United States General Accounting Office

GAO

Report to Congressional Requesters

April 2004

VA HEALTH CARE

Resource Allocations to Medical Centers in the Mid South Healthcare Network

GAO-04-444

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Highlights

Highlights of GAO-04-444, a report to congressional requesters

April 2004

VA HEALTH CARE

Resource Allocations to Medical Centers in the Mid South Healthcare Network

Why GAO Did This Study

Since fiscal year 1997, the Department of Veterans Affairs (VA) has relied primarily on its 21 health care networks to allocate resources to its medical centers. VA headquarters also directly allocates some resources to the medical centers. In addition, medical centers collect resources from third-party insurance payments and other sources.

VA provides general guidance to networks for resource allocation to medical centers, but permits variation in networks' allocation methodologies. Representatives from veterans groups and others have expressed concerns regarding resource allocations to medical centers in Network 9 (Nashville) known as the Mid South Healthcare Network.

GAO was asked to report for fiscal year 2002 (1) the amount of resources medical centers in the network received and the source of those resources and (2) the basis on which medical centers in the network received these resources. GAO was also asked to supplement findings for fiscal year 2002 with information for fiscal years 1997 through 2003.

www.gao.gov/cgi-bin/getrpt?GAO-04-444.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Cynthia A. Bascetta at (202) 512-7101.

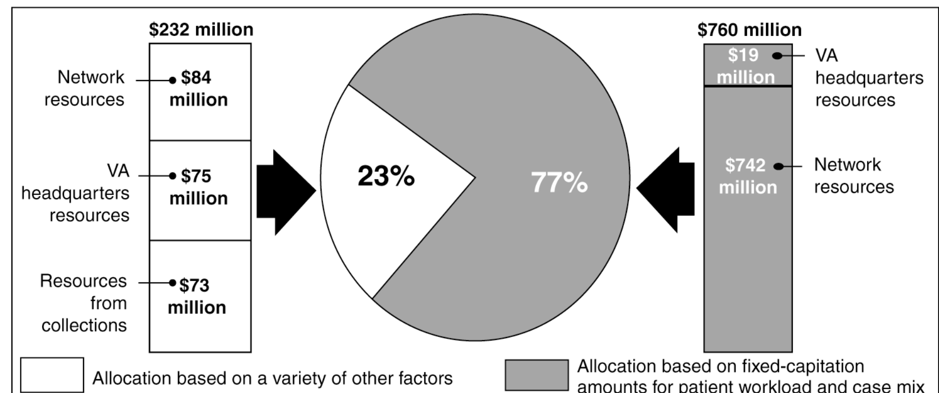
What GAO Found

The six medical centers in Network 9 (Nashville), known as the Mid South Healthcare Network, received a total of about $1 billion in resources in fiscal year 2002. The network allocated 83 percent of the total, or $825 million, to its medical centers. The medical centers received smaller amounts from VA headquarters (9 percent of the total or about $93 million) and resources from collections (7 percent of the total or about $73 million). As in fiscal year 2002, the network allocated more than 80 percent of medical center resources each year from fiscal years 1997 through fiscal year 2003.

Medical centers in Network 9 (Nashville) received about 77 percent of their resources, or $760 million, in fiscal year 2002 based on fixed-per-patient amounts, referred to as fixed-capitation amounts, for patient workload and case mix. Patient workload is the number of patients treated, and case mix is a classification of patients into categories based on health care needs and related costs. The largest portion of these resources allocated on this basis came from the network while a smaller portion came from VA headquarters. Medical centers in the network received about 23 percent of their total resources, or $232 million, in fiscal year 2002 based on a variety of other factors such as network managers' determination of the financial needs of medical centers during the course of the year. These resources came from the network, VA headquarters, and collections. Since VA changed its resource allocation system in fiscal year 1997, the medical centers in the network received about the same portions of their resources based on fixed-capitation amounts and on a variety of other factors each year from fiscal years 1997 through 2003.

VA agreed with GAO's findings.

Percentage, Amounts, and Basis of Approximately $1 Billion In Resources Received by Medical Centers in Network 9 (Nashville), Fiscal Year 2002



Source: GAO analysis of VA data.

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Abbreviations

CMOP	Consolidated Mail Outpatient Pharmacy
DOD	Department of Defense
DRG	diagnostic related group
DSS	Decision Support System
ELC	Executive Leadership Council
FTEE	full time equivalent employees
MCAC	Mid South Customer Accounts Center
PTSD	post-traumatic stress disorder
TVHS	Tennessee Valley Healthcare System
VA	Department of Veterans Affairs
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration

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United States General Accounting Office
Washington, DC 20548

April 21, 2004

The Honorable Bart Gordon
House of Representatives
The Honorable Jim Cooper
House of Representatives

The Department of Veterans Affairs (VA) has changed the way it allocates resources to its medical centers[1] in recent years. Since fiscal year 1997, VA has moved from a centralized allocation system—in which VA headquarters allocated resources directly to VA medical centers—to a more decentralized system in which VA headquarters allocates most of its resources to VA's 21 health care networks. The networks then allocate these resources to their respective medical centers. VA headquarters also directly allocates some additional resources to the medical centers. In addition, medical centers collect resources from third-party insurance payments and other sources. While implementing this new resource allocation process, VA increased the number of patients it treated from 3.1 million to 4.7 million from fiscal years 1997 through 2002 and received annual appropriations for medical care programs that increased from $17 billion to $21 billion.

We and others have examined how VA uses the Veterans Equitable Resource Allocation (VERA) system to allocate resources to the networks.[2] VERA is a national, formula-driven approach that VA uses to allocate most of its resources to networks based primarily on two factors that experts generally recognize as key principles of health care resource allocation—patient workload and case mix. Patient workload is the number of veterans treated. Case mix is a classification of patients into

[1]Medical centers typically include one or more hospitals as well as other types of health care facilities such as outpatient clinics and nursing homes.

[2]U.S. General Accounting Office, *VA Health Care: Allocation Changes Would Better Align Resources with Workload*, GAO-02-338 (Washington, D.C.: Feb. 28, 2002); U.S. General Accounting Office, *VA Health Care: More Veterans Are Being Served, but Better Oversight Is Needed*, GAO/HEHS-98-226 (Washington, D.C.: Aug. 28, 1998); U.S. General Accounting Office, *VA Health Care: Resource Allocation Has Improved, but Better Oversight Is Needed*, GAO/HEHS-97-178 (Washington, D.C.: Sept. 17, 1997); RAND, *An Analysis of Potential Adjustments to the Veterans Equitable Resource Allocation (VERA) System* (Santa Monica, California: 2003); and Price Waterhouse LLP and The Lewin Group, Inc., *Veterans Equitable Resource Allocation Assessment-Final Report*, Mar. 27, 1998.

categories based on their health care needs and related costs. Using workload and case-mix data, VERA allocates a fixed amount of resources for each veteran in a case-mix category. These amounts are often referred to as capitation. By contrast, VA does not require that networks use a formula-driven approach, like VERA, to allocate resources to medical centers. Instead, VA provides general guidance to networks for allocating resources to medical centers that permits variation in the network allocation methodologies to take into account varying local conditions.

Representatives from veterans groups and others in Network 9 (Nashville), also known as the Mid South Healthcare Network, have expressed concerns about the allocation of resources to the medical centers in Network 9 (Nashville). These concerns have focused on the total amount of resources allocated to the network's largest medical center, the Tennessee Valley Healthcare System (TVHS), which is located in Nashville and Murfreesboro; the basis on which medical centers in the network receive their resources; and to what extent network office expenditures have increased in recent years.

You asked us to determine for fiscal year 2002 (1) the amount of resources medical centers in the network received and the source of those resources, (2) the basis on which medical centers in the network received these resources, and (3) the extent to which network office expenditures were greater than in fiscal year 1997 and the primary reasons accounting for any increase. To place this information in context, you asked us to supplement our findings for fiscal year 2002, the most recent year for which complete data were available at the time of our analysis, with information for fiscal years 1997 through 2003.

To determine the amount of resources medical centers in the network received and the sources of those resources in fiscal year 2002, we categorized information in VA and Network 9 (Nashville) financial reports on resources available to medical centers by the source of those resources: Network 9 (Nashville), VA headquarters, and collections. Because resources for the TVHS medical center and the Network 9 (Nashville) office are combined in the same financial accounts, we used financial reports maintained by TVHS to separate out financial information for the TVHS medical center. We developed estimates on similar information for fiscal years 1997 through 2001 and 2003 based on these and other data. To determine the basis on which medical centers in the network received resources in fiscal year 2002, we obtained and analyzed documents that described the allocation methodology used by the network and VA headquarters. We relied on VA data, interviews with VA officials,

and on our prior work to calculate the extent of allocations based on fixed-capitation amounts for patient workload and case mix. We developed estimates on similar information for fiscal years 1997 through 2001 and 2003 based on these and other data. We limited our review to how resources were allocated to medical centers and did not analyze how medical centers in the network spent their allocations to deliver health care. To examine the extent to which network office expenditures were greater than in fiscal year 1997, we used financial reports maintained by TVHS to separate out financial information for the network office from the TVHS medical center resources and other data we obtained from the network office. We used these data to analyze changes in network staffing and other network office functions from fiscal years 1997 through 2002. We also interviewed network and VA headquarters officials about the roles and responsibilities of network office staff. To better understand the issues of concern for all three objectives, we conducted a site visit to interview officials at the network office located in Nashville and at the TVHS locations in Nashville and Murfreesboro. In doing our work, we tested the reliability of the data and determined they were adequate for our purposes. For a complete description of our scope and methodology, see appendix I. We conducted our work from March 2003 through April 2004 in accordance with generally accepted government auditing standards.

Results in Brief

The six medical centers in Network 9 (Nashville) received a total of about $1 billion in resources in fiscal year 2002. These resources came from three sources: the network, VA headquarters, and resources collected by the medical centers. The network allocated the largest amount—83 percent of the total or $825 million—to its medical centers. VA headquarters allocated the next largest amount—9 percent of the total or approximately $93 million—directly to medical centers in Network 9 (Nashville). In addition to these allocations, the medical centers collected other resources—7 percent of the total or about $73 million—from third-party insurance payments, copayments, and reimbursements for services provided to non-VA health care providers. The combined resources from the network, VA headquarters, and resources from collections for each medical center ranged from about $93 million for the Huntington medical center to about $291 million for TVHS. Medical centers in the network have relied on the network to provide most of their resources since VA changed its resource allocation system in fiscal year 1997. From fiscal year 1997 through fiscal year 2003, Network 9 (Nashville) allocated more than 80 percent of medical center resources each year.

Medical centers in Network 9 (Nashville) received about 77 percent of their resources, or $760 million, in fiscal year 2002 based on fixed-capitation amounts for patient workload and case mix. The network allocated a large portion of these resources, about $742 million, to its medical centers on this basis. To allocate these resources, the network classified its patient workload into three categories based on case mix, which resulted in medical centers receiving higher fixed-capitation amounts for patients with greater health care needs. VA headquarters also allocated about $19 million in resources directly to medical centers based on fixed-capitation amounts for patient workload and case mix. In addition to these resources, medical centers received about 23 percent of their resources, or $232 million, based on a variety of factors other than fixed-capitation amounts for patient workload and case mix. Of these $232 million in resources, $84 million came from Network 9 (Nashville), $75 million came from VA headquarters, and $73 million came from collections. For example, the network allocated about $33 million from its network reserve fund for unexpected contingencies based on network managers' determination of the financial needs of medical centers during the course of the year. Since VA changed its resource allocation system in fiscal year 1997, medical centers in Network 9 (Nashville) received about three-quarters of their resources based on fixed-capitation amounts and about one-quarter based on a variety of other factors each year from fiscal years 1997 through 2003.

Expenditures made by the network office increased from about $1 million to about $23 million from fiscal years 1997 through 2002, driven largely by spending for the consolidation of information technology and for staffing expenditures. Network office expenditures for information technology increased, in part, because the network assumed the costs of contracts the medical centers had previously paid for software licenses and information technology services. These expenditures represented $9.6 million or approximately 41 percent of total network office expenditures in fiscal year 2002. Expenditures for network office staff increased primarily because the network consolidated positions formerly located at the medical centers to a central location and added positions to handle an increased volume of insurance collections. The network consolidated its collections operations at Murfreesboro, Tennessee to increase the efficiency of collection operations. In addition to collections staff positions, the network increased the number of other network staff to improve network operations. Total network office staff expenditures accounted for $8 million of the network office's total expenditures in fiscal year 2002—$5 million for collections staff and $3 million for other network office staff.

In commenting on a draft of this report, VA agreed with our findings.

Background

Network 9 (Nashville) is composed of a network office in Nashville, Tennessee; six medical centers located in three states; and 27 community-based outpatient clinics. In fiscal year 2002, about 1 million veterans lived in the area served by the network. In that year, the six medical centers in the network treated about 208,000 patients or 20 percent of the veterans who lived in the area served by the network. (See table 1.) The largest medical center in the network is TVHS, which has two main locations—one in Nashville and the other in Murfreesboro, Tennessee. TVHS served more than twice as many patients and had more than three times the number of employees as the smallest medical center in the network in fiscal year 2002. For more detailed information on staff resources at TVHS's two locations, which were integrated to form TVHS in fiscal year 2001, see appendix II.

Table 1: Network 9 (Nashville) Medical Centers, Patients, and Staff, Fiscal Year 2002

Medical center	Patients[a]	Inpatients treated[b]	Outpatient visits[b]	Staff (full-time employees)
Tennessee Valley Healthcare System (TVHS), Tenn.	61,120	9,490	463,578	2,321
Memphis, Tenn.	35,440	7,559	294,373	1,723
Louisville, Ky.	31,281	4,800	317,863	1,121
Mountain Home, Tenn.	28,187	5,401	247,170	1,288
Lexington, Ky.	26,963	5,391	267,327	1,245
Huntington, W. Va.	25,378	3,570	252,887	697
Total	**208,369**	**36,211**	**1,843,198**	**8,395**

Source: VA.

[a]The number of patients using health care services as counted by unique or unduplicated social security numbers. Each patient is counted one time, regardless of how many visits each patient makes.

[b]The number of inpatients treated and the number of outpatient visits are not based on unique or unduplicated social security numbers.

Network 9 (Nashville) has received increased allocations each year under VERA to provide resources for medical centers to treat their growing patient workload. From fiscal year 1997 to fiscal year 2002, the number of patients medical centers in the network treated increased by 27 percent. To meet patient health care needs, the network received $700 million in resources from VERA in fiscal year 1997, and by fiscal year 2002 the

network's allocations from VERA had risen to $849 million—a 21 percent increase. The network has been responsible for developing a method to allocate these VERA resources to its medical centers. VA headquarters provides general guidance to networks on the principles they should use when developing their allocation methodologies, but does not require that networks use patient workload or case mix in their allocation methodologies.[3]

Using fixed-capitation amounts for patient workload and case mix are guiding principles recognized by experts on the design of health care payment systems and implemented in practice by major health care programs such as Medicare and Medicaid.[4] Medicare and Medicaid, for example, use fixed-capitation amounts to provide managed care plans with an incentive to operate efficiently by placing them at risk if their expenses exceed the payment amount. Our report on VERA in February 2002 also concluded that VERA provides a reasonable approach to resource allocation, in part because VERA allocates resources to the networks based primarily on the use of fixed-capitation amounts for patient workload and case mix.[5] VERA provides fixed-capitation amounts for each case-mix category that are the same for each network and are intended to reflect VA's average costs instead of historical local costs.

In addition to resources that VA allocates to its medical centers from the network and headquarters, medical centers also collect other resources

[3]VA policy provides the following 10 guiding principles to which networks shall adhere when developing network allocation methodologies: 1) be readily understandable and result in predictable allocations, 2) support high quality healthcare delivery in the most appropriate setting, 3) support integrated patient-centered operations, 4) provide incentives to ensure continued delivery of appropriate special care, 5) support the goal of improving access to care, 6) provide adequate support for the department's research and education missions, 7) be consistent with eligibility requirements and priorities, 8) be consistent with the network's strategic plans and initiatives, 9) promote managerial flexibility and innovation, and 10) encourage increases in alternative revenue collections. Veterans Health Administration (VHA), Department of Veterans Affairs, *Network Resource Allocation Principles*, *VHA Directive 97-054* (Washington, D.C.: Oct. 30, 1997).

[4]For a discussion of health care programs that use fixed-capitation amounts for patient workload and case mix, see John Holahan and Shinobu Suzuki, "Medicaid Managed Care Payment Methods and Capitation Rates in 2001," *Health Affairs*, vol. 22, no.1 (2003); Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy* (Washington, D.C.: 2003); and Nigel Rice and Peter C. Smith, "Capitation and Risk Adjustment in Health Care Financing: An International Progress Report," *The Milbank Quarterly*, vol. 79, no.1 (2001).

[5]GAO-02-338.

that they use in providing health care to veterans. VA medical centers collect third-party insurance payments and copayments from veterans.[6] VA collects insurance payments for treatment of veterans' conditions that are not a result of injuries or illnesses incurred or aggravated during military service. In addition, some veterans are charged copayments for certain health care services and prescription drugs obtained at a VA pharmacy. VA medical centers also collect resources for a variety of services VA provides to non-VA health care providers such as hospital laundry services and outpatient care provided to Department of Defense active duty military personnel.

Medical Centers in Network 9 (Nashville) Received About $1 Billion in Fiscal Year 2002 from the Network and Other Sources

The six medical centers in Network 9 (Nashville) received about $1 billion in fiscal year 2002 from three sources: the network, VA headquarters, and resources from collections. (See table 2.) The network allocated the largest share of this total—83 percent or about $825 million of the total resources received by the six medical centers. VA headquarters allocated directly to the medical centers the next largest share, which was about 9 percent or $93 million of the total resources the network's medical centers received. Finally, the six medical centers also collected about 7 percent of the total resources medical centers received or $73 million in resources from collections of third-party insurance payments, veteran copayments, and reimbursements primarily for services provided to non-VA healthcare providers.

[6] *See* 38 U.S.C. §§ 1710(f), (g), 1722A, 1729.

Table 2: Resources Provided to Network 9 (Nashville) Medical Centers in Fiscal Year 2002, by Source

Dollar amounts in millions

Medical center	Total resources	Resources provided by network (percent of total medical center resources)	Resources provided by VA headquarters (percent of total medical center resources)	Resources from collections (percent of total medical center resources)
Tennessee Valley Healthcare System (TVHS), Tenn.	$291	$240 (82)	$33 (11)	$18 (6)
Memphis, Tenn.	185	156 (84)	17 (9)	12 (6)
Louisville, Ky.	143	117 (82)	11 (8)	14 (10)
Lexington, Ky.	141	116 (82)	15 (11)	10 (7)
Mountain Home, Tenn.	139	119 (86)	8 (6)	12 (8)
Huntington, W. Va.	93	78 (83)	8 (9)	7 (8)
All medical centers	**$992**	**$825 (83)**	**$93 (9)**	**$73 (7)**

Source: GAO analysis of VA data.

Notes: Includes about $15.6 million from the fiscal year 2001 VERA allocation that the network allocated to the medical centers in fiscal year 2002. Dollar amounts and percents may not add due to rounding.

The amount of resources that the network, VA headquarters, and resources from collections provided, in total, to each medical center in fiscal year 2002 ranged from about $93 million for Huntington to about $291 million for TVHS. The network provided the largest portion of each medical center's total resources in fiscal year 2002. Network allocations as a percentage of total medical center resources ranged from 82 percent at TVHS and two other medical centers to 86 percent at Mountain Home. TVHS and Lexington received the highest percentage of resources directly from VA headquarters (11 percent), and TVHS and Memphis received the lowest percentage of resources from collections (6 percent).

The percentage of resources that medical centers in the network received in fiscal year 2002 from the three sources varied because of several factors. For instance, TVHS received a lower percentage of its resources from the network than three other medical centers, in part, because it received a larger percentage of its resources from VA headquarters than most medical centers in the network. The larger allocation from VA headquarters was used, in part, for the TVHS transplant program, the only

one of its kind in the network. Louisville also received a lower percentage of its resources from the network than three other medical centers, in part, because the medical center received a higher percentage of its total resources from collections than any other network medical center. This resulted from agreements the medical center had—and resources it collected—for the delivery of outpatient and family practice care to active duty military personnel and their dependents at Ft. Knox, Kentucky.

Medical centers in the network have relied on the network to provide most of their resources since VA changed its resource allocation system in fiscal year 1997. From fiscal year 1997 through fiscal year 2003, Network 9 (Nashville) allocated more than 80 percent of medical center resources each year. We estimate that on average the network provided 87 percent of the resources medical centers received during this period.

Medical Centers in Network 9 (Nashville) Received Most of Their Resources Based on Allocations Using Fixed-Capitation Amounts for Patient Workload and Case Mix

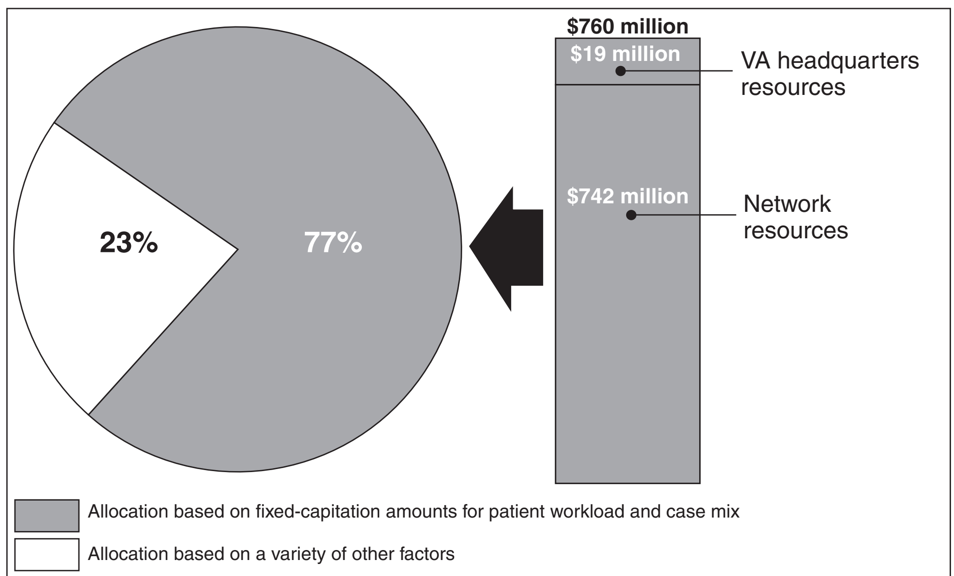
Medical centers in Network 9 (Nashville) received most of their resources in fiscal year 2002 based on allocations using fixed-capitation amounts for patient workload and case mix. A large portion of the resources allocated on the basis of fixed-capitation amounts for patient workload and case mix came from the network and a smaller portion came from VA headquarters. The other resources that medical centers received in fiscal year 2002 were based on a variety of other factors such as network managers' determination of the financial needs of medical centers during the course of the year. These resources came from the network, VA headquarters, and collections. Since VA changed its resource allocation system in fiscal year 1997, medical centers in Network 9 (Nashville) received about three-quarters of their resources based on fixed-capitation amounts and about one-quarter based on other factors each year from fiscal years 1997 through 2003.

Medical Centers Received About Three-Quarters of Their Resources from Allocations Based on Fixed-Capitation Amounts for Patient Workload and Case Mix

Medical centers received about 77 percent of their approximately $1 billion in total resources in fiscal year 2002—or $760 million—based on allocations using fixed-capitation amounts for patient workload and case mix. (See fig. 1.) The $760 million allocated on the basis of fixed-capitation amounts for patient workload and case mix came primarily from the network. The network allocated $742 million to medical centers on this basis. VA headquarters allocated the remainder of the resources based on fixed-capitation amounts for patient workload and case mix—$19 million—directly to medical centers in Network 9 (Nashville). The portion of medical center resources based on fixed-capitation amounts for patient workload and case mix was similar in other years. For each of

fiscal years 1997 through 2003, we estimated that medical centers received about three-quarters of their resources based on fixed-capitation amounts for patient workload and case mix.

Figure 1: Percentage and Amounts of Approximately $1 Billion in Resources Medical Centers Received Based on Fixed-Capitation Amounts for Patient Workload and Case Mix, Fiscal Year 2002



Source: GAO analysis of VA data.

Note: Dollar amounts do not add due to rounding.

Network 9 (Nashville) Allocated Largest Portion of Resources Based on Fixed-Capitation Amounts for Patient Workload and Case Mix in Fiscal Year 2002

The network allocated the largest portion of medical centers' resources—$742 million—based on fixed-capitation amounts for patient workload and case mix in fiscal year 2002. To calculate its patient workload, the network, like VERA, used two methods. The network calculated the number of patients who received a relatively limited amount of health care during a previous 3-year period, and calculated the number of patients who received relatively more care during a previous 5-year period. In its workload calculation for this 3-year period, the network's resource allocation methodology, like VERA, excluded a group of veterans, known

as Priority 7 veterans,[7] but included them in its 5-year workload calculation.[8] The network made an exception in the way it calculated 3-year workload for a one-time $5 million allocation, its share of a supplemental appropriation VA received in fiscal year 2002. For this allocation the network included all Priority 7 veterans in its workload calculation.

To calculate case mix in fiscal year 2002, the network classified patient workload into different categories, depending upon estimates of the patients' health care needs and associated costs for treating them. The network, like VERA, used three case-mix categories: basic non-vested, basic vested, and complex.[9] Basic non-vested and basic-vested categories included patients who have relatively routine health care needs and are principally cared for in an outpatient setting. Basic non-vested patients receive only part of their care through VA and are less costly to VA than basic-vested patients. Basic-vested patients, by contrast, rely primarily on VA for meeting their health care needs. Patients in the basic non-vested and basic-vested category represented about 97 percent of the network's patient workload in that year. The complex category included patients who generally required significant high-cost inpatient care as an integral part of their rehabilitation or functional maintenance, and represented about 3 percent of the network's workload in that year. For patients in each case-mix category, the network paid medical centers a capitation rate, which is based on the average cost of care in VA for a patient in that category. The capitation rates that the network used for each of these categories were the same as those used in VERA: basic non-vested ($197), basic vested ($3,121), and complex ($41,667). The network also allocated

[7]Priority 7 veterans are veterans with relatively higher incomes compared to other veterans and most have no service-connected disabilities. VA classifies veterans according to their eligibility for enrollment for health benefits, with Priority 1 veterans having the highest priority for enrollment and prior to fiscal year 2003, Priority 7 veterans having the lowest priority for enrollment. At the beginning of fiscal year 2003, an additional category, Priority 8, was established which includes mostly veterans with no service-connected disabilities whose incomes exceed a certain regional threshold. Many of the veterans formerly classified as Priority 7 veterans are now classified as Priority 8. *See* 38 U.S.C. § 1705(a)(8).

[8]VA did not include Priority 7 veterans in VERA's 3-year workload allocations, in part, because VA's expectation was that collections from copayments and third-party insurance reimbursements would cover the majority of the costs of patients who received a relatively limited amount of health care.

[9]The basic non-vested and basic-vested workload calculations are based on a 3-year time period and the complex workload calculations are based on a 5-year period.

about $9 million to medical centers based on other patient case-mix categories.[10]

Medical centers in Network 9 (Nashville) with larger patient workloads generally received more resources than medical centers with smaller patient workloads. In fiscal year 2002, for example, TVHS had the largest patient workload and received the most resources. However, if two medical centers had similar patient workloads but the two had differences in the case mix of their patients, one may have received more resources than the other. For example, Mountain Home and Huntington medical centers had almost identical patient workloads in fiscal year 2002, but Mountain Home received a larger allocation from the network ($119 million) than Huntington ($78 million), in part, because of an important difference in their respective patients' case mix. Mountain Home had more patients whose health care needs required more expensive care as indicated by the number of complex care patients. In that year, Mountain Home had almost 1,200 complex patients compared to 400 complex patients in Huntington.

VA Headquarters Allocated a Small Portion of Resources Based on Fixed-Capitation Amounts for Patient Workload and Case Mix in Fiscal Year 2002

VA headquarters allocated the remainder of resources that medical centers received based on fixed-capitation amounts for patient workload and case mix in fiscal year 2002, which was about $19 million. The largest resource allocation VA headquarters made to medical centers in Network 9 (Nashville) on this basis—$13 million—was to pay a portion of the costs for veterans receiving care in state veterans' nursing homes, which are operated in several locations in Network 9 (Nashville), including Murfreesboro, Tennessee and Hazard, Kentucky.[11] VA paid the same amount for veterans receiving this service, about $53 per day per veteran, without adjusting for differences in veterans' health care needs. The second largest resource allocation VA headquarters made to medical centers in Network 9 (Nashville) based on fixed-capitation amounts for patient workload and case mix in fiscal year 2002 was about $5 million for its transplant program.[12] VA headquarters allocated these resources based

[10]The network allocated these resources to medical centers for part of their equipment allocations.

[11]State veterans' nursing homes provide nursing home care to veterans in state-owned and operated veterans' nursing homes, for which VA pays a portion of daily costs. Other state veterans' homes in the Network 9 (Nashville) area are located in Humboldt, Tennessee; Wilmore, Kentucky; and Oxford, Mississippi.

[12]VA headquarters allocated about $6 million directly to TVHS for transplants based on other factors.

on the number of patients needing transplants and the type of transplant needed: kidney, liver, heart, and bone marrow transplants. The capitation amounts for transplants ranged from $50,000 to $138,000 in fiscal year 2002. TVHS received all the VA headquarters transplant resource allocation in Network 9 (Nashville) because it is the only medical center in the network performing transplants. VA also allocated about $1 million to medical centers through a per diem rate per veteran to support housing programs for homeless veterans operated by nonprofit community-based organizations.

Network 9 (Nashville) Changed Its Patient Workload and Case-Mix Measures During the Fiscal Year 1997-2003 Period

Network 9 (Nashville) changed how it determined patient workload in fiscal year 2003 to allocate resources to its medical centers. For that year, the network calculated patient workload based on a 1-year period—or the total number of patients who used network medical centers in fiscal year 2002. In addition, the network included all veterans, including Priority 7 and 8 veterans, in its patient workload. According to a network official, the network made these changes in determining patient workload to better account for the costs involved in treating its patients. By contrast, in fiscal years 1997 through 2002, the network determined workload based on the same measures that VERA used by calculating the number of patients who received a relatively limited amount of health care during a previous 3-year period, and calculating the number of patients who received relatively more care during a previous 5-year period. And like VERA, the network also generally excluded Priority 7 veterans from its 3-year workload calculation but included them in its 5-year calculation from fiscal years 1997 through 2002.

Network 9 (Nashville) also changed the way it calculated its case mix for allocating resources to medical centers several times during this period. In fiscal years 1997 and 1998, the network used the same 2 case-mix categories that VERA used—basic and special.[13] In fiscal year 1999, the network did not use the 3 case-mix categories that VERA converted to in that year but instead used the 44 classes that VA used to construct VERA's 3 case-mix categories. In fiscal years 2000 through 2002, the network used the 3 case-mix categories that VERA used: basic non-vested, basic vested, and complex care. In fiscal year 2003, the network made a significant change by increasing the number of case-mix categories from 3 used in fiscal year 2002 to 644 case-mix categories. The fiscal year 2003 case-mix

[13]VERA's special case-mix category in fiscal years 1997 and 1998 was renamed as complex in fiscal year 1999.

approach classified the health care needs of hospital inpatients into the 511 diagnostic related groups (DRGs) used by Medicare to pay hospitals for inpatient care.[14] For outpatient care, the approach used 121 different categories to classify the type of visit and account for the amount of resources the visit consumed. Additionally, the network used 12 different categories to measure the intensity of care in long-term care settings. According to a network official, these changes were made to better account for medical centers' cost for treating patients.

The Network 9 (Nashville) decision to use more case-mix categories in fiscal year 2003 is consistent with a recommendation we made to VA in February 2002 to improve VERA's allocation of comparable resources for comparable workloads among networks.[15] In that report, we recommended that VA adopt more case-mix categories to better account for differences in patient health care needs and that VA make other improvements. We also pointed out that the literature and experts we consulted suggested that a large increase in the number of case-mix categories—such as the increase in the number of Network 9 (Nashville) case-mix categories from 3 to 644 in fiscal year 2003—has advantages and disadvantages. Specifically, using more case-mix categories can increase the accuracy of health care resource allocations whether at the network or medical center level, but may also provide more opportunities to classify patients inappropriately to receive the highest capitation amounts.

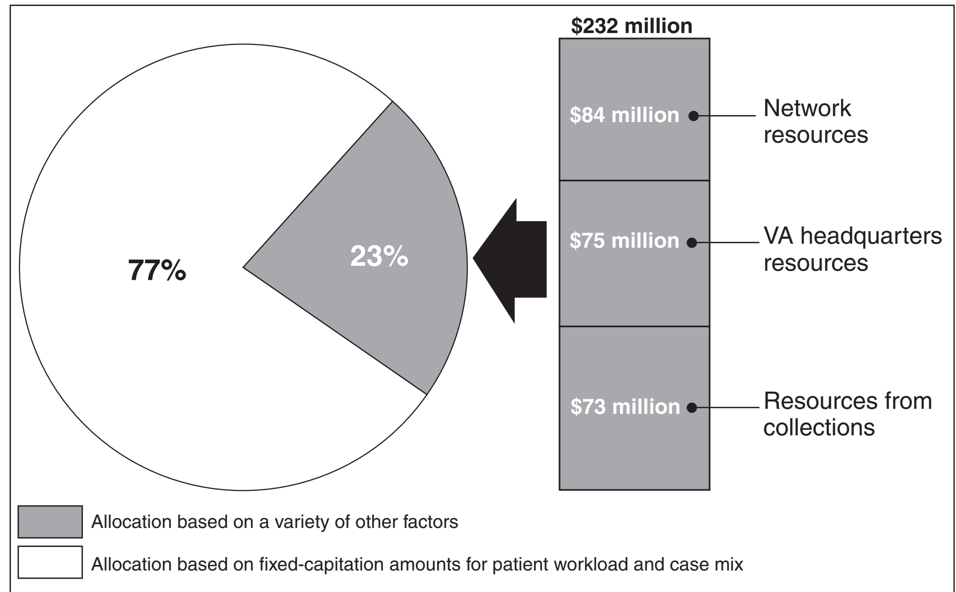
Medical Centers Received About One-Quarter of Their Resources Based on a Variety of Other Factors

Medical centers in Network 9 (Nashville) received about 23 percent of their total resources, or $232 million, in fiscal year 2002 based on a variety of factors other than fixed-capitation amounts for patient workload and case mix. (See fig. 2.) These resources came from three sources: Network 9 (Nashville), VA headquarters, and collections in the amounts of $84 million, $75 million, and $73 million, respectively.

[14] DRGs are designed to group patients with similar clinical problems that are expected to require similar amounts of hospital resources. Each DRG has a national relative weight that reflects the expected relative costliness of inpatient treatment for a patient in that group compared with that for the average Medicare patient. Groups expected to require above-average resources have higher weights and those that require fewer resources have lower ones.

[15] In response to our recommendation, VA increased the number of VERA case-mix categories in fiscal year 2003 from 3 to 10 in an effort to capture more accurately the health care needs and associated costs of its patients. See GAO-02-338.

Figure 2: Percentage and Amounts of Approximately $1 Billion in Resources Medical Centers Received Based on a Variety of Factors Other Than Fixed-Capitation Amounts for Patient Workload and Case Mix, Fiscal Year 2002



Source: GAO analysis of VA data.

Network 9 (Nashville) Allocated a Portion of Resources Based on a Variety of Other Factors in Fiscal Year 2002

In fiscal year 2002, Network 9 (Nashville) used a variety of factors to allocate $84 million to its medical centers. Using these factors, the network allocated $36 million for education and research support, $33 million for the network reserves, $14 million for equipment and nonrecurring maintenance, and $1 million for other purposes.

To allocate $36 million in resources for education and research support, Network 9 (Nashville) used two methods. For education, the network allocated $22 million in resources to medical centers based on the number of residents at each medical center in the current academic year, the same approach that VERA used that year. For research support, the network allocated $14 million in resources to medical centers based primarily on the amount of funded research in fiscal year 2000, like VERA.

To allocate the network's reserve fund, network management allocated about $33 million in fiscal year 2002 based on the financial needs of medical centers. The network reserve fund was intended to provide resources for unexpected contingencies and cover unmet expenses that

medical centers have during the course of a year. VA headquarters requires that all networks have such a fund, which is similar in concept to VERA's reserve fund.[16] Network officials told us while they encourage efficient operations, some medical centers have higher costs in certain areas and if these medical centers are unable to lower their costs, the network allocates funds from the reserve to help medical centers cover unmet expenses during the year. In fiscal year 2002, the network allocated reserve funds to medical centers for these purposes and distributed about half of the reserve fund to the Lexington medical center because of its higher than average costs in pharmacy, radiology, and laboratory expenses. Table 3 shows how the network distributed the network reserve to its six medical centers in fiscal year 2002.

Table 3: Allocations to Medical Centers from the Network 9 (Nashville) Reserve Fund, Fiscal Year 2002

Medical center	Amount distributed	Percent of network reserve distributed
Lexington, Ky.	$15,595,390	46.9
Tennessee Valley Healthcare System (TVHS), Tenn.	$7,097,166	21.4
Mountain Home, Tenn.	$5,834,036	17.6
Louisville, Ky.	$4,403,466	13.2
Memphis, Tenn.	$222,870	0.7
Huntington, W. Va.	$87,738	0.3
Total	**$33,240,666**	**100**

Source: GAO analysis of VA data.

Note: According to Network 9 (Nashville) officials, the network does not necessarily allocate its entire reserve fund to medical centers each year, sometimes carrying over some resources into the next year. The amount carried over each year varies. For example, the network carried over about $5 million from its fiscal year 2002 reserve fund into fiscal year 2003.

[16] VERA uses its national reserve fund to cover network requests for additional allocations over and above the networks' other VERA allocations and other sources of revenue. Allocations from the reserve fund provide protection to patients from the risk that a health care network would not be able to provide services because its expenditures exceeded available financial resources.

To allocate resources for equipment and nonrecurring maintenance, the network allocated about $14 million[17] for that purpose in fiscal year 2002 based on priorities established by the chief engineers from each medical center and the network's Executive Leadership Council (ELC).[18] These groups prioritized a list of projects submitted by each medical center and the network allocated resources for projects according to these priorities. VERA, by contrast, allocated its equipment and nonrecurring maintenance resources to all networks that year based primarily on fixed-capitation amounts for patient workload.

Two other factors accounted for a small portion of resources medical centers received or approximately $1 million. The network used other factors to control the amount of change in a medical center's total network allocation from the prior year and for differences in local costs. In fiscal year 2002, the network capped net change in medical centers' resources allocated by the network to a maximum of an 8 percent increase or decrease from fiscal year 2001 resource allocations. The caps were designed to prevent year-to-year fluctuations beyond management's ability to prudently manage services. In addition, the network adjusted the amounts allocated to some medical centers relative to others to account for local price differences. These differences resulted primarily from variations in federal employee pay rates at the various medical centers in the network.

VA Headquarters Allocated a Portion of the Resources Medical Centers Received Based on a Variety of Other Factors in Fiscal Year 2002

VA headquarters directly allocated $75 million to medical centers for special programs such as prosthetics, stipends for medical residents and other trainees, and other programs based on a variety of other factors. In fiscal year 2002, VA allocated $34 million for prosthetics directly to medical centers based largely on medical centers' historical expenditures for prosthetics, including items such as hearing aids, wheelchairs, and artificial limbs. VA headquarters also allocated $25 million that year to medical centers in the network to fund stipends for medical residents and other trainees based on the type and number of medical residents at each medical center. VA headquarters allocated about $16 million for other programs, including readjustment counseling, substance abuse, and post-traumatic stress disorder (PTSD) based on a variety of other factors.

[17]In addition, the network allocated about $9 million for equipment using patient workload and case mix.

[18]The ELC included all medical center directors and network leadership.

Medical Centers Also Received a Portion of Their Resources from Collections in Fiscal Year 2002

Medical centers in Network 9 (Nashville) collected $73 million in resources from third-party insurance payments, copayments, and reimbursements for services provided to non-VA health care providers in fiscal year 2002. Medical centers in the network collected about $67 million of this amount from third-party insurance and copayments paid by veterans. Medical centers in the network also collected about $6 million in resources through reimbursements from the provision of health care services to non-VA entities such as private hospitals, the Department of Defense (DOD), and DOD's civilian health care contractors in fiscal year 2002. Each medical center retained the resources it collected and had the flexibility to use these resources for any health care purpose. The amounts collected varied depending upon the priority status of veterans treated, whether their treatment was required for a service-connected condition, whether the veteran had health insurance, and other factors.

Expenditures Made by the Network 9 (Nashville) Office Increased by Approximately $22 Million Since Fiscal Year 1997

Expenditures made by the network office increased from $1 million in fiscal year 1997 to $23 million in fiscal year 2002. The two primary reasons for the $22 million increase were the consolidation of information technology and staffing expenditures. Information technology expenditures accounted for the largest increase in expenditures made by the network office. This increase occurred, in part, because the network assumed the cost of contracts for software licenses and information technology services for which medical centers had once been responsible, according to network officials. Instead of having each medical center contract for information technology services individually, the network took responsibility for these contracts to consolidate and negotiate lower costs. In fiscal year 2002, computer contracts, software licensing, and other information technology expenditures represented $9.6 million or approximately 41 percent of total network office expenditures. (See table 4.)

Table 4: Expenditures Made by the Network 9 (Nashville) Office, Fiscal Year 2002

Network 9 (Nashville) office expenditures	Amount	Percent of total
Information technology related expenditures	$9,583,965	41
Staff expenditures	8,051,324	35
Contracts/consultant services[a]	3,198,000	14
Other[b]	1,295,579	6
Office of Resolution Management[c]	1,119,098	5
Total	**$23,247,966**	**100**

Source: GAO analysis of VA data.

Note: Percents do not add due to rounding.

[a]Contracts and consultant services include a contract regarding quality assurance and consultant services for enhancing clinical and operational improvements for TVHS.

[b]Other includes after-hours telephone care, awards, and accounting support.

[c]Office of Resolution Management provides Equal Employment Opportunity complaint processing services to VA employees, applicants for employment, and former employees.

Staff expenditures accounted for the second largest increase in expenditures made by the network office and accounted for $8 million by fiscal year 2002. Most of the increase in network office staff resulted because of growth in Mid South Customer Accounts Center (MCAC) staffing. (See table 5.) This growth occurred because the network consolidated staff positions formerly located at medical centers for medical insurance collections and claims processing at a central location and also added additional staff for this purpose. To establish this operation in fiscal year 1998, the network transferred 57 positions from the medical centers to MCAC. By fiscal year 2002, the network had added another 30 MCAC staff positions. MCAC staff expenditures in fiscal year 2002 were about $5 million. The MCAC operation is based at TVHS's Murfreesboro location. Network officials told us they consolidated this operation to increase efficiency and improve oversight of collections and claims processing. From fiscal years 1997 through 2002, collections for third-party insurance payments and copayments increased from $28 million to about $67 million.

Table 5: Number of Network 9 (Nashville) Office Staff Positions, Fiscal Years 1997 through 2002

Network office staff positions	Fiscal year					
	1997	1998	1999	2000	2001	2002
Staff positions at Mid South Customer Accounts Center (MCAC)	0	57	62	66	68	87
Mandated by VA headquarters	4	5	8	7	8	9
Other network staff positions	4	4	6	8	14	16
Total	**8**	**66**	**76**	**81**	**90**	**112**

Source: GAO analysis of VA data.

Note: The MCAC opened in fiscal year 1998.

Staff expenditures by the network office also increased because of growth in positions mandated by VA headquarters and additional staff positions that network management said would improve operations. These staff positions accounted for about $3 million in staff expenditures in fiscal year 2002. The network office added 5 positions from fiscal years 1997 through 2002 that were mandated by VA headquarters for all network offices to improve operations VA wide. These staff positions included a patient safety officer and a compliance officer. In addition, the network created 12 other network staff positions from fiscal years 1997 to 2002 that management expected to improve operations. For example, the network created a pharmacy benefits manager position to manage the network's pharmaceutical budget, which, according to network officials, has brought down the increase in pharmaceutical costs for the entire network, and a Decision Support System (DSS) manager to oversee DSS activities.[19] For a detailed description of all network office staff positions and their responsibilities for the network from fiscal years 1997 to 2002, see appendix III.

[19]Network officials estimate that the pharmacy benefits manager reduced the network's pharmacy cost per unique user to a 4 percent growth in fiscal year 2002, compared to a 12 percent growth the previous year. DSS is an executive information system designed to provide VA managers and clinicians with data on patterns of patient care and outcomes as well as the capability to analyze resource utilization and the cost of providing health care services. DSS has been implemented at all VA medical centers.

Agency Comments

In commenting on a draft of this report, VA agreed with our findings. VA provided technical comments which we incorporated, as appropriate. VA's written comments are in appendix IV.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. We will then send copies of this report to the Secretary of Veterans Affairs, interested congressional committees, and other parties. We also will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov. If you or your staff have any questions about this report, please call me at (202) 512-7101. Another contact and key contributors are listed in appendix V.

Cynthia A. Bascetta
Director, Health Care—Veterans'
Health and Benefits Issues

Appendix I: Objectives, Scope, and Methodology

We reviewed Network 9 (Nashville) allocations to its medical centers for fiscal year 2002 to determine: (1) the amount of resources medical centers in the network received and the source of those resources, (2) the basis on which medical centers in the network received these resources, and (3) the extent to which network office expenditures were greater than in fiscal year 1997 and the primary reasons accounting for any increase. To place this information in context, we supplemented our findings for fiscal year 2002, the most recent year for which complete data were available at the time of our analysis, with information for fiscal years 1997 through 2003. We limited our review to how resources were allocated to medical centers in Network 9 (Nashville) and did not analyze how they spent their allocations to deliver health care.

The Amount of Resources Medical Centers in Network 9 (Nashville) Received and the Source of Those Resources

To determine the amount of resources medical centers in Network 9 (Nashville) received in fiscal year 2002 and the source of those resources we obtained financial data from the Office of the Chief Financial Officer within the Veterans Health Administration and from the Network 9 (Nashville) office. We categorized transactions in financial reports, referred to as medical center allotment reports, into the source of the resources: (1) Network 9 (Nashville), (2) VA headquarters, and (3) resources from collections. We identified transactions and summed the amount provided from each of the sources based on analysis of the medical centers' allotment reports and interviews with VA headquarters and network officials. As part of resources allocated by the network, we also included the amount each medical center received in fiscal year 2002 from the network's share of a supplemental appropriation that VA received, and the resources allocated for each medical center's costs for Consolidated Mail Outpatient Pharmacy (CMOP) mail prescription services to veterans. In fiscal year 2002, medical centers in Network 9 (Nashville) had additional resources that they carried over from the prior fiscal year, because they were authorized to use certain resources for longer than 12 months. We did not include $25 million the medical centers carried over into fiscal year 2002, because the network had allocated these resources in the prior year.

Information was available for resources allocated to all medical centers in medical center allotment reports except for the Tennessee Valley Healthcare System (TVHS) because TVHS's allotment report also included resources allocated to the network office. To determine the amount of resources allocated to TVHS in fiscal year 2002, therefore, required additional analysis. Each network medical center was identified in the VA allocation system with a unique three-digit station number; however, TVHS

and the network office shared the same station number, and as such, the VA allocation system combined their allotment data. To separate the TVHS and network office transactions, we obtained the fiscal year 2002 network office financial transfer report from TVHS. We separated each transaction on the combined network/TVHS allotment report, which allowed us to construct an allotment report for TVHS. We also obtained an internal allotment ledger from TVHS and network officials that documented fund transfers between the two, which were transacted outside the VA allotment system. Using our TVHS allotment report and the TVHS/network internal allotment ledger, we determined the amounts TVHS received through each funding source by applying similar calculations as with the other medical centers. This information was not available for TVHS's Nashville and Murfreesboro locations after fiscal year 2000. However, information on staffing resources at these two locations was available after that year. See appendix II for our analysis of staffing information at the two locations.

We estimated the percent of total medical center resources received from Network 9 (Nashville) for fiscal years 1997 through 2001 and 2003 to supplement our findings for fiscal year 2002. To develop these estimates, we used VA headquarters and network office data. To determine the amount of resources the medical centers received from the network we used VA information on the VERA allocations to Network 9 (Nashville) and network data on network office expenditures for these fiscal years. To estimate the total amount of resources the medical centers received through VA direct allocations in fiscal years 1997 through 2001 and in fiscal year 2003, we assumed it was the same percentage as in fiscal year 2002 when medical centers in the network received 3 percent of all funds VA headquarters allocated directly to all VA medical centers nationwide. To determine the amount that medical centers received through revenue collections in these years we relied on VA data.

The Basis on Which Medical Centers in Network 9 (Nashville) Received These Resources

To obtain information on the basis on which the medical centers received resources, we interviewed network officials including the director, the chief financial officer, and TVHS officials. In addition, we obtained and analyzed documents that described the network's allocation methodology and relied on our prior work on VERA.[1] To determine the basis on which VA headquarters allocated resources directly to medical centers in the

[1] GAO-02-338, GAO/HEHS-98-226, and GAO/HEHS-97-178.

network, we interviewed officials in the Office of the Chief Financial Officer within the Veterans Health Administration. To determine how insurance collections and copayments as well as other resources were incorporated in allocations, we interviewed network officials, including the director of the Mid South Customer Accounts Center (MCAC). Based on our analysis of information we obtained from the network and VA headquarters, first we calculated the percentage of resources allocated on the basis of fixed-capitation amounts for patient workload and case mix in fiscal year 2002. We then subtracted this amount from the total resources medical centers received in fiscal year 2002 to determine the amount they received based on other factors.

We estimated the percent of total resources received by all medical centers combined based on fixed-capitation amounts for patient workload and case mix for fiscal years 1997 through 2001 and 2003. To determine the total amount of resources allocated to the medical centers by the network based on fixed-capitation amounts, we used VA headquarters data on the amount of VERA allocations to Network 9 (Nashville) each year during this period. We then subtracted out expenditures made by the network office from data provided by the network. From this total, we subtracted out resources for allocations made to medical centers that were not based on patient workload and case mix. We obtained data on these allocations from VA headquarters, except allocations from the network reserve fund. We estimated network reserve funds for fiscal years 1997 through 2001 and 2003 by making the assumption that these funds represented 4 percent of all resources allocated to the network by VERA as in fiscal year 2002. To estimate the total resources medical centers in the network received directly from VA headquarters during this period we assumed it was the same percentage as in fiscal year 2002, when medical centers in the network received 3 percent of all funds VA headquarters allocated directly to all VA medical centers nationwide. We estimated the portion of these direct VA allocations to medical centers in the network that was based on fixed-capitation amounts for patient workload and case mix by assuming that during this period the portion was the same as in fiscal year 2002, when such resources amounted to 20 percent of VA headquarters' direct allocations to the network. To determine the amount of resources collected for each medical center in the network during this period, we used information provided by the network and VA headquarters.

The Extent to Which Network 9 (Nashville) Office Expenditures Were Greater Than in Fiscal Year 1997 and the Primary Reasons Accounting for Any Increase

To determine the extent to which network office expenditures were greater in fiscal year 2002 than in fiscal year 1997 and the primary reasons accounting for any increase, we analyzed reports on network office expenditures. Specifically, we analyzed expenditures made by the network office for fiscal year 2002 that were set aside from resources that the medical centers received. We also reviewed network office expenditures for information and technology, staffing, and other functions for fiscal years 1997 through 2002. We interviewed network officials to obtain the number of staff and their job titles and responsibilities from fiscal years 1997 through 2002. We interviewed the MCAC manager regarding the number of collections staff since fiscal year 1998, when the MCAC was created. We also contacted officials at VA headquarters to verify which staff positions were mandated by headquarters. As part of this analysis, we categorized staff into staff positions at MCAC and other network office staff positions, which included positions mandated by VA headquarters for all VA networks and those positions that Network 9 (Nashville) management established to improve operations. We included positions at the MCAC as network office positions because their salaries were paid from the same account as other network office staff and they were supervised by an official who reported to the network director.

Overall Data Verification and Methodology

Throughout our review we examined the reliability of VA data and our use of those data. We discussed these data with VA headquarters and network officials to validate their accuracy. In addition, we discussed our methodology with VA headquarters and Network 9 (Nashville) staff who agreed that our approach and our assumptions were reasonable. Furthermore, we tested the consistency of VA allocation data by systematically comparing various types of data we obtained from several VA sources. For example, we verified the amount and source of transactions on the medical center allotment reports through interviews with network and VA headquarters officials and by matching these transactions with other financial reports obtained from VA. To better understand all of these issues, we conducted a site visit to interview officials at the network office located in Nashville and at the TVHS locations in Nashville and Murfreesboro, Tennessee. We performed our review from March 2003 through April 2004 in accordance with generally accepted government auditing standards.

Appendix II: Staffing Resources Available at the Tennessee Valley Healthcare System's Nashville and Murfreesboro Locations

VA combined the Nashville and Murfreesboro medical centers to create a single integrated medical center—the Tennessee Valley Healthcare System (TVHS)—to improve veterans' health care and gain efficiencies. In fiscal year 2000, the TVHS integration was announced and the first TVHS director was hired. Separate financial resource information was available for the Nashville and Murfreesboro locations before fiscal year 2001. The accounting systems of the two locations were merged in fiscal year 2001 and since then, information has not been available on the financial resources allocated separately to the Nashville and Murfreesboro locations. However, information on staffing at each location was available for fiscal year 2002 and staff salaries and benefits comprised over half of TVHS's budget in that year. Overall staffing at each location declined since the integration, but trends varied by type of staff, such as administrative and medical center support staff and patient care staff. From fiscal year 2000 to fiscal year 2002, the TVHS patient workload increased while patient care staff remained about constant. Also, 125 other VA staff worked at the Murfreesboro location in fiscal year 2002, in addition to the staff at TVHS.[1]

Information Not Available on Financial Resources Allocated Separately to Nashville and Murfreesboro After Fiscal Year 2000

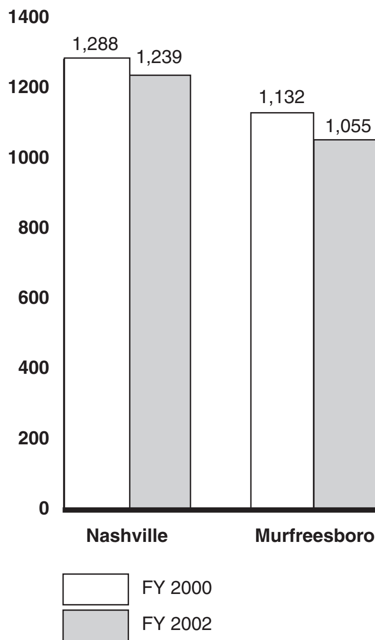
Information was not available on financial resources allocated separately to Nashville and Murfreesboro after fiscal year 2000. Beginning in fiscal year 2001, Network 9 (Nashville) did not allocate resources to Murfreesboro and Nashville separately because they were combined as a single medical center, TVHS. Moreover, TVHS did not allocate resources to each location. Instead, TVHS allocated resources to the programs it operated across the two locations. As a result, the accounting systems did not reflect allocations by location.

[1]Staff refers to full time equivalent employees (FTEE) and does not include contract staff.

Staffing Declined at the Nashville and Murfreesboro Locations from Fiscal Year 2000 to Fiscal Year 2002

Overall, the number of staff declined at Nashville and Murfreesboro from fiscal year 2000 to fiscal year 2002. However, the amount of change varied by the type of staff. The number of staff at Nashville declined by 49, or about 4 percent, from fiscal year 2000 to fiscal year 2002. At Murfreesboro, the number of staff declined by 77, or about 7 percent, from fiscal year 2000 to fiscal year 2002. (See fig. 3.)

Figure 3: Number of Staff at Nashville and Murfreesboro Locations, Fiscal Year 2000 and Fiscal Year 2002

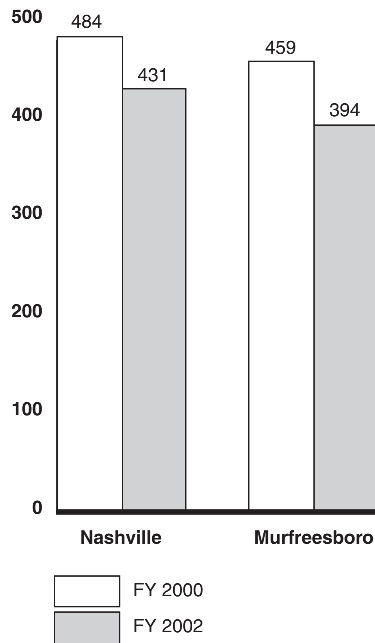


Source: GAO analysis of VA data.

Note: Staff refers to full time equivalent employees (FTEE). Numbers are rounded to the nearest FTEE.

Staffing trends varied by type of staff at both locations. Administrative and medical center support staff combined declined at both locations while patient care staff remained about constant. Administrative and medical center support staff include administrative, clerical, and wage rate staff who do not provide patient care-related work, such as secretaries and maintenance staff. At Nashville, the number of administrative and medical center support staff combined declined by 52, or 11 percent, from fiscal year 2000 to fiscal year 2002. At Murfreesboro, the number of administrative and support staff combined declined by 65, or 14 percent, from fiscal year 2000 to fiscal year 2002. (See fig. 4.)

Figure 4: Number of Administrative and Medical Center Support Staff at Nashville and Murfreesboro Locations, Fiscal Year 2000 and Fiscal Year 2002



Source: GAO analysis of VA data.

Note: Staff refers to full time equivalent employees (FTEE). Numbers are rounded to the nearest FTEE.

The largest decreases in administrative and medical center support staff are shown in table 6. The largest declines were in administrative and clerical staff. Smaller declines occurred among wage rate employees who are medical center support staff.

Table 6: Largest Administrative and Medical Center Support Staff Decreases at Nashville and Murfreesboro, Fiscal Year 2000 to Fiscal Year 2002

Location	Administrative and clerical	Wage rate[a]
Nashville	-45	-9
Murfreesboro	-56	-9

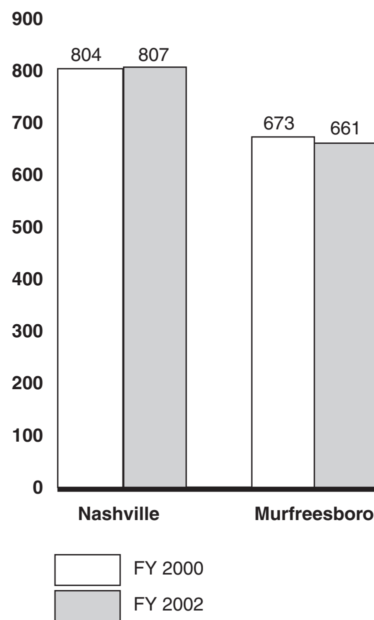
Source: GAO analysis of VA data.

Note: Table excludes changes in the number of administrative and medical center support staff of 1 or 2 positions. Staff refers to full time equivalent employees (FTEE).

[a]Wage rate employees, such as maintenance staff, are paid at an hourly rate.

There was very little change in patient care staff at both Nashville and Murfreesboro between fiscal year 2000 and fiscal year 2002. Patient care staff includes those who provide direct hands-on care to patients, such as doctors and nurses, as well as those staff who provide indirect care, such as pharmacists and laboratory technicians. The number of patient care staff at Nashville increased less than 0.5 percent from fiscal year 2000 to fiscal year 2002. The number of patient care staff at Murfreesboro decreased by almost 2 percent during the same time period. (See fig. 5.)

Figure 5: Number of Patient Care Staff at Nashville and Murfreesboro Locations, Fiscal Year 2000 and Fiscal Year 2002



Source: GAO analysis of VA data.

Note: Staff refers to full time equivalent employees (FTEE). Numbers are rounded to the nearest FTEE.

The largest changes in patient care staff from fiscal year 2000 to fiscal year 2002 can be seen in table 7. The biggest increases were in nursing staff and the biggest declines were in nursing aides and assistants.

Table 7: Largest Changes in Patient Care Staff at Nashville and Murfreesboro Locations, Fiscal Year 2000 to Fiscal Year 2002

Location	Increases	Decreases
Nashville	9 nurses (practical and licensed vocational) 6 part-time physicians 5 nurse practitioners	3 nursing aides/assistants 10 other health technicians/aides/therapists
Murfreesboro	13 nurses (registered)	18 nursing aides/assistants 3 other health technicians/aides/therapists 3 social workers

Source: GAO analysis of VA data.

Note: Table excludes changes in the number of administrative and medical center support staff of 1 or 2 positions. Staff refers to full time equivalent employees (FTEE).

Number of TVHS Patients Increased While Patient Care Staff Remained About Constant

The number of TVHS patients increased while the number of patient care staff remained about constant from fiscal year 2000 to fiscal year 2002. The number of patients increased at TVHS from fiscal year 2000 to fiscal year 2002 by 7 percent. The number of patient care staff decreased less than 1 percent during the same time period. (See table 8.)

Table 8: Tennessee Valley Healthcare System's Patients and Patient Care Staff, Fiscal Year 2000 and Fiscal Year 2002

Fiscal year	Patients[a]	Patient care staff
2000	57,080	1,477
2002	61,120	1,468

Source: GAO analysis of VA data.

Note: Staff refers to full time equivalent employees (FTEE).

[a]The number of patients using health care services as counted by unique or unduplicated social security numbers. Each patient is counted one time, regardless of how many visits each patient makes.

125 Other TVHS Staff Worked at Murfreesboro Location in Fiscal Year 2002

In addition to TVHS staff, 125 other VA staff worked at Murfreesboro in fiscal year 2002. These staff consisted of Network 9 (Nashville) staff, staff working at the Consolidated Mail Outpatient Pharmacy (CMOP), the Office of Resolution Management, and the Veterans Benefits Administration. Table 9 shows the numbers and types of VA staff other than those who work for TVHS who work at the Murfreesboro location.

Table 9: Other Staff Located at Murfreesboro, Fiscal Year 2002

Description	Staff
Network 9 (Nashville) – includes 87 staff at the MCAC and 8 other network office staff whose offices are located at Murfreesboro.	95
Consolidated Mail Outpatient Pharmacy (CMOP)	28
Office of Resolution Management	2
Veterans Benefits Administration	<1
Total	**125**

Source: GAO analysis of VA data.

Note: Staff refers to full time equivalent employees (FTEE).

The 95 Network 9 (Nashville) staff consisted of 8 office staff whose offices were located at Murfreesboro and 87 staff of the Mid South Customer Accounts Center (MCAC), which is responsible for insurance billing and collections for the network. These 87 staff were formerly located at medical centers within the network but were consolidated at the Murfreesboro location to increase the efficiency of collections. The CMOP had 28 VA staff in fiscal year 2002 (in addition to 155 contract staff) and provides mail prescription services to veterans. The CMOP at Murfreesboro is one of seven CMOPs across the country. VA's Office of Resolution Management had 2 staff located at Murfreesboro in fiscal year 2002 and provided Equal Employment Opportunity (EEO) complaint processing services to VA employees, applicants for employment, and former employees. Finally, the Veterans Benefits Administration had a part-time staff person providing vocational rehabilitation and employment counseling at Murfreesboro in fiscal year 2002.

Methodology

We obtained information on staffing resources available at VA's Nashville and Murfreesboro locations in fiscal year 2002 by interviewing Network 9 (Nashville) and TVHS officials. These officials told us that beginning in fiscal year 2001, information on financial resources allocated to Nashville and Murfreesboro separately was not available because these locations were combined as a single medical center, TVHS, in fiscal year 2001. However, information on staffing numbers and costs at each location was available and staff salaries and benefits constituted over half of TVHS's fiscal year 2002 budget. Therefore, our scope was limited to a comparison of staffing numbers at each location in fiscal years 2000 and 2002. We obtained the number of staff positions and descriptions for each position for each location for fiscal years 2000 and 2002, reported by each staff member's duty station. The number of staff positions was reported as the

number of full time equivalent employees (FTEE). We analyzed the increase and/or decrease in staff positions between the 2 years by the type of staff. We obtained workload data for TVHS for fiscal years 2000 and 2002 and compared them with the number of patient care staff during those years. In addition, we interviewed TVHS officials to determine the number of other VA staff working at the Murfreesboro location in addition to those staff working for TVHS.

Appendix III: Network 9 (Nashville) Office Staff and Their Responsibilities, Fiscal Years 1997 through 2002

Table 10 provides a brief description of the responsibilities for Network 9 (Nashville) office staff and the number of office staff positions filled from fiscal years 1997 through 2002. The table includes staff positions at the Mid South Customer Accounts Center (MCAC), positions mandated by VA headquarters for all networks, and other staff positions Network 9 (Nashville) created.

Table 10: Position Titles and Responsibilities for Network 9 (Nashville) Office Positions, Fiscal Years 1997 through 2002

		Number of positions filled for fiscal years					
Network office staff	**Network responsibilities**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Staff positions at the Mid South Customer Accounts Center (MCAC)	Perform billing, collecting, and verifying third-party insurance activities	**0**	**57**	**62**	**66**	**68**	**87**
Staff positions mandated by VA headquarters		**4**	**5**	**8**	**7**	**8**	**9**
Network Director (mandated in FY 1997)	Chief executive	1	1	1	1	1	1
Chief Financial Officer (mandated in FY1997)	Advises network director and other managers on fiscal management	1	1	1	0	0	1
Chief Medical Officer (mandated in FY1997)	Provides clinical leadership	1	1	1	1	1	1
Chief Information Officer (mandated in FY1997)	Manages the design, development, and basic functions of information technology and communications systems	1	1	1	1	1	1
Information Security Officer (mandated in FY 2001)	Develops and integrates infrastructure with mandated systems and products to ensure implementation and coordination of information and data systems	0	0	1	1	1	1
Patient Safety Officer (mandated in FY 2001)	Manages and implements patient safety policies of VA's National Center for Patient Safety	0	0	0	0	1	1
Prosthetics Manager (mandated in FY1999)	Manages, plans, develops, evaluates, and implements prosthetics program	0	0	1	1	1	1
Quality Management Officer (mandated in FY 1997)	Advises network director and others on quality improvement and performance management	0	1	1	1	1	1
Compliance Officer (mandated in FY 2000)	Plans, organizes, coordinates network activities, develops compliance program for internal controls and processes, and oversight in accordance with VA headquarters requirements	0	0	1	1	1	1
Other network staff positions[a]		**4**	**4**	**6**	**8**	**14**	**16**
Acquisition and Materiel Manager[b]	Manages the acquisition and materiel management product line	0	0	0	0	0	1

Network office staff	Network responsibilities	Number of positions filled for fiscal years					
		1997	1998	1999	2000	2001	2002
Ambulatory Care Product Line Manager	Advises director and other managers on ambulatory and primary care	0	0	0	1	1	1
Auditor/Compliance Officer	Identifies policies and procedures needed to prevent and detect noncompliance with VA regulatory, ethical, and legal requirements	0	0	0	0	1	1
Budget Analyst	Performs budget analysis, formulation, justification, and execution	0	0	1	1	1	1
Capital Assets Manager	Manages capital assets to ensure adherence to policies and procedures	0	0	0	1	1	0
Decision Support System (DSS) Manager	Establishes, plans, and directs DSS activities	0	0	1	1	1	1
Deputy Network Director	Assists network director and acts as director in his absence	0	0	0	0	1	1
Health System Specialist	Serves as program analyst for examining network activities such as cost effectiveness of operations	0	0	0	0	1	1
Mid South Customer Accounts Center (MCAC) Manager[b]	Manages and operates the MCAC and insurance collections program	0	0	0	0	0	1
Mental Health Product Line Manager	Serves as technical advisor to network director on the mental health program	0	0	0	0	0	1
Operations Director	Manages construction, equipment, and network office daily operations	1	1	1	1	1	0
Patient Administration Director	Manages patient access and benefits administration programs	0	0	0	0	0	1
Pharmacy Benefits Manager	Manages pharmaceutical budget, coordinates professional and administrative functions at medical centers	0	0	0	0	1	1
Public Affairs Officer	Manages public relations	1	1	1	1	1	1
Secretary	Performs administrative and clerical duties	2	2	2	2	3	3
Telephone Care Manager	Supervises employees of the network's 24-hour/7 days-a-week telephone health care advice center and provides technical guidance to day-shift staff at medical centers	0	0	0	0	1	1
Total staff		**8**	**66**	**76**	**81**	**90**	**112**

Source: GAO analysis of VA data.

[a]In fiscal year 2003, VA headquarters announced that some of the staff positions would become mandated later.

[b]The acquisition and materiel manager and the MCAC manager functioned in these positions since fiscal year 1997, but were charged to the TVHS payroll until the positions were transferred to the Network 9 (Nashville) payroll in fiscal year 2002.

Appendix IV: Comments from the Department of Veterans Affairs

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

April 2, 2004

Ms. Cynthia A. Bascetta
Director
Health Care Team
U. S. General Accounting Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Bascetta:

The Department of Veterans Affairs (VA) has reviewed your draft report, ***VA HEALTH CARE: Resource Allocations to Medical Centers in the Mid South Healthcare Network*** (GAO-04-444) and agrees with your findings. This is an interesting case study describing the complex changes the Veterans Health Administration has undergone in allocating its resources among the various health care delivery points within the Mid South Healthcare Network.

The enclosure provides some technical comments VA believes would add to the overall clarity of your report. I appreciate the opportunity to comment on your draft report.

Sincerely yours,

Anthony J. Principi

Enclosure

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

James C. Musselwhite, 202-512-7259

Acknowledgments

In addition to the contact named above, Cheryl A. Brand, Linda C. Diggs, Krister Friday, Donald W. Morrison, and Thomas A. Walke made key contributions to this report.

Related GAO Products

VA Health Care: Access for Chattanooga-Area Veterans Needs Improvement. GAO-04-162. Washington, D.C.: January 30, 2004.

VA Health Care: Changes Needed to Improve Resource Allocation. GAO-02-685T. Washington, D.C.: April 30, 2002.

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VA Health Care: More Veterans Are Being Served, but Better Oversight Is Needed. GAO/HEHS-98-226. Washington, D.C.: August 28, 1998.

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