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Report to Congressional Requesters

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VA HEALTH CARE

Assessment of Surgical Services at Two Medical Centers in the Southwest

GAO/HRD-90-6

GAO

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Human Resources Division

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December 14, 1989

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

The Honorable Dennis DeConcini
Committee on Veterans' Affairs
United States Senate

The Honorable G.V. Montgomery
Chairman, Committee on Veterans' Affairs
House of Representatives

The Honorable Bob Stump
Ranking Minority Member
Committee on Veterans' Affairs
House of Representatives

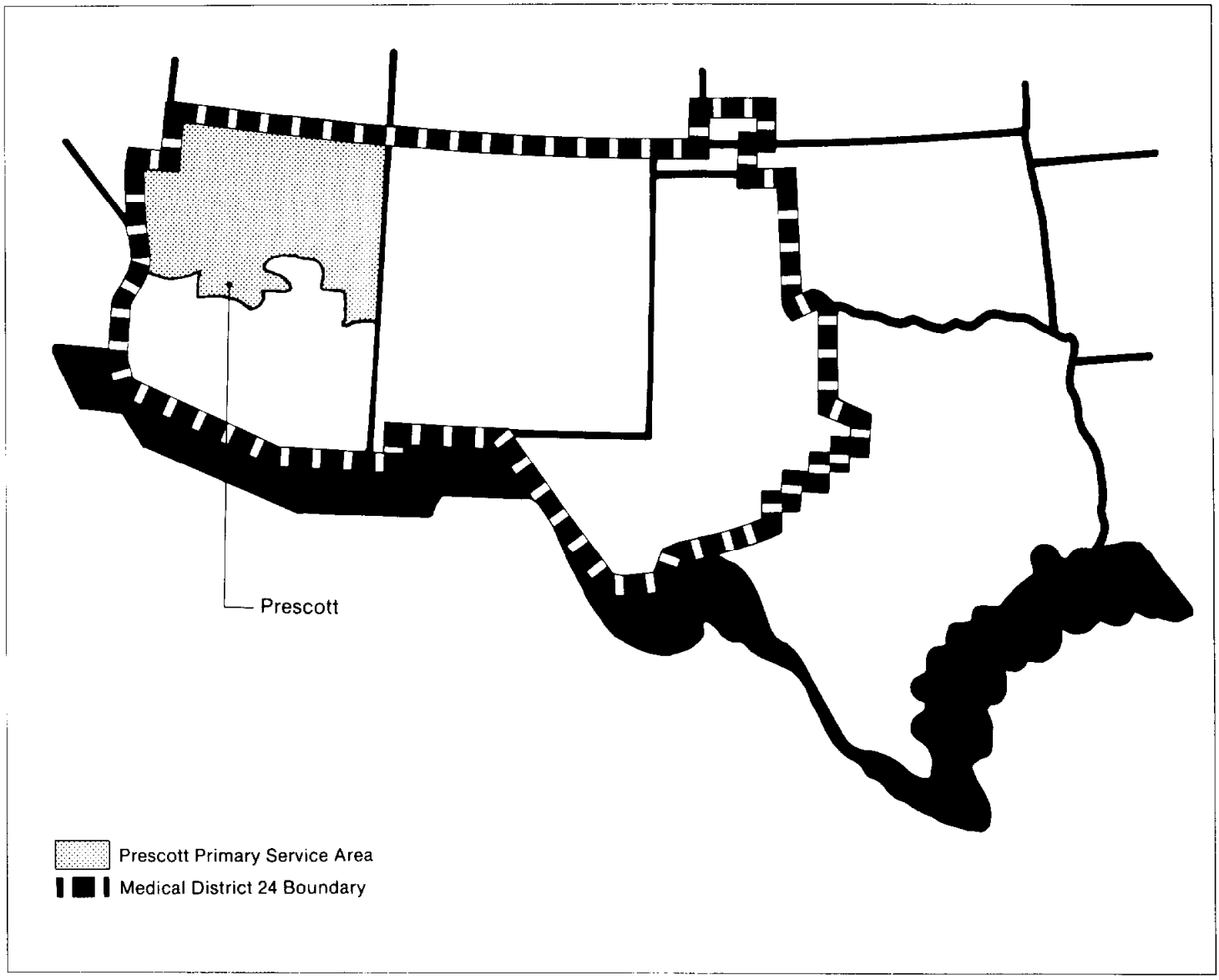
The Honorable Gerald B.H. Solomon
House of Representatives

In 1985, the Department of Veterans Affairs (VA) instructed its medical districts to review medical centers' performances and, when appropriate, identify services that should be consolidated or eliminated. In response, VA's Medical District 24 recommended that inpatient surgical services be closed at two medical centers—Prescott, Arizona, and Big Spring, Texas. After review, VA decided to close the inpatient surgical service at Prescott and retain service at Big Spring. At your request, we assessed whether VA's decisions were reasonable.

Results in Brief

VA's decisions to close inpatient surgical services at the Prescott Medical Center and retain them at the Big Spring Medical Center appear reasonable. VA officials relied on professional judgment to determine an appropriate mix of services at these facilities. They considered a wide range of factors, including such critical elements as workload and availability of alternative locations for inpatient surgery. VA's workload analyses, primarily those of current and projected use, showed that inpatient surgical services at both centers were underutilized—a key indicator that service delivery changes may be needed. In both cases veterans could receive needed surgical services at other medical centers. The expected

Figure 1: Prescott Primary Service Area (1985)



The Big Spring Medical Center is located approximately 300 miles west of Dallas, Texas. In fiscal year 1985, the Big Spring Medical Center consisted of a 209-bed hospital with an average daily occupancy of 151. It served 3,277 inpatients and recorded 25,396 outpatient visits. The Big Spring Medical Center operated 46 surgical beds and maintained an average daily occupancy of 24 patients. In fiscal year 1985, about

Decisions Made as Part of VA's Health Care Planning Process

In their decisions on the Prescott and Big Spring Medical Centers, VA officials relied primarily on professional judgment regarding the implications of acceptable surgical workload levels, types of procedures to be performed, and maximum distances veterans were to travel when referred for nonemergency surgery. The decisions were made as part of VA's planning process, which has been in place since 1981. This planning process is referred to as Medical District Initiated Program Planning (MEDIPP). It established the medical districts as the focal points for assessing veterans' health care needs and developing strategies for meeting them. The process contains seven basic phases:

1. The VA's Chief Medical Director issues planning guidance.

2. A district planning board develops a plan for its facilities.

3. A district executive council reviews the plan and recommends service delivery changes.

4. A regional planning board reviews the districts' plans and prioritizes recommended service changes for the regional director's consideration and approval.

5. A headquarters review board assesses regional plans and prioritizes recommendations system-wide.

6. The Chief Medical Director decides which recommendations are to be forwarded for final approval.

7. The Secretary of Veterans Affairs decides which recommendations are to be implemented.

As part of the 1985 planning process, the Medical District 24 Planning Board and Executive Council recommended specific changes for three of the six medical centers in the district, including those in Prescott and Big Spring. The recommended changes at the two centers were to discontinue inpatient surgery and enhance outpatient and extended care services. In June 1986, the then VA Administrator concurred with the assessment, thereby allowing district officials to develop the proposals further. The Prescott Medical Center performed its last inpatient surgery in August 1986. In August 1987, the Chief Medical Director deferred action on the recommendation to close inpatient surgery at the Big Spring Medical Center and recommended that the Prescott Medical Center's inpatient surgical unit remain closed. VA established a surgical

Center, his assistant, and one member of the surgical task force. Finally, we discussed standards for surgery with an official of the American College of Surgeons and GAO's Chief Medical Advisor. We conducted our review between October 1988 and August 1989. Our work was conducted in accordance with generally accepted government auditing standards.

Inpatient Surgical Workload

VA considered the two centers' past, current, and future workloads as major factors in its decisions regarding surgical services. VA's workload assessments were primarily based on discharge data from its Patient Treatment File—the primary demographic, clinical, and workload database for VA's inpatient activities.[3] The data showed a decline in use of inpatient surgical services by Prescott area veterans at the Prescott Medical Center and an increase in use by Big Spring area veterans at the Big Spring Medical Center. VA's data also showed both Prescott and Big Spring area veterans were increasing their use of inpatient surgical services at other medical centers.

Prescott Medical Center

Almost all of the patients from Prescott's primary service area who received VA inpatient surgical services in fiscal years 1983 through 1985 were treated at the medical centers in Prescott, Phoenix, Tucson, and Albuquerque. VA's data showed a 31-percent decline in the number of veterans using these services at the Prescott Medical Center, as table 1 shows. Prescott area veterans increased their use of inpatient surgical services at the Phoenix and Tucson Medical Centers. Overall, there was a 7-percent decline in the number of Prescott area veterans using these four centers in that period.

Table 1: Inpatient Surgical Discharges for Prescott Area Veterans

Fiscal year	Prescott	Phoenix	Tucson	Albuquerque
1983	702	200	136	17
1984	624	257	111	11
1985	482	326	153	15
Percent change 1983-85	−31	63	13	−12

Source: VA Patient Treatment File.

[3]Other data sources included the Annual Narrative Reports of the Surgical Service, the log of procedures performed in the surgical suite, and VA and non-VA quality-assurance reviews of inpatient surgery.

surgical workload was substantially lower relative to the complexity of the workload in District 24.

In our review of staffing levels, we found that, while there had been fluctuation in the number of surgical staff at the Big Spring Medical Center, there had been a net decrease similar to that found at the Prescott Medical Center. In fiscal year 1985, there were 2.8 full-time-equivalent positions filled—down from the fiscal year 1980 peak of 6.7 full-time-equivalent positions. By fiscal year 1987, only 1.8 full-time-equivalent positions were filled. Since that time, the Big Spring Medical Center has increased emphasis on surgical services by hiring additional surgical staff. In fiscal year 1988, the Big Spring Medical Center had 2.7 full-time-equivalent positions on the surgical staff. At this time, the surgical task force concluded that if the Big Spring Medical Center's inpatient surgical unit were to remain open additional staffing would be needed. In fiscal year 1989, there were 4 full-time-equivalent positions filled on the surgical staff, including a general surgeon, thoracic surgeon, urologist, and anesthesiologist. As of September 1989, the Big Spring Medical Center was conducting a search to hire an opthamologic surgeon.

In fiscal year 1985, the Big Spring Medical Center's inpatient surgical service was underutilized. It had an average daily occupancy of 24 patients in its 46 surgical beds. District planners estimated that the Big Spring Medical Center would need 32 surgical beds in 1990, and that the number of beds needed would increase to 43 in 2005, 3 fewer than existed in 1985. As in the case of the Prescott Medical Center, the planners assumed that all the veterans in the Big Spring Medical Center's primary service area needing surgical care would go to Big Spring for these services. In fiscal year 1985, however, 54 percent of Big Spring area veterans discharged from inpatient surgical services received the services at the Big Spring Medical Center and 46 percent were discharged from other centers.

Access to Alternative Locations for Inpatient Surgery

VA considered veterans' access to inpatient surgical services as an important factor in its assessment of these two centers. VA determined that the expected travel burden imposed by eliminating these services was far greater for Big Spring area veterans than for Prescott area veterans.

Among the key variables considered were (1) distance and the availability of transportation to other medical centers and (2) the ability of the other centers to provide surgical services to Prescott and Big Spring area

The Phoenix Medical Center is 96 miles from Prescott and had 124 surgical beds in fiscal year 1985. The Phoenix Medical Center's surgical bed section had an average of 83 beds occupied during that year. The medical center in Tucson, Arizona, 212 miles from Prescott, had 115 surgical beds and an average daily occupancy of 84 surgical patients.

In assessing the impact of distance and availability of transportation on access to alternative locations for inpatient surgery, VA took special note of the 96-mile distance between the Prescott and Phoenix Medical Centers. VA concluded that this distance afforded Prescott area veterans access to the Phoenix Medical Center for needed services. VA also considered that about one-half of the Prescott area veterans discharged from inpatient surgery were already receiving those services at the Phoenix, Tucson, and Albuquerque Medical Centers, as shown in table 1.

VA also determined that any increased surgical workload at the Phoenix Medical Center caused by closing the Prescott Medical Center's inpatient surgical unit would be less than 10 percent of the total workload at the Phoenix Medical Center. Both Chiefs of Surgery on the task force concluded that waiting times for elective surgery at these medical centers were not unreasonable. The Phoenix and Tucson Medical Centers reported to the surgical task force that patients requiring emergency surgery were admitted immediately.

District 24 also considered the need to maintain veterans' access to emergency surgery in the Prescott area. As a result, in 1986, the Prescott Medical Center established a policy of referring acute emergency cases to a non-VA hospital in Prescott. Additionally, the medical center made arrangements with community surgeons to accept emergency VA patients.

Big Spring Medical Center

The surgical task force concluded that closure of inpatient surgery service at the Big Spring Medical Center could likely create significant access problems for Big Spring area veterans. For example, the Big Spring Medical Center is located in an area where the nearest medical center is in Amarillo, 227 miles distant (see fig. 3). Furthermore, the surgical task force noted that 65 percent of the 119,000 veterans in the Big Spring Medical Center's primary service area lived in six counties. Four of these are more remote from Amarillo than Big Spring. The six counties accounted for 61 percent of the surgical discharges from the Big Spring Medical Center. In fiscal year 1985, the Amarillo Medical Center

make copies available to others on request. If you have questions concerning the information presented, please contact me on (202) 275-6207. Other major contributors are listed in appendix II.

David P Baine

David P. Baine
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Comments From the Department of Veterans Affairs

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

NOV 9 1989

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

Dear Mr. Baine:

We have reviewed your draft report, VA HEALTH CARE: Assessing Inpatient Surgery Services at Medical Centers in Prescott, Arizona, and Big Spring, Texas (GAO/HRD-90-6). We are pleased that GAO concluded our decisions to close inpatient surgical services at Prescott VA Medical Center and retain them at the Big Spring VA Medical Center appear reasonable.

We appreciate GAO's interest in this matter and since there are no recommendations in the report, we have no further comments.

Sincerely yours,

Edward J. Derwinski
Secretary

had 66 surgical beds and an average daily occupancy of 46 surgical patients.

District planners found that veterans from the Big Spring area increased their use of inpatient surgical services at the Big Spring Medical Center from fiscal year 1983 through fiscal year 1985. The planners expected that closure of the Big Spring Medical Center's surgical unit would result in an annual increase of 63 surgical patients at the Amarillo Medical Center, a 7-percent increase in workload for that medical center over fiscal year 1985 levels.

VA found that access to emergency surgical services could be maintained for Big Spring area veterans if the medical center's surgical service were closed. VA was able to establish agreements with a local hospital and a group of surgeons for emergency surgical services in Big Spring.

Conclusions

VA's decisions regarding surgical services at Prescott and Big Spring Medical Centers appear reasonable. The decisions were made as part of the overall planning process to determine an appropriate mix of services; for example, deciding between the need for inpatient surgery and extended care. VA officials relied on professional judgment to balance competing demands for services. In considering current and projected use and the availability of alternative locations for veterans to receive surgical services, VA considered the appropriate factors. Current and projected use of surgical services at individual medical centers are important indicators of whether a change may be needed. Moreover, the availability of care at other medical centers and the travel implications for veterans who might use those centers are essential components.

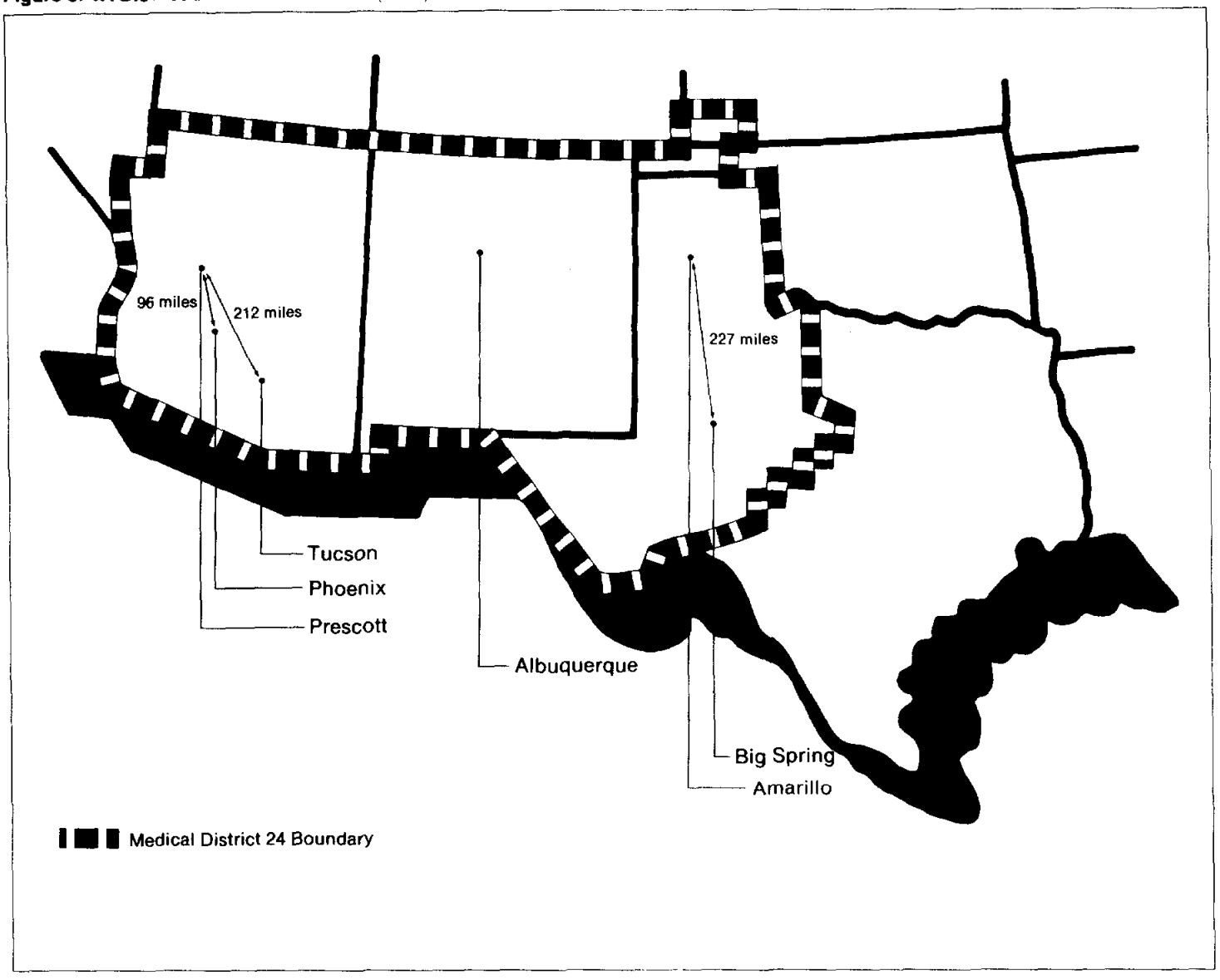
Agency Comments

VA generally agreed with the information presented in this report. VA's comments are in appendix I.

We are sending copies of this report to cognizant congressional committees, the Secretary of Veterans Affairs, the Director of the Office of Management and Budget, and other interested parties. We will also

veterans should inpatient surgery be closed at either medical center. The locations of medical centers in Medical District 24 are shown in figure 3.

Figure 3: VA District 24 Medical Centers (1989)



Prescott Medical Center

In the decision process, VA assessed the availability of alternative locations for Prescott area veterans needing inpatient surgery. As figure 3 shows, the closest medical centers were in Phoenix and Tucson, Arizona.

VA's analysis of the cases treated at the Prescott Medical Center in the first three quarters of fiscal year 1985 showed that the complexity of the inpatient surgical workload was substantially lower relative to the complexity of the workload in District 24. The surgical task force considered this information in determining that (1) the volume of the Prescott Medical Center workload was not sufficient to recruit qualified surgical or anesthesiology staff, and (2) the volume and diversity of cases was not adequate to permit such staff to maintain the necessary proficiency.

Our review of staffing levels found fluctuation in the number of surgical and anesthesiology staff at the Prescott Medical Center between 1978 and 1985. The number of surgeons had been below the authorized ceiling of 4 full-time-equivalent positions since 1979, and there had been a decline in their number since 1981. In 1985, there were 2.9 full-time-equivalent positions filled. The declining workload resulted in underutilization of the Prescott Medical Center's inpatient surgical service, and VA's analysis of future workload showed that the center would remain underutilized for the next 20 years. Although the center had 47 surgical beds available, the average daily occupancy decreased from 24 occupied beds in fiscal year 1983 to 20 in fiscal year 1985. VA projected that the center could support 29 of the 47 existing beds by 1990 if all veterans in the Prescott Medical Center's primary service area needing inpatient surgical services chose to use the Prescott Medical Center. Using the same assumption, VA projected that the number of beds needed at the Prescott Medical Center could increase to 37 in 2005. The assumption may not be valid, however, because Prescott area veterans also use the Phoenix and Tucson Medical Centers, as table 1 shows.

Big Spring Medical Center

In assessing inpatient surgical workload at the Big Spring Medical Center, VA officials reviewed the same types of data they examined in their review of the Prescott Medical Center. VA's data for fiscal years 1983 through 1985 showed that, unlike Prescott, the number of veterans discharged from inpatient surgery at the Big Spring Medical Center increased from 580 to 653 patients (13 percent). VA also found that Big Spring area veterans were increasingly using other medical centers. There was an overall 23-percent increase in the number of Big Spring area veterans discharged from inpatient surgical services (from 992 to 1,220) at medical centers in Medical Districts 24 and 20. VA's analysis of the cases treated at the Big Spring Medical Center in the first three quarters of fiscal year 1985 showed that the complexity of the inpatient

task force to review the decisions at the request of the then Deputy Administrator in 1988. The task force, which was not related to the planning process, evaluated all the data that had been considered in the decisions on the Prescott and Big Spring Medical Centers as well as more current information. The task force concurred with the Chief Medical Director's decisions.

Composition of Review Boards

Planning for the appropriate mix of medical services involves considerations about clinical and administrative matters. VA involved both clinicians and managers in its decisions on Prescott and Big Spring Medical Centers. Five of the seven District 24 Planning Board members who prepared the August 1985 assessment and recommended service delivery changes at the Prescott and Big Spring Medical Centers were physicians. The Region 7 Planning Board that reviewed District 24's recommendations included five physicians and one nurse among its nine members. One-half of the members of the headquarters review board that reviewed recommendations in 1986 and 1987 were physicians. Two chiefs of surgery from medical centers outside District 24 served on the surgical task force.[2]

Scope and Methodology

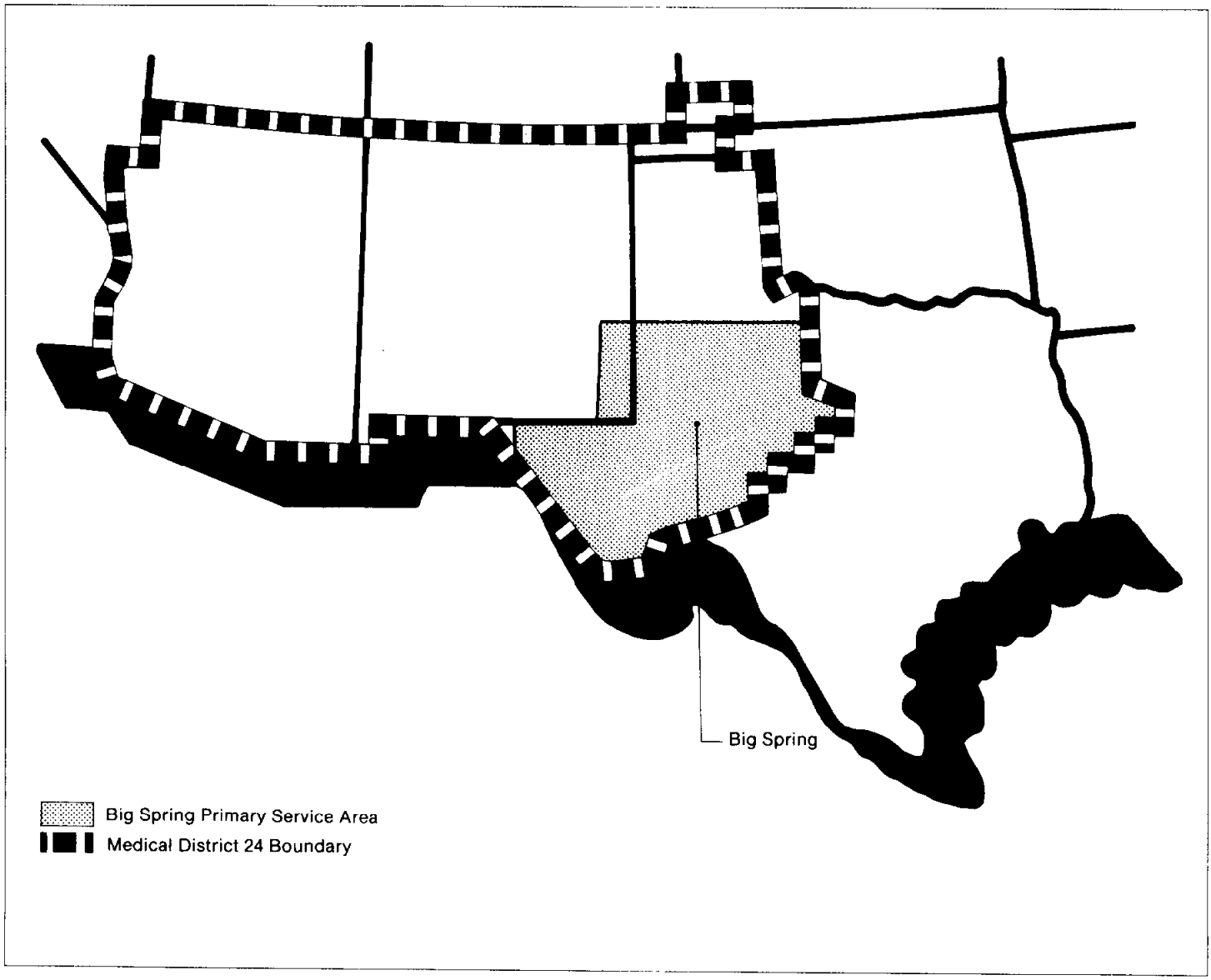
To assess the reasonableness of VA's decisions, we reviewed the factors and data that VA considered. We examined the 1985 planning process and all subsequent related efforts through the surgical task force reports. Specifically, we examined (1) planning process guidance, (2) procedures and minutes of meetings, (3) data considered, and (4) reports and correspondence issued. We limited the scope of our work to the decisions on inpatient surgery and did not examine the justifications for expanding outpatient and extended care services at these medical centers.

We interviewed headquarters officials in the Offices of Strategic Planning, Surgical Services, Information and Statistics, and Facilities. We also interviewed officials and planners from Region 7 and the District Director and coordinators in District 24. We visited the Prescott Medical Center and interviewed the Director, Chief of Staff, Chief of Surgery, and conducted a group interview with 18 medical staff. We also conducted telephone interviews with the Director of the Big Spring Medical

[2]The surgical task force had three members when it reviewed the Prescott Medical Center; an additional member was added for the review of the Big Spring Medical Center to reassess the need for approved renovations to the surgical unit.

115,500 veterans lived in the Big Spring Medical Center's primary service area, which included almost all of western Texas and a portion of southeast New Mexico. The service area covered approximately 80,000 square miles and included 54 counties. Figure 2 shows the Big Spring Medical Center's primary service area in fiscal year 1985.

Figure 2: Big Spring Primary Service Area (1985)



travel burden imposed by closing these services at the two medical centers, however, was far greater for Big Spring area veterans than for Prescott area veterans.

Background

VA's health care system includes 172 hospitals, 233 outpatient clinics, 119 nursing homes, and 26 domiciliaries. Most of these facilities are organized into 159 medical centers; each center has at least one hospital and outpatient clinic and most also include a nursing home. VA's health care system is organized into 7 regions, which are divided into 27 medical districts.[1] Medical District 24, which is in the Southwestern Region (Region 7), includes Arizona, New Mexico, 47 counties in the western portion of Texas, two counties in Oklahoma, and three counties in Kansas. The six medical centers in the district are located in Prescott, Phoenix, and Tucson, Arizona; Amarillo and Big Spring, Texas; and Albuquerque, New Mexico.

The Prescott Medical Center is located in central Arizona, about 96 miles north of Phoenix. When the district performed its review in fiscal year 1985, the Prescott Medical Center consisted of a 193-bed hospital with an average daily occupancy of 122 and a 214-bed domiciliary unit. It served 3,366 inpatients and recorded 46,925 outpatient visits. In fiscal year 1985, the Prescott Medical Center had 47 surgical beds with an average daily occupancy of 20 patients. About 40,000 veterans lived in the Prescott Medical Center's primary service area. The service area covered the five most northern counties in Arizona, approximately 61,000 square miles. Figure 1 shows the Prescott Medical Center's primary service area.

[1] In August 1989, the Secretary of the Department of Veterans Affairs instructed the Chief Medical Director to develop an implementation plan to phase out VA's medical districts and reduce the number of regions from seven to three.