School, which was affiliated with the Martinez medical center, has expressed reservations about building a replacement medical center at Martinez because of its distance from the school and has strongly encouraged VA to select one of the other sites.

Environmental Impact

Under the National Environmental Policy Act, federal agencies are required to perform environmental impact studies when they take actions that affect the physical as well as the human environment. In conducting its site selection for the new medical center in east central Florida, for example, VA completed an environmental impact analysis for each of the seven sites under consideration and used the results of those analyses in making its site selection. VA did not consider the environmental impact of the alternative sites in its Martinez site selection analysis.

Capabilities of Replacement Medical Center

Another factor that should be considered is the overall capabilities of the new medical center. For example, a total renovation of the Martinez medical center might yield a state-of-the-art hospital equal to new construction in Davis or Sacramento. A joint venture, on the other hand, would allow VA to offer services/programs that would not be available in a stand-alone medical center. For example, a joint venture might expand VA's capabilities to provide care to women veterans because DOD hospitals typically offer a broader range of services to women. Similarly, locating the new hospital close to the University of California at Davis-affiliated

hospital in Sacramento might offer the opportunity for greater sharing of high-technology equipment, thus expanding the capabilities of the VA medical center.

Consistency With Long-Range VA/DOD Needs

Declining veteran populations, military base closures, and seismic deficiencies in both VA and DOD hospitals could affect the long-range needs for health care facilities in the Bay Area and Sacramento. While the situation is in a state of flux, it is important to consider, to the extent possible, the long-range needs and capabilities of both agencies in selecting a site for the replacement hospital.

DOD medical facilities in the Bay Area and in Sacramento that serve active and retired military and their families need repair. For example, in Sacramento, the Mather Air Force Base hospital needs renovation and seismic work. In San Francisco, Letterman Army Medical Center needs seismic retrofit work. Its future is also uncertain because of the closure of the Presidio Army Base where it is located. In addition, consultants who studied Bay Area military hospitals in 1990 recommended that the Naval Hospital in Oakland, which has serious seismic deficiencies, be torn down and rebuilt.

These situations may create potential savings from joint hospital construction or joint use of currently operating facilities. In the Sacramento area, for example, DOD expects to keep the hospital at Mather Air Force base open after the closure of the rest of the base to meet the needs of DOD beneficiaries from nearby McClellan Air Force Base, as well as area retirees and their dependents. A joint venture with VA might be a cost-effective way to meet the health care demands of Air Force beneficiaries and veterans in the Sacramento area. Similarly, the Oakland Naval Hospital has seismic deficiencies. One option DOD is considering is a joint venture with VA at the Letterman Army Medical Center after the planned closure of the Presidio Army Base in 1995.

If the decision is made to build a new VA medical center, we believe consideration should be given to correcting the seismic deficiencies in the Martinez hospital to enable it to be used as "swing" space while the new hospital is built. This would, in our opinion, reduce the impact on patient care during the long construction process. The space might also be made available to the Navy as "swing space" if it decides to close the Oakland Naval Hospital. As discussed on page 14, the Martinez medical center could be seismically retrofitted for $15 to $40 million.

Agency Comments and Our Evaluation

The Assistant Secretary of Defense for Health Affairs, by letter dated September 17, 1992 (see app. II), concurred with the information contained in our report. DOD also provided oral technical comments, which we incorporated as appropriate. By letter dated September 25, 1992 (see app. III), the Secretary of Veterans Affairs expressed concern that our report offers factors for VA to consider in reevaluating the site options for the replacement hospital, but does not mention the meetings VA had with GAO evaluators to discuss those factors. VA has, the Secretary stated, worked very closely with GAO in considering these factors in reevaluating its decision to build a new hospital in Davis.

We have revised the final report to mention the meeting with VA to discuss the factors. It is misleading, however, to suggest that VA worked closely with GAO in conducting the reevaluation. Other than the meeting to discuss the factors we believe should be included in the reevaluation and giving VA an early draft of this letter, we were not involved in VA's reevaluation. Accordingly, at this time we are unable to comment on the extent or manner in which the factors were considered in the reevaluation.

VA also stated that a seismic retrofit of the Martinez medical center would be a shortsighted solution to the concerns regarding access to care for veterans in northern California. VA notes that, as stated in our report, a seismic retrofit would not address the serious patient privacy and functional problems that exist at the medical center. VA said that, given current budget constraints, a short-term retrofit would hardly be an economically wise option. The cost, $15 to $40 million, is substantial for a temporary fix.

Because of current budget constraints, it is unclear when VA will obtain funding for a replacement medical center. As discussed in appendix I, the closure of the Martinez medical center jeopardizes the care available to northern California veterans. Most veterans appear to be forgoing VA inpatient care rather than traveling to VA medical centers in other catchment areas.

Accordingly, we believe VA should fully evaluate all options for improving inpatient services for northern California veterans during the interim period. These options include temporary seismic corrections to the Martinez hospital, contracting with community hospitals to care for veterans, and sharing agreements with DOD facilities in the catchment area.

We also believe that partial renovation of the medical center should be considered as a long-term solution. As discussed on page 4, we do not believe that correcting only the seismic deficiencies is a viable long-term solution. However, VA's own facility development plan for the Martinez medical center in late 1990 indicated that aside from seismic problems, the building is sound and should be reused. The study concluded that tearing down the building and moving to a new location is not economically sound. Because the building at Martinez is sound, we believe that VA should consider a partial renovation of the facility to correct the seismic problems, life safety deficiencies, and major functional limitations. This could be a prudent course of action because of budget constraints.

VA also expressed concerns about the discussion of the emergency closure and site selection analysis discussed in appendix I and provided technical comments on both the letter and appendix I. The comments on appendix I are discussed on pages 30 to 34. The technical comments are discussed in appendix III.

We are sending copies of this report to the Acting Secretary of Veterans Affairs; the Secretary of Defense; the Director, Office of Management and Budget; and other interested parties. Copies will be made available to others upon request. If you have any questions regarding this report, please contact me on (202) 512-7101. Major contributors to this report are listed in appendix IV.

David P. Baine

David P. Baine
Director, Federal Health
Care Delivery Issues

Contents

Letter		1
Appendix I Summary of Congressional Briefings on the Closure and Replacement of the VA Medical Center in Martinez, California		12
	Objectives of Review	12
	Scope and Methodology	12
	Summary of Briefing	13
	Seismic Retrofit Grew to More Costly Total Renovation	14
	Basis for Emergency Closure Decision Unclear	15
	Emergency Closure Jeopardized Veteran Health Care	20
	Early Personnel Difficulties Addressed	25
	VA Site Selection Analysis Flawed	25
	Site Selection Analysis Biased Against Martinez	28
	VA and DOD Have Not Developed Long-Range Plans for Sacramento/Bay Area	29
	Agency Comments and Our Evaluation	30
Appendix II Comments From the Department of Defense		35
Appendix III Comments From the Department of Veterans Affairs		36
	Evaluation of VA Technical Comments	38
Appendix IV Major Contributors to This Report		45
Figure	Figure 1: Potential Martinez Replacement Sites and Existing VA Facilities in Northern California	2

Abbreviations

DOD	Department of Defense
VA	Department of Veterans Affairs

Summary of Congressional Briefings on the Closure and Replacement of the VA Medical Center in Martinez, California

This appendix summarizes and updates information we provided in February 6, 1992, briefings for the congressional requesters and their staffs. A briefing was given for VA officials on February 5, 1992. The views expressed by VA officials during that briefing were considered in preparing the congressional briefings.

Objectives of Review

On August 9, 1991, VA announced the emergency closure of its medical center in Martinez, California, because of concerns about the facility's safety in the event of a major earthquake. At the same time, VA announced that rather than repair the Martinez facility, it would build a replacement facility on the campus of the University of California at Davis.

After the announcement, veterans, community officials, and Members of Congress expressed concerns about the closure and planned replacement of the Martinez medical center. In three separate requests, former Senator John Seymour; Representatives George Miller, Ronald Dellums, Don Edwards, and Fortney (Pete) Stark; and Senator Alan Cranston, Chairman of the Senate Committee on Veterans' Affairs, asked us to:

- assess VA's estimates of the cost and time that would be required to bring the Martinez medical center into compliance with earthquake safety standards;
- determine the basis for the emergency closure decision;
- determine whether VA had adequately planned for (1) providing interim medical care and (2) handling the needs of Martinez personnel following the closure; and
- review VA's decision to locate a new medical center in the Davis/Sacramento area.

Scope and Methodology

To determine the scope and cost of the work necessary to correct seismic deficiencies at the Martinez medical center, we reviewed VA and architectural studies and spoke with VA officials and contractors who were involved with the studies. The studies we reviewed included the 1973 geologic/seismologic engineering study, which established the potential for earthquake-generated ground movement; the 1983 Phase I seismic study, which identified structural deficiencies; and the 1989 Phase II seismic study, which determined the corrective actions needed to achieve compliance with VA structural criteria.

To evaluate the decision to close the Martinez medical center on an emergency basis due to seismic safety concerns, we interviewed VA medical center, regional office, and central office officials involved in the decision. We did not, however, meet with the Secretary or Deputy Secretary of Veterans Affairs. Because supporting documentation for the decision was not available, we developed a chronology of events from interviews and VA memorandums to determine what led to the emergency closure decision.

To evaluate plans for patient care and personnel actions after the closure, we interviewed VA officials, administrators, and physicians responsible for health care delivery and personnel actions. We compared VA's closure transition plan with events that occurred during our review, and we evaluated internal memorandums presented to us as planning documents. Finally, we interviewed veterans, local officials, and University of California at Davis representatives to identify the impact of the closure.

We also examined the methodology VA used in its summer 1991 analysis, which VA indicates was the basis for its decision to construct a new medical center in Davis. In addition, we obtained and analyzed written clarification of the cost methodology from VA's Deputy Assistant Secretary for Facilities.

We conducted our review from November 1991 through May 1992 in accordance with generally accepted government auditing standards. We were unable to perform a detailed review of the VA site selection analysis supporting the Martinez medical center closure and Davis medical center construction because VA discarded site scoring data before our review. VA reviewed 10 options, which differed by location and type of facility, on the basis of six criteria. The criteria included cost, accessibility of care, and furtherance of VA health care goals. While the final scores for each option were provided to us, VA officials said that the scoring breakdown by criteria had been discarded. Without the scores, we could not perform a complete assessment of the site selection analysis, nor could we verify that the analysis supports the Davis site selection.

Summary of Briefing

The 1989 proposed retrofit of the Martinez medical center to correct seismic deficiencies grew to a more costly total renovation of the center aimed at correcting the center's seismic, life safety, and functional deficiencies. Because of the escalating costs, in late 1990 VA began considering replacing rather than retrofitting the medical center.

VA did not adequately document its subsequent decision to close the Martinez medical center on an emergency basis. As a result, the basis for the emergency closure is unclear. The closure jeopardized veteran health care in northern California. Although the closure also led to personnel placement difficulties, those problems appeared to have been adequately addressed.

VA's site selection analysis concluding that a new medical center should be built in Davis was flawed and biased against retrofitting the Martinez medical center. In addition, the analysis did not adequately explore the potential for joint ventures with DOD to address both veteran and military personnel health care needs.

Seismic Retrofit Grew to More Costly Total Renovation

Between 1989 and 1991, the planned seismic retrofit of the Martinez medical center grew into a total renovation. The estimated costs for seismic upgrading and other renovations at Martinez similarly increased from $15 million to $313 million. The lower estimate covers only the seismic retrofit, while the higher estimate includes a combination of seismic retrofit, renovation, and new construction. The renovation work would bring the medical center up to current VA standards for seismic strength, life safety, and functionality.

Retrofit Only Would Cost $15 Million to $40 Million

VA's 1989 seismic phase II study[1] identified actions needed to bring the main building at Martinez into compliance with current building codes. These actions included strengthening the foundation, removing the brick facade from exterior walls, strengthening the floors, and increasing the load-bearing capacity of two walls by extending them from the second floor to the ground.

The architectural firm that conducted the phase II study estimated the seismic retrofit would cost about $15 million. The firm indicated that the estimate included only basic structural improvements and not such things as moving patients during construction. The Deputy Assistant Secretary for Facilities, responsible for hospital construction and renovation projects, estimated the cost to perform the seismic corrections would be around $40 million when all costs were considered. He indicated that $40 million was a rough estimate based on past experience, but he did not

[1]VA contracted for two seismic studies at the Martinez medical center. The phase I study, conducted in 1983, identified the structural deficiencies in need of correction to bring the main hospital building into compliance with VA seismic safety standards. The phase II study, conducted in 1989, identified the actions needed to correct the deficiencies identified in the phase I study.

have documentation to support the estimate. The firm that prepared the study said that the retrofit hospital would be a workable facility, but that other problems, such as the 16-bed rooms, would not have been corrected.

VA Incorporated Seismic Work Into Total Renovation Project

According to a number of studies conducted over the past 15 years, the Martinez medical center has not had adequate space or a proper layout to deliver medical care effectively and efficiently. According to internal VA studies and Joint Commission on Accreditation of Healthcare Organizations reports, the medical center has life safety deficiencies as well as space and layout problems that inhibit the delivery of efficient and effective medical care. For example, the medical center has 16-bed wards that do not meet current VA privacy standards.

In 1990, VA conducted a comprehensive survey to identify renovation work needed to correct the safety, space, and functional deficiencies at the Martinez medical center. The results were incorporated into a design that combined seismic retrofit work with total renovation of the facility to bring it to VA seismic, safety, and functional standards.

The estimated cost to perform the total renovation was $180 million. Because the seismic work had been incorporated into the total renovation, it was not possible to determine what the retrofit alone would cost. However, the seismic retrofit and total renovation of the main hospital building was estimated to cost $92 million. The other $88 million was for construction of a clinical addition, a parking garage, and a new power plant.

Final Estimate Included Additional Facilities

The final VA cost estimate for upgrading the medical center was slightly over $313 million. This estimate, developed for the July 1991 site selection analysis, included not only the seismic retrofit and total renovation, but also a new outpatient clinic in Sacramento and 120-bed nursing homes in Sacramento and Martinez.

Basis for Emergency Closure Decision Unclear

Although VA announced the closure of the Martinez medical center as an emergency, it did not adequately document the closure decision. As a result, the basis for the emergency closure is unclear. We did not evaluate the seismic risks at the Martinez medical center and are not taking any position on whether the medical center should have been closed.

The decision to close the Martinez medical center on an emergency basis is, however, important because an emergency (1) alters the need for congressional notification before closure, (2) could change the project's funding priority, (3) can reduce the need for environmental impact studies, and (4) hampers planning for patient care.

VA did not document the date of its decision to close the center, nor did it document the process followed in making the decision. Consequently, the basis for VA's decision to close the medical center on an emergency basis remains unclear. VA indicated that its decision was based on concern for patient and staff safety in the event of an earthquake.

Based on detailed studies, engineers have determined that the main hospital building does not meet building code standards for seismic safety. Some of the lateral force resisting walls stop at the second floor. This condition, known as a discontinuous sheer wall, is a serious design flaw that compromises the building's ability to withstand seismic forces.

VA officials cite two July 1991 consultant letters as evidence of the seriousness of the seismic risk at the Martinez medical center.[2] The letters indicated that the hospital had serious flaws and posed a danger to occupants. One indicated that the building could totally collapse in an earthquake; the other indicated that there was the potential for partial collapse.

Earlier letters from the same consultants, however, indicated that the building could be fixed. For example, in March 1991, the member of the VA's structural safety advisory committee indicated that if the building were going to be temporarily used, steps would have to be taken to strengthen the interior support walls that were designed to provide resistance to lateral movement. In an August 1989 letter, the engineer had proposed several options for repairing the building. The August 1989 letter also indicated that the building would not collapse in a severe earthquake.

We contacted both consultants to discuss their responses to VA's requests for an assessment of the seismic risk at Martinez. While both consultants indicated the main building was not safe, they indicated they could not predict the potential injury and death that could result from an earthquake.

[2]The letters were written by an engineer, who participated in the 1989 seismic phase II study to determine what was needed to correct the deficiencies, and a member of VA's structural safety advisory committee.

Finally, VA did not assess the potential health effects on patients in deciding to close the Martinez medical center on an emergency basis. Such an assessment is important because studies have shown that patients' health status can be adversely affected when a hospital they use closes or when their eligibility for care changes (see pp. 24-25).

VA Began Considering Closure in 1990

VA began considering closure of the Martinez medical center and construction of a new medical center in Davis in 1990, months before it had received the consultant letters on seismic safety and before it had prepared the cost analysis given as justification. The timing raises further questions about the basis for the closure decision.

In October 1990, the Assistant Secretary for Acquisitions and Facilities questioned the economic merits of renovating the Martinez medical center. He indicated that the $180 million cost to renovate the medical center was too high given its location. He stated that a new hospital could be built at a lower cost in a location better suited for delivering health care. There was no mention of the seismic problems at the Martinez medical center in discussing the potential closure.

In late 1990, VA decided to remove the renovation project from its construction budget request. In January 1991, VA's central office directed its Western Regional Office to conduct a veteran population study for the catchment area served by the Martinez medical center to determine where health care facilities are needed. A stated assumption and guideline in the 1991 study was that it was highly probable that a new medical center would be built in the Davis or Sacramento area. Two population studies had already been performed—one by the former Martinez medical center director in 1989, and one by the Western Regional Office in 1990. Both studies recommended establishing hospital space at Mather Air Force Base to give veterans in the Sacramento/Davis area an alternative to obtaining inpatient care at Martinez.

In February 1991, a site review team composed of staff from VA's Western Regional Office and central office visited potential medical center sites in the Davis/Sacramento area. The team visited sites at the University of California at Davis medical school campus in Davis, the University of California at Davis Medical Center in Sacramento, and Mather and Travis Air Force Bases. The site review team did not issue a final report on the relative merits of the sites visited. A preliminary report VA provided, with its comments on a draft of this report, indicated that the Sacramento site

had the highest rating. Based on the belief that free land would be available at the University of California at Davis campus and that a medical center in Davis was preferred over the other sites by Martinez medical center physicians, VA's central office, however, dropped the Sacramento and other sites from consideration in the July 1991 task force evaluation.

The following month, personnel from VA's Office of the Associate Chief Medical Director for Resources Management and Office of Facilities met to develop an explanation for why the Martinez medical center was to be closed for seismic safety reasons while other hospitals at similar risk were not being closed. The then acting VA General Counsel told us that he was asked in late May or early June 1991 for an opinion as to whether legal requirements to notify the Congress of administrative actions significantly affecting VA personnel would apply if the Martinez medical center were closed on an emergency basis.

In June 1991, the Secretary of Veterans Affairs, in response to a briefing from VA personnel on structural deficiencies at the Martinez medical center, said he felt the medical center should be closed immediately. The Secretary agreed to delay his final decision until a decision paper containing options for immediate closure was prepared. The options paper was to be ready for the Secretary's review in 2 weeks. Shortly thereafter, a VA task force was convened to study options for delivering health care to patients served by the Martinez medical center.

In July 1991, after VA convened the task force to consider options for replacing the Martinez medical center, VA received the letters on the seismic risk at the Martinez medical center from its consultants (see p. 16). These letters were cited by VA as the basis for the emergency closure announced on August 9, 1991.

Implications of Emergency Closure

Declaring the Martinez medical center closure an emergency reduced (1) congressional oversight of the closure decision and (2) the requirements for environmental impact studies. In addition, declaring the closure an emergency could enhance VA's ability to obtain funding for a replacement facility. Finally, problems in providing patient care following the closure are more understandable if the closure is an emergency.

Emergency Closure Reduces Congressional Oversight

The VA General Counsel determined that declaring the Martinez medical center closure an emergency would obviate the need to give the Congress

advance notice of the planned closure. VA is required to give the Congress 90 days' advance notification of major changes affecting VA personnel, such as closure or relocation of VA facilities. The General Counsel, however, decided that the notification requirements do not apply to emergency closures. Closing the Martinez medical center on an emergency basis thus reduced the amount of congressional oversight of the closure decision.

Emergency Declaration Lessens Environmental Impact Requirements

Under the National Environmental Policy Act, federal agencies are required to perform environmental impact studies when they take actions that affect the physical or human environment. Emergency situations do not relieve agencies of these requirements but lessen actions needed to meet them.

VA's Office of the General Counsel determined that VA, in closing the Martinez medical center, would have to fully comply with the act unless the closure was declared an emergency. The General Counsel said, however, that VA was required, even in an emergency, to contact the Council on Environmental Quality to develop a plan for identifying and addressing environmental issues. VA did not contact the Council regarding the closure of the medical center.

Emergency Closure Creates Funding Pressures

Closing the Martinez VA medical center on an emergency basis creates added pressure on the Congress to fund a replacement facility. This is because the closure left the 400,000 veterans in the catchment area without any VA hospital beds. By contrast, if the Martinez facility had remained open while VA sought funding to renovate the facility or construct a replacement medical center, the project might have had a harder time competing with other proposed construction projects. For example, following the emergency closure of the Martinez medical center, VA was able to quickly obtain funding for a replacement outpatient clinic in Martinez, even though the project was not in the VA budget submission and no design work had been completed.

Disruption of Patient Care More Understandable Under Emergency Closure

By definition, an emergency calls for immediate action. Time is of the essence, and actions cannot be as well planned as in a nonemergency situation. As a result, disruption of service can be expected and is understandable, until adequate plans can be developed.

If the closure of the Martinez medical center was, as VA announced, an emergency, then the disruption of patient care discussed below was largely unavoidable. If, however, the emergency closure was an attempt to

limit congressional oversight and speed funding for a replacement facility, then the resulting patient care problems were avoidable.

Emergency Closure Jeopardized Veteran Health Care

The emergency closure of the Martinez medical center jeopardized veteran health care. This was because VA (1) had no system in place to refer inpatients to other VA hospitals, (2) issued conflicting guidance to Martinez medical center staff on how to handle emergency patients, (3) did not control the departure of medical center staff, thus allowing loss of staff to dictate the pace of the closure, and (4) did not adhere to its own transition plan for providing patient care. Although the long-term effects of the closure on veterans' health is unknown, available data suggest that veterans' use of VA services has declined since the closure.

System Not in Place to Refer Inpatients to Other Hospitals

The Martinez medical center had not developed plans or procedures for referring patients to other VA hospitals when shortly after the August 9, 1991, closure announcement, it stopped admitting all but emergency patients. Martinez physicians attempted to (1) notify patients scheduled for admission to the Martinez medical center and (2) reschedule them into other area VA medical centers. Other medical centers, however, were not prepared to begin accepting referrals from Martinez, and many patients could not be immediately scheduled for care.

In the following weeks, Martinez developed a more detailed referral system. Specifically, Martinez medical center officials met with officials from other VA medical centers and established a team of nurses to coordinate transfers and locate beds in non-VA facilities for patients unable to be accommodated within the VA system.

Physicians, however, remained concerned about the medical consequences of rapidly terminating scheduled hospital admissions. A resolution approved by most of the physicians present at an August 22, 1991, meeting with the medical center director declared "The decision not to arrange for management of patients in a timely and cost-effective way...represents reckless abandonment of the veteran patients and will lead to a significant morbidity and mortality to the patients serviced in this area."

Loss of Medical Staff Dictated Pace of Closure

Due to the rapid loss of medical staff transferring to other VA facilities or leaving for jobs outside the VA system, the Martinez medical center was

forced to terminate all inpatient care in October 1991, 2 months earlier than planned. In their transition plan, VA officials stated inpatient care would be phased out over 120 days between August and December 1991. They estimated that at the end of 120 days, about 50 patients would remain who would need to be transferred to other northern California VA hospitals.

In an October 4, 1991, emergency meeting, Martinez physicians concluded they could no longer "meet community standards of quality of care," due to erosion of support services and loss of the interns and residents who performed much of the patient care. On October 8, the Martinez medical center director informed staff, veterans, and the Congress that the medical center would transfer remaining inpatients to other facilities, terminate emergency admissions, and discontinue after-hours care within 2 weeks.

Physicians Confused About Emergency Referrals

After the decision was made to terminate all inpatient care at Martinez, physicians were instructed to refer patients with emergency conditions to other hospitals. Procedures for handling emergency referrals were developed hastily and had to be clarified or revised several times. For example, in early October, medical staff were told to call "911" for patients in immediate need of care. A week later, however, they were given a different number to call and told not to call "911" because it was "too bureaucratic." Two weeks later, medical staff were told the new number was inappropriate for some emergency situations and that they should be calling "911."

VA Did Not Adhere to Its Transition Plan for Outpatient Care

VA's transition plan called for the closure of the Martinez outpatient clinic by early December 1991, with all Martinez patients (over 100,000 visits annually) initially being treated in the Sacramento and Oakland VA clinics. VA would then lease space for an interim clinic in the Martinez area, in order to "alleviate the heavy outpatient burdens shifted to Oakland and Sacramento." After securing the leased space, VA intended to transfer about half of the former patients back to the interim clinic. VA planned to continue treating Martinez patients in leased space in Martinez and in the Oakland and Sacramento clinics until a new outpatient clinic could be constructed 5 or 6 years later in Martinez.

VA was unable to secure leased space for an interim clinic in the Martinez area. However, in early October 1991, the Congress authorized funds to construct a new outpatient clinic and nursing home on the grounds of the

Martinez medical center. Construction was expedited, and the new outpatient clinic became operational in November 1992.

To alleviate the space shortage created by the lack of leased space, VA decided to renovate the education wing of the Martinez medical center. This action contradicted the VA transition plan for the medical center. According to the transition plan, the seismically safe education wing "could not easily and expeditiously be retrofitted for ambulatory care purposes." The plan indicated it would take over a year to renovate the wing for patient care. In November 1991, 1 month before the planned termination date for outpatient care, VA began retrofitting the education wing to provide space for several outpatient programs.

The transition plan also indicated that, to accommodate Martinez outpatients, programs, and staff, the Oakland and Sacramento clinics would move their mental health clinics into leased space, reconfigure parts of their facilities, expand their hours of operation, and install trailers to store the medical records of Martinez patients. The space leased at the Oakland clinic for the mental health program was not ready for occupancy until March 1992, 2 months after the Martinez outpatient clinic was closed. The storage trailers for patient records were not provided until late May 1992, and VA no longer plans to expand the hours at the two clinics.

In its transition plan, VA recognized that "accessibility to outpatient care will be compromised when Oakland and Sacramento absorb the additional Martinez workload, both from a travel standpoint as well as from the vantage of appointment availability." According to VA officials at the Oakland clinic, patients' accessibility to care has been reduced. For example, patients are having more difficulty than in the past obtaining scheduled appointments, because of heavily booked clinics. Similarly, patients are experiencing longer waits at the clinic for both scheduled appointments and drop-in care. In spite of the crowded schedules and long lines, however, the Oakland clinic did not expand its hours due to insufficient support staffing.

Long-Term Effects of Closure on Veterans' Health Care Are Difficult to Assess

Studies indicate that eliminating or reducing health services to veterans or the economically deprived can adversely affect their access to health care and overall health. Although the long-term impact of the Martinez medical center closure on veterans' health care is difficult to assess, the lower number of hospitalized veterans in area VA medical centers and the

increased rate of missed outpatient appointments may indicate that fewer veterans are receiving care since the closure.

Declining Inpatient Census

Early data suggest that not all veterans who previously relied on the Martinez medical center are now seeking care at other VA medical centers. VA medical centers responsible for treating patients displaced by the Martinez closure have not experienced patient load increases commensurate with the Martinez preclosure patient load. Overall, the increase in workload at the VA medical centers in San Francisco, Palo Alto, Fresno, Livermore, and Reno accounts for less than 25 percent of the Martinez preclosure patient load.

A November 1991 study by the Martinez medical center transfer coordinator team concluded Martinez patients were not always being examined or treated at other VA medical centers in a timely manner. The study, which included 117 patients referred over a 2-month period to other VA hospitals, reported that over 40 percent of them were not examined or treated within the time frames recommended by the referring Martinez physicians.

More Missed Appointments

A larger percentage of veterans who previously used the Martinez medical center are missing their scheduled appointments in Oakland. At the Oakland clinic, the rate of missed appointments for these veterans increased 50 percent in the month after the Martinez medical center closed its outpatient clinic. The number of missed appointments declined in the following month but not to preclosure levels. The Sacramento clinic has kept limited data on patients missing scheduled appointments, but clinic officials indicated that a slightly higher percentage of appointments are being missed than before the closure.

While the increase in missed appointments may be a transitory problem, it nonetheless may indicate a reduced level of care for veterans. Several explanations have been provided for the higher rate of missed appointments. Some veterans said they did not receive timely notice of appointment changes. Clinic staff said clinic cancellations and double-scheduling of patients may be inaccurately recorded as missed appointments. Veterans and VA staff also suggested that veterans (1) are still confused about the closure of the Martinez medical center, (2) have difficulty obtaining transportation to the Oakland and Sacramento clinics, and (3) skip scheduled appointments at one clinic in favor of drop-in care at the other.

In January 1992, we discussed the problem of missed appointments with the Martinez chief of staff. After our discussion, VA began tracking and following up on patients who have missed appointments at the Sacramento and Oakland clinics.

Studies Indicate Veterans and Disadvantaged Do Not Seek Alternative Care

VA officials, administrators, and medical staff have provided varying explanations for the declining inpatient census and increasing rates of missed appointments within the catchment area. Some VA representatives emphasized that other VA medical centers admit patients for shorter stays and perform more procedures on an outpatient basis than Martinez. Others stated that the declining census and increasing "no-show" rates are short-term problems, created by the expedited closure, which will correct themselves in time. Some VA representatives, however, expressed concern that the confusion surrounding the closure and the loss of the Martinez medical center will have a long-term impact on patients' willingness and ability to obtain health care.

Studies performed at VA and public hospitals indicate that when facilities are closed or eligibility is restricted, some patients do not seek alternative sources of care. Researchers reported that reduced access to care adversely affects some patients' health. For example, one study found that patients previously served by the public hospital "had difficulty finding new health care providers, waited longer for routine medical care, and felt that the availability of hospital services had decreased."[3] A second study reported that among the veterans examined, "the general health perceptions and functional status of discharged patients had worsened when compared with non-discharged patients....Among previously hypertensive patients who were discharged [the study] found statistically and clinically significant elevations in blood pressure."[4] A third study found that, "[a]mong those who stop using the VA [because they were found ineligible for VA outpatient care], many do not receive any medical care or obtain a regular care provider within the first 9 months after their release from the VA system."[5]

It is difficult to determine whether the Martinez medical center closure will have a long-term adverse impact on veterans' access to health care,

[3]A.B. Bindman, D. Keane, and N. Lurie. "A Public Hospital Closes." Journal of the American Medical Association. 264: 2899-2904, 1990.

[4]S.D. Fihn and J.B. Wicher. "Withdrawing Routine Outpatient Medical Services: Effects on Access and Health." Journal of General Internal Medicine. 3: 356-362, 1988.

[5]J. Meuleman and M. Mounts. "Health Status of Veterans Found Ineligible for Ongoing Outpatient Care." Journal of Community Health. 2: 108-114, 1985.

given VA's plan to replace the closed facility with a medical center, outpatient clinic, and nursing home. In addition, VA has taken steps in the short run to encourage patients to continue using VA care. VA has established a transfer coordinator team, a mail notification system, a 24-hour toll-free information line, and an expanded shuttle service to assist patients in receiving care. Other VA facilities have increased available space and beds, acquired staff from Martinez, and improved their response time to referrals. Even so, because of the decline in VA area hospital patients following the closure and the increased number of veterans missing scheduled appointments, VA may need to do even more to ensure that veterans continue to receive care now that the Martinez medical center is closed.

Early Personnel Difficulties Addressed

Outplacement services for Martinez employees were not in place at the time of the closure announcement, but were operational within weeks. The personnel department did not receive advance notice of the closure and, therefore, did not have a plan for conducting the necessary outplacement efforts. Within weeks of the closure announcement, however, outplacement services were fully functioning.

VA did not determine what positions would be retained to run the Sacramento, Oakland, and Martinez clinics until January 29, 1992. As a result, some employees expressed confusion about seeking outplacement services and indicated it was difficult to plan their careers. Other employees said they believed the personnel office was doing its best to support the Martinez medical center staff.

VA Site Selection Analysis Flawed

The VA site selection analysis was flawed and should not be used as justification for constructing a new medical center in Davis. Specifically, the analysis

- included options that were inappropriate because they would either build too many or too few hospital beds for the service area or would build hospital beds outside the area;
- used cost data that were too imprecise to result in meaningful cost comparisons;
- did not adequately consider the environmental impact of the options and the effects on the construction timetable; and
- used inappropriate criteria to assess the effects of the options on the availability of health care services.

In addition, as discussed earlier, VA discarded the supporting documentation for the site selection analysis, preventing us from assessing the effects of the design flaws.

Options Not Based on Veterans' Needs

Rather than determine the health care needs of veterans in the Martinez catchment area based on the VA planning model and then develop and evaluate options for meeting those needs, VA developed 10 options largely independent of the planning model. These options were then evaluated in part on whether they met health care needs.

Normally, the health care needs in an area are assessed using the VA hospital sizing model and other planning criteria. Using these criteria identifies (1) the number and types of hospital beds needed in the area, (2) the number of nursing home beds needed, and (3) the number of outpatient visits expected. Options are then developed to determine the optimum location(s) for the facilities. Under each option, however, the total capacity should be the same. For example, one option could be to place the total capacity in one location, either Martinez, Davis, or Sacramento. Another option might be to split the hospital capacity between two locations, such as Martinez and Davis. A third option could be sharing of facilities with DOD or the community. The options would then be evaluated using such criteria as cost and ease of access.

VA, however, developed options that ranged from doing nothing to building greater capacity than indicated by its hospital sizing model. One option involved establishing a replacement hospital at the Letterman Army Medical Center in a different catchment area (San Francisco) about 1-1/2 hours driving time from Martinez and about 3 hours from Sacramento. Only two of the options considered—a 243-bed hospital in Davis and a 243-bed hospital in Martinez—would have correctly addressed the health care needs of veterans in the Martinez catchment area as determined by the sizing model.

Cost Data Imprecise

The cost data used in the analysis were not precise enough to allow a comparison of the relative costs of the options. For example, VA officials said they developed an estimate for the cost of a medical center in Davis based on the 400-bed Palm Beach, Florida, medical center currently under construction rather than using their space criteria or historical data to

develop a more precise estimate. The resulting cost estimates were not adjusted to account for the smaller size of the Davis hospital.

Similarly, VA based its cost estimates for the Martinez construction work on the site renovation plans for the seismic retrofit, renovation of the existing hospital, and construction of additional facilities, including the clinical addition and the parking garage. VA adjusted the estimate and eliminated the cost of the parking garage for smaller hospital options considered in the site selection analysis. VA did not, however, adjust the data to reflect the lower costs that would be incurred in renovating an empty hospital.

In addition, VA could have improved its analysis by using life-cycle costing. This involves evaluating costs based on the expected life of a facility, the projected costs associated with operating it, and the services the facility is expected to provide.

Effects of Environmental Impact Requirements Not Considered

Although VA's July 1991 task force study noted that completion of the replacement medical center could be delayed by environmental requirements, it did not contain any analysis to determine the extent of the potential delays. For example, the Davis site is currently agricultural land, and California has strict regulations governing the conversion of agricultural land to other uses. VA officials said that they would expect legal battles over construction of a medical center in Davis because of these regulations. Although an environmental impact study may also be required for construction/renovation at the Martinez site, significant delays are less likely to occur because it does not involve a change in land use.

Inappropriate Availability Criteria Used

The site selection analysis scoring criteria allotted twice as many points for the availability of inpatient hospital care as for outpatient care. This is inconsistent with a VA strategic goal to shift its focus from inpatient care to outpatient care, community services, home-based services, and nursing home care. The two options that finished just below the Davis medical center option that was selected involved 120-bed hospitals with expanded outpatient clinics called "Ambulatory Care Centers of Excellence." Because the scoring data were discarded, we could not determine whether placing greater emphasis on outpatient care would have resulted in a different option being selected.

Site Selection Analysis Biased Against Martinez

The VA site selection analysis for the Martinez catchment area was biased against keeping the medical center in Martinez because it

- excluded options for limited renovation of the Martinez center,
- overestimated the costs of the Martinez options by basing them on renovation of an occupied building, and
- used accessibility criteria that favored the Davis site.

Limited Renovation of Martinez Not Considered

Less extensive renovation of the Martinez medical center that could have been done at lower cost and given VA a functional medical center was not included in the site selection analysis. For example, one option could have been to correct the seismic deficiencies at the medical center. Such corrections would, as discussed on page 14, cost between $15 and $40 million and would have left VA with a functional hospital. The obvious disadvantage of this option is that it would not correct the long-standing patient care deficiencies, such as 16-bed wards. Other options, however, could correct the seismic and life safety deficiencies without building the clinical addition. For example, the 1990 renovation plan placed the cost of completing the seismic retrofit and renovating the hospital at $92 million.

Cost Estimates Based on Occupied Hospital

The cost figures used to assess the Martinez options in the site selection analysis were overstated because they were based on renovating an occupied hospital. In an occupied hospital, special construction techniques must be used to reduce noise and dust. In addition, a complex construction phasing plan must be followed to reduce patient care disruption. Both the architect and the engineer who developed the estimates used in the options analysis indicated that renovating an unoccupied hospital would require less time and money. Neither the engineer nor the architect could readily quantify the savings that would result from renovating an empty building, but both believed that savings in both time and costs would be significant.

Inappropriate Accessibility Criteria Used

VA used accessibility criteria that would not necessarily yield optimal veteran access to health care. Accessibility was judged based on the percentage of veterans within 60 minutes driving time of care. Because Davis is between the two population centers in the Martinez catchment area (Sacramento and East Bay), which are more than 60 minutes away from each other, it was the favored option under the accessibility criteria. This is because hospital care would become more accessible to veterans

from Sacramento while still being within 60 minutes of many veterans from the East Bay.

For many veterans seeking outpatient care, however, accessibility would decline if the medical center is constructed in Davis. Under the Davis option, the outpatient clinic currently operating in Sacramento would be closed, and Sacramento area veterans would have been expected to travel an additional 34 miles to obtain outpatient care at Davis. Because Davis is within 60 minutes of Sacramento, the accessibility criteria did not identify this decline in accessibility for Sacramento area veterans.

Patients from the Sacramento area who traveled to Martinez for inpatient care and for those outpatient care services not available at the Sacramento clinic would have better access if the new medical center was constructed in Davis. However, this gain would be offset by the reduced accessibility for patients in the East Bay who would have to travel to Davis or to Bay Area VA hospitals for similar type care available at the new Martinez clinic.

In addition, VA officials indicate that many veterans who come to the Martinez medical center outpatient clinic do so because they cannot get appointments in the Sacramento clinic. In their case, a larger Sacramento clinic would improve accessibility more than a medical center in Davis.

VA and DOD Have Not Developed Long-Range Plans for Sacramento/Bay Area

Declining veteran populations, military base closures, and seismic deficiencies in both VA and DOD hospitals could affect the long-range needs for health care facilities in the Bay Area and Sacramento. While the situation is in a state of flux, it is important to consider, to the extent possible, the long-range needs and capabilities of both agencies in selecting a site(s) for the replacement hospital.

Many Bay Area and Sacramento DOD hospitals are facing significant changes because of either seismic deficiencies or changing missions. For example, the hospital at Mather Air Force Base needs renovation to correct seismic and functional deficiencies. The extent of the renovations will affect DOD's capability to provide care to both military retirees in the Sacramento area and personnel from nearby McClellan Air Force Base. Similarly, the future of Letterman Army Medical Center in San Francisco is uncertain because of the closure of the Presidio Army Base. Like the hospital at Mather, Letterman has uncorrected seismic problems. Significant seismic problems were also found during a 1990 study of Bay Area military hospitals. For example, consultants who performed the

study recommended that the Oakland Naval Hospital in Oakland be torn down and rebuilt.

Like DOD, VA has several hospitals in the Bay Area that have seismic deficiencies. The Palo Alto medical center was damaged during the October 1989 Loma Prieta earthquake, and plans are being developed for its renovation. Similarly, the San Francisco and Livermore VA medical centers have uncorrected seismic problems.

These problems create numerous opportunities for joint ventures and could improve the ability of both agencies to serve their beneficiary populations. They also create the opportunity to lessen the impact on patient care that will accompany efforts to correct seismic deficiencies. For example, joint ventures between VA and the Navy in the East Bay area and between VA and the Air Force in the Sacramento area could improve service to beneficiaries in both locations.

Agency Comments and Our Evaluation

In his September 25, 1992, letter, the Secretary of Veterans Affairs said that our report does not

- adequately evaluate complex policy and health care delivery issues;
- acknowledge that time constraints surrounding the emergency closure decision somewhat precluded maintaining a meticulously documented paper trail supporting its decision, which VA continues to believe was appropriate;
- acknowledge VA's efforts to establish an integrated system of ambulatory, inpatient, and extended care services following the closure of the Martinez medical center; and
- include any of the additional information passed on to us since the completion of the 1991 task force study.

VA States That GAO Does Not Recognize Important Issues

VA expressed concern that this report does not adequately recognize (1) the substantial programmatic, financial, and demographic analyses surrounding the decision to close the Martinez medical center and (2) the very complex public policy and health care delivery issues surrounding the decision to close and replace the Martinez medical center.

We evaluated all studies and analyses relating to the closure and replacement of the Martinez medical center made available by VA. These included demographic studies for the area as well as four separate 1991

studies of the Martinez medical center replacement issue conducted by medical center staff, regional office staff, and a central office appointed task force. As discussed on pages 28 to 29, the primary programmatic and financial analysis VA cited to support its decision to relocate the Martinez medical center to Davis was flawed and biased against rebuilding or renovating the Martinez medical center. In addition, the study did not, as noted on page 5, evaluate socioeconomic factors that could be important in determining the location of the replacement medical center. Further, as discussed below, the lack of detailed analyses and a decision paper led us to question the basis for the emergency closure decision. VA provided no new analyses to support that decision.

VA did not identify any specific public policy or health care delivery issues not addressed in our report. Our report discusses several policy and delivery issues that were not adequately addressed by VA in its closure and replacement decisions. For example, issues such as DOD-VA joint ventures and socioeconomic characteristics of the veteran population were identified as factors that should be addressed in evaluating the merits of alternative locations for the replacement medical center. Similarly, our report discusses the potential implications of the emergency closure decision on patient care, congressional oversight, and funding of a replacement medical center, factors that do not appear to have been fully evaluated by VA in reaching the decision.

VA Maintains That Emergency Closure Was Justified

The Secretary said that his foremost concern was and still is the safety of patients and staff in the event of an earthquake. The Secretary said that before making his decision to close the Martinez hospital, he received in-depth briefings, including the latest evaluation from VA's seismic consultants, who later submitted their positions in writing. The Secretary said that time constraints prevented VA from maintaining a meticulous paper record of the closure decision. He said that nothing that has happened since those briefings has caused him to change his mind.

We did not intend to imply that the Secretary's concerns were not legitimate or that the center should not have been closed on an emergency basis. We did not independently assess the seismic risks at the Martinez medical center and therefore take no position on whether the center should have been closed. We believe, however, that for such an important decision as the closure of a medical center affecting 400,000 veterans, there should be some written record evaluating the risks posed by seismic problems at the center. Instead, the written record focuses more on

(1) how VA will justify closing the Martinez medical center while leaving other medical centers with seismic deficiencies open and (2) where the replacement medical center will be constructed.

VA did not provide additional information concerning the emergency nature of the decision or the reasons for it with its comments. As a result, the basis for the emergency closure remains unclear.

After we completed our field work, a task force from the Woodrow Wilson School of Public Policy and International Affairs, Princeton University, commissioned by the Senate Committee on Veterans' Affairs, questioned the emergency closure. Based on its study (which included a review of VA's seismic consultants' reports), the Woodrow Wilson School reported that while "risks exist to the Martinez medical center, we found that when compared to other VA facilities it is neither so imminent nor so life threatening that closure bypassing Congressional oversight is warranted." The report further stated that "[we] found that the combination of location in an active seismic zone, site geology, and building structure do not warrant emergency closure within 120 days."

VA States That Its Efforts to Meet Veterans' Needs Are Not Acknowledged

VA has, the Secretary stated, taken numerous steps that demonstrate that it is, above all, concerned with the health care needs of the veteran patient population. These measures demonstrate that VA's decision to close the medical center was not an attempt, as GAO suggested, to circumvent the Congress. These actions, the Secretary stated, included

- constructing a 78,000-square-foot outpatient clinic at Martinez, expected to open by November 1992;
- making an in-depth reevaluation of the replacement hospital site options;
- developing a space program and preliminary concepts for a 120-bed nursing home to be constructed on the Martinez campus;
- expanding capabilities at the Oakland clinic by leasing nearby space for mental health programs;
- retrofitting seismically safe buildings at the Martinez campus to provide uninterrupted ambulatory care services to East Bay veterans;
- reestablishing administrative functions in leased space; and
- implementing a rational and dynamic plan for the downsizing and closure of inpatient operations, guided by clinical input concerning quality and level of care available to the patient.

The actions VA cites are positive steps to overcome the patient care problems that occurred following the closure of the Martinez medical center and are discussed in our report. Most of the actions cited, however, were either (1) taken after problems were identified by GAO, the Congress, or Martinez medical center staff, (2) implemented later than anticipated in the transition plan, or (3) unrelated to the health problems associated with the medical center closure (e.g., plans to establish a VA nursing home in Martinez are unrelated to the medical center closure because there was no nursing home before the closure).

As discussed on pages 20 to 25, the emergency closure of the Martinez medical center jeopardized veteran health care. This was because VA (1) did not have a system in place to refer inpatients to other VA hospitals, (2) issued conflicting guidance on how to handle emergency patients, (3) did not control the departure of medical center staff, thus allowing the loss of staff to dictate the pace of the closure, and (4) did not adhere to its own transition plan for providing patient care.

Further, available data suggest that veterans' use of VA inpatient services has declined since the closure. VA cited no efforts to assess the adequacy of health care available to veterans in the Martinez catchment area during the interim period before a replacement medical center is operational.

VA Argues That Our Report Is Based on Incomplete Data

Our report, VA stated, is based on an outdated study and includes none of the additional information VA has passed on to us since completion of the 1991 task force study. Specifically, VA said that we did not include (1) a November 25, 1991, VA response to questions we posed concerning the cost data used in assessing the options for retrofitting/replacing the Martinez medical center and (2) a preliminary site visit report from its February 1991 site selection visits.

Our draft report was based on all of the information VA made available to us, including the November 25, 1991, letter. We did not, however, include information from the preliminary site visit report because we were told by a member of the site selection team that no report was prepared.

The preliminary site visit report raises further concerns about bias in the July 1991 task force report. This is because the preliminary site selection analysis scored the Sacramento site about 17 percent higher than the

highest scoring Davis site. The July 1991 task force report, however, did not include a Sacramento site.

Comments From the Department of Defense

HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

SEP 17 1992

Mr. David P. Baine
Director, Federal Health Care
Delivery Issues
Human Resources Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Baine:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "VA HEALTH CARE: Closure and Replacement of the VA Medical Center in Martinez, California," dated July 29, 1992 (GAO) Code 406038)/OSD Case 9119).

The DoD has reviewed the draft report and concurs without further comment. (Technical comments were separately provided to the GAO staff.) The Department appreciates the opportunity to review the draft report.

Sincerely,

Enrique Mendez, Jr., M.D.

Comments From the Department of Veterans Affairs

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

SEP 25 1992

Mr. David P. Baine
Director, Federal Health Care
Delivery Issues
U. S. General Accounting Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Baine:

I am pleased to respond to your draft report, VA HEALTH CARE: Closure and Replacement of the VA Medical Center in Martinez, California (GAO/HRD-92-134). This report discusses the major issues involved in my decision to close the VA Medical Center (VAMC) in Martinez, California. I cannot overstate the importance of this emergency decision. Your report focuses on the 1991 Secretary's Task Force Report and offers additional factors for the Department of Veterans Affairs (VA) to consider. However, it stops short of subsequent meetings we had with GAO evaluators, and our previous written response to questions they submitted.

My foremost concern was and still is for the safety of patients and VA staff in the event of an earthquake. This was and is a legitimate concern. The damage the Loma Prieta earthquake caused at VAMC Palo Alto and serious seismic problems at Martinez speak eloquently to this issue. Furthermore, since there is no reliable way to forecast seismic activity, the need to place patient and employee safety above all other considerations becomes even more critical. Before making my decision to close Martinez, I received in-depth briefings, including the latest evaluation from our seismic consultants, who later submitted their positions in writing. Based on all the information at my disposal, I felt that closing the VAMC was by far the wisest course of action. Nothing since then has caused me to change my position.

I am concerned over several issues GAO has raised. The report suggests a seismic retrofit project as a possible short or long term solution. Nevertheless, as the report states, such a solution would not address serious patient privacy and functional problems. Given current budgetary constraints, a short term retrofit would hardly be an economically wise option. The cost, $15-$40 million, is substantial for a temporary fix. Furthermore, this short term solution does not begin to address long term concerns such as patient privacy needs and serious functional issues. Neither does it answer our long term concerns regarding access to care for veterans in Northern California. I believe such a shortsighted solution would be a clear misuse of limited public resources.

Regrettably, GAO does not sufficiently address the very complex public policy and health care delivery issues surrounding this decision. Neither does it acknowledge the circumstances and time frames that somewhat precluded maintaining a meticulously documented paper trail of the decision. Nor does it acknowledge VHA's efforts to establish an integrated system of ambulatory, inpatient and extended care services following the VAMC Martinez closing and in

the future. Based on the reevaluation of the site options, I believe VA will be able to provide this integrated system to meet the needs of northern California veterans.

The Veterans Health Administration (VHA) has taken numerous steps that I believe demonstrate VA is, above all, concerned with the health care needs of the veteran patient population. These measures demonstrate VA's decision to close the medical center was not an attempt to circumvent the Congress, as GAO suggests. Specifically, VA took the following actions during the same 9 month period in which GAO prepared this report:

o designed and constructed a 78,000 square foot outpatient clinic at the Martinez campus, anticipated to open by November 1992,

o conducted an in-depth reevaluation of the replacement hospital site options (including VA/DoD joint ventures, dual-site alternatives, and Martinez rebuild options),

o developed a space program and preliminary concepts for a 120 bed nursing home care unit to be constructed at the Martinez campus (design/build award expected in 1993),

o expanded the Oakland outpatient clinic capabilities by leasing nearby space for mental health programs (activated in March 1992),

o retrofitted seismically safe buildings at the Martinez campus to provide uninterrupted ambulatory care services to East Bay veterans,

o reestablished administrative functions in leased space while maintaining service to the network of clinics and support for VHA's Western Region and Information Resources Management Support Center; and,

o implemented a rational and dynamic plan for the downsizing and closure of inpatient operations, guided by clinical input concerning quality and level of care available to the patient.

Regrettably, this report is based on an outdated study and includes none of the additional information VA has passed on to GAO since completion of the 1991 task force study. Enclosed are:

o detailed comments to inaccuracies in the report,

o GAO's November 7, 1991 questions for clarification of cost data used in assessing options for retrofitting/relocating VAMC Martinez

o our November 25, 1991, replies to GAO's questions, and

o a preliminary site visit report from our February 1991 site selection visits.

It is important to note that this issue has probably been analyzed and reviewed more than most other VA programs and projects. The various options have been through substantial programmatic, financial, and demographic analyses. Unfortunately, this significant point is not recognized in the GAO report. I trust this information will assist you in clarifying my position.

Thank you for the opportunity to comment on your report.

Sincerely yours,

Edward J. Derwinski

Enclosures
EJD/vz

Evaluation of VA Technical Comments

In the following sections, we present VA's technical comments, followed by our evaluation of each. Page references have been changed to reflect the page numbers in the final report.

VA Comment 1

On page 6 - The environmental impact discussion is misleading. VA did consider the environmental impact of the various site alternatives in the original report. For instance, VA reported that both the Sacramento and Davis sites would require the Environmental Impact Statement.

GAO Evaluation

While VA indicated in its July 1991 task force report that environmental impact statements would have to be prepared for the Davis sites, there was no effort to gather data on the potential impact on the environment and the potential costs and delays that might be experienced in addressing environmental issues. Further, VA incorrectly states that the task force report indicated that the Sacramento sites would require an environmental impact statement. The task force report did not include a Sacramento site.

VA included with its comments an undated preliminary site visit report from VA's February 1991 site selection visits to Davis, Sacramento, Travis Air Force Base, and Mather Air Force Base. The preliminary report indicates that among the criteria used to score the physical characteristics of the five sites evaluated were such environmental factors as wetlands, groundwater limitations, soils, and potential for toxic/chemical wastes. The preliminary report did not, however, contain any data on the results of the analysis other than an overall point score on physical characteristics, both environmental and nonenvironmental.

VA Comment 2

On page 7 - The suggestion that VA consider using VAMC Martinez as swing space is not viable for several reasons. The time frame to complete the seismic corrections would not be significantly shorter than the construction of a permanent replacement hospital. Furthermore, while GAO considers construction cost for a minimal seismic upgrade of the facility, there is no consideration of the impact costs associated with moving staff and patients from the Martinez hospital to an interim facility so that seismic upgrading of a vacant building can occur. Finally, there is already a plan in effect to provide for the hospital needs of the Martinez veteran population.

GAO Evaluation

VA apparently misunderstood our suggestion that consideration be given to making temporary repairs to the already vacant Martinez medical center and using it as swing space until a permanent replacement is completed. VA's current plans for providing inpatient care to veterans affected by the closure of the Martinez medical center at other medical centers in adjoining catchment areas have apparently resulted in a 75-percent decline in inpatient admissions of veterans from the Martinez catchment area. Accordingly, we believe VA needs to reevaluate its plans to rely on hospitals in other catchment areas to meet the inpatient needs of Martinez area veterans. Among the options that could be considered would be temporary repairs to the Martinez medical center, contracting with private sector hospitals in the Martinez catchment area, and sharing agreements with DOD facilities in the catchment area (Oakland Naval Hospital, Travis Air Force Base, and Mather Air Force Base).

It generally takes VA over 10 years to plan, design, and construct a new medical center. In our opinion, retrofitting the vacant Martinez hospital could be completed much more quickly.

VA Comment 3

On page 12 - The scope and methodology discussion should reference additional information passed on to GAO evaluators (see enclosed copy of November 25, 1991, letter from the Deputy Assistant Secretary for Facilities) and a subsequent meeting in San Francisco in which VA agreed to respond to many of GAO's issues. [GAO note: Copy of VA's letter not included in this report.]

GAO Evaluation

The scope and methodology section has been revised to specifically mention the November 25, 1991, letter from the Deputy Assistant Secretary for Facilities.

The meeting with VA officials in San Francisco was not, however, a part of our methodology. At the request of VA officials, we agreed to discuss with them our views on the factors that should be considered in the reevaluation of siting options for the replacement medical center. The meeting was held to assist VA in planning its reevaluation, not to help us identify factors. Similarly, we provided an advance draft of the factors to the Assistant Chief Medical Director for Resource Management and to the Deputy Secretary to help ensure that VA was able to fully consider our views in completing its reevaluation.

VA Comment 4

On page 14 - The discussion on the low end seismic correction costs ($15 to $40 million) should reflect the many serious health care deficiencies in the old Martinez Hospital (Building 1). The cost information GAO attributes to the Deputy Assistant Secretary for Facilities should be clarified to indicate that the $40 million would only correct seismic problems. This would still leave the hospital with serious life safety problems and very likely result in a non-functional building.

GAO Evaluation

We indicate on page 15 that the low end seismic correction costs would correct only the seismic deficiencies in the hospital and not the functional deficiencies. The section beginning on page 15 discusses the many space and life safety deficiencies at the Martinez medical center and the expansion of the renovation project to correct these deficiencies. We do not agree with VA's assertion that correcting only the seismic deficiencies would very likely result in a nonfunctional building. The firm that prepared the study on the proposed retrofit for VA advised us that the retrofit hospital would be a safe and workable facility.

VA Comment 5

On page 15 - The estimate of $313 million referenced is associated with option 2A in the 1991 Task Force Report. This cannot be considered as the original seismic correction and renovation project that had been cancelled earlier. This estimate also includes a Sacramento outpatient clinic and nursing home that were never part of the original renovation and seismic correction project.

GAO Evaluation

We have clarified the final report to show that the $313 million estimate was developed as part of the July 1991 task force report. The report already pointed out that the $313 estimate included nursing homes and a Martinez outpatient facility that were not a part of the original renovation and seismic correction project.

VA Comment 6

On page 17 - The information regarding the VA Site Evaluation Team is not accurate. The team did prepare a report of its activities. A copy of their draft report is enclosed.

GAO Evaluation

The undated, unsigned preliminary site report was not given to us during our audit work although we twice asked whether the site review team had

prepared a report on the relative merits of the sites visited. A member of the site selection team told us a site report was not prepared. We have revised the final report to show that a preliminary site report favoring a medical center in Sacramento over the Davis sites was prepared but that no final report was issued.

VA Comment 7

On page 22 - GAO reports VA's renovation of the education building for use as an outpatient clinic contradicts VA's transition plan for the Martinez medical center. While this is correct, the issue should be what VA has accomplished rather than what initial reports indicated were possible. The renovation of the education building demonstrates VA's resolve in providing outpatient care to the veteran population in the Martinez area.

GAO Evaluation

We agree with VA's ultimate decision to renovate the education building for use as an outpatient clinic. We believe, however, that VA should have made the decision earlier rather than waiting until 1 month before the closure of the Martinez outpatient clinic to decide that the education building could be used for outpatient care. VA decided to renovate the education building only after plans to lease space fell through.

VA Comment 8

On page 26 - The implication that VA did not use its own planning models when developing options for the replacement medical center is not accurate. VA planning models were used to develop all projections for all of the options. Differences in bed numbers were based on the ability to size facilities in several options in different ways. In addition, the reevaluation of the replacement hospital site options includes all of the selection factors GAO outlines in the report. In fact, although it is not evidenced in the report, VA worked very closely with GAO in addressing these factors in the reevaluation.

GAO Evaluation

VA itself indicated it used an alternative to its planning model. According to the task force report "[a]n alternative method to the ... planning model is appropriate for sizing the Sacramento/Davis facility".

The Martinez options paper included alternatives with several widely different bed levels. For example, as discussed on page 26, one of the options VA considered was to construct no hospital beds in a catchment area of over 400,000 veterans. Another option was to construct 338 beds in

the same catchment area. VA's sizing model, however, indicated that 243 beds were needed in the catchment area. We are not aware of any planning model that would suggest that no hospital beds are needed in a catchment area of over 400,000 veterans.

We did not, as VA suggests, work closely with VA on its reevaluation. We met with VA to discuss the factors we believed should be considered in the reevaluation of sites, but had no involvement in the reevaluation itself. Nor has VA shared the results of the reevaluation with us other than to tell us that sites at Travis Air Force Base and Sacramento (neither of which was considered in the July 1991 task force report) were ranked highest. VA officials, however, told us that the factors we identified have been considered in the reevaluation.

VA Comment 9

On page 26 - In November 1991, the Deputy Assistant Secretary for Facilities forwarded information on cost data development. We believe the cost data used for the task force study are accurate for the level of detail available.

GAO Evaluation

We considered the Deputy Assistant Secretary's November 1991 letter in developing our position on the preciseness of the cost estimates. For example, the Deputy Assistant Secretary advised us that the estimated $23 million cost for sitework and the energy plant at the Martinez medical center was based on historical experience and not on any particular design or architect/engineering firm estimate. He advised us that VA considered the $14 million estimate developed by an architect/engineering firm and included in VA's fiscal year 1991 budget submission as too low.

Similarly, the Deputy Assistant Secretary's comment in the November 1991 letter that VA assumed that the Martinez hospital would be vacant when renovated led us to question the preciseness of the cost estimates because those estimates were based on the assumption that VA would be renovating an occupied hospital. The Deputy Assistant Secretary later agreed with us during the February 5, 1992, briefing of VA officials that the estimates overstated the cost of renovating the Martinez medical center.

VA Comment 10

On page 27 - The discussion on the Environmental Impact Statement (EIS) should note that VA did consider the environmental requirements in

preparation of the project scheduled in the task force study. A standard schedule for an EIS was used for those options requiring an EIS.

GAO Evaluation

For each Davis option included in the July 1991 task force report, VA listed as a disadvantage of the site the possibility of delay because of the need to complete an environmental impact statement. There was no estimate of the delays or assessment of potential environmental problems. We have revised the report, however, to indicate that VA recognized that completion of environmental impact statements could delay completion of the project.

VA Comment 11

On page 28 - Once again, VA did not consider a limited renovation of Martinez because, after spending up to $40 million, we would have been left with a hospital with serious life safety deficiencies at best and very possibly a non-functional building.

GAO Evaluation

As stated on pages 4 and 28, we recognize the obvious disadvantage of correcting only the seismic deficiencies at the medical center and did not suggest that option as a viable long-term alternative. We continue to believe, however, that other options, such as correcting the seismic and life safety deficiencies and most serious functional limitations without building the clinical addition should be assessed.

The September 1990 facility development plan for the Martinez medical center indicates that the building is sound and should be reused. The study indicates that tearing down the facility or moving to a new location are not economically sound options given the good condition of the facility. Accordingly, we continue to believe one of the options VA should be considering is for limited renovation of the Martinez medical center. Even the most limited renovation of the medical center would, as discussed on page 15, leave VA with a functional building.

VA Comment 12

On pages 29-30 - VA has considered long range VA/DOD needs. Although we do not consider Letterman Army Medical Center a viable option for the Martinez service area veterans, we believe that opportunities to use Letterman for ... San Francisco area veterans do exist either as a joint venture with the Navy or independently. Similarly, after consideration of the site, we do not believe the Air Force's Mather hospital is a viable option for the replacement medical center due to capacity, seismic, and

safety limitations. However, we do believe, outpatient and nursing home care services should be strongly considered for the Mather site and evaluated against other potential sites in the Sacramento area depending on the site selected for the replacement facility.

GAO Evaluation

Although VA's comment indicates that it assessed the potential for using military facilities to meet VA's health care needs in the Martinez catchment area, VA has not worked with DOD to develop long-range plans to meet the needs of both agencies in the Sacramento/Bay area. VA and DOD should look at their combined needs for the area and decide what type of joint construction or sharing plan could best meet those needs. VA has inquired about capacity at DOD hospitals but has not sat down with DOD to look at their joint health care needs.

We agree with VA that Letterman Army Medical Center is not a viable option as a replacement for the Martinez medical center. We note, however, as discussed on page 26, that VA included Letterman as one of the options in its July 1991 task force report.

Major Contributors to This Report

Human Resources Division, Washington D.C.

James Linz, Assistant Director, (202) 512-7116

San Francisco Regional Office

Thomas P. Monahan, Evaluator-in-Charge
Kathy Colgrove-Stone, Evaluator
Kristin Jordahl, Evaluator
Donald J. Porteous, Evaluator
Jonda VanPelt, Evaluator

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