

Testimony

**Comparing the Costs of the Veterans' Health Care
System With Private-Sector Costs**

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Before the
Subcommittee on Health
Committee on Veterans' Affairs
U.S. House of Representatives

January 28, 2015

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Wednesday, January 28, 2015. The contents may not be published, transmitted, or
otherwise communicated by any print, broadcast, or electronic media before that time.

Chairman Benishek, Ranking Member Brownley, and Members of the Subcommittee, thank you for the opportunity to testify on the Congressional Budget Office's understanding of the costs of health care provided to veterans by the Veterans Health Administration (VHA).

CBO regularly examines issues related to veterans' health care as well as other benefits that are provided by the Veterans Benefits Administration (VBA). Most recently, in December 2014, CBO released a report that compared the costs of health care provided directly at VHA facilities with the costs of private-sector care. My submitted statement today reprises that report, *Comparing the Costs of the Veterans' Health Care System with Private-Sector Costs*. Although the structure of VHA and some published studies suggest that VHA care has been cheaper than care provided by the private sector, limited evidence and substantial uncertainty made it difficult for CBO to reach firm conclusions about those relative costs or about whether it would be cheaper to expand veterans' access to health care in the future through VHA facilities or the private sector. Uncertainty about relative costs in the future is compounded by uncertainty about how VHA would structure contracts with private-sector providers.

CBO also produces budgetary baselines and cost estimates for legislative proposals that would modify veterans' benefits. Among other measures, over the past eight months CBO has estimated the budgetary effects of the Veterans Access, Choice, and Accountability Act of 2014 (H.R. 3230, enacted as Public Law 113-146), including earlier versions of that legislation, and the Department of Veterans Affairs Expiring Authorities Act of 2014 (H.R. 5404, enacted as P.L. 113-175), which contained several amendments to P.L. 113-146.

In recent years, at the request of the Senate and House Committees on Veterans' Affairs, CBO has reported on several related topics:

- Veterans' disability compensation,¹
- VHA's treatment of post-traumatic stress disorder and traumatic brain injury among recent combat veterans,² and
- The potential costs of providing health care to veterans of all eras.³

Among the many analytical challenges in conducting those studies are the problems CBO sometimes encounters in obtaining appropriate data from VHA or VBA. For instance, comparing health care costs in the VHA system and the private sector is difficult partly because the Department of Veterans Affairs (VA), which runs VHA, has provided limited data to the Congress and the public about its costs and operational performance.

¹Congressional Budget Office, *Veterans' Disability Compensation: Trends and Policy Options* (August 2014), www.cbo.gov/publication/45615.

²Congressional Budget Office, *The Veterans Health Administration's Treatment of PTSD and Traumatic Brain Injury Among Recent Combat Veterans* (February 2012), www.cbo.gov/publication/42969.

³Congressional Budget Office, *Potential Costs of Veterans' Health Care* (October 2010), www.cbo.gov/publication/21773; and Congressional Budget Office, *Potential Growth Paths for Medical Spending by the Department of Veterans Affairs* (July 2006), www.cbo.gov/publication/17962.

Additional data, particularly if it was provided on a regular and systematic basis, could help inform policymakers about the efficiency and cost-effectiveness of VHA's services. For example, the Department of Defense publishes an annual report to the Congress about its health care system, known as TRICARE (in response to a statutory requirement established in the National Defense Authorization Act for Fiscal Year 1996). The most recent of those reports contains more than 100 pages of operating statistics, including trends among beneficiaries and their demographics; funding by appropriation category; use and costs of inpatient, outpatient, and pharmacy services; beneficiaries' cost sharing; and patients' satisfaction with their care.⁴ A virtue of the annual, recurring nature of those reports is that each contains consistent trend data from the previous few years, and longer data series can be compiled by comparing past years' volumes. A corresponding annual report on VHA—if one existed—would facilitate comparisons between VHA and the private sector. However, such comparisons would still be challenging, in part because private-sector data might also be incomplete, unavailable, or difficult to make comparable with VHA data.

The best study CBO could identify that compared the costs of health care directly provided by VHA with private-sector care was published in 2004, based on data from 1999. The authors of that study had access to detailed administrative data from six VHA medical centers and the clinical charts from the veterans treated at those centers in 1999.⁵ CBO could not replicate that study with more recent data, both because it had limited time and resources to perform its analysis and because, with few exceptions, VHA does not make either existing administrative data or clinical records (even with personal identifying information removed) available to researchers in other government agencies, universities, or elsewhere. Additional systemwide data from VHA would have facilitated the comparison of costs for care provided directly by VHA with the costs for care offered by the private sector. For example, it would be useful to know the average salaries, performance pay, and other elements of compensation that VHA provides for its physicians in various specialties and for its other clinicians; the number of patients its clinicians treat per unit of time (for example, in a typical week) and the length and intensity of those encounters; and the average prices it pays for pharmaceutical products—but VHA does not report that information publicly.

⁴See Department of Defense, *Evaluation of the TRICARE Program—Access, Cost, and Quality: Fiscal Year 2014 Report to Congress* (March 2014), <http://go.usa.gov/vEc4>.

⁵Gary N. Nugent and others, "Value for Taxpayers' Dollars: What VA Care Would Cost at Medicare Prices," *Medical Care Research and Review*, vol. 61, no. 4 (November 2004), pp. 495–508, <http://dx.doi.org/10.1177/1077558704269795>.

Comparing the Costs of the Veterans' Health Care System With Private-Sector Costs

Summary

Legislation enacted in 2014 calls for the Veterans Health Administration (VHA) to expand the availability of health care to eligible veterans. That legislation provided temporary funding to expand VHA's capacity to deliver care and to increase the amount of care purchased from the private sector.

The Congressional Budget Office (CBO) has conducted a limited examination of how the costs of health care provided by VHA compare with the costs of care provided in the private sector. Although the structure of VHA and published studies suggest that VHA care has been cheaper than care provided by the private sector, limited evidence and substantial uncertainty make it difficult to reach firm conclusions about those relative costs or about whether it would be cheaper to expand veterans' access to health care in the future through VHA facilities or the private sector. Uncertainty about relative costs in the future is compounded by uncertainty about how VHA would structure contracts with private-sector providers.

This report briefly describes some of the features that distinguish the health care system run by VHA from health care provided in the private sector. It also examines the available evidence about the relative costs of VHA and private-sector care and explores possible reasons why costs might differ in the two settings and why they can be difficult to compare. Finally, CBO briefly considers some factors that could influence the cost-effectiveness of alternative means of expanding health care services to veterans in the future.

What Has Previous Research Concluded?

Distinctive features of the VHA system—such as its mission, mix of enrollees, and financing mechanism—complicate cost comparisons with other sources of health care. One useful analytic approach, which was most carefully and comprehensively employed by researchers in 2004, estimates what costs would be if private-sector doctors, hospitals, and other health care providers supplied the same number and types of services as those actually delivered by VHA. Similar to earlier studies, those researchers concluded that the health care provided by VHA generally cost less than would equivalent care provided in the private sector, even though the comparison used Medicare's relatively low payment rates for private-sector doctors and hospitals.

How Applicable Are Previous Findings Now?

Whether such findings can be extrapolated to the present is uncertain, for several reasons. The limited number of comprehensive studies that have been done and the complexity of the research methods contribute to uncertainty about their conclusions. In addition, previous research has generally relied on cost information from 1999 or earlier, but changes since then in the VHA system and the health care sector as a whole could produce different results today. Such differences could go in either direction, which increases the range of uncertainty.

Another complication is that past studies do not fully explain why VHA care might be less expensive than private-sector care—making it hard to tell whether the same considerations apply now—and do not address whether patients would get the same amount and mix of services in both systems. More broadly,

cost comparisons do not reflect such important considerations as the quality of the care provided, its effects on patients' health, and patients' satisfaction with a given health care system. Thus, even if VHA care was less expensive, determining whether that care was a better value would still be difficult.

Why Might Costs Differ Between VHA and the Private Sector?

CBO's analysis indicates that VHA pays lower prices for pharmaceutical products than private-sector health care systems do (largely because of federal price controls) and may also pay less to doctors. For other medical goods and services, however, CBO could not determine whether VHA or the private sector has lower unit costs. In addition to any differences in prices per service, veterans might receive a larger amount or more complex mix of services if they were treated by private-sector doctors and hospitals than by VHA because those providers have stronger financial incentives to deliver more expensive care. At the same time, having the government provide health care through VHA may not be efficient. All of those factors make it hard to draw firm conclusions about relative costs.

Even if VHA currently provided care at a lower cost than the private sector, expanding the VHA system might not be cheaper in the longer term than increasing the use of private-sector providers. That would depend on the manner in which VHA chose to expand its own staff and facilities or the terms of any contracts it arranged for care with private-sector providers. One key consideration would be the relative flexibility that those contracts gave VHA to adapt to future changes in the population of veterans, the number of veterans who enrolled in the VHA system, and the medical services they used.

What Additional Information Would Help in Comparing Costs?

Comparing health care costs in the VHA system and the private sector is difficult partly because the Department of Veterans Affairs (VA), which runs VHA, has provided limited data to the Congress and the public about its costs and operational performance. Additional data, particularly if it was provided on a regular and systematic basis, could help inform policymakers about the efficiency and cost-effectiveness of VHA's services.

For example, the Department of Defense publishes an annual report to the Congress about its health care system, known as TRICARE (in response to a statutory requirement established in the National Defense Authorization Act for Fiscal Year 1996). The most recent of those reports contains more than 100 pages of operating statistics, including trends among beneficiaries and their demographics; funding by appropriation category; use and costs of inpatient, outpatient, and pharmacy services; beneficiaries' cost sharing; and patients' satisfaction with their care.¹ A virtue of the annual, recurring nature of those reports is that each contains consistent trend data from the previous few years, and longer data series can be compiled by comparing past years' volumes. A corresponding annual report on VHA—if one existed—would facilitate comparisons between VHA and the private sector. However, such comparisons would still be challenging, in part because private-sector data might also be incomplete, unavailable, or difficult to make comparable with VHA data.

¹See Department of Defense, *Evaluation of the TRICARE Program—Access, Cost, and Quality: Fiscal Year 2014 Report to Congress* (March 2014), <http://go.usa.gov/vEc4>.

Distinctive Features of VHA's Health Care System

The system of medical centers and other facilities operated by the Veterans Health Administration has several distinctive features that make cost comparisons with other health care systems difficult. For one, the VHA system is designed to serve a unique patient population: former members of the armed forces who served on active duty. Veterans must enroll to receive care from VHA, and when they do so, they are placed in one of eight priority groups reflecting any disabilities they may have, their income, and other factors.² Many of VHA's enrollees have injuries or disabilities that were incurred or aggravated during military service. Of the estimated 22 million living veterans in the United States, nearly 9 million were enrolled in VHA in 2013. About 40 percent of those enrollees had either a service-connected disability or a severe impairment; those veterans accounted for about half of VHA's \$54 billion in total spending that year.

Another unique feature of VHA is that it is funded through annual appropriation acts, so unlike an entitlement program—in which the government would be obligated to provide all of the health care that enrolled veterans demanded—VHA's budget and subsequent outlays are determined by lawmakers. In an effort to keep its spending within its budget, VHA has restricted the enrollment of some higher-income veterans who do not have service-connected disabilities. By contrast, payments for most health care services outside VHA, whether provided through public or private insurance programs, are generally triggered whenever care is delivered and are not subject to formal budget constraints.

A third distinctive feature of VHA is that it provides the vast majority of its care directly through the facilities it operates. Because veterans are dispersed across the country, some of them may have to travel relatively long distances to obtain care at a VHA facility. However, VHA has also traditionally paid for some care delivered by private providers—for instance, when veterans do not live near VHA facilities. In 2013, those payments accounted for about 10 percent of VHA's budget. As a result of legislation enacted in August 2014, VHA is implementing a new system to pay for privately provided care for enrollees who could not obtain appointments at VHA facilities in a timely manner or who live beyond a certain distance from those facilities (as discussed further below).

The mix of services and benefits that veterans receive from VHA also differs somewhat from the mix covered by typical health insurance plans. For example, enrollees rely heavily on VHA for some types of specialized mental health care, such as treatment for post-traumatic stress disorder or substance abuse. Although private insurance plans may cover those services, that coverage may not be as extensive as VHA's, and VHA usually provides such services at no cost to veterans. In addition, several other services provided by VHA may fall outside the typical scope of health care provided to patients in the private sector. For instance, veterans may receive assistance from a social worker or reimbursement for nonemergency transportation costs, and some of their family members may receive counseling or financial support.

Another key feature of VHA care is that enrollees pay no premiums or enrollment fees and little or nothing out of pocket for that care. In 2013, VHA enrollees spent an average of about \$100 on copayments (or roughly 2 percent of the costs of their care). By contrast, most enrollees in Part B of

²The highest priority group consists of veterans who have the severest service-connected disabilities; the lowest priority group consists of higher-income veterans who have no compensable service-connected disabilities. In addition to income, other factors that determine priority include special circumstances such as having been a prisoner of war.

Medicare (which covers physicians' services) paid premiums of just over \$100 per month in 2013 and are typically responsible for paying 20 percent of the costs for their care. The lack of premiums or enrollment fees for VHA care, even for veterans with relatively high income, has two competing effects on program costs and thus on cost comparisons. On the one hand, the lack of premiums and enrollment fees encourages more veterans to enroll, which would raise total spending (if VHA's budget was set or increased accordingly). On the other hand, the absence of enrollment fees may also encourage veterans with fewer health problems—who might not value VHA benefits as highly—to enroll in the system, which would tend to lower the average cost per VHA enrollee.

Although the absence of premiums and enrollment fees should not affect the amount of care that veterans seek once they have enrolled, the extremely low copayments probably increase that demand. However, research suggests that among some segments of the general population—such as the elderly, those with chronic conditions, and those with low income—the prospect of higher out-of-pocket costs may cause people to cut back on preventive care or on the appropriate use of medications, resulting in greater need for acute care services later on.³ Therefore, although its relatively low out-of-pocket costs probably increase costs for VHA in the short run, there may be some offsetting savings over the longer run because many VHA enrollees belong to those segments of the population. Further, VHA is more likely than private insurers to capture those longer-term savings because veterans generally remain enrolled in VHA for life, even if they receive only a portion of their care from that system.

In addition, VHA has other notable features that may affect cost comparisons, such as its payment arrangements for prescription drugs and physicians and its overall system for delivering care. Those features are discussed in more detail later in this report.

Comparisons With Private-Sector Costs

One approach for comparing the costs of different health care systems is to look at average costs per enrollee in each system, but for several reasons that method is not appropriate in the case of VHA. An alternative method is to estimate what the services provided by VHA would cost at prices paid to private-sector doctors, hospitals, and other providers of health care goods and services. That approach provides more useful information but still presents many challenges.

Comparing Average Costs per Enrollee

In CBO's view, comparing the average costs of an enrollee in the VHA system with those of an enrollee in a private health insurance plan—or in another government health care program, such as Medicare or Medicaid—can be misleading for several reasons:

- Veterans who are enrolled in the VHA system receive most of their health care outside that system—typically about 70 percent, according to information provided by VHA. As a result, VHA's average cost per enrollee understates the full annual cost of a veteran's health care. Moreover, about half of veterans enrolled in VHA are also enrolled in Medicare or Medicaid, and

³For an overview of that research, see Katherine Swartz, *Cost-Sharing: Effects on Spending and Outcomes*, Research Synthesis Report 20 (Robert Wood Johnson Foundation, December 2010), <http://tinyurl.com/mxc3ue9>; and Michael E. Chernew and Joseph P. Newhouse, "What Does the RAND Health Insurance Experiment Tell Us About the Impact of Patient Cost Sharing on Health Outcomes?" *American Journal of Managed Care*, vol. 14, no. 7 (July 2008), <http://tinyurl.com/n247vg7>.

many others have a private insurance plan, further complicating comparisons with average costs per enrollee in those programs and plans.

- The veterans seeking VHA care have different clinical and demographic characteristics than people using private-sector care. For example, in 2012, most veterans with severe service-connected disabilities sought health care from VHA, and the average age of VHA enrollees was about 62. A recent study found that VHA patients (primarily older men) had much higher rates of many chronic health problems—such as high blood pressure, diabetes, and depression—than the U.S. patient population as a whole.⁴
- As noted above, cost-sharing requirements are much lower for VHA care than for care received from private-sector providers—which both increases the amount of care that veterans seek and means that VHA pays a larger share of the resulting costs of care than Medicare or private insurance plans do.
- Veterans may have difficulty obtaining VHA care because its facilities are not conveniently located or the waiting times are long—a problem that received considerable attention in 2014. As a result, veterans may use less VHA care and more private-sector care than they would otherwise.
- Calculations of average annual costs per VHA enrollee are generally based on the agency's appropriation for medical care, which raises two accounting issues. First, those medical care accounts do not include some costs that are reflected in private-sector spending, such as malpractice insurance payments and awards, construction and capital expenses, and information technology costs. (Those types of costs are covered in separate VA or federal accounts, such as VA's construction accounts, and could be included along with operating costs to provide a more comprehensive analysis.) Second, VHA's medical care accounts include the costs of some services and programs not typically provided by the private sector, such as travel reimbursement and financial support for family members.

In principle, careful studies could take into account those complicating factors, but in practice, doing so is very difficult. CBO is unaware of any studies that have controlled for all of the systematic differences that arise when comparing costs per enrollee in VHA and costs per person for private-sector care.

Comparing Costs to Provide the Same Services

A better approach that some researchers have taken is to estimate how much private doctors, hospitals, and other entities would be paid for the goods and services currently provided by VHA. Such comparisons are still challenging because researchers must identify the specific services provided by VHA, find comparable service codes in private-sector payment systems, estimate total payments for those services using private-sector payment rates, and then compare those total payments with total costs in the VHA system. Yet, that approach avoids several of the fundamental analytical problems of cost comparisons listed above by estimating prices for the actual bundle of services that veterans receive.

Very few studies have applied such a rigorous methodology, however. Several studies from the 1970s and 1980s compared VHA's costs for inpatient care with costs in private-sector hospitals and generally

⁴Sarah Klein, *The Veterans Health Administration: Implementing Patient-Centered Medical Homes in the Nation's Largest Integrated Delivery System* (Commonwealth Fund, September 2011), <http://tinyurl.com/q2jm9yb>.

concluded that VHA's costs were lower, but those studies used less thorough research methods. By 2000, only two studies had attempted to calculate the costs of the services VHA provided using private-sector payment rates, and those studies were limited to the costs of inpatient care and excluded the costs of clinicians.⁵ The studies estimated that VHA's inpatient care cost about 10 percent less, on average, than comparable services in the private sector.

Subsequently, researchers conducted a careful and comprehensive study to examine the full range of services provided by VHA. That study, using data from 1999, estimated what VHA's inpatient care, outpatient care, and other patient services would have cost if supplied by private-sector providers at Medicare's payment rates.⁶ The analysis also accounted for VHA's overhead costs, including costs for research support, interest on capital assets, information technology, and medical malpractice. The study examined six VHA medical centers closely and allocated resources on the basis of administrative data and detailed chart reviews. (Those estimates provided the basis for national-level estimates for the agency's entire system.)

Key Findings. That study concluded that delivering VHA's services through private-sector providers would have cost more overall at the six medical centers studied and at the national level, although the results varied depending on the types of care involved. For the six centers, the study estimated the following differences:

- The full range of services that VHA provided in 1999 would have cost about 21 percent more if those services had been delivered through the private sector at Medicare's payment rates.
- Inpatient care (excluding costs for nursing homes and rehabilitation facilities) would have cost about 16 percent more if it had been purchased at Medicare's rates.
- The outpatient care provided by VHA would have cost about 11 percent more if it had been provided at Medicare's prices.
- Prescription drugs would have cost about 70 percent more using a combination of Medicaid's and Medicare's payment methods. That difference alone accounted for almost half of the net difference in overall costs.⁷

⁵For an overview of the studies, see Ann M. Hendricks, Dahlia K. Remler, and Mark J. Prashker, "More or Less? Methods to Compare VA and Non-VA Health Care Costs," *Medical Care*, vol. 37, no. 4 (April 1999), pp. AS54–AS62, <http://tinyurl.com/l6c4rn9>; and Gary N. Nugent and Ann M. Hendricks, "Estimating Private Sector Values for VA Health Care: An Overview," *Medical Care*, vol. 41, no. 6 (June 2003), pp. II-2–II-10, <http://tinyurl.com/pqwy42c>.

⁶That research is summarized in Gary N. Nugent and others, "Value for Taxpayers' Dollars: What VA Care Would Cost at Medicare Prices," *Medical Care Research and Review*, vol. 61, no. 4 (December 2004), pp. 495–508, <http://dx.doi.org/10.1177/1077558704269795>.

⁷Nationwide, the study estimated that the total costs for VHA's services in 1999 would have been about 17 percent higher if those services had been provided at Medicare's payment rates. For in-patient care, however, the nationwide estimates were the opposite of the estimates for the six centers: Costs would have been 10 percent lower if they had been priced at Medicare's rates—that is, VHA's inpatient costs were higher. Nationwide, the outpatient care provided by VHA would have cost about 30 percent more if it had been provided at Medicare's prices. The authors speculated that the difference between the national and local results reflected VHA costs at the national level that could not be priced using less detailed data. (For prescription drug costs, the results were the same at the national level and the local level.)

Using Medicare's payment rates as the primary basis for comparison had important effects on those results. In particular, Medicare's payment rates for doctors and hospitals are generally much lower than those of commercial insurance plans—an average of about 20 percent lower for physicians' services and about 30 percent lower for hospital services, according to recent estimates.⁸ Consequently, the difference between VHA's costs and private-sector costs would have been much larger if the comparison had been made using those commercial payment rates.

Limitations. Although that study had many strengths, its authors acknowledged that their results could either underestimate or overestimate the costs of providing care for veterans at Medicare's payment rates. On the one hand, the researchers examined certain individual records for each medical service that a patient received at a VHA center to find the closest set of diagnosis and procedure codes as if a bill were being prepared for submission to Medicare, but they still found that they “could not price many services...for which a private sector system would charge.”⁹ The costs of those services were still counted as costs for VHA but were not included when calculating costs at Medicare's payment rates, which means that VHA's cost advantage may have been underestimated. On the other hand, the study's authors noted that the prices paid by Medicare for the prescription drugs it covered at that time were higher than the prices paid by private insurance plans, which tilted the cost analysis in VHA's favor. Differences in accounting practices could also have affected the cost comparison, although the direction of that bias is not obvious. For example, VHA's accounting system might regard an admission to an inpatient facility followed by treatment at a rehabilitation facility as a single “stay,” whereas other accounting systems might regard them as two distinct stays.

Another concern about that study is that it used data that are now 15 years old. Since then, VHA, Medicare, and the national health care market have changed in several ways that could affect cost comparisons, although it is not clear whether those changes would widen or narrow the cost differences. First, VHA's spending (adjusted to remove the effects of inflation) has roughly doubled since 2000, while Medicare spending and national health expenditures have also increased sharply. Second, the VHA system has shifted from focusing on inpatient care to providing more outpatient services; it is unclear whether VHA has maintained a cost advantage for out-patient services as it has expanded those services. Third, the mix of VHA patients has changed, with an influx of younger veterans returning from Iraq and Afghanistan and the aging of the Vietnam War veterans. Finally, Medicare now pays for drugs differently than it did then and covers outpatient drugs, while many other changes have occurred that affect payment rates for other services under Medicare and private health insurance.

By contrast to the study above, other research published in 2009 compared VHA's spending to an estimate of costs for treating veterans in the private sector and found that VHA's costs were “considerably higher”; in CBO's judgment, though, the methodology of this newer study is relatively weak.¹⁰ The study relied on survey data rather than detailed reviews of administrative data and medical charts to estimate which specific services veterans received from VHA, and then sought to price those services at private-

⁸See Centers for Medicare & Medicaid Services, *Review of Assumptions and Methods of the Medicare Trustees' Financial Projections* (December 2012), pp. 66–67, <http://tinyurl.com/krz6qne> (PDF, 684 KB).

⁹Gary N. Nugent and others, “Value for Taxpayers' Dollars: What VA Care Would Cost at Medicare Prices,” *Medical Care Research and Review*, vol. 61, no. 4 (December 2004), p. 505, <http://dx.doi.org/10.1177/1077558704269795>.

¹⁰See William B. Weeks and others, “Does the VA Offer Good Health Care Value?” *Journal of Health Care Finance*, vol. 35, no. 4 (Summer 2009), pp. 1–12.

sector rates. However, the Medical Expenditure Panel Survey (MEPS) on which that analysis was based does not seek to capture all of the inpatient and out-patient costs incurred by VHA, and it is known to underestimate total spending on health care somewhat and to undercount high-cost cases in particular.¹¹ Adjusting the study's results to account for those differences could largely offset its reported gap in costs. More important, MEPS does not generally capture services (such as those provided in VHA hospitals) that are not paid on a fee-for-service basis, but instead imputes what those services were using data on seemingly similar patients treated in other settings. How well the results reflect the services actually provided to veterans is thus unclear. In light of those limitations, CBO concluded that the 2004 study cited above, which included detailed chart reviews of VHA care, had a more reliable methodology.

Recently, problems that some veterans have had in obtaining timely access to care at VHA facilities have also come to light, resulting in the enactment of the Veterans Access, Choice, and Accountability Act of 2014 (Public Law 113-146). Under that law, VHA will increase its use of contracts with private-sector providers in the near term; it also plans to hire additional medical personnel and expand its capabilities to provide in-house care over the next several years. Those changes and the other factors described above mean that cost comparisons made now or in the future could have different results than the studies conducted earlier.

Reasons That VHA's Costs May Differ

To help understand the results and implications of the studies discussed above, CBO considered three significant differences between the VHA and private-sector health care systems: input costs, financial incentives for providers, and the systems used to deliver care. The effects of those factors are difficult to predict accurately, so their overall effects on costs could not be determined precisely.

Two points provide useful context for this analysis. First, health care spending can be viewed as the outcome of the number of units of service provided, the average complexity or mix of services provided, and the average cost per unit. Therefore, the following discussion addresses the effect of differences between the VHA and private-sector health care systems along those dimensions. Second, the number of units of service provided depends in part on the cost-sharing arrangements that patients face, which affects their demand for care. For the purposes of this discussion, CBO assumed that veterans would have the same cost-sharing rules for private-sector care as they do for care delivered in VHA facilities. Thus, CBO assumed that a veteran's demand for health care would be about the same in either setting, although some differences could still occur because of factors such as proximity or ease of making appointments. Nevertheless, the amount and mix of medical services provided could differ under the two arrangements, as described below, because private-sector providers have financial incentives to deliver more care and often lack mechanisms to coordinate patients' care.

Differences in Input Costs

Although VHA and the private sector use largely the same types of resources to provide health care services, the quantities, mix, and prices of those inputs may differ. Key inputs for health care include pharmaceutical products, physicians and other types of personnel, facilities (hospitals and clinics), and

¹¹See Didem Bernard and others, "Reconciling Medical Expenditure Estimates From the MEPS and NHEA," *Medicare and Medicaid Research Review*, vol. 2, no. 4 (December 2012), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4006479/>; and Thomas M. Selden and Merrile Sing, "The Distribution of Public Spending for Health Care in the United States, 2002," *Health Affairs*, vol. 27, no. 5 (September 2008), pp. w349–w359, <http://content.healthaffairs.org/content/27/5/w349.full>.

medical equipment. CBO estimates that VHA has a clear cost advantage over private-sector providers for pharmaceutical products and may also have a cost advantage for physicians; CBO examined the relative costs of facilities but could not reach a firm conclusion about them. For other inputs—such as nurses, administrative staff, and medical equipment—further research would be necessary to determine whether VHA or private-sector providers had a cost advantage. Because VHA and private-sector providers generally purchase those inputs in the same markets and VHA does not enjoy any statutory or regulatory cost advantages for them (as it does for pharmaceutical products), there is no obvious reason that either system would have lower costs for those inputs.

Costs for Pharmaceutical Products. Largely because of federal price controls, VHA's pharmaceutical costs are significantly lower than those of private health care systems. Two caps set in legislation mean that the maximum price that VHA pays for a drug is either the best commercial price net of certain discounts and rebates or the average price paid by pharmacies minus a large statutory discount, whichever is lower. VHA receives additional discounts if drug prices rise faster than general inflation (which they have generally done). VHA negotiates further discounts with drugmakers for the drugs included on its formulary (or list of preferred drugs), and in return steers its enrollees to use those drugs. In a 2005 study, CBO calculated that certain federal purchasers—including VHA and the Department of Defense—paid roughly half as much for brand-name drugs as retail pharmacies did, on average.¹²

Costs for Physicians. VHA's primary care physicians (including those practicing general internal medicine and family medicine) are probably paid roughly the same salaries as their peers in the private sector; however, many specialists in the VHA system appear to receive lower salaries than their private-sector counterparts. Base salaries for VHA's physicians are broadly determined by statute, although physicians are also eligible for performance pay (up to \$15,000 a year). Federal regulations set an annual salary range for VHA's primary care physicians of about \$100,000 to \$245,000 (excluding bonuses). Specialists may earn more, but their total salary and bonuses are capped at \$400,000 annually.¹³

Although salaries account for a large share of physicians' total compensation, benefits—such as pension contributions and health and malpractice insurance—are also important. However, comparing those costs at VHA and in the private sector is difficult, partly because limited data are available on physicians' noncash compensation and partly because their compensation arrangements can be complex. Like other federal workers, VHA's physicians may be entitled to a defined benefit pension, but that type of retirement benefit has been waning in the private sector. In addition, VHA's physicians are not liable for damages from malpractice suits—and thus do not need to purchase malpractice insurance; instead, patients may sue the federal government under the Federal Tort Claims Act for damages related to VHA

¹²See Congressional Budget Office, *Prices for Brand-Name Drugs Under Selected Federal Programs* (June 2005), www.cbo.gov/publication/16634.

¹³In 2013, average salaries (excluding performance pay) for physicians in some of the most common fields at VHA were \$182,000 for general internal medicine, \$193,000 for psychiatry, \$209,000 for emergency medicine, and \$259,000 for general surgery. (In September 2014, VA announced a proposed increase of \$20,000 to \$35,000 in annual pay ranges for physicians who provide care to veterans at VHA facilities.) By comparison, two recent surveys of cash compensation for private-sector physicians reported averages of \$188,000 and \$198,000 for general internal medicine, \$197,000 and \$217,000 for psychiatry, \$272,000 and \$311,000 for emergency medicine, and \$295,000 and \$354,000 for general surgery. Surprisingly, the survey with the higher figures covered only salaries, whereas the survey with the lower figures also included bonuses and profit-sharing arrangements; see Leslie Kane and Carol Peckham, *Medscape Physician Compensation Report 2014* (Medscape, April 2014), <http://tinyurl.com/ou4e5gt>, and Merritt Hawkins, *2014 Review of Physician and Advanced Practitioner Recruiting Incentives* (Merritt Hawkins, 2014), <http://tinyurl.com/oezpa9m> (PDF, 1.6 KB).

care, and any settlements are paid by the Treasury from its Judgment Fund.¹⁴ Private-sector physicians, by contrast, incur significant costs for malpractice insurance. Estimates of annual malpractice premiums for physicians vary, but according to a 2011 survey, premiums averaged roughly \$12,000 for primary care doctors and \$30,000 for surgeons.¹⁵ If private-sector physicians must bear those costs themselves, rather than having the premiums paid by their employer, they are likely to demand a higher salary than equivalent physicians at VHA.

VHA's physicians might be willing to accept lower compensation for several other reasons. Working for a salary involves less financial risk than owning or being a partner in a medical practice. Salaried doctors also may have less intensive or more predictable schedules or fewer administrative duties, so they may require less in average compensation. One survey found that salaried physicians made about 20 percent less than self-employed physicians, with much larger differences for specialists than for primary care doctors.¹⁶ In addition, some reports have indicated that a primary care doctor at VHA is supposed to have about 1,200 patients, compared with an average of 2,000 or more for private doctors.¹⁷ However, in the time available for this analysis, CBO was not able to determine how workloads for VHA's physicians compare with workloads in the private sector—a comparison that would need to account for any differences in the mix and average sickness of patients seen and in the number of visits per patient.

Costs for Facilities. Little information is available about VHA's operating costs for its physical structures or about how those costs compare with private-sector costs. Many of the hospitals in the VHA system are old. Rather than build new ones, VHA tends to refurbish its hospitals and purchase new equipment. In addition, with its increased emphasis on outpatient care, VHA has opened hundreds of community-based outpatient clinics in the past 15 years, many in places that were not served by existing VHA hospitals. VHA is subject to complex regulations governing construction, contracting, and hiring; though the same thing may be true for private hospitals in many locations, such complexity makes determining differences in facility costs difficult. Both VHA and private-sector hospitals report that about 65 percent of their beds are occupied on an average day. Although occupancy is a fairly crude measure of efficiency, those figures suggest that hospital facilities are used with roughly equal efficiency in both systems.

Differences in Financial Incentives for Providers

Most private-sector providers, whether hospitals or physicians, generate revenues for each unit of service that they deliver. Thus, they have a financial incentive to deliver more services. Although there is disagreement about the size of that effect, most health analysts conclude that fee-for-service payments to

¹⁴In the recent past, paid malpractice claims were equivalent to less than 0.1 percent of VHA's annual budget. In the private sector, by comparison, premiums for malpractice insurance constitute a considerable expense; by one estimate, total premiums for doctors, nurses, hospitals, and other entities represented about 2 percent of total health care spending in 2009.

¹⁵See Jeffrey Bendix, "Malpractice Premiums Continue Their Downward Trend for Most Physicians," *Medical Economics* (November 25, 2012), <http://tinyurl.com/lautqwz>.

¹⁶See Leslie Kane and Carol Peckham, *Medscape Physician Compensation Report 2014* (Medscape, April 2014), <http://tinyurl.com/ou4e5gt>.

¹⁷See David C. Mohr, Justin K. Benzer, and Gary J. Young, "Provider Workload and Quality of Care in Primary Care Settings: Moderating Role of Relational Climate," *Medical Care*, vol. 51, no. 1 (January 2013), pp. 108–114, <http://tinyurl.com/nh2ppqg>; and G. Caleb Alexander, Jacob Kurlander, and Matthew K. Wynia, "Physicians in Retainer ("Concierge") Practice: A National Survey of Physician, Patient, and Practice Characteristics," *Journal of General Internal Medicine*, vol. 20, no. 12 (December 2005), pp. 1079–1083, <http://dx.doi.org/10.1111/j.1525-1497.2005.0233.x>.

physicians lead them to provide more services and more expensive services, some of which may be duplicative or otherwise unnecessary.¹⁸ As discussed above, many private-sector doctors receive a salary, but their bonuses may be linked to the number of services they provide or the amount of revenue they generate. Similarly, hospitals sometimes receive a fixed payment per admission, but they still have a financial incentive to generate more admissions, and they are often paid more when they provide more complex (and more costly) treatments during those admissions.¹⁹ In addition, private-sector physicians may have a financial stake in hospitals, surgical centers, diagnostic centers, or other clinics, giving them an incentive to refer patients to those facilities for additional services. (Partly to offset such incentives and to discourage overuse of health care, insurance companies typically require enrollees to share in the costs of their care or impose administrative hurdles that enrollees must clear to receive some covered services.)

VHA, by contrast, has its budget determined in advance through annual appropriations, so it does not have any incentive to increase the volume or intensity of services it provides in a given year to boost its revenues. Although VHA's budget is not simply the product of the number of enrollees and a fixed annual payment per enrollee, the projected number of enrollees is nonetheless a major factor in the development of VHA's annual budget requests. In some ways, therefore, VHA's funding is analogous to a health insurance plan that receives "capitated" (or fixed) annual payments per enrollee and thus has a strong incentive to keep costs in line with that payment. If its funds run short, VHA could seek emergency or supplemental appropriations from lawmakers—but lawmakers might not approve such requests. Further, because VHA pays its doctors primarily on a salary basis, those physicians have limited or no financial incentives to provide more expensive or potentially unnecessary treatment. However, VHA's physicians also lack strong financial incentives to see as many patients as their private-sector counterparts. More broadly, VHA could limit the provision of services to enrollees and let them seek care from another source, so its incentives to control the total costs of veterans' care may not be as strong as those that a fully capitated health plan would face.

Differences in Delivery Systems

Two features of VHA's delivery of care distinguish it from most medical care that people in the United States receive: That care is delivered through an integrated health care system, and the system is owned and operated by the federal government. Both of those features may affect the relative costs of VHA and private-sector care.

Integrated Delivery. VHA operates one of the largest integrated health care delivery systems in the United States. Although there is no standard definition of an integrated health care system, such systems generally provide a full range of services—including primary and specialty care, inpatient care, and pharmacy services—and have either a single ownership structure or strong financial ties among the participating organizations. Such systems may also seek to coordinate the care that patients receive from different providers within the system and may take some degree of responsibility for delivering good care

¹⁸See James C. Robinson, "Theory and Practice in the Design of Physician Payment Incentives," *Milbank Quarterly*, vol. 79, no. 2 (June 2001), pp. 149–177, <http://dx.doi.org/10.1111/1468-0009.00202>; and Heike Hennig-Schmidt, Reinhard Selten, and Daniel Wiesen, "How Payment Systems Affect Physicians' Provision Behaviour—An Experimental Investigation," *Journal of Health Economics*, vol. 30, no. 4 (July 2011), pp. 637–646, <http://dx.doi.org/10.1016/j.jhealeco.2011.05.001>.

¹⁹For example, hospitals are paid more under Medicare when patients have a heart bypass operation than when they receive an angioplasty or other less intensive treatment. For additional discussion, see Mark McClellan, "Hospital Reimbursement Incentives: An Empirical Analysis," *Journal of Economics and Management Strategy*, vol. 6, no. 1 (Spring 1997), pp. 91–128, <http://dx.doi.org/10.1111/j.1430-9134.1997.00091.x>.

and improving their patients' overall health. According to a recent estimate, a substantial number of integrated delivery systems were operating in the United States in the late 2000s, with a total enrollment of about 40 million people; prominent examples include Kaiser Permanente, Geisinger Health System, and the Mayo Clinic.²⁰ For the most part, however, doctors and hospitals in the private sector are not integrated.

Integrated health care systems generally have several features that, at least theoretically, should enable them to deliver less expensive or higher-quality care than nonintegrated providers:

- Comprehensive medical records are accessible to all providers and in all care locations, providing better information on which to make clinical decisions and making it easier to avoid delivering duplicative or potentially conflicting services;
- Collaboration among doctors and coordination of care among locations should be easier for both doctors and patients when the care is all provided “under one roof”; and
- Doctors' performance can be measured (and correspondingly rewarded) using factors that contribute to the overall health and improvement of patients, such as timely provision of care and adherence to treatment guidelines.

Although the available evidence is limited, integrated delivery systems appear to have lower average use of services per patient, so they probably have lower costs as well.²¹ A major study conducted in the late 1970s and early 1980s, the RAND Health Insurance Experiment, concluded that health care spending was about 30 percent lower for participants treated by an integrated delivery system, which received capitated payments, than for participants whose providers were not integrated and were paid on a fee-for-service basis.²² However, that study was conducted more than 30 years ago and reflects the experience of only one integrated delivery system. Most recent studies of integrated systems have not addressed costs directly. A systematic review of the research literature found only five peer-reviewed studies that compared use of services between integrated and nonintegrated systems.²³ Four of those studies found that patients used fewer services in integrated delivery systems. (Many more studies have concluded that integrated systems improved the quality of care.)

Federal Ownership and Management. A related consideration is whether and how federal operation of the VHA system affects its relative costs and efficiency. For example, regulations that govern the hiring and firing of federal employees probably make it harder for VHA to deal with personnel who do not

²⁰See Alain C. Enthoven, “Integrated Delivery Systems: The Cure for Fragmentation,” *American Journal of Managed Care*, vol. 15, no. 10 (December 2009), pp. s284–s290, <http://tinyurl.com/kqv2duc>.

²¹Lower utilization might not translate into lower costs if the prices that integrated health plans charged were higher. The studies cited above, however, indicate that VHA has lower costs per unit of service, so costs under its integrated system are probably lower.

²²See Willard G. Manning and others, “Health Insurance and the Demand for Medical Care: Evidence From a Randomized Experiment,” RAND Report R-3476-HHS (February 1988), www.rand.org/content/dam/rand/pubs/reports/2005/R3476.pdf (4.66 MB). In that comparison, neither enrollees in the integrated system nor people receiving fee-for-service care faced any cost-sharing requirements.

²³Wenke Hwang and others, “Effects of Integrated Delivery System on Cost and Quality,” *American Journal of Managed Care*, vol. 19, no. 5 (May 2013), pp. e175–e184, <http://tinyurl.com/lgpsf2f>.

perform at expected levels, or to expand or contract its workforce, than is the case for private-sector health care systems. (Recent legislation has relaxed some of those regulations for certain classes of senior executives but not for practicing medical staff.) Similarly, VHA may have greater difficulty closing or shrinking facilities when their use declines. More broadly, VHA facilities do not have the same incentives as private health care systems to control their costs and thus may not operate as efficiently.²⁴

At the same time, the efficiency of private-sector health care systems is often the subject of debate. Most hospitals are nonprofit organizations, so they may not have strong incentives to control their costs. Perhaps more important, many of the markets in which hospitals operate, and some of the markets in which physicians work, are not very competitive, with just one or a few providers dominating the market.²⁵ Lack of competitive pressure may also weaken providers' incentives to control their costs.

The Relative Costs of Expanding VHA Services

In response to concerns about veterans' access to VHA care, lawmakers enacted the Veterans Access, Choice, and Accountability Act in August 2014. That law provides an additional \$10 billion in funding over three years for medical care to treat veterans outside VHA facilities if those veterans are unable to schedule appointments at VHA facilities within the department's goals for waiting times or if they live more than a specified distance from the nearest VHA facility.²⁶ That law also provides \$5 billion in funding that will allow VHA to hire more medical staff and expand its capabilities to provide in-house care over the next several years.

VHA's experiences under that legislated expansion could provide an opportunity to collect and disseminate new and useful information. The previous cost comparisons discussed above shed light on whether the care provided by VHA could theoretically be provided more cost-effectively outside its system. However, if VHA were to substantially expand its use of private-sector providers over the longer term, the terms of the contracts that VHA sets up would help to determine the cost-effectiveness of that approach. Some issues that VHA would need to address include the bundle of services to be provided to veterans through the private sector and the payment rates for private providers—including options such as whether to use capitated payments or to establish fee-for-service payment rates linked to those of Medicare or another program. (Under the 2014 legislation, Medicare rates generally apply.) Those considerations would have to be balanced against the costs of expanding VHA's existing infrastructure. Although the Department of Veterans Affairs projects that the population of veterans will decline, it

²⁴See Joseph E. Stiglitz, *Economics of the Public Sector*, 3rd ed. (W.W. Norton, 2000), pp. 189–213; and Robert H. Wessel, "Privatization in the United States," *Business Economics*, vol. 30, no. 4 (October 1995), pp. 45–50, www.jstor.org/stable/23487734.

²⁵See Robert A. Berenson and others, "The Growing Power of Some Providers to Win Steep Payment Increases From Insurers Suggests Policy Remedies May Be Needed," *Health Affairs*, vol. 31, no. 5 (May 2012), pp. 973–981, <http://content.healthaffairs.org/content/31/5/973.abstract>; Martin Gaynor and Robert J. Town, "Chapter 9: Competition in Health Care Markets," in Mark V. Pauly, Thomas G. McGuire, and Pedro P. Barros, eds., *Handbook of Health Economics*, vol. 2 (Elsevier B.V., 2011), pp. 499–637, <http://www.sciencedirect.com/science/handbooks/15740064>; and Laurence C. Baker and others, "Physician Practice Competition and Prices Paid by Private Insurers for Office Visits," *Journal of the American Medical Association*, vol. 312, no. 16 (October 22/29, 2014), pp. 1653–1662, <http://jama.jamanetwork.com/article.aspx?articleid=1917436>.

²⁶For CBO's estimates of the budgetary effects of that legislation, see Congressional Budget Office, letter to the Honorable Bernie Sanders providing an estimate for H.R. 3230, the Veterans Access, Choice, and Accountability Act of 2014 (July 29, 2014), www.cbo.gov/publication/45601.

expects VHA enrollment to rise slightly over the next decade before returning to current levels.²⁷ Nevertheless, increasing VHA's capacity might not be cost-effective in an era when the population of veterans is shrinking, because there would probably be considerable resistance to closing VHA facilities once they were built.

The choice between expanding VHA facilities and expanding care for veterans through the private sector involves other considerations besides costs, including the quality of the care that veterans receive. VHA ranks highly among health care providers by some objective measures of quality (such as low infection rates and high vaccination rates).²⁸ However, some studies have found no differences in health outcomes—or worse outcomes for some types of care—at VHA facilities than in the private sector. Moreover, as in the private sector, some measures of health outcomes vary among VHA hospitals, but many important outcomes and other dimensions of health care quality are generally hard to measure.²⁹ As a result, CBO was not able to incorporate a careful consideration of quality in this limited examination of how VHA care compares with care provided in the private sector.

²⁷For those population estimates, see Department of Veterans Affairs, "Veteran Population," www.va.gov/vetdata/Veteran_Population.asp.

²⁸See Phillip Longman, *Best Care Anywhere: Why VA Health Care Is Better Than Yours* (PoliPointPress, 2007); and Department of Veterans Affairs, *VHA Facility Quality and Safety Report, Fiscal Year 2012 Data* (December 2013), pp. 12–17, <http://tinyurl.com/oj8e7xz> (PDF, 5.6 KB).

²⁹See Amal N. Trivedi and others, "Systematic Review: Comparison of the Quality of Medical Care in Veterans Affairs and Non-Veterans Affairs Settings," *Medical Care*, vol. 49, no. 1 (January 2011), pp. 76–88, <http://tinyurl.com/nj26vto>; William B. Weeks and others, "Reducing Avoidable Deaths Among Veterans: Directing Private-Sector Surgical Care to High-Performance Hospitals," *American Journal of Public Health*, vol. 97, no. 12 (December 2007), pp. 2186–2192, <http://dx.doi.org/10.2105/AJPH.2007.115337>; and Department of Veterans Affairs, "Quality of Care: How Does Your Medical Center Perform?" (accessed September 10, 2014), www.va.gov/QUALITYOFCARE/aspire-app.asp.

About This Document

The Congressional Budget Office's report, *Comparing the Costs of the Veterans' Health Care System With Private-Sector Costs*, released on December 10, 2014, was prepared in response to a request by the former Chairman of the Senate Committee on Veterans' Affairs. In keeping with CBO's mandate to provide objective, impartial analysis, that report makes no recommendations.

Elizabeth Bass, Philip Ellis, and Heidi Golding wrote the report with guidance from David Mosher and Matthew Goldberg. Jared Maeda contributed to the analysis, and Linda Bilheimer, Ann Futrell, Theresa Gullo and Sarah Jennings of CBO provided helpful comments. Jeffrey Kling and Robert Sunshine reviewed the report, Christian Howlett edited it, and Maureen Costantino and Jeanine Rees prepared it for publication.

This testimony reprises the report released last month. Both the report and the testimony are available on CBO's website (www.cbo.gov/publication/49763 and www.cbo.gov/publications/49905 respectively).