5

Leveraging Other Federal Health Systems

SUSAN D. HOSEK

The Veterans Health Administration (VHA) and Military Health System (MHS) are the two largest federal health programs directly providing health care in federally owned and operated hospitals and clinics.[1] In fiscal year 2006, they will spend about $70 billion on health care for approximately 16 million enrolled veterans and active duty and retired military personnel and their beneficiaries.[2] With about one-tenth of the budget of Medicaid and Medicare, the health systems for veterans and the military are small compared to those programs. Controlling their future costs will have little effect on the total federal health care budget.

Nevertheless, these federal health systems can play a larger role in health care reform than their size might suggest. Previous chapters pointed to evidence that federal (and private-sector) health care dollars are not buying consistently high quality care. Improving the value of public and private health spending will require a focus on both efficiency and quality of care. VHA and MHS can be innovative and can set an example for the rest of the U.S. health sector because they are integrated systems that both pay for and, to a considerable extent, provide care and

because they are not bound by the myriad constraints in state health regulation. In some areas—including electronic medical records, pharmaceutical costs, and quality-of-care improvement—one or both systems have been leaders. In other areas, they could be more innovative.

Although VHA and MHS account for a small fraction of total federal health care spending, rising spending is of considerable concern to the Department of Veterans Affairs (VA), Department of Defense (DoD), and their constituencies. The scope of benefits provided to veterans' and military beneficiaries has grown over time, and today the benefit packages are significantly better than the benefits available in almost all private employer health plans. As a result, potential beneficiaries increasingly want to take advantage of these relatively generous benefits, and Congress has significantly expanded eligibility for both programs. More eligible beneficiaries are using the systems, and more are dropping their employer coverage in consequence. The expansion in these populations served may continue well into the future and may drive up spending even faster than spending for the health care system in the United States as a whole.

VA and DoD have sought to control their health care budgets by proposing modest increases in cost sharing and adopting management initiatives from the private sector. The proposed cost-sharing increases were intended to moderate the demand for care by those beneficiaries who already rely on the two systems and to discourage additional eligible beneficiaries from shifting into the systems and out of private coverage. Congress has not supported the proposed increases, however. Higher cost sharing is actively opposed by the veterans and military associations, who can marshal strong public support—especially in wartime. With benefit changes ruled out, VHA and MHS will have to focus on improving the efficiency with which they provide benefits.

Evolution of Veterans' and Military Health Care

Each of the two health care systems was established for a narrowly defined purpose, and each has expanded its scope over time. The origins of the systems date back to the beginning of the United States, when they were established to treat the casualties of successive wars and provide

ongoing care for those whose injuries were disabling. Up to World War II, the military maintained only a small medical system to care for active duty personnel in peacetime, while the veterans' system grew from a single facility established in 1811 to a system of fifty-four hospitals in 1930.[3]

After World War II, both systems grew rapidly. DoD kept a much larger peacetime medical establishment to support a large standing armed force countering the perceived Soviet threat in central Europe. In 1995, just after the end of the cold war, MHS operated 130 hospitals and 388 clinics in the United States. This large system provided only a fraction of the medical capacity that the military services estimated they would need for a conventional war in Europe. More recently, the post–cold war drawdown resulted in a smaller system comprising 52 hospitals and 309 clinics in the United States that is more than adequate for military needs.[4]

Following World War II, VA significantly expanded its medical system to handle the many disabled veterans, with the system growing over time to its current size of 171 medical centers and more than 350 clinics.[5] Currently, VA projects a decline of 40 percent in the veteran population in the next three decades; in 2004 the Capital Asset Realignment for Enhanced Services (CARES) Commission proposed facility changes to prepare for future demographic and health care delivery changes.[6]

Expansion of Military Health Care

Within DoD, MHS needed patients to keep its many providers busy in its large postwar peacetime system, so active duty dependents, retirees, and retirees' dependents were provided "space-available" access to care in military treatment facilities (known as MTFs). By this time, the nation's employer-based insurance system was in place, and in 1958 MTF space-available care was supplemented by CHAMPUS, a fee-for-service insurance program that financed care provided in the civilian sector for military beneficiaries under the age of 65.[7] MTF care was free of charge, but CHAMPUS included cost-sharing provisions that were similar to many health insurance plans at the time. CHAMPUS covered services for active duty dependents and retirees and their dependents until the age of 65, when these beneficiaries enrolled in Medicare.

In the mid-1990s the MHS adopted managed care practices and transformed the MTF-CHAMPUS program into a new program called

TRICARE. TRICARE continues the old benefit in an option called Standard, but it adds a preferred provider option (PPO) called Extra and a health maintenance organization (HMO) called Prime. Beneficiaries choose either Standard with Extra or Prime; retirees pay a nominal annual enrollment fee for Prime—$230 for single coverage and $460 for family coverage—but active duty dependents pay no enrollment fee for either option.[8]

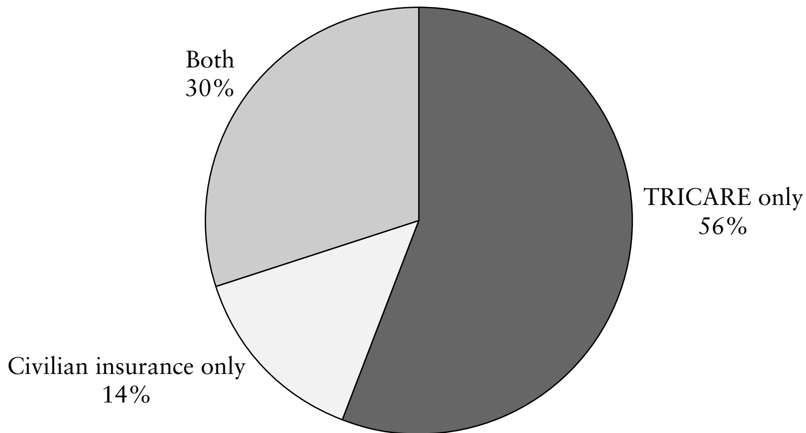
In the decade since it was implemented, TRICARE benefits have remained constant or even improved while employer insurance has become significantly less generous. For military retirees, TRICARE cost-sharing provisions have remained constant during the past decade. In 2001 Congress eliminated all cost sharing for active duty dependents enrolled in Prime, except for very modest charges for prescription drugs. More recently, Congress also added new benefits for military retirees aged 65 and older and military reservists.

In the decade that TRICARE has been in existence, the under-65 retired population has gradually shifted out of employer insurance to take advantage of the increasingly generous DoD benefit. As figure 5-1 illustrates, in 2005 over half of these beneficiaries relied exclusively on TRICARE, and 14 percent relied only on civilian insurance.[9] Three-quarters of retirees who were eligible for TRICARE used it in 2005. In addition, the over-65 retired population now makes significant use of its new TRICARE for Life benefit. In contrast, few reservists have enrolled in their new benefit, called TRICARE Reserve Select, because they must pay a sizeable premium.[10] This is the one remaining group still looking for expanded eligibility and a more generous military health benefit.

Expansion of Veterans' Health Care

The veterans' health system was also initially developed for a specific purpose—to care for veterans who were seriously injured or who developed long-term illnesses because of wartime military service.[11] Current VHA eligibility rules give highest priority to those who have a significant "service-connected" disability resulting from their injury or illness. As with the DoD system, need for care by these veterans has varied, and so at times the VA system has had excess capacity. As early as 1924, Congress authorized impoverished veterans to use the system to fill the unused capacity.

Figure 5-1. *Insurance Choices of Military Retirees under the Age of 65*



Source: Louis T. Mariano and colleagues, *Health Insurance Options for Military Retirees under 65: Results from a 2005 Survey,* MG-583-OSD (Santa Monica, Calif.: RAND Corporation, forthcoming).

World War II led to a large expansion of the VA system, initially to provide acute care to veterans and then to specialize in the rehabilitative care veterans needed but could often not get in the civilian sector. Since then, Congress has further expanded VHA eligibility. The Veterans' Health Care Eligibility Reform Act of 1996 made all veterans eligible for the first time; in particular, it authorized access to VHA by veterans who have no service-connected disability or other special circumstance and who are not poor. Veterans must enroll to obtain care, and priority for enrollment is determined by which of eight eligibility categories a veteran falls into. Veterans with major service-connected disabilities have top priority, and nondisabled veterans who exceed an income threshold have lowest priority.

Also like MHS, VHA implemented major changes in the 1990s, responding to the emergence of managed care health systems in the private sector. The VHA was reorganized to incorporate procedures used by managed care organizations and to reflect modern principles of organizational structure.[12] With the management reorganization, VHA reorganized its care delivery system, shifting patients from inpatient to outpatient

treatment where possible and opening a network of outpatient clinics in areas previously not served by the VHA.

Unlike TRICARE, the VHA benefit is not strictly an entitlement, even for enrolled veterans. VHA funding is discretionary, and the system is expected under normal circumstances to meet the needs of its enrollees within its budget. The agency is directed by law to "ensure that the provision of care to enrollees is timely and acceptable in quality."[13] Thus the congressional intent is clearly to afford enrollees a benefit that comes close to an entitlement. Consistent with this intent, Congress may choose to supplement the VHA budget, and it did so twice in recent years—in 2002 and 2005. Generally, however, VHA has tried to keep enrollment at a level that the discretionary budget can support. Enrollment of veterans in the lowest priority category was suspended in January 2003 and has not been reopened. Before that date, veterans wanting to enroll faced long delays in some geographic areas, and appointment delays were also common.

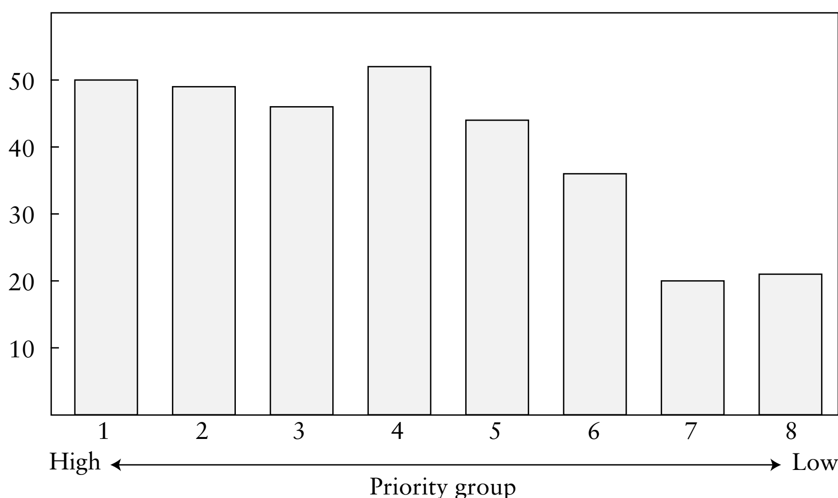
The delay and suspension in enrollment is undoubtedly one reason for the difference in reliance of veterans on VHA and military beneficiaries on MHS. Veterans have shifted from private sources of care to the VHA, just as military beneficiaries have. However, only 30 percent of 25 million veterans are enrolled in the system. Almost 80 percent of all veterans have other insurance, including Medicare for roughly one-half of the population. Enrollment rates across priority categories range from 10 to 90 percent, but four-fifths of current enrollees come from priority categories that had access to the system before 1996 (figure 5-2).[14]

Many enrolled veterans get only part of their care from VHA. The most reliant groups—veterans with significant disabilities—get only about half of their care from VHA. In the lowest priority groups, where enrollment is currently frozen, enrollees have an average reliance rate of only 20 percent. Clearly, there is potential for increased use of VHA by all veteran groups if VHA capacity constraints were eased.

Trends in MHS and VHA Users and Budgets

In the decade after Congress enacted eligibility reform in 1996, the number of veterans who enrolled in and used VHA doubled. The largest increases were for category 7 veterans, whose incomes are below the federal levels

Figure 5-2. *Veterans' Reliance on the Veterans Health Administration, 2004*

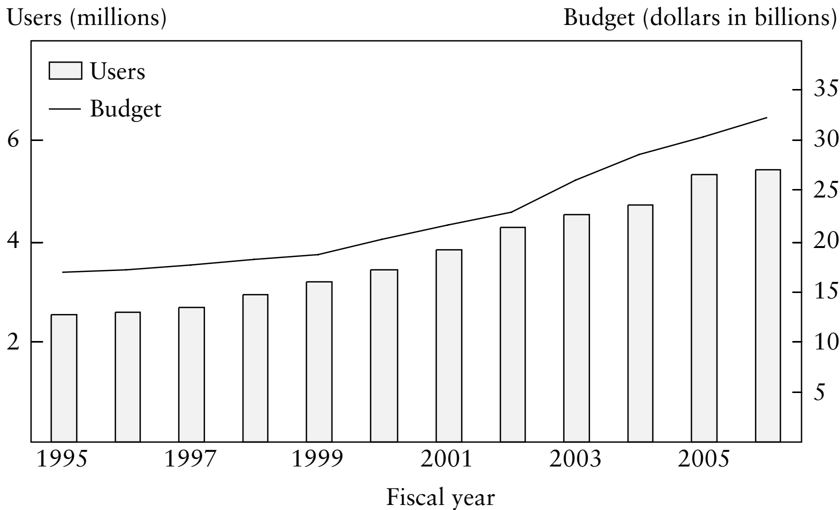


Source: Congressional Budget Office, *The Potential Cost of Meeting Demand for Veterans' Health Care* (March 2005), figure 3, p. 7.

for subsidized housing, and those over the age of 65.[15] With some lag, figure 5-3 shows that VHA's budget has kept up with this growth. This crude comparison of total users with the budget suggests that eligibility expansion has been an important factor in recent budget increases. Looking to the future, VHA expects that veterans' utilization of services will continue to increase, in large part because the population is aging. It also expects that the intensity of services provided will increase.[16]

DoD's beneficiary population remained relatively constant throughout the 1990s at roughly 8.5 million, but call-ups of reservists have brought the beneficiary population total to 9.2 million in recent years. DoD's budget growth during the same period was similar to VHA's, with most of the increase occurring after 2000; since then, costs have grown more than 12 percent annually, compared with 8 percent for VHA (figure 5-4).[17] The difference is primarily due to TRICARE for Life, which added $4.6 billion in 2003 and an estimated $7.1 billion in 2006.

Figure 5-3. *Users of Veterans Hospital Administration and Budget, 1995–2006*

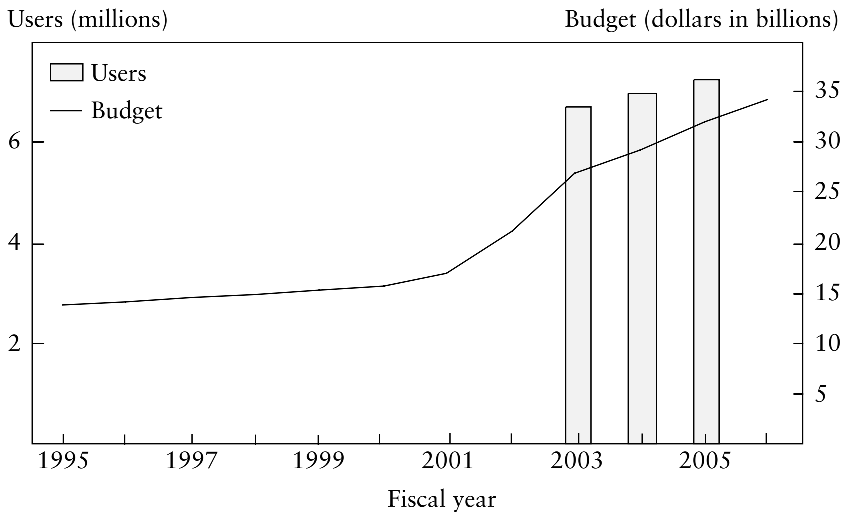


Source: Data from 1995 to 2004 are from Sidath V. Panangala, *Veterans' Medical Care Funding: FY1995–FY2004* (Washington: Congressional Research Service, 2005); data for 2005 to 2006 are from congressional submissions for Medical Programs, tables 3B-2 and 3B-5.

The Congressional Budget Office (CBO) estimates that MHS spending in 2020 will range from $42 billion to $52 billion in 2002 dollars; the projected increase in real spending over seventeen years (from the base year 2003 to 2020) is 2.3 to 3.9 percent per year. CBO's projections for the VHA budget are in a narrower range; by 2025 the budget is projected to increase to between $53 billion and $57 billion, reflecting a relatively low 3.1–3.6 percent annual real rate of growth. Thus the combined budget for military and veterans' health care could grow from about $70 billion to well over $100 billion in today's dollars in the next 20 years. However, if general health care spending continues its rapid rise and more retired beneficiaries shift to TRICARE and VHA, the CBO projections are likely to be too conservative.[18]

This year, both DoD and the VHA asked Congress to narrow the gap in cost sharing between their systems and private-sector plans. DoD requested substantial increases in retiree enrollment fees in TRICARE, deductibles in the Standard and Extra plans, and pharmacy co-pays. The

Figure 5-4. *Users of the Military Health System and Budget, 1995–2006*[a]



Source: Author's calculations based on annual reports to Congress on TRICARE. See Department of Defense, TRICARE, Health Program Analysis and Evaluation Division website "Reports" (www.tricare.mil/ocfo/hpae/reports.cfm).

a. 1996–99 budgets are interpolated.

VA requested a modest $250 annual enrollment fee and higher co-pays for prescription drugs, to be paid only by veterans in the two lowest priority categories. Congress did not support these requests. At least while so many military personnel are deployed and at risk in Iraq and elsewhere, both health care systems will find it difficult to increase beneficiary cost sharing. Even in peacetime, there is significant public support for sustaining benefits for military personnel and veterans.

Cost-Effectiveness of Direct Provision of Care by the MHS and VHA

To put MHS and VHA costs in perspective, policymakers would like to know how the costs the systems incur to treat their beneficiaries compare with what the care would cost in the private sector. Is it more or less costly to provide care directly in federal facilities? Further, is direct care more or less effective than care provided in the private sector? For health

care, effectiveness is typically thought to encompass several outcomes including access to care, quality of care, and patient satisfaction.

More information for assessing cost-effectiveness is available for VHA than it is for MHS. Nugent and others measured the costs of all health care services provided in six diverse VA facilities in 1999 and estimated what those same services would have cost in the private sector at Medicare prices. They concluded that purchasing the care would have cost at least 20 percent more than providing it directly.[19] Approximately one-half of the difference was attributed to the much lower prices VHA (and MHS) pays for prescription drugs through the Federal Supply Schedule.

A number of recent studies have shown that VHA's quality of care compares favorably with the quality of care provided in the private sector. More than a decade ago, as part of its broader reorganization, VHA established a quality improvement initiative. This initiative apparently has paid off. Asch and others reported that, in a comparison with a matched national sample of patients, VA patients were more likely to receive recommended chronic care and preventive care—the types of care for which VA actively monitors performance—and as likely to receive recommended acute care.[20] Two subsequent studies reached a similar conclusion. Kerr and others found that process of care and intermediate outcomes were better for VHA diabetes patients than those for similar patients in leading managed care organizations.[21] Selim and others concluded that mortality rates were lower in VHA than the rates in Medicare Advantage programs.[22] These studies have established VHA's reputation as a leader in quality-of-care improvement among U.S. health care organizations.[23]

There is less published research that compares cost with quality outcomes in MHS and the private health care system. Goldberg with others compared the costs of all care in the MTF system with what the care would cost if TRICARE purchased it from civilian providers.[24] Similar to the VHA study, the results favor the MTFs. For the median facility, MTF costs were about one-quarter lower; only 15 percent of MTFs had higher costs than facilities of the private sector.

These comparisons of costs in VHA and MHS versus the private health care sector should be viewed with caution for a number of reasons. They are based on very different cost accounting systems and, in the case of

DoD, are based on an allocation of costs between purely military medical support activities and TRICARE activities that is difficult to calculate. The comparisons also hold constant the amount of care provided: for DoD, there is some evidence that more care is provided when beneficiaries use the MTFs than when they use civilian providers.[25] Accurate comparisons of per capita costs cannot be made because most veterans and many TRICARE beneficiaries have dual insurance coverage and because information on the type of care and costs covered by the other insurance is not generally available.

Research on quality of care in the military system comparable to the studies of VHA has not been done. In 1999 responding to news stories about instances of poor care, Congress chartered the DoD Healthcare Quality Initiatives Review Panel to investigate the processes DoD employs to ensure quality. The panel findings included a recommendation to develop data systems that can support measurement of key outcomes including quality. DoD recently announced that it had completed implementation of its electronic medical record system, and studies of quality employing methods similar to the ones applied to VHA data should be possible in the future.

Both VHA and MHS conduct surveys to track patient experiences and satisfaction. DoD reports data from these surveys in its annual report to Congress. Satisfaction improved as TRICARE matured; by 2006, although TRICARE lagged civilian managed care organizations on some measures, the differences were small.[26]

Prospects and Options for Providing Health Care to Veterans and Military Personnel

There is strong political support for seeing to the health care needs of current and former military personnel. Consequently, VHA and MHS now provide a comprehensive set of services at minimal cost to the patient, and the number of beneficiaries who are eligible for and use these services has increased, as other health care sources have become relatively less attractive. The movement of veterans from other health care providers to VHA has been limited by the size of the discretionary budget, which has led to a partial enrollment freeze and queues for appointments. Future

VHA budgets will be determined by congressional decisions about funding greater access to the system. In contrast, TRICARE is an entitlement with open-ended access to purchased care from civilian providers. Most military beneficiaries use MHS for a substantial fraction of their care; in the future, the major source of additional demand is the reserve population. How many reservists switch to TRICARE will depend on whether their premium share remains similar to employer plans. If the reserve benefit is enhanced over time, as the benefit for other military beneficiaries has been, MHS budgets could increase more rapidly than current projections show.

While controlling future costs will make little difference in the overall federal budget picture, within VA and DoD rapidly increasing health spending may constrain budgets for other programs important to their missions. It is worth considering whether providing care directly to the veteran and military populations continues to be cost-effective and what options may be available for controlling future costs. One option, suggested by those who believe public organizations are inherently inefficient, is to outsource VHA and MHS health care services. Another is to modify the benefit to deter switching from employer insurance.

Outsourcing VHA and MHS Care

There are limits to how much and what types of care could be outsourced. VHA has areas of highly specialized expertise that would be hard to match in the private sector. This expertise includes the treatment and rehabilitation of catastrophically injured patients and treatment of certain mental health conditions, including posttraumatic stress disorder.

MHS requires a substantial number of active duty health personnel to support military operations. For the third time in the past fifteen years, DoD is undertaking a major review of its medical personnel requirement. The review is expected to conclude that the requirement remains large but is less than the number of active duty medical personnel MHS currently has in its active duty medical service. The question is whether the marginal cost of a larger-than-required MTF system is less than the cost of purchasing more care from civilian providers. This question has been debated for many years. A major DoD study in the early 1990s concluded that expanding the MTFs beyond the minimum necessary for military

purposes is the more costly choice because beneficiaries have higher utilization rates when they use MTFs (largely because the care is free). There are a number of reasons to be cautious about this conclusion. The methodology of this analysis was challenging, the data systems at the time had important limitations, and—most important—the study was conducted before TRICARE.

The published research on VHA and MHS cost-effectiveness, although limited, suggests that outsourcing is not likely to significantly lower costs or improve quality. These two systems appear to pay less for the resources they use to provide services than they would pay to purchase the same services in the private sector. VHA quality compares favorably with quality nationwide; however, no comparable evidence on MHS quality is available. Access to VHA care continues to be below private-sector standards, but access has improved and could be further improved at a cost—including the cost of increased utilization by enrolled veterans who would find it easier to get care.

MHS already purchases one-half of the care provided through its managed care contracts. This fraction has increased over time as the Base Realignment and Closure process has closed military hospitals or turned them into clinics. VHA purchases a limited amount of care only when it cannot be provided in any other way. In the absence of compelling evidence for outsourcing and given the special requirements for these two federal health systems, it appears unlikely that either of them will outsource significantly more care than they do now.

Modifying VHA and MHS Benefits

VHA and MHS health costs have risen rapidly because their beneficiaries increasingly find that they can get good care at much lower cost from these systems than through their employer health plans—if they still have employer coverage.

The most direct option for deterring beneficiary switching is to narrow the gap in premium contributions. The average annual employee contribution in the private sector was $612 for single coverage and $2,712 for family coverage in 2005.[27] Veterans pay nothing to enroll in VHA, and Congress recently rejected a proposed $250 annual contribution for veterans with higher incomes.[28] TRICARE requires a contribution from

retirees who elect to enroll in Prime or from reservists, but not otherwise. The annual retiree contributions of $230 for single coverage and $460 for family coverage have not changed since TRICARE was implemented a decade ago.[29] The difference in premium cost between TRICARE and private employer plans will continue to grow over time unless TRICARE premiums are increased, but Congress also rejected a Defense Department proposal to gradually increase retiree premiums to around half the average for employer coverage for retired senior officers and less for other retirees.

Cost sharing for private-sector care in TRICARE is roughly similar to other employer plans. However, there is no charge for care in MTFs or, for most veterans, from VHA. Introducing a co-pay for visits would reduce outpatient utilization, but evidence from private-sector HMOs suggests that overall cost savings are likely to be modest. However, a recent study showed that people are highly responsive to the price they pay for prescriptions.[30] TRICARE charges nothing for prescriptions filled at MTFs and less than typical employer plans for prescriptions filled in their retail pharmacy network or mail-order system. VHA charges many veterans $8 a prescription. Updating prescription co-pays to employer-plan levels would likely lead to noticeable cost savings. To lower the financial impact, the higher co-pays could be waived for some beneficiaries and subjected to an annual cap as VHA already does. Nevertheless, Congress has also been resistant to proposals for increases in pharmacy co-pays.

Given congressional resistance to modest increases in premium contributions or other forms of cost sharing for military personnel and veterans, health care decisionmakers interested in controlling future VHA and MHS spending may need to find some other way to induce beneficiaries to rely on employer and other private insurance to the maximum extent possible.

For example, military retirees might be offered a new benefit option in lieu of TRICARE that would cover premiums and out-of-pocket costs in employer plans. There are other benefits that could be offered to induce these beneficiaries to enroll in and rely on their employer plans—for example, a long-term care benefit, which is not currently a part of the military package. More information is needed to determine whether any of these approaches would realize significant savings, how retirees would react to the idea, and how to design the most cost-effective approach for

military personnel and retirees. Given the substantial savings for DoD if under-65 retirees take full advantage of their employer benefits, an investment in information and analysis would appear to be warranted.

It is difficult to identify a benefit that would induce veterans to limit their use of VHA, that would be consistent with a discretionary budget, and that would support the needs of many veteran users. A cash benefit to offset the out-of-pocket costs for employer insurance would inevitably become an entitlement. Further, many of the biggest users of VHA have health care needs that may be difficult to meet in an employer health plan.

In the short run, it is likely that VHA and MHS benefits will remain attractive in comparison with many employer plans. The growth in their budgets will depend critically on whether Congress funds the enrollment of all veterans who want to get care from VHA and keeps the military reserve health benefit comparable with employer benefits.

Leading Improvement in Health Care Cost and Quality

Overall, VHA and MHS are successful public health organizations. They provide care that has been demonstrated or is widely believed to be of high quality at a cost that appears comparable with private-sector costs. Both systems have adopted innovations from the private sector and have been innovators. Several VHA or MHS initiatives demonstrate the ability of both to innovate. These include electronic medical records, coordination of care by different providers, pharmaceutical purchasing, and improvement in quality and patient safety. Other promising ideas for health care reform, such as pay-for-performance for individual providers, have received less attention but may be usefully explored by VHA and MHS.

Electronic Medical Records

Electronic medical records (EMR) have considerable potential for improving care and saving money.[31] However, EMR systems are complex and expensive to develop and require adaptation of medical practice to be fully effective. VHA pioneered in EMR with its Veterans Health Information System and Technology Architecture (VistA) system and its predecessor, which was implemented as long ago as 1985.[32] VistA archives

comprehensive diagnostic and treatment information for each patient, accessible to any provider within the same facility. In addition to patient care information, VistA includes financial and management information. Recently, VHA made its system available to private-sector providers at nominal cost. Under the current version of VistA, providers in one facility cannot access EMR information on care provided to their patients in other facilities, but VHA is developing an upgrade that would make a record accessible to all VA providers in the system. Despite its limitations, VistA has provided VHA with the information needed for its exemplary quality improvement program and a functional EMR system that private health care providers can use.[33]

DoD recently announced that it is close to full implementation of its EMR, called the Armed Forces Health Longitudinal Technology Application (AHLTA). AHLTA contains a central record for every MHS patient that is accessible throughout the system, including on the battlefield. Future plans call for connecting the system with private-sector providers in the TRICARE network and, jointly with VHA, building a new medical imaging data system (for example, X-ray).

VHA and MHS experience with EMR is potentially very valuable to the health sector as a whole. Both systems can make important contributions to knowledge of designing a cost-effective system, implementation, training requirements, and methods for exploiting EMR systems for improving health system outcomes such as quality of care, patient safety, provider productivity, and patient service. There are a few studies of VistA, but many more should be done for both EMR systems. Given their differences, comparisons of outcomes under VistA and AHLTA would be instructive.

Coordinating Care by Different Providers

VHA and MHS purchase care for their patients in the private sector; purchased care, however, is a small fraction of the care provided to veterans but a significant fraction for military beneficiaries. Coordinating care provided within and outside the systems has proved to be difficult. In establishing TRICARE, MHS created a process for facilitating the referral of patients between the MTFs and the private sector. VHA is conducting a demonstration project, beginning this year, to develop its own approach

to this challenging problem. Four of VHA's regional networks will work with private-sector partners to develop and implement interventions. TRICARE's program was implemented as part of a package of reforms, and an evaluation of this single component was not possible. However, VHA's initiative will be the subject of an independent evaluation.

Pharmaceutical Costs

The VHA negotiates prices for pharmaceutical drugs through the Federal Supply Schedule, and the MHS is able to take advantage of the resulting low prices, which are comparable with those that the Canadian National Health Service pays.[34] However, Federal Supply Schedule prices were higher during a period when they applied to Medicaid as well as VA and DoD, suggesting that significant volume discounting can be negotiated only if the covered population does not become too large.[35] Expanding Federal Supply Schedule purchasing to Medicare and Medicaid would save far less for those programs and increase costs for the VA and DoD.[36]

Quality Improvement and Patient Safety

As discussed above, VHA's achievements in this area have been documented in research using sophisticated methods, whereas there is no similar research for the MHS. Over the past 10 years, the Institute of Medicine has brought national attention to a quality problem in U.S. health care. For most of this period, VHA's Quality Enhancement Research Initiative (QUERI) program has sought to translate evidence-based research on quality into clinical practice improvements. By publishing its evidence-based research and supporting broad assessments of its quality outcomes, QUERI is a model for MHS and other large public health systems as well as the private sector.

Performance Incentives

VHA and MHS have both sought to enhance the performance incentives in their systems. Both have adopted regional management structures with accountability for outcomes; until now, VHA's structure has been clearly superior for this purpose. DoD recently decided not to adopt a unified medical command, but it continues to seek ways to streamline and integrate TRICARE management.[37] As in other areas, researchers have studied

VHA's experience with organizational reform.[38] Given the unusual MHS structure, with four separate management structures for the Army, Navy, and Air Force systems and the TRICARE contracts, less may be learned of relevance to other health systems from studying its organizational effectiveness.

Neither system has so far adopted provider-level incentives for clinical performance, which many believe will be needed to induce physicians to adopt evidence-based improvements in their practice of medicine. VistA and AHLTA can provide the information needed to design and implement performance-based incentives at the individual and group level (including performance-based pay and other incentives). There may be no better place to learn whether these incentives will be effective and how to design them.

Learning from the VHA and MHS Experience

VHA and MHS can lay claim to excellence and innovation in other areas as well. MHS has made great strides in treating combat casualties, developing new technologies that can be applied in other settings. In partnership with the Indian Health Service, the two systems are exploring methods for delivering care in the most remote areas in Alaska. The federal government should ask its two large integrated health systems to continue to aggressively develop and test new approaches and disseminate information about what works and does not work to the broader health care sector. A more systematic and open evaluation of broad VHA and MHS outcomes and new initiatives will lead to improved public accountability and knowledge helpful in improving the nation's health care system.

Finally, the parallel histories of VHA and military health care illustrate some realities of public health benefits. For programs that serve beneficiaries whose welfare is important to the public, Congress finds it easier to expand benefits than to reduce benefits or increase cost sharing, even in nominal terms. When congressional action results in a relatively generous public system that covers employed people, they will be tempted to drop their employer coverage, especially as cost sharing rises under employer-provided plans. In this regard, there are parallels to other federal health programs, including Medicare and Medicaid.

Notes

1. The Indian Health Service (IHS) also provides health care directly, as well as through tribally contracted and operated health programs, and purchases from private providers. It is a much smaller system than the VHA and MHS; it serves 1.8 million American Indians and Alaska Natives with an annual appropriation of approximately $3 billion. See the Indian Health Service website, "Year 2006 Profile" (http://info.ihs.gov/Files/ProfileSheet-June2006.pdf).

2. See U.S. Department of Veterans Affairs, "Medical Programs" in *Fiscal Year 2007 Budget Submission,* Washington, February 2006 (www.va.gov/budget/summary/1514Chapter3B.pdf); U.S. Department of Defense, "The Military Overview Statement," David S. C. Chu, under secretary of defense for personnel and readiness, and William Winkenwerder Jr, assistant secretary of defense for health affairs, testimony before the Senate Committee on Armed Services Subcommittee on Personnel, 109th Cong., 2d sess., April 4, 2006 (www.tricare.mil/planning/congress/downloads/2006/04-04-06SASCChuWinkenwerderOMBFinal.pdf); U.S. Department of Defense, *Evaluation of the TRICARE Program: FY 2006 Report to Congress,* Washington, March 13, 2006 (www.tricare.mil/ocfo/_docs/eval_report_fy06.pdf).

3. Department of Veterans Affairs website, "VA History" (www.va.gov/about_va/vahistory.asp).

4. DoD, *Evaluation of the TRICARE Program: FY 2006 Report to Congress.*

5. "VA History."

6. CARES Commission, *Capital Asset Realignment for Enhanced Services,* Report to the Secretary of Veterans Affairs (Washington: Department of Veterans Affairs, 2004) (www.carescommission.va.gov/cares_charter.asp).

7. CHAMPUS: Civilian Health and Medical Program of the Uniformed Services.

8. Figures available at the Department of Defense TRICARE website, "TRICARE Costs" (www.tricare.mil/tricarecost.cfm).

9. Louis T. Mariano and colleagues, *Health Insurance Options for Military Retirees under 65: Results from a 2005 Survey,* MG-583-OSD (Santa Monica, Calif.: RAND Corporation, forthcoming).

10. The premium for TRICARE Reserve Select enrollment varies from 50 to 85 percent of the cost of the coverage, depending on access to other (for example, employer) insurance. See U.S. Congress, House, *National Defense Authorization Act for Fiscal Year 2006,* HR 1815, 109th Cong., 1st sess. (January 4, 2005), title VII, subtitle A, sec. 702, "Expanded Eligibility of Members of the Selected Reserve under the TRICARE Program" (www.tricare.mil/planning/congress/downloads/2006/PublicLaw109163.pdf).

11. See Sidath V. Panangala, *Veterans' Medical Care Funding: FY1995–FY2004,* CRS Report for Congress (Washington: Library of Congress, Congressional Research Service, January 14, 2005).

12. See Kenneth W. Kizer, *Prescription for Change: The Guiding Principles and Strategic Objectives Underlying the Transformation of the Veterans Healthcare*

System (Washington: Department of Veterans Affairs, March 1996); Department of Veterans Affairs, Office of Inspector General, *Audit of Veterans Integrated Service Network (VISN 10): Organization, Planning, and Implementation of Key Strategic Goals and Objectives,* 9D2-A19-001 (January 12, 1999); Jeff Luck and John W. Peabody, "Improving the Public Sector: Can Reengineering Identify How to Boost Efficiency and Effectiveness at a VA Medical Center?" *Health Care Management Review* 25, no. 2 (Spring 2000): 34–44.

13. Title 38: Veterans' Benefits, pt. II, ch. 17, subchptr. I, sec. 1705: Management of Health Care: Patient Enrollment System (www.law.cornell.edu/uscode/html/uscode38/usc_sec_38_00001705——000-.html).

14. Congressional Budget Office, *The Potential Cost of Meeting Demand for Veterans' Health Care* (CBO, March 2005), figure 3, p. 7.

15. Panangala, *Veterans' Medical Care Funding.*

16. Jonathan B. Perlin, under secretary of health, statement before the House Committee on Veterans' Affairs, Subcommittee on Health, 109th Cong., 2d sess., February 14, 2006.

17. DoD health funding is appropriated in different subaccounts that are combined in the annual reports and include total medical funding. Totals are provided for 1995, the first year of the TRICARE program, and for each year since 2000. Estimates of the total military health budget differ slightly depending on the methods used to identify health funding in nonhealth budget elements. The estimates used here are from a series of annual reports to Congress on TRICARE, which are available at http://tricare.osd.mil/ocfo/hpae/reports.cfm.

18. Congressional Budget Office, *Growth in Medical Spending by the Department of Defense* (2003).

19. Gary N. Nugent and others, "Value for Taxpayers' Dollars: What VA Care Would Cost at Medicare Prices," *Medical Care Research and Review* 61, no. 4 (2004): 495–508.

20. Steven Asch and others, "Comparison of Quality of Care for Patients in the Veterans Health Administration and Patients in a National Sample," *Annals of Internal Medicine* 141, no. 12 (December 2004): 938–45.

21. Eva A. Kerr and others, "Diabetes Care Quality in the Veterans Affairs Health Care System and Commercial Managed Care: The TRIAD Study," *Annals of Internal Medicine* 141, no. 4 (August 2004): 272–81.

22. Alfredo J. Selim and others, "Risk-Adjusted Mortality as an Indicator of Outcomes: Comparison of the Medicare Advantage Program with the Veterans' Health Administration," *Medical Care* 44, no. 4 (April 2006): 359–65.

23. Lucian L. Leape and Donald M. Berwick, "Five Years after *To Err Is Human:* What Have We Learned?" *Journal of the American Medical Association* 293, no. 19 (May 2005): 2384–390.

24. Mathew Goldberg, Ted Jaditz, and Viki Johnson, *Efficiency Analysis of Military Medical Treatment Facilities* (Alexandria, Va.: Center for Naval Analyses [CNA Corporation], October 2001).

25. U.S. Department of Defense, *The Economics of Sizing the Military Medical Establishment,* report of the comprehensive study of the military medical system (DoD, Office of Program Analysis and Evaluation, April 1994).

26. DoD, *Evaluation of the TRICARE Program: FY 2006 Report to Congress.*

27. Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2005 Annual Survey* (Washington: Kaiser Family Foundation and HRET, 2005).

28. Unlike TRICARE, the VHA does not cover dependents. Veterans with families who need to enroll in their employer plans to obtain dependent coverage will have less reason to use the VHA unless they have specialized health care needs.

29. TRICARE enrollment premium information can be found at "TRICARE Costs" (www.tricare.mil/tricarecost.cfm).

30. Geoffrey F. Joyce and others, "Employer Drug Benefit Plans and Spending on Prescription Drugs," *JAMA* 288, no. 14 (October 2002): 1733–739; Dana P. Goldman and others, "Pharmacy Benefits and the Use of Drugs by the Chronically Ill," *JAMA* 291, no. 19 (May 2004): 2344–350.

31. Roger Taylor and others, "Promoting Health Information Technology: Is There a Case for More-Aggressive Government Action?" *Health Affairs* 24, no. 5 (September-October 2005):1234–245.

32. VistA earned VHA the Innovations in American Government Award from the John F. Kennedy School of Government at Harvard University in July 2006.

33. Denise M. Hynes and others, "Informatics Resources to Support Health Care Quality Improvement in the Veterans Health Administration," *Journal of the American Medical Informatics Association* 11, no. 5 (June 2004): 344–50.

34. Aidan Hollis, "How Cheap Are Canada's Drugs Really?" *Journal of Pharmacy and Pharmaceutical Sciences* 7, no. 2 (2004): 215–16.

35. Ann E. Cook, "Strategies for Containing Drug Costs: Implications for a Medicare Benefit," *Health Care Financing Review* 20, no. 3 (1999): 29–37.

36. See Gail Wilensky's discussion in chapter 3 on Medicare and sustainable growth in health spending.

37. Susan D. Hosek and Garry Cecchine, *Reorganizing the Military Health System: Should There Be a Joint Command?* (Santa Monica, Calif.: RAND Corporation, 2001).

38. Luck and Peabody, "Improving the Public Sector: Can Reengineering Identify How to Boost Efficiency and Effectiveness at a VA Medical Center?"