

GAO

Report to the Chairman, Subcommittee
on VA, HUD, and Independent Agencies,
Committee on Appropriations, U.S.
Senate

February 1998

VA HEALTH CARE

Status of Efforts to Improve Efficiency and Access





**United States
General Accounting Office
Washington, D.C. 20548**

**Health, Education, and
Human Services Division**

B-276004

February 6, 1998

The Honorable Christopher S. (Kit) Bond
Chairman, Subcommittee on VA, HUD,
and Independent Agencies
Committee on Appropriations
United States Senate

Dear Mr. Chairman:

In the mid-1990s, the Department of Veterans Affairs (VA) began to fundamentally change the way it delivers health care to veterans to increase the efficiency of its health care system and to improve access to medical services. VA receives approximately \$17 billion annually for delivering health care services to veterans. Applying lessons learned from the private sector's experiences with managed health care, VA began emphasizing certain managed care practices, such as primary, outpatient, and preventive care, and de-emphasizing practices such as inpatient care. VA implemented two key management changes to support its health care reform efforts. First, it decentralized the management structure of its Veterans Health Administration (VHA) to coordinate the organization of hospitals, outpatient clinics, and other facilities into 22 Veterans Integrated Service Networks (VISN). VA expected the VISNs to improve efficiency by reducing unnecessarily duplicative services and shifting services from costly inpatient care to less costly outpatient care. VA expected that this reform, along with an emphasis on primary care, would also improve veterans' access to care because existing resources could then be redirected to serve more patients. Second, VA began phasing in a new national resource allocation method, the Veterans Equitable Resource Allocation (VERA) system as part of its broader efforts to provide incentives for the networks and medical centers to improve operational efficiency and access.

VA has testified before your Subcommittee that these reform efforts have unleashed unprecedented changes in its health care system. This report, which expands upon preliminary information in our May 1997 statement for the record for a hearing held by your Subcommittee, discusses examples of the efficiencies achieved and improvements in veterans' access to health care.¹ It also discusses VA's monitoring of the health care that its networks are providing.

¹VA Health Care: Assessment of VA's Fiscal Year 1998 Budget Proposal (GAO/T-HEHS-97-121, May 1, 1997).

For this report, we interviewed officials at VA headquarters, networks, and medical centers and reviewed documentation they provided. We visited three networks and seven of the medical centers located in them, interviewed officials there, and collected information from four other networks.² (See app. I for more detail on our scope and methodology.) From our work, we created profiles of the seven VISNs we reviewed, which appear in appendix II. We also reviewed policy and planning guidance, monitoring procedures, and performance data. We conducted our work from November 1996 to January 1998 in accordance with generally accepted government auditing standards.

Results in Brief

VA has taken important steps to improve the efficiency of its health care system and veterans' access to it. VA medical centers have increased efficiency by expanding the use of outpatient care. For example, VA has increased the percentage of surgical procedures performed on an outpatient basis from 34 percent in fiscal year 1993 to 66 percent by mid-fiscal year 1997. This has allowed it to reduce bed-days of care (BDOC), operating beds, and staff. At the Pittsburgh, Pennsylvania, medical center, the increase in outpatient surgeries saved more than \$7.5 million from October 1995 through May 31, 1997.³ Preventive care, including health assessments and patient education, has also increased, which VA officials told us can lead to efficiencies because patients can be kept healthier, avoiding expensive hospital stays. Furthermore, VA is increasing efficiency by integrating services both within and among medical centers.

VA is improving access to health care in several ways. For example, VA has begun to emphasize primary care, in which generalist physicians see patients initially and coordinate any specialty care that patients may need. By increasing the number of primary care teams, VA has improved access to routine care and expedited referrals to specialty care. VA is also improving access to health care by providing outpatient care at additional community-based outpatient clinics (CBOC), expanding evening and weekend hours for clinics, and exploring other innovations. These efforts have shortened the time veterans spend waiting for an appointment as well as that spent waiting to be seen upon arrival for an appointment. All

²The networks from which we gathered data include VISN 1 (Boston), VISN 2 (Albany), VISN 3 (Bronx), VISN 4 (Pittsburgh), VISN 16 (Jackson), VISN 18 (Phoenix), and VISN 20 (Portland). The cities indicated in parentheses are the sites of the network offices.

³In October 1996, VA integrated two hospitals and an extended care facility located in Pittsburgh, creating the Pittsburgh Health Care System. In this report, we refer to this integrated unit as a medical center.

of the medical centers we visited have established primary care teams and increased the number of veterans assigned to primary care.

As networks and medical centers continue to respond to incentives to improve the efficiency of their operations, headquarters' monitoring of the impact of such responses is necessary to help ensure that they do not compromise the appropriateness of health care veterans receive. In our prior work, we found that although VA has implemented health care monitoring mechanisms to assess some of the changes networks and medical centers are introducing, these mechanisms have not fully succeeded.⁴

Background

With many hospitals, outpatient clinics, domiciliaries, and nursing homes, VA is one of the largest direct-delivery health care systems in the country. In fiscal year 1997, VA received a medical care appropriation of about \$17 billion to provide inpatient, outpatient, nursing home, and domiciliary services to 2.6 million of the nation's 26 million veterans. VA services include care to veterans with special needs such as spinal cord dysfunction, blindness, post-traumatic stress disorder, substance abuse, and serious mental illness.

In 1995, VA shifted management authority from its headquarters to new regional management structures—VISNS. VA created 22 VISNS, each led by a director and a small staff of medical, budget, and administrative officials. (See fig. 1 for a map of the VISNS.) The VISNS have been configured around historic referral patterns to VA's tertiary care medical centers.⁵ These networks have substantial operational autonomy and now perform the basic decision-making and budgetary duties of the VA health care system. The network office in each VISN oversees the operations of the medical centers in its area and allocates funds to each of them. VISNS vary in several ways, including

- geographic size, ranging from about 10,000 square miles in VISN 3 (Bronx) to 885,000 square miles in VISN 20 (Portland);
- the number of hospitals in each, ranging from 5 in VISN 5 (Baltimore) and VISN 10 (Cincinnati) to 11 in VISN 4 (Pittsburgh); and
- the extent of services provided, reflecting, for example, historically longer inpatient and nursing home stays in the Northeast.

⁴See VA Health Care: Resource Allocation Has Improved, but Better Oversight Is Needed (GAO/HEHS-97-178, Sept. 17, 1997).

⁵Tertiary care medical centers provide highly specialized clinical care and technical support.

Figure 1: Veterans Integrated Service Networks



Source: VA.

VA Established Incentives to Encourage Efficiency and Access

When VA reorganized its health care system into 22 VISNs, it gave network and medical center directors the authority to realign services to increase efficiency and improve access. One aspect of VA's reorganization was establishing two incentives to encourage network and medical center directors to reach these objectives. First, VHA established organizationwide goals for improving efficiency and access and created performance measures to hold network directors accountable for achieving them. Second, it implemented VERA, a new workload-based allocation system that

encourages networks to identify and implement efficiencies and serve more veterans.

The performance measures emphasize organizational priorities, such as increasing outpatient surgeries and reducing inpatient care, and they enable VA to gauge each network's performance. VA has incorporated these measures into each network director's performance contract and required each VISN to have a strategic plan explaining how it intends to improve efficiency and access.

VERA, introduced in fiscal year 1997, allocates budget resources to the networks and provides them incentives for achieving cost efficiencies and serving more veterans. VERA is intended to improve the equity of resource allocations to networks. It provides more comparable levels of resources to each network for each high-priority veteran served than the system it replaced, which allocated resources primarily on the basis of facilities' historical budgets.⁶

Networks that increase their patient workload compared with other networks gain resources under VERA; those whose patient workloads decrease compared with other networks lose resources. More efficient networks (that is, those whose patient care costs are below the national cost) have more funds available for local initiatives. Less efficient networks (whose patient care costs are above the national cost), however, must increase efficiency to have such funds available.

By directly funding the networks, rather than the medical centers as in the past, VERA clearly conveys that each facility is a part of a larger regional network that must facilitate veterans' equitable access to services. VERA recognizes that networks are responsible for fostering change, eliminating duplicative services, and encouraging cooperation among medical facilities. Network officials have the authority to tailor their VERA allocations to facilities and programs within parameters set by national policy and guidelines and to integrate services among facilities for achieving equitable access to care and other purposes.⁷

⁶High-priority veterans—commonly referred to as Category A veterans—are those with service-connected disabilities, low incomes, or special health care needs.

⁷See [GAO/HEHS-97-178](#) for a discussion of issues concerning networks' allocation of resources to their facilities.

VA's Efforts Have Increased Efficiency

In the mid-1990s, VA, recognizing that its health care system was inefficient and in need of reform, followed the lead of private-sector health care providers and began reorganizing its system to improve efficiency and access. Like other federal health programs, such as Medicare and Medicaid, that are adopting managed care practices to control program expenditures, VA recognized that it could improve its health care system by adopting selected managed care practices.⁸ Consequently, in 1995, VA introduced substantial structural and operational changes in its health care system to improve the quality and efficiency of and access to care by reducing its historical reliance on inpatient care. VA shifted its focus from a bed-based, inpatient system emphasizing specialty care to one emphasizing primary care provided on an outpatient basis. In addition, the Congress enacted legislation in October 1996 eliminating several restrictions on veterans' eligibility for VA outpatient care, which allowed VA to serve more patients on this basis.⁹

These actions accelerated VA's shift in delivery of health care services from expensive hospital-based inpatient care to less costly outpatient care.¹⁰ VA has begun to increase its use of outpatient surgery and nonhospital care settings, reduce and reassign staff, and integrate services. As a result, VA has achieved efficiencies by reducing personnel costs.

Outpatient Visits Have Increased

From fiscal years 1993 to 1997, VA increased the number of outpatient visits nationwide by about 27 percent. VA estimates that in fiscal year 1997, it will provide nearly 32 million outpatient visits, an increase of 6.2 percent from fiscal year 1996.¹¹ From fiscal years 1993 to 1997, the number of hospital admissions for inpatient care decreased about 23 percent. (See fig. 2.) VA documentation shows that the seven networks we reviewed increased the number of outpatient visits from fiscal year 1995 to fiscal year 1996 by about 590,000 visits—an increase of 5.8 percent. They

⁸Vision for Change: A Plan to Restructure the Veterans Health Administration, VA (Washington, D.C.: Mar. 1995) and Prescription for Change: The Guiding Principles and Strategic Objectives Underlying the Transforming of the Veterans Health Care System, VA (Washington, D.C.: Mar. 1996).

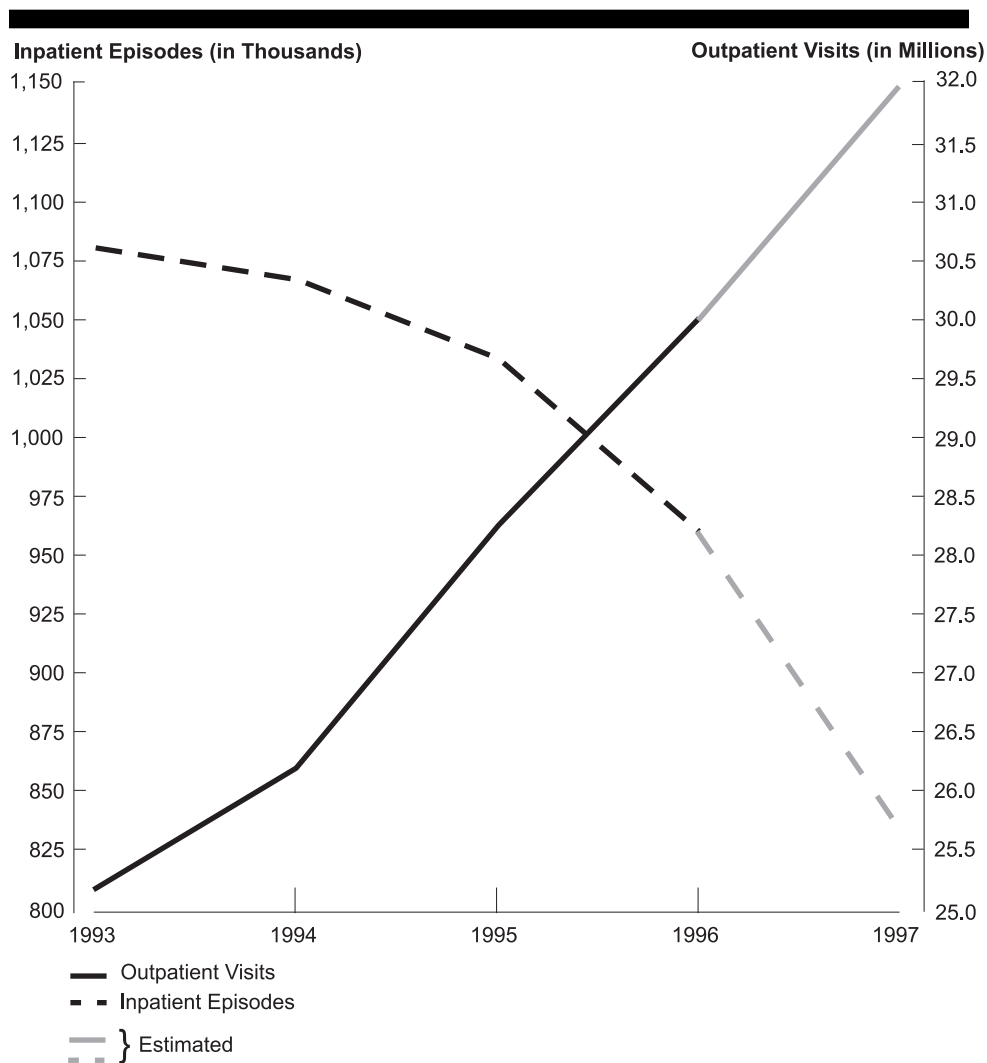
⁹The Veterans Health Care Eligibility Reform Act of 1996 (P.L. 104-262) eliminated the restrictions that limited certain veterans' eligibility for outpatient care to instances when it was necessary (1) to obviate the need for hospitalization or (2) in preparation for, or to complete, inpatient care.

¹⁰Such outpatient care may take place in physicians' offices, hospital or freestanding outpatient diagnostic and surgical centers, urgent care centers, outpatient rehabilitation centers, or outpatient drug and alcohol rehabilitation centers.

¹¹During an outpatient visit, a veteran may receive several medical services such as primary care, laboratory tests, and an electrocardiogram. Outpatient services received by a veteran on the same day count as one outpatient visit.

decreased inpatient episodes in fiscal year 1996 by over 22,000 from fiscal year 1995—a decrease of 6.2 percent.

Figure 2: VA Inpatient Episodes Compared With Outpatient Visits, Fiscal Years 1993-97



Source: VHA Office of the Chief Financial Officer.

According to data obtained from the medical centers we visited, the number of outpatient visits increased between fiscal years 1995 and 1996.

For example, the Jackson, Mississippi, medical center increased outpatient visits by about 4,000 (about 2 percent); the Pittsburgh medical center increased these visits by about 20,000 (about 7 percent). At the Brockton/West Roxbury, Massachusetts, medical center, the number of outpatient visits increased by about 5 percent from fiscal year 1995 to fiscal year 1996.

Medical center officials told us that they increased outpatient visits by shifting resources from inpatient to outpatient care, increasing marketing and conducting outreach efforts, extending clinic hours to evenings and weekends, and reassigning staff. Outreach efforts included health fairs conducted at various community locations, flu vaccinations, and cancer screenings. In VISN 4 (Pittsburgh), medical center officials said that when appropriate, they move patients to outpatient locations. They also use educational programs to inform people of alternatives to expensive inpatient care.

VA Is Emphasizing Preventive Care

As part of its emphasis on outpatient care, VA has promoted preventive measures to keep veterans healthier and out of the hospital to improve efficiency, access, and quality of care. Preventive measures consist of periodic health assessments that provide screening, counseling, risk assessment, and patient education. To encourage preventive care, VA assesses network and medical center directors on their facilities' progress in implementing nationally recognized health prevention standards for eight diseases with major social consequences.¹²

All of the medical centers we visited provided preventive care services and education programs. An example of a preventive measure is VA's guideline for examining the feet of diabetic patients during an outpatient visit to detect circulatory problems. In addition, the centers conduct classes in smoking and alcohol abuse cessation, stress management and hypertension reduction, and a wide variety of other disease prevention measures.

Prevention efforts vary by medical center. The Pittsburgh medical center is piloting a prevention clinic in conjunction with one of its primary care teams. Clinic visits involve patients arriving 1 hour early for appointments with their primary care provider. During this time, a nurse or nurse practitioner discusses prevention issues with the patient and writes orders

¹²The eight diseases are influenza and pneumococcal diseases; tobacco consumption; alcohol abuse; and cancer of the breast, cervix, colon, and prostate.

for prevention activities that will then be reviewed and signed by the patient's primary care provider during the scheduled appointment. The Brockton/West Roxbury medical center offers smoking cessation clinics, which are held in the evenings to improve veterans' access to them. Beginning in fiscal year 1997, nurses at the Clarksburg, West Virginia, medical center started making follow-up telephone calls to recently treated patients to answer questions and ensure that patients are following post-treatment instructions, taking their medications, and following dietary instructions. As a result, the medical center expects fewer return visits by these patients.

Outpatient Surgeries Have Increased

Consistent with the changes in other health care sectors, VA has used advances in diagnostic, therapeutic, surgery, and rehabilitative services to increase its use of outpatient surgery. VA's goal is for its medical centers to perform at least 65 percent of selected surgical procedures on an outpatient basis. Outpatient surgical units require less extensive staffing levels because patients are typically discharged in less than 12 hours and do not need around-the-clock nursing care. In addition, because patients spend less time in the hospital, costs for housekeeping, nutrition, linens, medical, and administrative services are lower.

Most VA medical centers now have outpatient surgery capability, and the percentage of such surgeries has increased nationwide from 34 to 66 percent between fiscal year 1993 and mid-fiscal year 1997.¹³ During this same time period, each of the seven networks we reviewed increased the percentage of outpatient surgeries. (See fig. 3.)

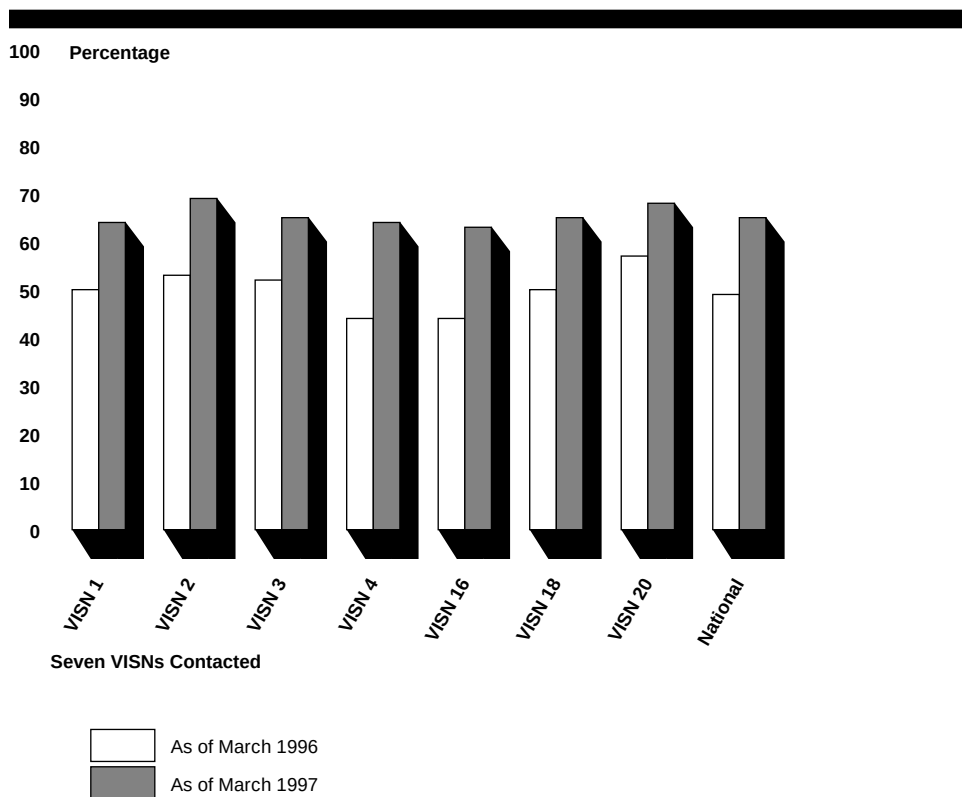
Each of the medical centers we reviewed that performed surgery increased the number of outpatient surgeries performed. Officials at four of the six medical centers we reviewed that had inpatient surgery reported that increasing outpatient surgeries has lowered hospital admissions, reducing costs.¹⁴ Clarksburg medical center officials reported an increase in the percentage of outpatient surgeries between fiscal year 1995 and mid-February of fiscal year 1997 from 62 to 83 percent. Furthermore, the

¹³The surgeries and invasive diagnostic procedures most frequently performed by VA on an outpatient basis include extraction of cataract, insertion of prosthetic lens following cataract surgery, repair of hernia, examination of knee with arthroscope, examination of small intestine with endoscope, examination of large intestine with endoscope, examination of large intestine and polyp removal with endoscope, and examination of bladder with cystoscope.

¹⁴The remaining two medical centers we contacted could not provide comparable information.

number of both inpatient and outpatient procedures increased from about 2,130 to more than 2,276 between fiscal years 1995 and 1996.¹⁵

Figure 3: Change in Percentage of Outpatient Surgeries Nationwide and for Seven VISNs Reviewed (as of March 1996 and March 1997)



Source: VHA Office of Policy, Planning and Performance.

The medical centers we visited use a variety of practices to support outpatient surgery. At the Pittsburgh medical center, for example, patients requiring care following surgery, but not needing hospitalization, receive

¹⁵An additional efficiency owing to the successful shift to outpatient surgery, according to Clarksburg officials, is a reduction in hospital-acquired, surgery-related infections—from 4 to 2 percent. Medical center officials in Brockton/West Roxbury and in Lebanon and Pittsburgh, Pennsylvania, also attributed reduced infection rates to outpatient surgery. Hard-to-treat bacteria are often found in hospitals, and patients may stay longer or be readmitted if they contract postsurgical infections.

that care in an observation unit.¹⁶ The Clarksburg, Jackson, and Lebanon medical centers also use observation units. In addition, the medical centers in Jackson, Lebanon, and Pittsburgh reduce costs by providing local accommodations or “Hoptel” beds¹⁷ for veterans who live far from the medical center on the night before scheduled outpatient surgery rather than admit them to the hospital. Following are other practices medical centers reported using to support outpatient surgery:

- Improved scheduling helps support outpatient surgery. One example of this is keeping time slots available in specialty clinics to ensure that patients with multiple conditions be scheduled for timely evaluations before surgery—patients such as those with heart problems who are seen in a cardiology clinic before having noncardiac surgery. Another example involves scheduling patients with similar diagnoses for simultaneous treatment in a clinic, allowing VA to better manage workload and staff assignments and also reducing the time veterans spend waiting to get an appointment. In addition, some facilities are contacting patients before surgery to reduce the no-show rate.
- Medical centers are educating patients to improve compliance with preoperative guidelines, precluding the need to reschedule surgery due to patients’ failure to follow such guidelines.
- Preoperative clinics are being used to perform lab tests, X rays, medical histories, and physical assessments of patients before surgery, precluding the need for overnight hospital stays.
- Medical centers use nationally developed guidelines to improve patient health outcomes. These guidelines allow VA to standardize treatment by using appropriate and cost-effective medical practices.

BDOC and Operating Beds Have Decreased

VA’s efforts to decrease BDOC as well as the number of operating beds reflect its goal of becoming an outpatient care-based system and more efficient.¹⁸ In fact, VA establishes BDOC performance goals for each network that are comparable with or lower than VA’s projections of the local Medicare region’s data for short-stay hospitals.

¹⁶Observation units provide full access to medical and nursing care for individuals whose need for care is short, for example, after outpatient surgery, or when the decision whether to admit a patient to the hospital requires a testing and observation period to determine the severity of the illness or injury.

¹⁷VA’s Temporary Lodging Program (Hoptel) is intended to provide free or reduced-cost temporary lodging to outpatients and their family members when medically necessary or when travel distances are extreme.

¹⁸VA calculates a network’s BDOC by dividing the number of days of acute inpatient care by the number of unique patients receiving any care from the network in a fiscal year.

VA has reduced BDOC, decreasing the amount of inpatient care provided. By the end of June 1997, each of VA's 22 VISNS had reduced its BDOC to a number below its BDOC at the end of fiscal year 1996; nationally, VA's BDOC per 1,000 unique users dropped from 2,959 in August 1995 to 1,651 in August 1997—a 44-percent decrease. In fiscal year 1997, BDOC for all of the VISNS we contacted in our study were lower than VA's projections of Medicare data for the regions with which they were compared.

BDOC decreased at each of the medical centers we reviewed. From August 1995 through August 1997, BDOC decreases ranged from a low of 577 (22 percent) at the Jackson medical center to a high of 2,237 (62 percent) at the Pittsburgh medical center. (See table 1.)

Table 1: BDOC per 1,000 Unique Veterans Served

Medical center	August 1995	August 1996	August 1997	Difference (August 1995 - August 1997)	Percentage change (August 1995-August 1997)
Brockton/West Roxbury, Mass.	3,168	2,448	2,130	-1,037	-33
Northampton, Mass.	2,842	1,669	1,507	-1,335	-47
Clarksburg, W. Va.	3,495	2,766	1,475	-2,020	-58
Lebanon, Penn.	3,608	2,283	1,544	-2,064	-57
Pittsburgh, Penn.	3,593	2,631	1,356	-2,237	-62
Fayetteville, Ark.	1,552	1,195	936	-616	-40
Jackson, Miss.	2,678	2,614	2,101	-577	-22
National	2,959	2,366	1,651	-1,308	-44

Note: Totals may not add due to rounding.

Source: VHA Office of Policy, Planning and Performance.

Consistent with its goals of becoming an outpatient care-based system and increasing efficiency, VA has also decreased operating beds, which are hospital beds staffed for delivering a specific type of care. VA's average number of medical, surgical, and psychiatric operating beds decreased nationwide from about 51,000 in fiscal year 1995 to 46,000 in fiscal year 1996—a decrease of 9.8 percent.

VA data on the seven networks we contacted show that the average number of operating beds decreased between fiscal years 1995 and 1996, ranging from a 95-bed decrease (6.5 percent) in VISN 20 (Portland) to a 546-bed decrease (14.3 percent) in VISN 16 (Jackson). (See table 2.)

Table 2: Operating Beds in Seven Networks Reviewed, Fiscal Years 1995-96

VISN	Operating beds			
	Fiscal year 1995	Fiscal year 1996	Difference	Percentage change
1 (Boston)	2,918	2,560	-358	-12.3
2 (Albany)	1,880	1,713	-167	-8.9
3 (Bronx)	3,789	3,350	-439	-11.6
4 (Pittsburgh)	3,215	2,777	-438	-13.6
16 (Jackson)	3,824	3,278	-546	-14.3
18 (Phoenix)	1,371	1,239	-132	-9.6
20 (Portland)	1,456	1,361	-95	-6.5
Total	18,453	16,278	-2,175	-11.8

Source: VA annual reports.

Similarly, the medical centers we visited reduced their collective operating beds by 375 or 12.8 percent between fiscal years 1995 and 1996. The Pittsburgh medical center, a tertiary care facility, had the largest decrease in beds—114 beds or 11.9 percent; the Fayetteville, Arkansas, medical center, a primary care facility, had the largest percentage decrease of the medical centers we reviewed—27.7 percent (38 beds). The Northampton, Massachusetts, medical center, however, which has a larger proportion of its workload in inpatient psychiatry, had the smallest decrease—21 beds or 6.4 percent. Furthermore, data provided by the seven medical centers we reviewed showed an additional reduction of 542 operating beds through mid-fiscal year 1997.

Inpatient Staff Have Been Reduced and Reassigned

VA has targeted staff reduction as a major part of its effort to improve efficiency because medical staffing costs exceed \$10 billion annually—about 60 percent of VA's medical care budget. By closing beds and integrating medical center services, VA decreased full-time employee equivalents (FTEE) by 8.1 percent between the beginning of fiscal years 1996 and 1998—a reduction of almost 16,114 FTEES. (See app. II for details of FTEE reductions in the seven networks contacted.)

VISN 3 (Bronx) has aggressively addressed staffing reductions. For example, from October 1995 through March 1997, the Brooklyn, New York, medical center closed 65 beds and reduced physician staff by 26 FTEES, registered nurses by almost 90 FTEES, nursing assistants and licensed practical nurses by over 40 FTEES, and administrative and other workers by about 252 FTEES. According to network officials, during this time period,

networkwide staffing was reduced by almost 2,124 FTEES. In VISN 4 (Pittsburgh), the Lebanon medical center reduced staff by approximately 117 FTEES since fiscal year 1995 with its shift to outpatient care. The Brockton/West Roxbury medical center in VISN 1 (Boston) reduced FTEES by 200 in fiscal year 1996 and 137 in fiscal year 1997.

Integrating Services Has Achieved Efficiencies

Service integrations are part of VA's nationwide strategy to restructure its health care delivery system to improve efficiency as well as access to care and quality of care. Integrations involve the combining of administrative units of multiple facilities as well as the elimination of unnecessarily duplicative services within and among facilities.¹⁹ Integrations produce efficiencies through staff reductions or economies of scale that enable facilities to serve more patients. Integrations can significantly benefit veterans mainly because VA can reinvest the money it saves to enhance veterans' access to care and improve service and quality.

VISNs and medical centers we visited have completed several integrations and have others in progress. In fiscal year 1997, for example, the two VA hospitals in Pittsburgh—the University Drive hospital (a tertiary care referral center) and the Highland Drive hospital (a psychiatric facility)—integrated to form the Pittsburgh Health Care System under a single medical director. This integration also eliminated duplicate service units, resulting in the closing of one acute and two intermediate care units at Highland Drive. As part of this integration, the medical center identified excess staff positions and reduced the number of FTEES by 232 during fiscal year 1997. In another case, VISN 1 (Boston) is proposing a large-scale integration of two tertiary care centers located within 7 miles of each other in the Boston metropolitan area. The resulting integration, if approved, could change the mission of the Brockton/West Roxbury medical center to one focusing on outpatient care, while the other center, the Boston medical center, could retain its tertiary care status. Not all networks are planning facility integrations, however. VISN 16 (Jackson) officials told us that they did not plan any facility integrations because of the distances between hospitals in this geographically large network.

In addition, VA has integrated medical and support services within hospitals. For example, VISN 1 (Boston) has integrated the laboratory and

¹⁹As of July 1997, networks had initiated the mergers of management structures at 38 facilities in 18 geographic areas. For a discussion of issues related to facility integrations, see VA Health Care: Lessons Learned From Medical Facility Integrations (GAO/T-HEHS-97-184, July 24, 1997) and VA Health Care: Opportunities to Enhance Montgomery and Tuskegee Service Integration (GAO/T-HEHS-97-191, July 28, 1997).

laundry services of eight medical centers. The Brockton/West Roxbury medical center now processes all mail-out laboratory tests for the network. Furthermore, the Northampton medical center integrated its medical service and ambulatory care into primary care and integrated engineering and environmental management services into one facilities management service unit. In VISN 4 (Pittsburgh), the Lebanon medical center merged five support and resources management units into two new departments in fiscal year 1997. In fiscal years 1996 and 1997, the Clarksburg medical center integrated several services, including surgical service with supply processing and distribution, which distributes surgical supplies and sterilizes equipment. In VISN 16 (Jackson), the Jackson medical center integrated environmental and engineering services into a new facility management service unit and created a diagnostic service by combining radiology, pathology/laboratory, and nuclear medicine.

Improved Efficiencies Have Produced Some Savings

Efficiencies from increased outpatient care, staff reductions and reassignments, and integrations at the medical centers we reviewed have resulted in savings. In some cases, efficiencies did not save money because hospitals reinvested funds to enhance existing services or to offer new services.

Savings From Increased Outpatient Care

Savings from shifting to outpatient care varied at the medical centers we reviewed. For example, Lebanon medical center officials estimated that the shift to outpatient care saved their facility \$346 for each day of inpatient care avoided in fiscal year 1997, while officials at the Jackson medical center estimated that they saved \$665 for every day of inpatient care avoided. At the Pittsburgh medical center, officials estimated that savings from an increase in outpatient surgeries for fiscal year 1997 totaled more than \$7.5 million through May 31, 1997. For example, these officials estimated that using observation beds saved about \$930,000 from October 1, 1996, through May 31, 1997. The Brockton/West Roxbury medical center avoided \$630,454 in inpatient costs in fiscal year 1997 by increasing the number of outpatient surgeries, according to officials' estimates.²⁰ Facilities used these savings to fund increases in other services, notably primary care.

Savings From Staff Reductions and Reassignments

Nationally, the networks' efforts to reduce staff have reduced VA's personnel expenditures. On the basis of VA staffing data, we estimate that the reduction of 16,114 FTEs (8.1 percent) in staff—as measured from the beginning of fiscal year 1996 to the beginning of fiscal year 1998—will save

²⁰Data on additional outpatient surgery costs were not readily available at the time of our review.

Savings and Efficiency Gains From Integrations

VA annual costs of approximately \$897,000,000.²¹ The three networks and seven facilities we visited reduced FTEES during this period. At the facilities we visited, the number of staff reduced ranged from 396 FTEES (14 percent) at the Pittsburgh medical center to 13 FTEES (less than 1 percent) at the Jackson medical center.

Integrations within and among medical centers have helped generate savings and increase operational efficiency. VA estimates that integrating facilities had generated over \$83 million in savings by July 1997. Medical centers have used these savings to provide new CBOCs and to make new services available or to improve accessibility of existing services. In Pittsburgh, the integration of the University Drive and the Highland Drive hospitals reduced FTEES by 232 during fiscal year 1997. Hospital officials estimated savings from reduced staffing levels and other actions associated with the integration to be approximately \$4.2 million in fiscal year 1997.

VISN 1 (Boston) officials estimate that a proposed integration of tertiary care facilities will save \$40 million a year for 5 years. Beginning in fiscal year 1997, this network also expects to save \$640,000 annually from the integration of laundry services at three of its medical centers and over \$1.8 million by having the Brockton/West Roxbury medical center perform laboratory services for all VA hospitals in the network. The Northampton medical center integrated medical and ambulatory care services into primary care and combined engineering with environmental management services, saving \$138,293, according to officials there. Lebanon medical center officials project an annual savings of more than \$489,000 from integrating administrative services at their facility. Jackson medical center officials estimate that FTEE reductions attributable to integrations will save about \$400,000 per year.

In some cases integrations did not save money because hospitals reinvested potential savings to enhance existing services or to allow them to offer new services. For example, officials at the Jackson medical center said that although they realized no net savings from consolidating ward administration into nursing services, the resulting efficiencies enabled them to expand nursing coverage for the operating room and outpatient areas.

²¹Based on VA estimate of payroll costs per FTEE in fiscal year 1998.

VA Is Taking Steps to Improve Access to Health Care

Veterans' access to health services is improving as VA hospitals reinvest the savings from efficiency initiatives and restructure their service delivery. VA hospitals have increased the number of primary care teams, added or improved space to accommodate additional primary care patients, shortened appointment waiting times, increased the number of locations providing community-based care, and redefined the role of VA inpatient nursing home care. As a result, the networks we contacted have been increasing the number of high-priority veterans they serve.

Use of Primary Care Has Improved Access

VA has improved veterans' access to health care through the use of primary care. Medical centers assign patients to primary care teams, which are responsible for managing patient care. The composition of a primary care team varies depending upon a medical center's mission and patient population, but these teams generally include physicians, one or more health care professionals (for example, nurse practitioners, physician assistants, registered and licensed practical nurses, and medical residents), and clerks for administrative support. Some teams may include a psychiatrist, social worker, dietician, or physical therapist. For example, the Northampton medical center, which has more psychiatric than acute care beds, has established a primary care team to treat psychiatric patients. Members of this team include a psychiatrist, psychiatric social worker, psychologist, and clinical pharmacist as well as a clinical nurse specialist or physician assistant, dietician, and administrative staff.

As the first point of contact, primary care teams provide accessible, routine care for veterans, establish an ongoing relationship with them, and coordinate treatment for patients requiring specialized care. They generally provide a comprehensive range of medical services, except for emergency or specialty care. As managers of patient care, teams help ensure that appropriate services are provided and duplicate services are avoided. For example, by calling veterans on the telephone primary care teams can answer veterans' questions about their health and ask whether veterans are following their post-discharge instructions. This practice may eliminate the need for veterans to visit medical centers.

In addition, primary care team staff encourage veterans to schedule appointments rather than just walk in to medical centers for treatment as many veterans have done in the past. Appointments enable VA to improve scheduling of its workload and resources, reducing the time patients spend waiting for an appointment as well as that spent waiting upon arrival to be seen. For example, officials at the Causeway Street outpatient

clinic in Boston and the Jackson medical center told us that scheduling nonurgent patients for appointments reduced the number of walk-ins and allowed for more efficient staff assignment. This helps reduce the number of patients receiving care inappropriately at specialty clinics, improving access for those who need such care.

Each of the medical centers we visited had established primary care teams, and most of them had increased the number of these teams between fiscal years 1995 and 1997. For example, the Brockton/West Roxbury and the Lebanon medical centers had no primary care teams in fiscal year 1995; by fiscal year 1997, they had seven and four, respectively. The medical centers we reviewed showed sizable growth in the numbers of veterans assigned to primary care teams. (See table 3.) In fiscal year 1997, VA had over 1,000 primary care teams in operation.

Table 3: Number of Veterans Assigned to Primary Care

Medical center	Fiscal year 1995	Fiscal year 1996	Fiscal year 1997
Brockton/West Roxbury, Mass.	Data not available	21,212 ^a	19,860
Clarksburg, W. Va.	6,349	9,720	10,982
Fayetteville, Ark.	8,000	10,500	12,800
Jackson, Miss.	2,500	8,758	11,372
Lebanon, Penn.	0	1,984	4,308
Northampton, Mass.	0	11,880	12,470
Pittsburgh, Penn.	Data not available	10,765	25,540

^aAccording to medical center officials, this facility's fiscal year 1996 count may be overstated because veterans were inappropriately assigned to more than one primary care team.

Source: VA medical centers.

Medical Centers Have Supported Increased Use of Primary Care in Various Ways

Medical centers we visited have taken many actions to accommodate increased numbers of primary care patients. For example, they have expanded and converted hospital space to create additional primary care clinics, added more examination and treatment rooms and support space, and used off-site clinics to deliver primary care. Previously, physicians in the medical centers we visited had only the use of their offices or one exam room to see patients. Multiple examination rooms enable primary care teams to treat more patients because a physician can treat one patient while other patients prepare for or are attended by other team members. More examination and treatment rooms for each physician or team allow primary care doctors to see more patients, more efficiently using their

time and reducing patients' waiting time. For example, at the Lebanon medical center, we observed renovations under way to increase primary care space from 978 to 4,786 square feet in fiscal year 1997. Furthermore, by converting additional hospital space, Lebanon will add 2,400 square feet in fall 1998. In fiscal year 1998, the Fayetteville medical center is expanding its primary care space from 3,400 to 11,233 square feet, including 16 examination rooms, 2 treatment rooms, and support space. By renovating existing space for use by primary care teams, the Jackson medical center increased space from 2,021 to 13,835 square feet from fiscal years 1995 to 1996. Renovation under way at the time of our visit will more than double the number of examination rooms for each primary care physician. This medical center is also more than doubling the number of physicians assigned to primary care. Finally, all medical centers we visited also provide full- or part-time primary care clinics in off-site locations in neighboring communities, improving access to care for veterans in those areas.

All the medical centers we reviewed reported that increased space devoted to primary care allowed them to see more patients:

- The Fayetteville medical center anticipates that the additional space will allow them to treat more than 55 new primary care patients each week. This increase in new patients will be possible because the additional space will allow each physician to use two examination rooms instead of one-half of a room, which was what they had before renovating.
- Additional space devoted to primary care at the Clarksburg medical center will enable each primary care team to increase the number of its assigned patients from 2,116 per team in 1995 to almost 4,500 in 1997.
- Additional space allowed primary care enrollment at the Lebanon medical center to increase from 1,984 veterans in fiscal year 1996 to more than 4,308 in fiscal year 1997.
- The Jackson medical center reported that newly converted hospital space for primary care completed in December 1997 will allow physicians to see 20 percent more patients than they now see. Each primary care provider will have use of two to three rooms; each provider had only one room before this expansion.

Appointment Waiting Times Have Been Shortened

VA cited decreased waiting times for appointments as a part of its objective to increase veterans' access to services in its Prescription for Change—its blueprint for reforming health care. In fiscal year 1996, VA headquarters established a 30-day standard for veterans' obtaining appointments for

specialty and primary care clinics. Documents we reviewed showed that all 22 VISNS succeeded in achieving a median waiting time of less than 30 days.

Some of the medical centers we visited have shortened appointment waiting times for specialty care as access to primary care has improved. At the Lebanon medical center, as the number of VA primary care patients increased by 2,324 in fiscal year 1997, waiting times for appointments at some specialty clinics decreased. For example, the appointment waiting time at this center's urology clinic declined from 100 days to 40 days. Fayetteville medical center officials report that before their medical center introduced primary care, the average appointment waiting time for specialty care was more than 90 days; it is now less than 30 days. At the Pittsburgh medical center, appointment waiting times for new patients decreased between fiscal year 1995 and 1997 in over half of that center's specialty clinics.

Some medical centers have also shortened waiting times for primary care appointments. From fiscal years 1996 to 1997, the Jackson and Pittsburgh medical centers shortened appointment waiting times for primary care from 32 to 13 days and 12 to 5 days, respectively. Data provided by the Lebanon medical center showed that the number of veterans receiving an appointment within 7 days more than doubled in this time period. At the Brockton/West Roxbury and Fayetteville medical centers, however, appointment waiting times remained constant—at approximately 7 days—reflecting the increasing number of veterans enrolled in primary care.

In addition, medical centers have shortened appointment times by establishing more flexible scheduling of outpatient services. For example, the Brockton/West Roxbury medical center now schedules its smoking cessation clinics in the evenings and other medical clinics on weekends to improve access. Officials there cite improved scheduling of clinics as one factor in improving access and leading to an increase in patients assigned to primary care.

CBOCs Are Improving Access

VA is also improving veterans' access to health care by increasing the number of CBOCs that it funds or operates. CBOCs are geographically separate from their "parent" medical center and provide outpatient primary care. Their locations facilitate access to health services for veterans who live some distance from a VA facility—about one-half of all veterans live 25 miles or more from a VA hospital—especially those living

in medically underserved areas. CBOCs exemplify VA's effort to convert from a hospital-based system to one focusing on outpatient services.²² When appropriate, providers at CBOCs refer patients to hospitals for specialty care.

Some of VA's goals for CBOCs are to

- shorten hospital lengths of stay by doing preadmission work-up or providing postdischarge follow-up care closer to the patient's home;
- reduce veterans' need to travel long distances to receive care;
- redirect patients currently served at medical center clinics, shortening waiting times or relieving congestion at these sites;
- shorten waiting times for follow-up care, for example, postsurgical care or after a hospitalization; and
- improve access to care for historically underserved veteran populations.

The Congress must review and approve medical centers' proposals to open CBOCs after preliminary review by VISNs and VA headquarters. As of November 1997, 153 CBOCs were approved or operating nationwide. VA estimates that these clinics, when fully operational, will serve more than 280,000 veterans each year. Fifty-eight of the recently approved CBOCs were in the seven networks we reviewed. As of November 1997, these networks indicated their intent to establish at least 150 additional CBOCs through fiscal year 2002.

Medical Centers Are Improving Access to Nursing Home Care

Some medical centers that we contacted changed their nursing home services to improve access and reduce costs. In the past, some medical centers in the Northeast provided extensive nursing home benefits, which could involve stays lasting many years. Responding to VERA's incentives, officials at the medical centers in Pittsburgh, Lebanon, and Newington/West Haven (the Connecticut Health Care System) told us that they have made nursing home services available to more veterans at less cost to VA by establishing alternatives to long-term, inpatient nursing home care. The Pittsburgh and Lebanon medical centers now use their inpatient nursing home services to evaluate, medically stabilize, and then, if appropriate, prepare patients for placement in the least restrictive community environment, including their own homes. According to Lebanon officials, for example, this "transitional care" approach has reduced the average length of stay in the nursing home unit. This has enabled them to increase

²²See VA Health Care: Improving Veterans' Access Poses Financial and Mission-Related Challenges (GAO/HEHS-97-7, Oct. 25, 1996).

the number of patients served annually from 264 in fiscal year 1995 to 448 in fiscal year 1997 without increasing the number of staff in the unit. At the Pittsburgh medical center, the number of nursing home patients served increased from 399 in fiscal year 1996 to 571 in fiscal year 1997, according to facility officials.

Beginning in 1996, the Connecticut Health Care System replaced its nursing home program with a sub-acute care program and additional patient support services. The objective of sub-acute care is the same as that of the nursing home programs in the Pittsburgh and Lebanon medical centers. Following evaluation and medical stabilization in the sub-acute care unit, patients are discharged to their home or a community facility. To enable veterans to return home, the Connecticut Health Care System

- established a day hospital program to provide medical services, such as physical therapy and intravenous medications, to patients who then return home at night;
- upgraded support services in patients' homes, such as providing visiting nurses; and
- improved transportation services.

These changes reduced the Connecticut Health Care System's nursing home beds from 150 in fiscal year 1995 to 40 by the end of fiscal year 1997. Despite the decrease, the number of patients served in fiscal year 1997 was more than double the number served in fiscal year 1991.

VA Is Serving More High-Priority Veterans

Network efforts to improve access to VA medical services have led to VA's serving an increased number of high-priority patients (Category A). Category A patients are those veterans who qualify to receive medical care on the basis of a service-connected disability, low income, or special health care needs. In each of the networks we contacted, the number of unique (unduplicated) Category A veterans served rose between fiscal years 1996 and 1997. (See table 4.)

Table 4: Category A Veterans Served

VISN	Fiscal years 1994-96 ^a	Fiscal years 1995-97	Increase in the number of Category A veterans served
1 (Boston)	175,070	178,919	3,849
2 (Albany)	95,771	99,661	3,890
3 (Bronx)	172,743	174,188	1,445
4 (Pittsburgh)	175,493	196,747	21,254
16 (Jackson)	344,469	346,876	2,407
18 (Phoenix)	169,429	174,174	4,745
20 (Portland)	167,472	170,633	3,161

^aTo achieve an annual count of Category A veterans served by each network, VA totals the number of unique Category A veterans seen at least once during that fiscal year and the two previous fiscal years.

Source: VHA Office of Policy, Planning and Performance.

Monitoring Changes to Health Care Services Is Important

VA headquarters' monitoring of changes to the health care system is important because network and medical center directors are responding to incentives to change VA's health care delivery. These changes, which are intended to improve efficiency and access, could lead to outcomes that compromise care received by some veterans. For example, officials in several of the VISNs we contacted have reinvested savings from changes in inpatient care and specialty services—such as nursing home care—to improve veterans' access to primary care. Previously, however, we reported that VA headquarters lacked timely and detailed indicators of certain changes in its health care delivery—particularly to veterans receiving special care services such as nursing home care or treatment for spinal cord injuries.²³ Without such indicators, it is difficult for VA to ensure that service delivery changes do not compromise the appropriateness of the health care veterans receive.

VA, to its credit, has developed some performance indicators for VISN directors such as patient satisfaction, efficiency indicators (for example, BDOC), and number of veterans served. VA officials told us that it holds VISN directors accountable for meeting goals related to these indicators. VA also

²³See [GAO/HEHS-97-178](#), Sept. 17, 1997.

created indicators measuring the number of veterans treated for certain disabling conditions and funds spent for their care.²⁴

Although the indicators will provide headquarters officials with some important process information about patient care, as we noted in our previous report, these data—and VA’s other data sources—generally provide little assessment of the outcomes of program changes on veterans. As noted, monitoring the impact of such changes is critical because networks are responding to VA’s incentives to reduce the cost of care. Special care services, which include the most expensive services VA delivers (for example, nursing home care or care for veterans with spinal cord injuries), are especially important to monitor because the population receiving these services is particularly vulnerable. Lack of adequate performance information will hinder VA headquarters’ ability to take corrective action if networks’ program changes are inconsistent with VA’s organizational goals. VA officials told us they have begun to develop some outcome measures.

Concluding Observations

VA is making unprecedented changes to its health care system. Introducing practices inspired by managed care, VA is shifting the emphasis of its medical care delivery system from extensive inpatient services to outpatient care. Responding to management and budgetary incentives, VISN and medical center directors are implementing changes intended to improve the efficiency of their operations, while improving veterans’ access to their services.

The medical centers we contacted are operating more efficiently in several key areas: they are performing more outpatient treatment and surgery, shortening veterans’ length of stay in the hospital, and integrating hospital services to streamline operations. As VA shifts from providing mainly inpatient to outpatient care, it needs fewer hospital beds and staff; staff reductions should lead to significant cost reductions. In addition, to improve access, the facilities we contacted are increasing the number of patients assigned to primary care and decreasing the waiting times for appointments. Other data we reviewed show similar efficiency and access improvements throughout VA’s health care system.

The transformation of the VA health care system, however, is a work in progress. Networks and medical centers are rapidly introducing new

²⁴The six conditions include spinal cord dysfunction, blindness, amputations, severe mental illness, traumatic brain injury, and post-traumatic stress disorder. Homeless veterans and substance abusers who are disabled due to mental illness are included in the mental illness category.

approaches to delivering care and planning the introduction of other initiatives. Adequate monitoring of the outcomes of these changes is essential to assure VA's stakeholders that veterans are receiving health care that is timely and appropriate.

Agency Comments

Officials from the Veterans Health Administration reviewed a draft of this report. They generally agreed with its contents and provided technical comments, which we incorporated as appropriate.

As arranged with your staff, we are sending copies of this report to the Acting Secretary of Veterans Affairs, interested congressional committees, and other interested parties. We will make copies of this report available to others upon request.

If you have any questions about this report, please call me at (202) 512-7101 or Bruce D. Layton, Assistant Director at (202) 512-6837. Other major contributors to this report are Frederick K. Caison, Linda C. Diggs, Darrell J. Rasmussen, Jean N. Harker, Brian W. Eddington, and Liz Williams.

Sincerely yours,

A handwritten signature in black ink that reads "Stephen P. Backhus". The signature is written in a cursive, flowing style.

Stephen P. Backhus
Director, Veterans' Affairs and
Military Health Care Issues

Contents

Letter	1
Appendix I Scope and Methodology	28
Appendix II Profiles of Seven Networks	30
Related GAO Products	40
Tables	
Table 1: BDOC per 1,000 Unique Veterans Served	12
Table 2: Operating Beds in Seven Networks Reviewed, Fiscal Years 1995-96	13
Table 3: Number of Veterans Assigned to Primary Care	18
Table 4: Category A Veterans Served	23
Figures	
Figure 1: Veterans Integrated Service Networks	4
Figure 2: VA Inpatient Episodes Compared With Outpatient Visits, Fiscal Years 1993-97	7
Figure 3: Change in Percentage of Outpatient Surgeries Nationwide and for Seven VISNs Reviewed	10
Figure II.1: VISN 1	31
Figure II.2: VISN 2	32
Figure II.3: VISN 3	33
Figure II.4: VISN 4	34
Figure II.5: VISN 16	35
Figure II.6: VISN 18	36
Figure II.7: VISN 20	37

Abbreviations

BDOC	bed-days of care
CBOC	community-based outpatient clinics
FTEE	full-time employee equivalent
VA	Department of Veterans Affairs
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network

Scope and Methodology

We focused our work on VA's efforts to improve the efficiency of its health care system and improve veterans' access to health services. To assess VA's progress in increasing the efficiency of its health care system, we examined VA records documenting effects of efficiency initiatives, including increased outpatient visits, decreased bed-days of care and operating beds, reduction and reassignment of staff, and integration of services. We focused on these measures because VA lacks outcome measures that show the impact of these changes on veterans' health status. To assess VA's progress in improving veterans' access to services, we examined the steps VA is taking to accomplish this, including emphasizing primary care and increasing the number of locations that provide community-based care.

To obtain data on efficiency and access issues, we interviewed network and medical center directors, medical center staff, VA headquarters officials, and representatives from veterans service organizations, such as the American Legion, Disabled American Veterans, Paralyzed Veterans of America, and Veterans of Foreign Wars. We visited three Veterans Integrated Service Network (VISN) offices in Boston, Jackson, and Pittsburgh—to obtain the views of network directors, chief medical officers, and chief financial officers and supporting documentation on network-led initiatives to manage VISNs' resources and change service delivery. We selected these VISNs for site visits because of the differing impact of the Veterans Equitable Resource Allocation (VERA) system on their fiscal year 1997 budgets and also because of the differences in the geographic dispersion of these networks' facilities. In addition, we conducted telephone interviews and collected efficiency and access information from two other networks with budget decreases in fiscal year 1997—VISN 2 (Albany) and VISN 3 (Bronx) in New York—and two networks with budget increases—VISN 18 (Phoenix) in Arizona and VISN 20 (Portland) in Oregon.

We also visited seven medical centers—in Brockton/West Roxbury and Northampton, Massachusetts; Jackson, Mississippi; Fayetteville, Arkansas; Lebanon and Pittsburgh, Pennsylvania; and Clarksburg, West Virginia. We toured these facilities to identify physical changes made to accommodate increased use of primary care. We interviewed medical facility directors, administrative officials, chiefs of the various services, physicians, nurses, and union officials for information on VA's reorganization and VERA implementation and collected facility-specific documents.

In addition, we met with the director of the Connecticut Health Care System in VISN 1 (Boston) to discuss that medical center's initiatives to improve access and efficiency. We met with officials of the Causeway Street outpatient clinic, which provides 180,000 primary and specialty care visits each year to veterans in downtown Boston, and toured the facility. We also interviewed officials in the Veterans Health Administration's Office of the Deputy Under Secretary for Health; Office of the Chief Network Officer; Office of Policy, Planning and Performance; Office of the Chief Financial Officer; and strategic health care groups. We obtained and reviewed VA headquarters documents on policies, monitoring procedures, and performance data to address issues about the monitoring of changes implemented by networks and medical centers. We drew on previous work to make observations about VA's monitoring of the health care that networks are providing. Because many of VA's reform initiatives had been recently introduced or were in the planning phase during our review and due to inconsistencies among facilities' reporting of data, we relied on VA documentation and officials' estimates of savings. We did not verify the accuracy of these estimates. We performed our review in accordance with generally accepted government auditing standards between November 1996 and January 1998.

Profiles of Seven Networks

We selected seven networks on the basis of projected changes in resource allocations if the Veterans Equitable Resource Allocation (VERA) system had been fully implemented in fiscal year 1997. We selected four networks—VISN 1 (Boston), VISN 2 (Albany), VISN 3 (Bronx), and VISN 4 (Pittsburgh)—that would have lost resources had VERA been fully implemented. We selected three networks—VISN 16 (Jackson), VISN 18 (Phoenix), and VISN 20 (Portland)—that would have gained resources had VERA been fully implemented.²⁵ The cities named on the map of each VISN show the locations of VA medical centers in that VISN. The Pittsburgh Health Care System includes two hospitals in Pittsburgh.

We compiled data for the profiles from several sources, including VA annual reports, network strategic plans, and documents provided by headquarters and network officials. Data are from fiscal year 1996 unless otherwise noted. VA's figures for full-time employee equivalents (FTEE) are based on regular hours worked by VA employees during the first pay period of each fiscal year. The annual counts for Category A veterans (those with service-connected disabilities, low incomes, or special health care needs) reflect the number of unique Category A veterans seen at least once during a fiscal year and the two previous fiscal years. Other veterans generally have incomes and net worth above a certain threshold and must pay part of the cost of the care they receive. Nonveterans include veterans' dependents and beneficiaries in the Civilian Health and Medical Program of the Uniformed Services and VA employees. Data on inpatient and outpatient treatments count each visit of a patient separately; therefore, these data show the number of times patients received care at a VISN medical center. Patients may have received care at more than one medical center.

²⁵VA began phasing in VERA in fiscal year 1997. VERA's immediate impact was lessened because its adjustments to network allocations only affected budgets for the second half of the fiscal year and caps were placed on the amount of funds moved among networks. Because of the phase in, VISN 4 (Pittsburgh) gained resources instead of losing them. VISN 1 (Boston), VISN 2 (Albany), and VISN 3, (Bronx) lost less money than projected because of the phase in, while VISN 16 (Jackson), VISN 18 (Phoenix), and VISN 20 (Portland) gained less than projected.

Appendix II Profiles of Seven Networks

Figure II.1: VISN 1 (Boston)



VISN Profile

Veteran Population: 1,375,445

States: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Patients Served (Fiscal Years 1995-97)

Users

Unique Category A	178,919
Unique Other	41,836
Total	220,755

Network Staff (FTEE)

Fiscal year	Staff (FTEE)
1996	11,344
1997	10,476
1998	9,943

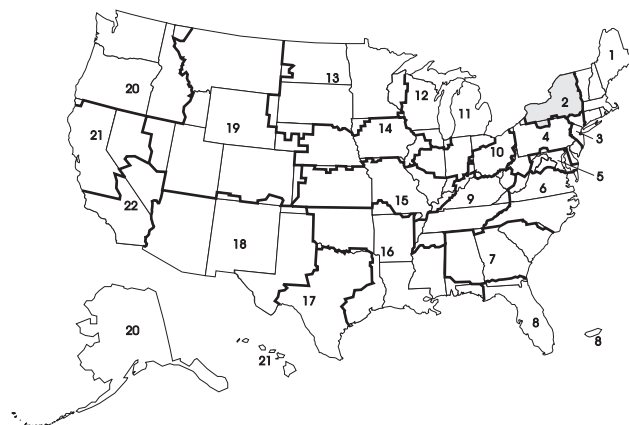
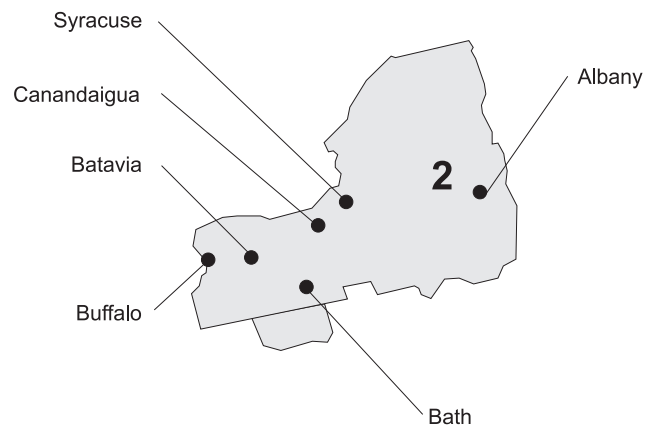
Patients Treated and Facility Utilization

Type of care	Patients treated		Utilization		
	VA facilities	Non-VA facilities	Average operating beds	Average daily census	Occupancy rate
Patients treated	44,076	6,234	3,353	2,587	77.2
Hospital	42,177	1,553	2,560	1,856	72.5
Nursing home	1,544	3,424	711	653	91.8
Domiciliary	355	1,257	82	78	95.1
Outpatient visits	1,844,596	45,423	NA	NA	NA

Note: NA means "not applicable."

Appendix II
Profiles of Seven Networks

Figure II.2: VISN 2 (Albany)



VISN Profile

Veteran Population: 623,720

States: Parts of New York and Pennsylvania

Patients Served (Fiscal Years 1995-97)

Users

Unique Category A	99,661
Unique Other	25,944
Total	125,605

Network Staff (FTEE)

Fiscal year	Staff (FTEE)
1996	6,469
1997	6,048
1998	5,367

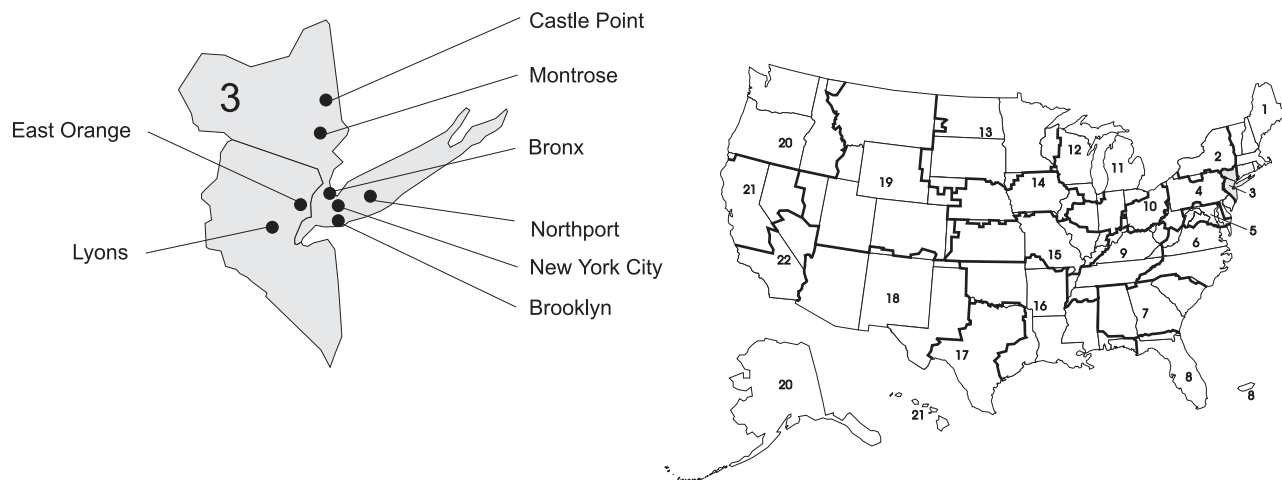
Patients Treated and Facility Utilization

Type of care	Patients treated		Utilization		
	VA facilities	Non-VA facilities	Average operating beds	Average daily census	Occupancy rate
Patients treated	24,318	1,042	2,697	2,106	78.1
Hospital	22,190	268	1,713	1,254	73.2
Nursing home	1,304	774	574	543	94.6
Domiciliary	824	0	410	309	75.4
Outpatient visits	844,844	25,581	NA	NA	NA

Note: NA means "not applicable."

Appendix II
Profiles of Seven Networks

Figure II.3: VISN 3 (Bronx)



VISN Profile

Veteran Population: 1,433,790 **States:** Parts of New Jersey and New York

Patients Served (Fiscal Years 1995-97)

Users

Unique Category A	174,188
Unique Other	59,763
Total	233,951

Network Staff (FTEE)

Fiscal year	Staff (FTEE)
1996	13,735
1997	12,646
1998	11,665

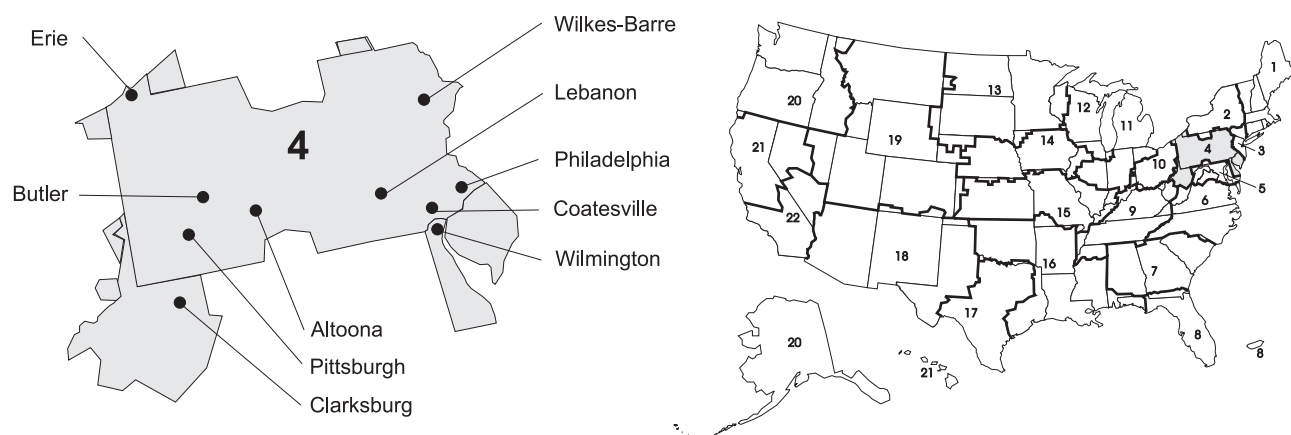
Patients Treated and Facility Utilization

Type of care	Patients treated		Utilization		
	VA facilities	Non-VA facilities	Average operating beds	Average daily census	Occupancy rate
Patients treated	47,101	2,553	4,712	3,900	82.8
Hospital	44,367	113	3,350	2,626	78.4
Nursing home	1,948	2,436	1,159	1,090	94.0
Domiciliary	786	4	203	184	90.6
Outpatient visits	1,753,228	7,988	NA	NA	NA

Note: NA means "not applicable."

Appendix II Profiles of Seven Networks

Figure II.4: VISN 4 (Pittsburgh)



VISN Profile

Veteran Population: 1,699,734

States: Delaware, parts of New Jersey, New York, Ohio, Pennsylvania, and West Virginia

Patients Served (Fiscal Years 1995-97)

Users

Unique Category A	196,747
Unique Other	40,057
Total	236,804

Network Staff (FTEE)

Fiscal year	Staff (FTEE)
1996	10,850
1997	10,388
1998	9,364

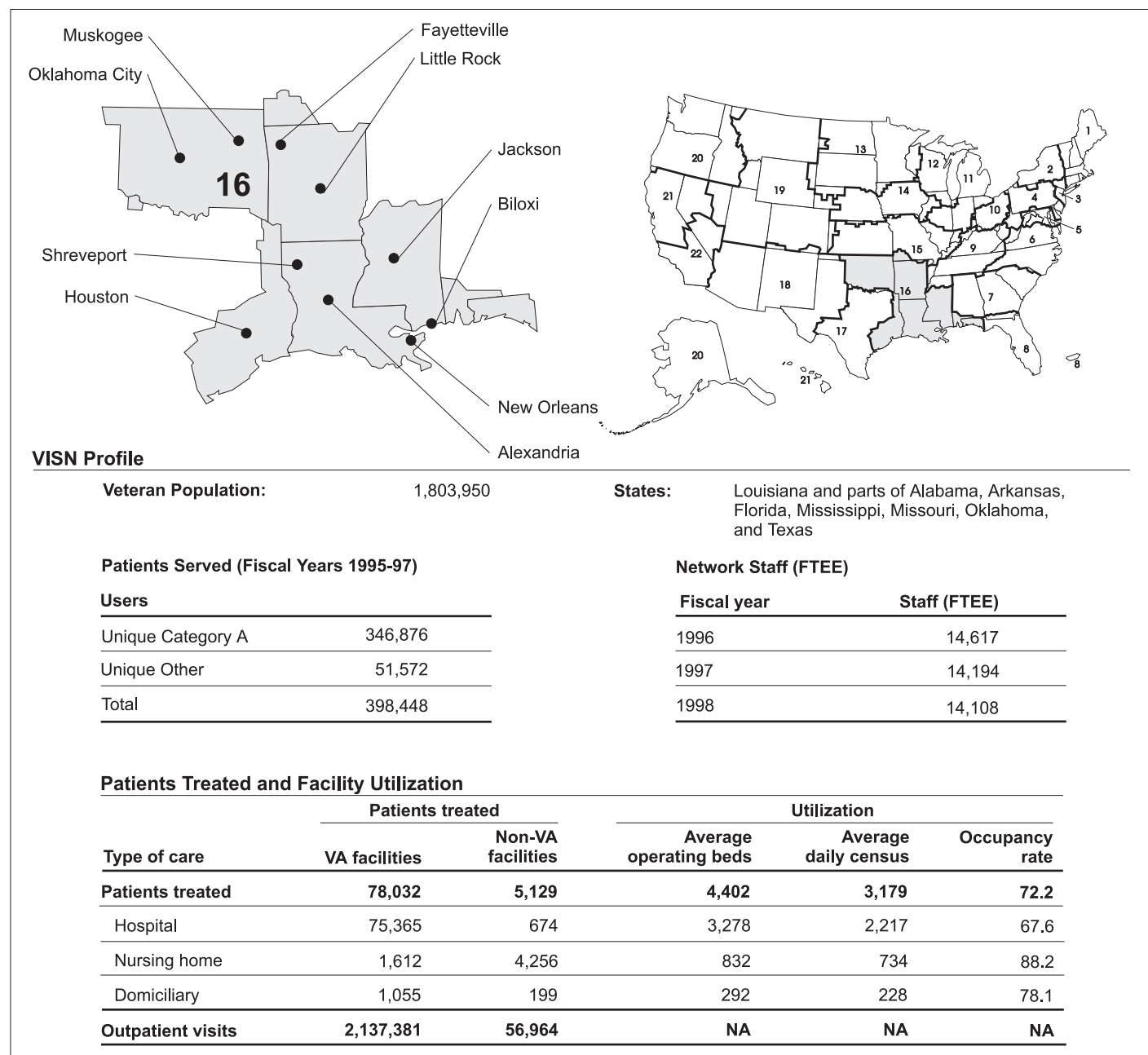
Patients Treated and Facility Utilization

Type of care	Patients treated		Utilization		
	VA facilities	Non-VA facilities	Average operating beds	Average daily census	Occupancy rate
Patients treated	43,767	4,536	4,287	3,442	80.3
Hospital	40,648	609	2,777	2,021	72.8
Nursing home	2,243	3,256	1,308	1,240	94.8
Domiciliary	876	671	202	181	89.6
Outpatient visits	1,440,307	53,876	NA	NA	NA

Note: NA means "not applicable."

Appendix II
Profiles of Seven Networks

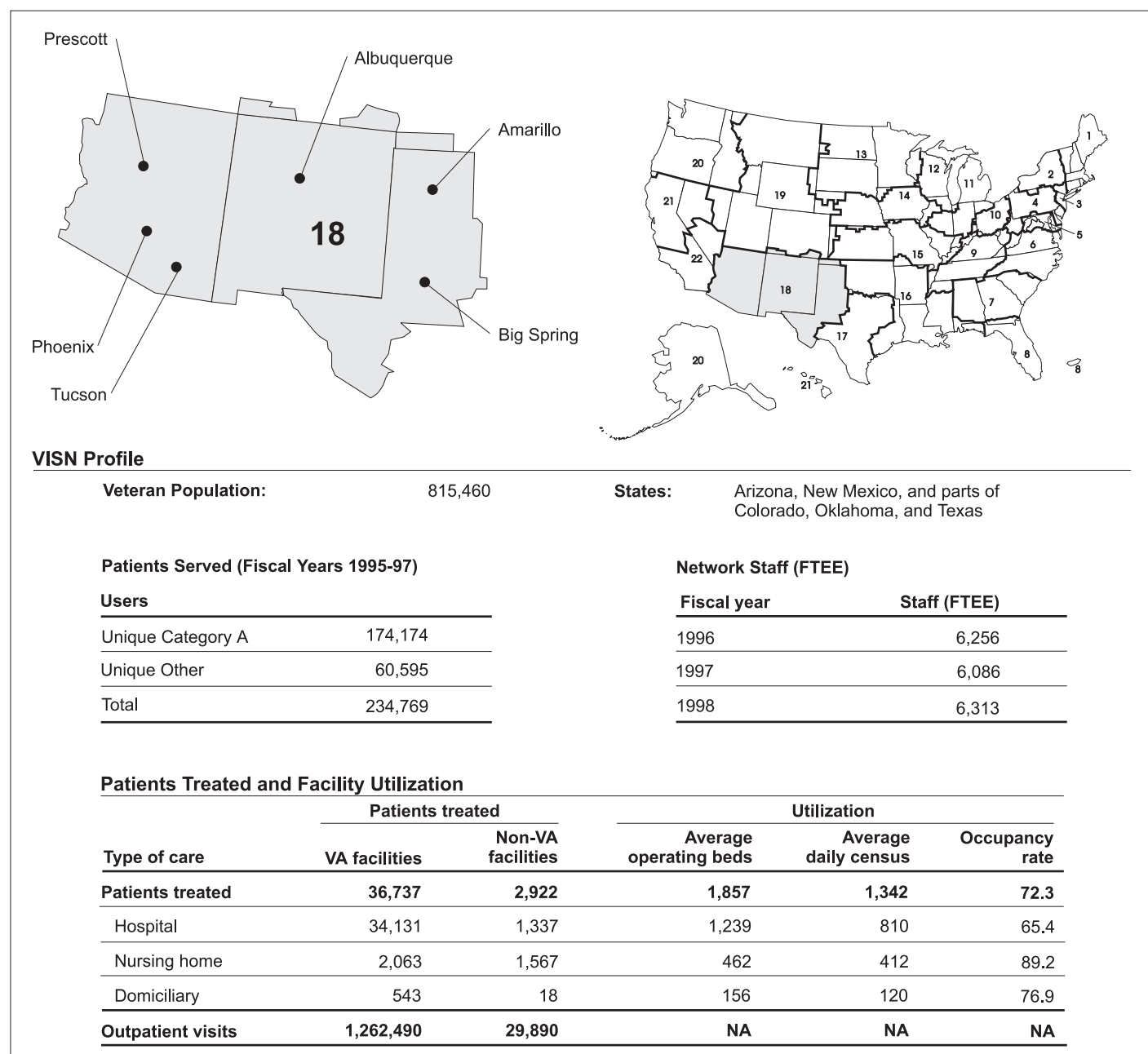
Figure II.5: VISN 16 (Jackson)



Note: NA means "not applicable."

Appendix II Profiles of Seven Networks

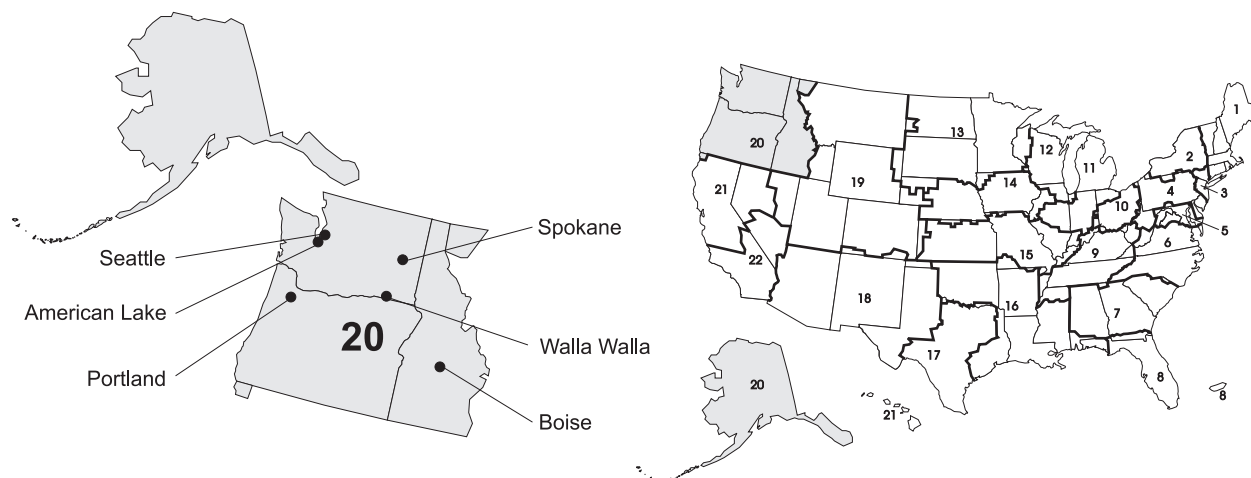
Figure II.6: VISN 18 (Phoenix)



Note: NA means "not applicable."

Appendix II
Profiles of Seven Networks

Figure II.7: VISN 20 (Portland)



VISN Profile

Veteran Population: 1,152,112

States: Alaska, Oregon, Washington, and parts of California, Idaho, and Montana

Patients Served (Fiscal Years 1995-97)

Users

Unique Category A	170,633
Unique Other	29,931
Total	200,564

Network Staff (FTEE)

Fiscal year	Staff (FTEE)
1996	7,258
1997	6,973
1998	7,083

Patients Treated and Facility Utilization

Type of care	Patients treated		Utilization		
	VA facilities	Non-VA facilities	Average operating beds	Average daily census	Occupancy rate
Patients treated	35,726	3,908	2,854	2,172	76.1
Hospital	31,694	1,694	1,361	888	65.2
Nursing home	1,762	1,957	475	387	81.5
Domiciliary	2,270	257	1,018	897	88.1
Outpatient visits	1,193,956	103,825	NA	NA	NA

Note: NA means "not applicable."

Related GAO Products

VA Health Care: Resource Allocation Has Improved, but Better Oversight Is Needed ([GAO/HEHS-97-178](#), Sept. 17, 1997).

VA Health Care: Opportunities to Enhance Montgomery and Tuskegee Service Integration ([GAO/T-HEHS-97-191](#), July 28, 1997).

VA Health Care: Lessons Learned From Medical Facility Integrations ([GAO/T-HEHS-97-184](#), July 24, 1997).

VA Health Care: Assessment of VA's Fiscal Year 1998 Budget Proposal ([GAO/T-HEHS-97-121](#), May 1, 1997).

Department of Veterans Affairs: Programmatic and Management Challenges Facing the Department ([GAO/T-HEHS-97-97](#), Mar. 18, 1997).

Veterans' Health Care: Facilities' Resource Allocations Could Be More Equitable ([GAO/HEHS-96-48](#), Feb. 7, 1996).

VA Health Care: Exploring Options to Improve Veterans Access to VA Facilities ([GAO/HEHS-96-52](#), Feb. 6, 1996).

VA Health Care: Improving Veterans' Access Poses Financial and Mission-Related Challenges ([GAO/HEHS-97-7](#), Oct. 25, 1996).

VHA's Management Improvement Initiative ([GAO/HEHS-96-191R](#), Aug. 30, 1996).

Veterans' Health Care: Challenges for the Future ([GAO/T-HEHS-96-172](#), June 27, 1996).

VA Health Care: Efforts to Improve Veterans' Access to Primary Care Services ([GAO/T-HEHS-96-134](#), Apr. 24, 1996).

VA Health Care: Challenges and Options for the Future ([GAO/T-HEHS-95-147](#), May 9, 1995).

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013**

or visit:

**Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

**United States
General Accounting Office
Washington, D.C. 20548-0001**

**Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100**

**Official Business
Penalty for Private Use \$300**

Address Correction Requested

