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VA HEALTH CARE

Changes Needed to
Improve Resource
Allocation to Health Care
Networks

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Abstract We are pleased to be here today to discuss the Department of Veterans Affairs (VA) health care resource allocation system and how it could be improved. In fiscal year 2001, VA used the Veterans Equitable Resource Allocation (VERA) system to allocate \$17.8 billion of its \$20.3 billion health care budget to 22 regional health care networks. Networks allocate the resources they receive from VERA to their respective facilities. VERA was intended to equitably allocate resources by providing comparable resources to networks with comparable workloads. Before VERA was implemented, resources were allocated to facilities primarily on the basis of their historical expenditures. By aligning resources with workloads, VERA shifted approximately \$921 million among VAs networks in fiscal year 2001 compared to what the allocations would have been under the previous allocation system.		
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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss the Department of Veterans Affairs' (VA) health care resource allocation system and how it could be improved. In fiscal year 2001, VA used the Veterans Equitable Resource Allocation (VERA) system to allocate \$17.8 billion of its \$20.3 billion health care budget to 22 regional health care networks. Networks allocate the resources they receive from VERA to their respective facilities. VERA was intended to equitably allocate resources by providing comparable resources to networks with comparable workloads. Before VERA was implemented, resources were allocated to facilities primarily on the basis of their historical expenditures. By aligning resources with workloads, VERA shifted approximately \$921 million among VA's networks in fiscal year 2001 compared to what the allocations would have been under the previous allocation system.

In my remarks today, I will briefly discuss our conclusion that VERA's design is reasonable and highlight our recommendations for improving its implementation to better align resources with workload. My comments are based on a report we issued on February 28, 2002.¹ To examine these issues, we reviewed VA documents and consultants' reports on VERA's original design, proposed VERA changes, and actual VERA changes. We also interviewed VA management officials in headquarters and eight networks, conducted site visits in five VA health care networks, interviewed VA and other public and private sector health care resource allocation experts, and analyzed current literature on health care resource allocation. We also relied on our more than 10 years of work reviewing VA's resource allocation process in addition to other health care financing work.² In addition, we analyzed changes that have been made in resources allocated among the networks since VERA was implemented and the effect of making adjustments to VERA.

In summary, VERA's design is reasonable for equitably allocating resources, but certain improvements to VERA's implementation could result in a better allocation of comparable resources for comparable workloads. VERA's design is reasonable because allocations are based primarily on

¹U.S. General Accounting Office, *VA Health Care: Allocation Changes Would Better Align Resources with Workload*, [GAO-02-338](#) (Washington, D.C.: Feb. 28, 2002).

²See the Related GAO Products page at the end of this testimony.

network workload and adjustments are made for factors beyond the control of network management. These include the health care needs of veterans and certain local cost differences. In addition, VERA's design protects patients from the effects of network budget shortfalls. But implementation weaknesses we identified result in approximately \$200 million annually that could be reallocated to better align network resources with workloads. First, VERA's measurement of network workload is not as accurate as it could be to determine each network's allocation because VERA excludes most veterans with higher incomes who do not have service-connected disabilities—about one-fifth of VA's workload. Second, VERA does not adjust as accurately as it could for cost differences among networks that result from differences in patients' health care needs or case mix across networks. We also found that VA has not analyzed whether the networks' need for supplemental resources—provided through the National Reserve Fund—is the result of potential problems in VERA, network inefficiency, or other factors. Without such information, VA can neither ensure the appropriateness of supplemental funding nor take corrective action.

We made recommendations to correct weaknesses in VERA's workload and case-mix measures. Although VA concurred with all our recommendations, in commenting on a draft of our report, VA stated that it planned to wait for further study before determining how and whether to change VERA for fiscal year 2003. Given the already extensive study by VA and others of VERA's workload and case-mix measures, we believe VA should implement these changes for fiscal year 2003. In addition, VA's response to our recommendation regarding the supplemental funding process does not fully address our recommendation because it does not provide information on the relative contributions of specific factors to network shortfalls such as network inefficiency, imperfections in VERA, and other factors.

Background

Before VERA was implemented during fiscal year 1997, VA based its allocation of resources primarily on facilities' historical expenditures. By the 1990s, the share of the veteran population in the Northeast and Midwest declined while the share of the veteran population in the South and West increased. However, resources continued to be allocated based on historical expenditures, resulting in inequitable resource allocations to some VA networks. VERA was intended to correct these regional inequities.

VERA allocates nearly 90 percent of VA's medical care appropriation. These allocations are for six categories of expenses: complex patient care, basic patient care, equipment, nonrecurring maintenance, education support, and research support.³ Resources for the first four categories are allocated on the basis of patient workload and account for approximately 96 percent of the resources VERA allocates.⁴ Allocations for education support and research support are based on workload measures specific to those activities within the VA health care system.

As VERA was being implemented, two major changes in VA health care occurred as a result of the Veterans' Health Care Eligibility Reform Act of 1996. First, by eliminating certain restrictions preventing VA from treating some veterans in outpatient care settings, the act allowed VA to begin delivering care, where appropriate, in outpatient rather than inpatient settings—a practice consistent with care delivery throughout the health care industry. Second, VA introduced an enrollment system to manage access to VA health care in relation to available resources. As required by the act, VA established seven priority categories for enrollment. Higher priority for enrollment is given to veterans with service-connected disabilities, lower incomes, or other statuses such as former prisoners of war. Priority 7, the lowest priority level, is given primarily to veterans without a service-connected disability, who have higher incomes.

VERA's Design Is a Reasonable Approach to Resource Allocation

VERA's design is a reasonable approach to resource allocation and has helped promote more comparable resource allocations for comparable workloads in VA. Consistent with the literature and expert views on resource allocation, VERA allocates resources primarily on the basis of network patient workload, attempts to adjust network resources for factors beyond the control of network management, and provides protection to patients against network budget shortfalls. As a result, VERA has shifted substantial resources among regions to better reflect workload.

³Networks and their facilities also receive resources from the medical care appropriation not allocated through VERA for such things as prosthetics, homeless programs, and readjustment counseling. In addition, VA facilities' budgets include collections for insurance reimbursements, copayments, and deductibles for the care of some veterans.

⁴We examined these four categories in our analysis. We did not examine the education support and research support categories, which constitute approximately 4 percent of VERA's allocation.

VERA is a reasonable approach because it allocates resources to networks primarily based on workload. Each network receives an allocation based on a predetermined dollar amount per veteran served. This is consistent with how other federal health care payers, such as the Medicare and Medicaid programs, allocate resources to managed care plans for their patient workload. Because VERA uses workload to allocate resources, networks that have more patients generally receive more resources than networks that have fewer patients. By receiving funding based on workload, VA's health care networks have an incentive to focus on aligning facilities and programs to attract patients rather than focusing on maintaining existing operations and infrastructure regardless of the number of patients served.

In addition, VERA adjusts network allocations for cost differences beyond the networks' control. VERA does this through adjustments for networks' case mix by classifying patients into one of three categories—complex care, basic vested care, and basic “non-vested” care—which are based on the level of patient health care need and the costs associated with that care. Complex care comprises about 4 percent of VA's workload and includes patients who generally require significant high-cost inpatient care as an integral part of their rehabilitation or functional maintenance. Basic vested care and basic non-vested care patients—who compose 84 percent and 12 percent of VA's workload, respectively—include patients whose health care needs are more routine and can be met in an outpatient setting. These patients typically require significantly fewer resources than complex care patients. However, basic vested care patients rely primarily or completely on VA for meeting their health care needs, while basic non-vested care patients receive only part of their care through VA and have not undergone comprehensive medical evaluations by VA practitioners. In fiscal year 2001, the capitation amount—or dollar amount per patient served—was \$42,765 for complex care, \$3,126 for basic vested care, and \$121 for basic non-vested care.⁵ In addition, VERA adjusts for cost differences beyond networks' control by applying a price adjustment factor to each network's allocation to account for uncontrollable geographic price differences. The adjustment lowers the VERA allocation for networks located in lower cost

⁵VERA allocated about \$16.2 billion in fiscal year 2001 for basic and complex care and \$878 million for equipment and nonrecurring maintenance based on patient workload. In addition, VERA allocated about \$688 million for research support and education support based on other workload measures.

areas and increases the allocation for networks located in higher cost areas.

Also contributing to the reasonableness of VERA's approach is that it provides protection to patients against network budget shortfalls. VERA does this by providing supplemental resources through the National Reserve Fund to networks that have difficulty operating within their available resources. These supplemental allocations protect patients from the risk that a health care network would be unable to provide services if its expenditures exceeded available resources. Since fiscal year 1999, resources distributed through the National Reserve Fund have supplemented VERA allocations in six networks and averaged approximately 1 percent of total VERA allocations.

As a result of VERA's approach, resources have shifted among regions to better reflect workload. Consequently, resources moved primarily from networks located in the Northeast and Midwest to networks located in the South and West. In fiscal year 2001, VERA shifted approximately \$921 million among networks compared to what the allocations would have been if networks received the same proportion of funding they received in fiscal year 1996, the year before VERA was implemented. VERA shifted the most resources in fiscal year 2001 to Network 8 (Bay Pines)—approximately \$198 million—and the most resources from Network 3 (Bronx)—approximately \$322 million—compared to what allocations would have been if both networks had received the same proportion of funding they received in fiscal year 1996.

Implementation Specifics Weaken VERA

Although VERA's overall design is a reasonable approach to equitably allocate resources, we identified weaknesses in its implementation that compromise the achievement of its goal of allocating comparable resources for comparable workloads. To correct these weaknesses we made several recommendations that, if implemented, would better align approximately \$200 million in resources with workloads in VA's health care networks.⁶ Specifically, we recommended that VERA improve its workload calculations to include all veterans served—including Priority 7 veterans, the most rapidly growing proportion of VA's workload. We also recommended that VA improve its adjustment for cost differences beyond

⁶We also made several other recommendations to improve VERA's implementation. For a complete discussion of our recommendations, see [GAO-02-338](#).

network control by incorporating more categories into VERA's case-mix adjustment to more accurately account for the differences in networks' patient health care needs. Finally, we recommended that VA improve its process to protect patients from network budget shortfalls by determining the extent to which different factors cause networks to need supplemental resources in order to address factors, such as inefficiency, that may cause budget shortfalls.

VA Could Better Align Resources with Workload and Network Cost Differences

To improve its network workload calculation, VERA should account for all veteran workload served—including Priority 7 veterans, who have higher incomes and no service-connected disabilities.⁷ By excluding most Priority 7 veterans from VERA's workload calculation, networks with a higher proportion of Priority 7 veterans have fewer resources per patient to treat veterans than networks with a lower proportion of Priority 7 veterans. For example, in fiscal year 2001, Network 3 (Bronx) had the highest proportion of Priority 7 veterans, 37 percent, and Network 20 (Portland) had the lowest proportion, 14 percent. Nationally, VA's proportion of Priority 7 veterans was 22 percent of total workload in fiscal year 2001.

When VERA was established, the number of higher income veterans without service-connected disabilities that VA treated was about 4 percent of the total number of veterans treated in fiscal year 1996. VA decided not to include most of these Priority 7 veterans in VERA's basic care workload calculations because of their small numbers and the expectation that collections from copayments, deductibles, and third-party insurance would cover most of their costs. However, Priority 7 veterans accounted for 22 percent of VA's workload in fiscal year 2001—a substantial increase from 107,520 patients in fiscal year 1996 to an estimated 827,722 patients in fiscal year 2001.⁸ In addition, VA projects that the growth in Priority 7 patients will continue at least through fiscal year 2010. Although VA initially expected to cover the majority of Priority 7 patient costs through

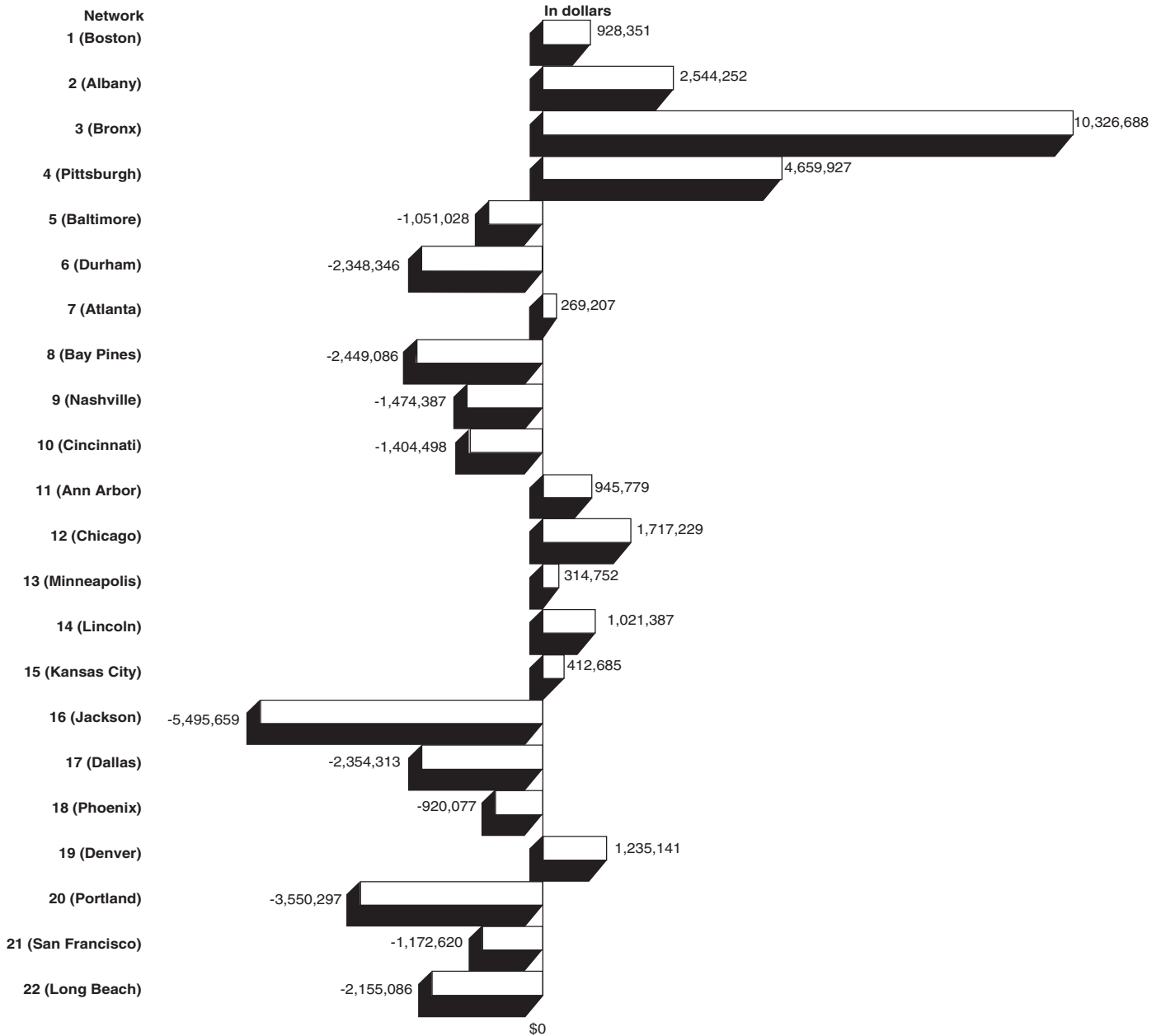
⁷VA's Office of Inspector General also recommended that VA include Priority 7 workload in the VERA model. See Office of Inspector General, Department of Veterans Affairs, *Audit of The Availability of Healthcare Services in the Florida/Puerto Rico Veterans Integrated Service Network (VISN) 8*, Report Number 99-00057-55 (Washington, D.C.: Aug. 13, 2001).

⁸VERA does include some Priority 7 veterans in its workload measure. In fiscal year 2000, about 8 percent of Priority 7 veterans treated were included in VERA's workload measure because they were complex care patients or basic care patients with service-connected conditions.

collections, VA collected only 24 percent of Priority 7 veterans' costs in fiscal year 2000. As a result, networks pay for most of the costs of Priority 7 services through VERA allocations made for the service-connected and low-income veteran workloads.

Inclusion of Priority 7 veterans in VERA's basic vested care workload would increase the comparability of resources among networks' per patient treated. If VERA were to have funded Priority 7 basic vested veterans at 50 percent of their costs, as VA had considered, resources would have moved from networks with smaller proportions of Priority 7 veterans to networks with larger proportions of Priority 7 veterans based on our simulation (see fig. 1). VERA allocations would have increased to 9 networks in the Northeast and Midwest and decreased to 10 networks in the South and West in the fiscal year 2001 VERA allocation.

Figure 1: Estimated Change in VERA Allocations from Adding Priority 7 Basic Vested Veterans to VERA Workload at Half Their National Cost, Fiscal Year 2001



Note: For this simulation we used VERA fiscal year 2001 workload numbers for basic vested care, which are the total unduplicated numbers of veterans served for fiscal years 1997, 1998, and 1999.

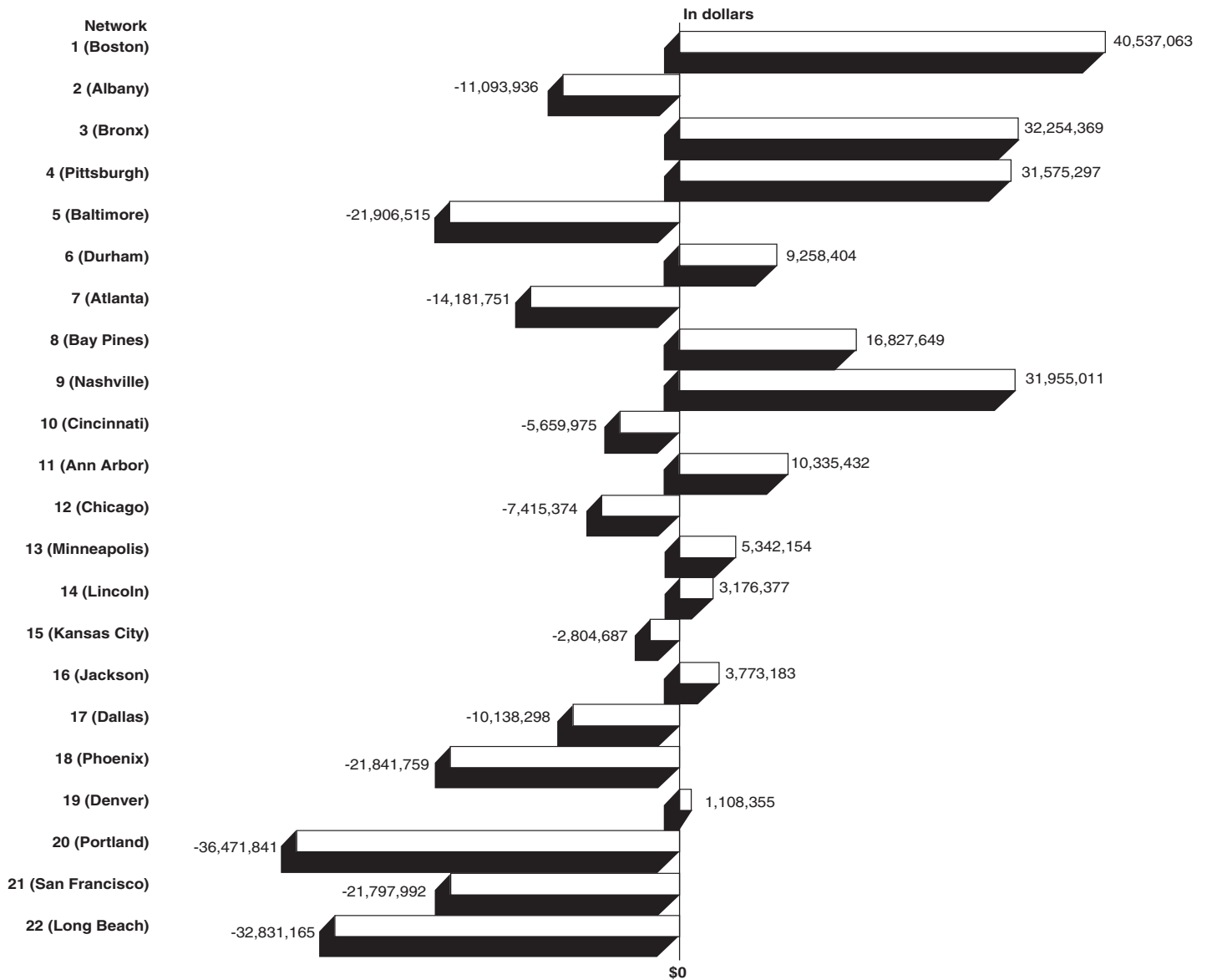
Source: GAO analysis of VA data.

To improve its adjustment for cost differences beyond networks' control, we also recommended that VERA use more case-mix categories to adequately adjust for differences in patients' health care needs across networks. Based on the results of our simulation, this change to VERA would have the largest effect on resource allocation. VERA's three case-mix categories—complex, basic vested, and basic non-vested—are based on 44 patient classes. Because average costs of patients in the classes within the VERA categories vary significantly and can be dramatically higher or lower than their capitation amounts for the three case-mix categories, VERA's ability to allocate comparable resources for comparable workloads is limited. The wide variation in cost between home-based primary care and ventilator-dependent care—two of the patient classes in complex care—illustrates this point. The national average cost for home-based primary care in fiscal year 2000 was about \$24,000, roughly \$18,000 less than the \$42,153 capitation amount for complex care. In contrast, the average patient cost for ventilator-dependent care in that year was about \$163,000, roughly \$121,000 more than the complex care capitation amount. As a result of VERA's having only three case-mix categories, networks with proportionately more workload in less expensive patient classes, such as home-based primary care, receive more resources relative to their costs than other networks. Similarly, networks with more workload in more expensive patient classes, such as ventilator-dependent care, receive fewer resources relative to their costs.

If VERA were to use VA's current 44 patient classes rather than the three case-mix categories, resources would move from networks having proportionately fewer patients in expensive patient classes to networks having proportionately more patients in expensive patient classes. As figure 2 shows, based on our simulation, there would be a significant movement of resources—an average of 2 percent per network.⁹

⁹For our simulation we used the 44 patient classes VA uses to construct the three VERA case-mix categories.

Figure 2: Estimated Change in VERA Allocations among Networks as a Result of Using 44 Case-Mix Categories, by Network, Fiscal Year 2001

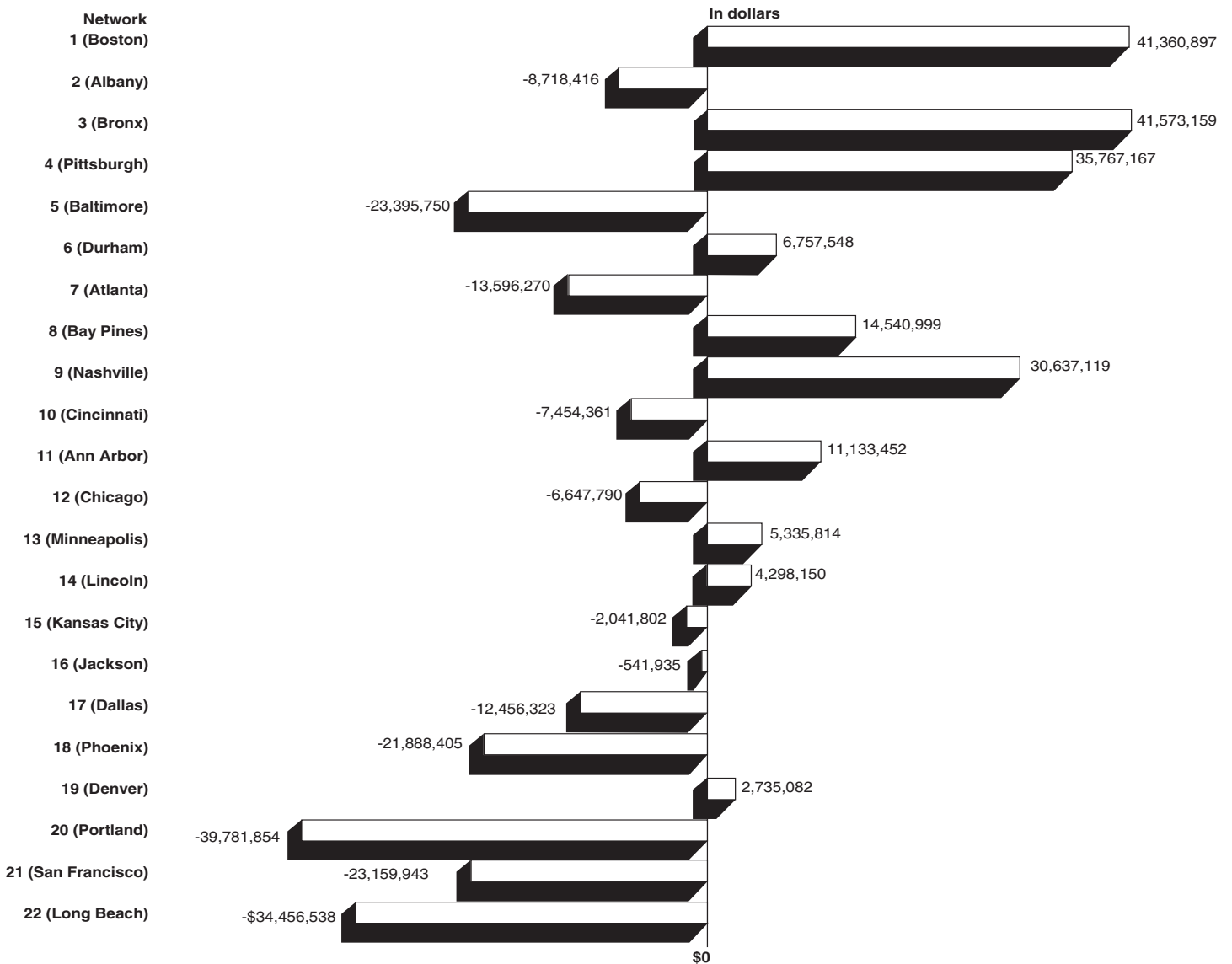


Note: We used fiscal year 1999 expenditure data for the calculations, the most recent data available for fiscal year 2001 VERA allocations.

Source: GAO analysis of VA data.

The combined effect of including basic vested Priority 7 veterans in VERA's workload and using all 44 VA patient classes in VERA's case-mix adjustment would provide additional resources to some northeastern and midwestern networks and reduce resources for some southern and western networks (see fig. 3). The allocation change would represent about 2 percent of networks' budgets but would be more substantial for some networks. The two networks with the largest percentage change are Network 1 (Boston) with an approximate 5 percent increase and Network 20 (Portland) with an approximate 5 percent decrease.

Figure 3: Estimated Change in VERA Allocations from Incorporating 44 Case-Mix Categories and Priority 7 Basic Vested Veterans Treated, Fiscal Year 2001



Note: We allocated resources for Priority 7 basic vested care veterans at 50 percent (\$849) of the national average cost based on a policy VA had considered implementing to minimize possible incentives for networks to serve more Priority 7 veterans. We used fiscal year 1999 expenditure data for these calculations.

Source: GAO analysis of VA data.

While VA concurred with our recommendations to better align VERA's measure of workload with actual workload served and to incorporate more (not necessarily 44) categories into VERA's case-mix adjustment, it plans to wait for further study before making a decision about modifications to VERA for the fiscal year 2003 allocation. VA and others have conducted various studies on including all Priority 7 workload in VERA and increasing the number of VERA case-mix categories.¹⁰ Given the extensive studies by VA and others of VERA's workload and case-mix measures, we believe that VA should make needed improvements to VERA for the fiscal year 2003 allocation and further refine VERA as needed in subsequent years.

Identifying Reasons for Budget Shortfalls Would Help VA Take More Appropriate Corrective Actions

To improve its process to protect patients from network budget shortfalls, we also recommend that VA's supplemental funding process determine to what extent networks need supplemental resources due to such factors as imperfections in VERA, lack of network efficiency, or lack of managerial flexibility to close or consolidate programs or facilities. VA's supplemental funding processes have not collected the information necessary to make these determinations. As a result, VA cannot provide adequate assurance that supplemental allocations are appropriate or correct problems that cause networks to have budget shortfalls.

VA has focused its process for providing supplemental funding from the National Reserve Fund almost solely on providing supplemental resources to networks to get through a fiscal year, but it has not included in this process an examination of the root causes of networks' needs for additional resources. From fiscal years 1999 through 2001, VA used different approaches for evaluating networks' supplemental funding requests and distributing a total of approximately \$323 million in supplemental resources to six networks. However, in none of these approaches has VA collected adequate information for determining the extent to which certain factors cause budget shortfalls. For example, in fiscal year 2001, about half of the supplemental resources provided to networks was for "inflation and miscellaneous program adjustments." All networks experienced inflation, however, and VA did not distinguish

¹⁰For example, RAND, *An Analysis of the Veterans Equitable Resource Allocation (VERA) System* (Santa Monica, Calif., 2001), pp. 21-22, discusses the need for additional case-mix adjustment in VERA as does Price Waterhouse LLP and The Lewin Group, Inc., *Veterans Equitable Resource Allocation Assessment—Final Report*, March 27, 1998.

between the level of inflation in networks that requested supplemental resources and those that did not.

VA concurred with our recommendation to improve the supplemental funding process. For fiscal year 2002, VA developed a different approach to providing supplemental resources to networks, one that it indicates will better identify factors, such as inefficiency, VERA imperfections, or other factors, that cause networks to require supplemental resources. However, the actions VA discussed to improve the process do not address our recommendation to identify the relative contributions of such factors to network budget shortfalls. Until VA implements our recommendation, it cannot provide assurance that supplemental resources are appropriate or take needed actions to reduce the likelihood of network shortfalls in the future.

Concluding Observations

VERA's design is a reasonable approach to resource allocation and has had a significant effect on promoting more comparable resource allocations for comparable workloads in VA. Yet VA needs to correct weaknesses in VERA's implementation to better align resources with workload and to adequately account for important variations in health care needs among networks. Our analysis shows that doing so would better allocate about \$200 million annually. Although most of the reallocation at this time would result from better case-mix adjustments in VERA to reflect differences in health care needs among networks, the importance of including all Priority 7 veterans in VERA workload could increase in the future because the number of Priority 7 veterans is projected to continue to increase at least through fiscal year 2010. Making changes to address these weaknesses in VERA will add some complexity to how VA allocates resources, but delaying these needed improvements to VERA will perpetuate inequities that currently exist.

In addition, VA has not used the supplemental funding process to improve VERA allocations and management of VA's resources. The amount of resources provided to networks through the supplemental funding process for the National Reserve Fund has continued to increase, yet VA has not been able to determine the relative contribution of factors such as imperfections in VERA, network inefficiency, or lack of managerial flexibility to close or consolidate programs or facilities to the need for supplemental resources. Because VA has not identified the relative contribution of factors that could cause network budget shortfalls, it is unable to ensure that the supplemental funds provided are appropriate or

correct problems that cause networks to have budget shortfalls. Without knowing the extent to which VERA imperfections or other factors are responsible for budget shortfalls, stakeholders may lose confidence in VERA's ability to allocate resources equitably.

Mr. Chairman, this concludes my prepared remarks. I will be pleased to answer any questions you or other members of the subcommittee may have.

Contacts and Acknowledgments

For further information regarding this testimony, please contact me at (202) 512-7101 or James Musselwhite at (202) 512-7259. Marcia Mann and Thomas Walke also contributed to this statement.

Related GAO Products

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