

October 2001

MEDICARE  
SUBVENTION  
DEMONSTRATION

Greater Access  
Improved Enrollee  
Satisfaction but  
Raised DOD Costs





---

# Contents

---

---

Letter	1
Results in Brief	2
Background	3
Senior Prime Enrollees Got More Care While Some Nonenrollees Were Crowded Out of MTFs	8
Improved Enrollee Access Resulted In Higher Patient Satisfaction but Costs for DOD Were High	17
Concluding Observations	20
Agency Comments	20

---

## Appendixes

<b>Appendix I: Health Care Survey of Subvention Demonstration</b>	
<b>Beneficiaries</b>	24
Panel Study	24
Cross Section Study	26
Questionnaire Design	28
<b>Appendix II: Measures of Access to Care And Satisfaction With Care</b>	33
Measures of Change in Access and Satisfaction	33
Measures of Access and Satisfaction at the End of the Demonstration	42
<b>Appendix III: Models of Utilization</b>	64
Data	64
Models of Risk-Adjusted Utilization	65
Acute Hospitalization Model	66
Outpatient Physician Visit Model	67
Profile of Sites' Utilization and Risk Factors	68
<b>Appendix IV: Crowd-Out of Nonenrollees</b>	72
Change in Satisfaction With Access to Military Care Among Crowd-Outs	72
Trend in Utilization Among Crowd-Outs	73
<b>Appendix V: Health Outcomes Analysis</b>	74
Mortality Analysis	74
Health Status Analysis	76
Preventable Hospitalizations	79

<b>Appendix VI: Comments From the Department of Defense</b>	80
<b>Appendix VII: Comments From the Centers for Medicare and Medicaid Services</b>	82
<b>Appendix VIII: GAO Contacts and Staff Acknowledgments</b>	83
GAO Contacts	83

---

<b>Related GAO Products</b>	84
-----------------------------	----

---

<b>Tables</b>		
Table 1: Enrollment at Medicare Subvention Demonstration Sites		7
Table 2: Enrollees' Change in Access to Health Care		8
Table 3: Change in Enrollees' Views of the Convenience of Their Doctors' Hours and Doctors' Timeliness		10
Table 4: Usual Waiting Time to See Doctor Varied by Type of Visit for Senior Prime Enrollees		11
Table 5: Change in Satisfaction With Doctors for Enrollees		18
Table 6: Sample and Population Sizes in the Panel		25
Table 7: Reasons for Nonresponse in the Panel Sample		25
Table 8: Sample and Population Sizes in the Cross Section		27
Table 9: Reasons for Nonresponse in the Cross Section Sample		27
Table 10: Survey Questions Used in This Report		29
Table 11: Net Improvement in Access and Quality		33
Table 12: Level of Access and Quality at the End of the Demonstration		44
Table 13: Comparison of Senior Prime Enrollees With Medicare Fee-for-Service Beneficiaries in the Demonstration Areas in 1999		65
Table 14: Estimated Effects of Selected Factors on Acute Hospitalization of Medicare Fee-for-Service Beneficiaries		67
Table 15: Estimated Effects of Certain Factors on Medicare Fee-for-Service Outpatient Utilization		68
Table 16: Site Profiles of Senior Prime and Medicare Fee-for-Service Utilization in 1999		70
Table 17: Change in MTF Utilization Among Nonenrollees		72

---

Table 18: Change in Self-Reported Access to MTF Care and Satisfaction With MTF Care Among Crowd-Outs	73
Table 19: Changes in Utilization of Nonenrollees Who Were Crowded Out of MTFs	73
Table 20: Profile of 2-Year Mortality Rate	74
Table 21: Factors Affecting 2-Year Mortality Rate	75
Table 22: Profile of SF-12 Scores	77
Table 23: Factors Affecting Change in SF-12 Score	77

---

## Figures

Figure 1: Enrollees Who Did Not Use MTFs Before Demonstration Reported Greatest Improvement in Access to MTFs	9
Figure 2: Three-fifths of Retirees Who Had Been Heavy MTF Users Before the Demonstration Enrolled in Senior Prime	14
Figure 3: Many Nonenrollees Who Were Heavy MTF Users Before the Demonstration Were Crowded Out	15
Figure 4: Few Nonenrollees Were Heavy MTF Users Before the Demonstration	16
Figure 5: Medicare Fee-for-Service Care Did Not Offset Drop in MTF Care for Nonenrollees Who Were Crowded Out	17

---

## Abbreviations

BBA	Balanced Budget Act of 1997
CMS	Centers for Medicare and Medicaid Services
COPD	Chronic Obstructive Pulmonary Disease
DOD	Department of Defense
ESRD	end-stage renal disease
FFS	fee-for-service
HCC	Hierarchical Coexisting Conditions
ICD-9	International Classification of Diseases, Ninth Revision
MTF	military treatment facility

---

**Contents**

---



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

October 31, 2001

### Congressional Committees

In the Balanced Budget Act (BBA) of 1997,<sup>1</sup> Congress established a 3-year demonstration, called Medicare subvention, designed to improve the access of Medicare-eligible military retirees to care at military treatment facilities (MTF). Historically, military retirees age 65 and over have had only limited access to military health care. Until they turned 65, they could enroll in TRICARE Prime, the Department of Defense's (DOD) managed care plan, which gave them priority access to MTFs. Alternatively, they could use one of DOD's other plans that pays part of the cost of civilian health care. However, when they turned 65 and became eligible for Medicare, retirees lost their right to military health care and could obtain care at MTFs only if space were available after higher priority beneficiaries were treated.<sup>2</sup>

The demonstration allowed retirees<sup>3</sup> to get their care largely at MTFs by enrolling in a DOD-run Medicare managed care organization known as TRICARE Senior Prime. Enrollees in Senior Prime could receive the full range of Medicare services, as well as some additional TRICARE services, and they would incur minimal out-of-pocket costs. For enrollees, the MTF became the focal point of their medical care—the source of all their primary care and much of their specialty care, as well as referrals to civilian network providers. Those retirees who chose not to enroll could still use MTFs on a space-available basis. However, given the MTFs' new responsibilities for treating Senior Prime enrollees, nonenrollees might no longer be able to get care at MTFs.

---

<sup>1</sup>PL. 105-33, sec. 4015.

<sup>2</sup>The Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (P.L. 106-398, sec. 712) established a new program, known as TRICARE For Life, which started October 1, 2001. Under this program, TRICARE is a secondary payer for Medicare, paying nearly all beneficiary cost-sharing for Medicare-covered services obtained from civilian providers.

<sup>3</sup>Throughout this report, we use the term "retirees" to refer to military retirees and their dependents and survivors aged 65 and over.

---

In establishing the subvention demonstration, the BBA also directed us to evaluate the demonstration over its initial 3-year period, which ended in December 2000.<sup>4</sup> Our evaluation covers three major areas: the effect of the demonstration on retirees' access to care and the quality of care received by enrollees; the cost of the demonstration to beneficiaries, Medicare, and DOD; and management and implementation issues encountered during the demonstration.

This report, focusing on access to care, is one of several addressing these issues.<sup>5</sup> Our objectives were to examine (1) the effect of the demonstration on enrollees' and nonenrollees' access to health care and (2) the consequences of changes in access to care for retirees' satisfaction, health outcomes, and DOD costs. To address these issues, we surveyed about 20,000 enrollees and eligible nonenrolled retirees by mail at the beginning of the demonstration and at the end of 2000. (See app. I.) We supplemented the surveys with Medicare and DOD administrative data, but did not independently verify these data. Although the survey data covered the period of the initial demonstration, the administrative data related primarily to 1999, due to reporting lags. We performed our work according to generally accepted government auditing standards from June 1998 through September 2001.

---

## Results in Brief

During the subvention demonstration, access to health care for many retirees who enrolled in Senior Prime improved, while access to MTF care for some of those who did not enroll declined. Many enrollees said that, compared with their experience before Senior Prime, they were better able to get care when they needed it. In addition, they reported that access to doctors in general as well as to care at MTFs improved. DOD's and Medicare's own data confirmed enrollees' self-reports: They had more hospital stays and more visits to doctors than before the demonstration. Enrollees also used more health care than their counterparts in Medicare fee-for-service. Although the demonstration did not affect most nonenrollees, access to military health care declined sharply during the

---

<sup>4</sup>The BBA authorized the demonstration to start in January 1998 and run through December 2000. However, the first site did not become operational until September 1998. By January 1999, all other sites were operational. Congress extended the demonstration for an additional year through December 2001. As directed by law, our evaluation covers the period from start-up through December 2000.

<sup>5</sup>A list of related GAO products is included at the end of the report.



---

demonstration for the minority of nonenrollees who had relied on MTF care.

The results of enrollees' improved access and high utilization were mixed. Enrollees generally were more satisfied with their care than before the demonstration. However, the demonstration did not improve enrollees' self-reported health status. In addition, compared to nonenrollees, enrollees did not have better health outcomes, as measured by their mortality rates and rates of "preventable" hospitalizations. Moreover, DOD's costs of care were high, reflecting enrollees' heavy use of hospitals and doctors. These costs were significantly higher than Medicare's costs for comparable fee-for-service beneficiaries.

In commenting on a draft of this report, DOD stated that the report was accurate and thorough, while noting some issues concerning the utilization data. The Centers for Medicare and Medicaid Services (CMS) agreed with the findings of the report.

---

## Background

DOD's health system, TRICARE, currently offers health care coverage to approximately 6.6 million active duty and retired military personnel under age 65 and their dependents and survivors. An additional 1.5 million retirees aged 65 and over can obtain care when space is available. TRICARE offers three health plans: TRICARE Standard, a fee-for-service plan; TRICARE Extra, a preferred provider plan; and TRICARE Prime, a managed care plan. In addition, TRICARE offers prescription drugs at no cost from MTF pharmacies and, with co-payments, from retail pharmacies and DOD's National Mail Order Pharmacy.

---

Retirees have access to all of TRICARE's health plans and benefits until they turn 65 and become eligible for Medicare. Subsequently, they can only use military health care on a space-available basis, that is, when MTFs have unused capacity after caring for higher priority beneficiaries.<sup>6</sup> However, MTF capacity varies from a full range of services at major medical centers to limited outpatient care at small clinics. Moreover, the amount of space available in the military health system has decreased during the last decade with the end of the Cold War and subsequent downsizing of military bases and MTFs. Recent moves to contain costs by relying more on military care and less on civilian providers under contract to DOD have also contributed to the decrease in space-available care.

Although some retirees age 65 and over rely heavily on military facilities for their health care, most do not, and over 60 percent do not use military health care facilities at all. In addition to using DOD resources, retirees may receive care paid for by Medicare and other public or private insurance for which they are eligible. However, they cannot use their Medicare benefits at MTFs, and Medicare is generally prohibited by law from paying DOD for health care.

---

## Medicare

Medicare is a federally financed health insurance program for persons age 65 and over, some people with disabilities, and people with end-stage kidney disease. Eligible beneficiaries are automatically covered by part A, which covers inpatient hospital, skilled nursing facility, and hospice care, as well as home health care that follows a stay in a hospital or skilled nursing facility. They also can pay a monthly premium to join part B, which covers physician and outpatient services as well as those home health services not covered under part A. Traditional Medicare allows beneficiaries to choose any provider that accepts Medicare payment and requires beneficiaries to pay for part of their care. Most beneficiaries have supplemental coverage that reimburses them for many costs not covered by Medicare. Major sources of this coverage include employer-sponsored

---

<sup>6</sup>It is not yet clear how the new TRICARE For Life program will affect access to MTF care. In addition to offering military retirees coverage that wraps around Medicare coverage, DOD has established a new program, TRICARE Plus, that allows retirees to get their primary care at MTFs. However, TRICARE Plus coverage of specialist care is limited. If MTF specialists are not available, TRICARE Plus enrollees are referred to civilian providers, with Medicare as the primary payer and TRICARE covering out-of-pocket costs. MTFs can cap enrollment in TRICARE Plus, and there will not necessarily be space for all who wish to enroll. Retirees are not allowed to enroll in TRICARE Prime.

---

health insurance; “Medigap” policies, sold by private insurers to individuals; and Medicaid, a joint federal-state program that finances health care for low-income people.

The alternative to traditional Medicare, Medicare+Choice, offers beneficiaries the option of enrolling in managed care or other private health plans. All Medicare+Choice plans cover basic Medicare benefits, and many also cover additional benefits such as prescription drugs. Typically, these plans have limited cost sharing but restrict members’ choice of providers and may require an additional monthly premium.

---

## The Subvention Demonstration

Under the Medicare subvention demonstration, DOD established and operated Medicare+Choice managed care plans, called TRICARE Senior Prime, at six sites.<sup>7</sup> Enrollment in Senior Prime was open to military retirees enrolled in Medicare part A and part B who resided within the plan’s service area. About 125,000 dual eligibles (military retirees who were also eligible for Medicare) lived in the 40-mile service areas of the six sites—about one-fifth of all dual eligibles nationwide living within an MTF’s service area. DOD capped enrollment at about 28,000 for the demonstration as a whole. Over 26,000 enrolled—about 94 percent of the cap. In addition, retirees enrolled in TRICARE Prime could “age in” to Senior Prime upon reaching age 65, even if the cap had been reached, and about 6,800 did so. Beneficiaries enrolled in the program paid the Medicare part B premium, but no additional premium to DOD. Under Senior Prime, all primary care was provided at MTFs, although DOD purchased some hospital and specialty care from its network of civilian providers. Senior Prime enrollees received the same priority for care at the MTFs as younger retirees enrolled in TRICARE Prime. Care at the MTFs was free of charge for enrollees, but they had to pay any applicable cost-sharing amounts for care in the civilian network (for example, \$12 for an office visit).

---

<sup>7</sup>See table 1 for a list of the six sites.

---

The demonstration authorized Medicare to pay DOD for Medicare-covered health care services provided to retirees at an MTF or through private providers under contract to DOD. As established in the BBA, capitation rates—fixed monthly payments for each enrollee—for the demonstration were discounted from what Medicare would pay private managed care plans in the same areas. However, to receive payment, DOD had to spend at least as much of its own funds in serving this dual-eligible population as it had in the recent past.<sup>8</sup>

The six demonstration sites are each in a different TRICARE region and include 10 MTFs<sup>9</sup> that vary in size and types of services offered. (See table 1.) The five MTFs that are medical centers offer a wide range of inpatient services and specialty care as well as primary care. They accounted for over 75 percent of all enrollees in the demonstration, and the two San Antonio medical centers had 38 percent of all enrollees. MTFs that are community hospitals are smaller, have more limited capabilities, and could accommodate fewer Senior Prime enrollees. At these smaller facilities, the civilian network provides much of the specialty care. At Dover, the MTF is a clinic that offers only outpatient services, thus requiring all inpatient and specialty care to be obtained at another MTF or purchased from the civilian network.

---

<sup>8</sup>For more information on the payment mechanism, see *Medicare Subvention Demonstration: DOD Data Limitations May Require Adjustments and Raise Broader Concerns* (GAO/HEHS-99-39, May 28, 1999).

<sup>9</sup>Two sites have more than one MTF.

**Table 1: Enrollment at Medicare Subvention Demonstration Sites**

Demonstration site, location of military treatment facility	Facility type	Eligible retirees <sup>a</sup>	Total enrollment <sup>b</sup>	Percentage of eligible retirees enrolled	Percentage of demonstration wide enrollment
<b>Colorado Springs</b>					
Fort Carson Colorado Springs, Colo.	Community hospital	6,530	2,371	36	7
U.S. Air Force Academy Colorado Springs, Colo.	Community hospital	8,458	1,750	21	5
<b>Dover<sup>c</sup></b>					
Dover Air Force Base Dover, Del.	Clinic	3,894	1,062	27	3
<b>Keesler</b>					
Keesler Air Force Base Biloxi, Miss.	Medical center	8,309	3,507	42	11
<b>Madigan</b>					
Fort Lewis Tacoma, Wash.	Medical center	21,072	4,674	22	14
<b>San Antonio</b>					
San Antonio Area					
Fort Sam Houston San Antonio, Tex.	Medical center	21,354	5,928	28	18
Lackland Air Force Base San Antonio, Tex.	Medical center	15,153	6,523	43	20
Texoma Area					
Sheppard Air Force Base Wichita Falls, Tex.	Community hospital	2,820	1,074	38	3
Fort Sill Lawton, Okla.	Community hospital	4,873	1,467	30	4
<b>San Diego</b>					
San Diego, Calif.	Medical center	34,485	4,751	14	14
<b>Total</b>		<b>126,948</b>	<b>33,107</b>	<b>26</b>	<b>100<sup>d</sup></b>

Note: Although the law specifies six sites, for the purpose of analysis we treat the San Antonio area and the Texoma area, which are roughly 300 miles apart, as separate sites.

<sup>a</sup>As of December 31, 2000.

<sup>b</sup>As of December 31, 2000. Total enrollment includes age-ins.

<sup>c</sup>Dover dual-eligibles as of June 1998.

<sup>d</sup>Percentages do not add to 100 due to rounding.

Source: *TRICARE Senior Prime Plan Operations Report* (Washington, D.C.: DOD, Dec 31, 2000). The number of eligible retirees (by site and total) is drawn from DOD's Defense Enrollment Eligibility Reporting System (DEERS).

---

---

## Senior Prime Enrollees Got More Care While Some Nonenrollees Were Crowded Out of MTFs

Compared with their access to care before the demonstration, many enrollees reported that their access to care overall—their ability to get care when they needed it—had improved. They reported better access to MTFs as well as to doctors. Although at the start of the demonstration enrollees had reported poorer access to care than nonenrollees, by the end of the demonstration about 90 percent of both groups said that they could get care when they needed it. Enrollees' own views are supported by administrative data: they got more care than they had received from Medicare and DOD combined before the demonstration. However, most nonenrollees who had relied on MTFs before the demonstration were no longer able to rely on military health care.

---

## Enrollees Obtained More Health Care Than Before the Demonstration

Most enrollees reported that their ability to get care when they needed it was not changed by the demonstration, but those who did report a change were more likely to say that their access to care—whether at MTFs or from the civilian network—had improved.<sup>10</sup> (See table 2.)

---

**Table 2: Enrollees' Change in Access to Health Care**

<b>Change in access</b>	<b>Percentage</b>
Improved	32
Stayed the same	54
Declined	14
<b>Total</b>	<b>100</b>

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

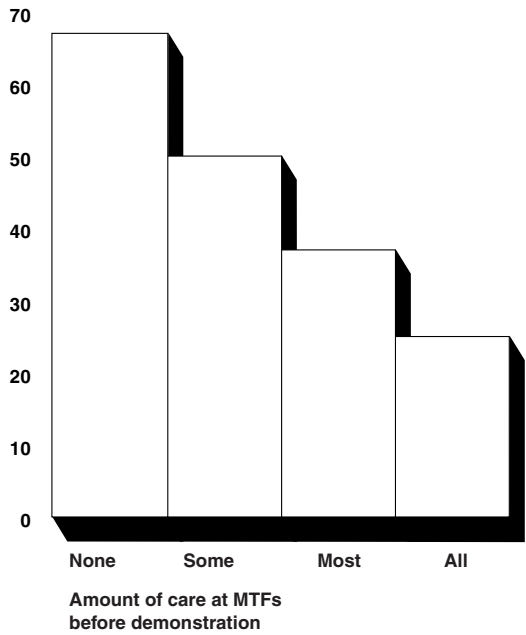
When asked specifically about their access to MTF care, those who had not used MTFs in the past reported the greatest improvement. (See figure 1.)

---

<sup>10</sup>Appendix II contains information by site on access to care and satisfaction with care.

**Figure 1: Enrollees Who Did Not Use MTFs Before Demonstration Reported Greatest Improvement in Access to MTFs**

80 Percentage improvement in MTF access



Note: Improvement in access to care was determined by comparing enrollees' reports on ability to get needed care at the MTF before the demonstration and at the end of its initial period.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

About one-third of all enrollees said that their access to physicians had improved, and a significantly smaller fraction said that it had declined. For example, 32 percent of enrollees said that, under the demonstration, their primary care doctor's office hours were more convenient, while 20 percent said they were less so. Similarly, enrollees said that they did not have to wait too long to get an appointment with a doctor and, once they reached the office, their doctor saw them more promptly. (See table 3.)

**Table 3: Change in Enrollees' Views of the Convenience of Their Doctors' Hours and Doctors' Timeliness**

Numbers in percent			
	Improved	Unchanged	Declined
Primary care doctor's hours convenient	32	48	20
Did not have to wait too long for an appointment with the primary care doctor	35	39	26
Primary care doctor saw me promptly	34	49	17

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

For two aspects of access, however, Senior Prime enrollees' experience was mixed. TRICARE has established standards for the maximum amount of time that should elapse in different situations between making an appointment and seeing a doctor: 1 month for a well-patient visit, 1 day for an urgent care visit, and 1 week for routine visits.<sup>11</sup> According to TRICARE policy, MTFs should meet these standards 90 percent of the time. While Senior Prime met the standards for the time it took to get an appointment and see a doctor for well-patient visits (like a physical), it fell slightly short of the standard for urgent care visits (such as for an acute injury or illness like a broken arm or shortness of breath) and, more markedly, for routine visits (such as for minor injuries or illnesses like a cold or sore throat).<sup>12</sup> (See table 4.)

<sup>11</sup>We modified these standards slightly when making a comparison of DOD's standards to the responses to our questionnaire, using 30 days for a well-patient visit and less than 3 days for urgent care.

<sup>12</sup>We have previously reported that TRICARE Prime also had difficulty in meeting these goals for active duty and other Prime enrollees. See *Defense Health Care: Appointment Timeliness Goals Not Met; Measurement Tools Need Improvement* (GAO/HEHS-99-168, Sept. 30, 1999).



**Table 4: Usual Waiting Time to See Doctor Varied by Type of Visit for Senior Prime Enrollees**

Numbers in percent	
Standard	Enrollees receiving care within standard
Well-patient visits: less than 30 days	91
Urgent care visits: less than 3 days	87
Routine visits: less than 1 week	69

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

When asked about their ability to choose their own primary care doctors, enrollees were somewhat more likely to say that it was more difficult than before the demonstration. This is not surprising, in view of the fact that Senior Prime assigned a primary care doctor (or nurse) to each enrollee. However, regarding specialists, enrollees said that their choice of doctors had improved.

Enrollees reported fewer financial barriers to access under Senior Prime. They said that their out-of-pocket spending decreased and was more reasonable than before. By the demonstration's end, nearly two-thirds said that they had no out-of-pocket costs. Even at the smaller demonstration sites, where care from the civilian network, which required co-payments, was more common, about half of enrollees said they had no out-of-pocket costs.

These enrollee reports of better access under Senior Prime are largely supported by DOD and Medicare administrative data. Enrollees received more services from Senior Prime than they had obtained before the demonstration from MTFs and Medicare combined. Specifically, their use of physicians increased from an average 12 physician visits per year before enrolling in Senior Prime to 16 visits per year after enrollment, and the number of hospital stays per person also increased by 19 percent.

---

Enrollees' use of services not only increased under Senior Prime—as did other measures of access to care—but exceeded the average level in the broader community. Enrollees used significantly more care than their Medicare fee-for-service counterparts. These differences cannot be explained by either age or health—enrollees were generally younger and healthier. Adjusted for demographics and health conditions, physician visits were 58 percent more frequent for Senior Prime enrollees than for their Medicare counterparts, and hospital stays were 41 percent more frequent. Nonetheless, enrollees' hospital stays—adjusted for demographics and health conditions—were about 4 percent shorter.<sup>13</sup>

We found three probable explanations for enrollees' greater use of hospital and outpatient care:

- **Lower cost-sharing.** Research confirms the commonsense view that patients use more care if it is free.<sup>14</sup> Whereas in traditional Medicare the beneficiary must pay part of the cost of care—for example, 20 percent of the cost of an outpatient visit<sup>15</sup>—in Senior Prime all primary care and most specialty care is free.
- **Lack of strong incentives to limit utilization.** Although MTFs generally tried to restrain inappropriate utilization, they did not have strong financial incentives to do so. MTFs cannot spend more than their budget, but space-available care acts as a safety valve: that is, when costs appear likely to exceed funding, space-available care can be reduced while care to Senior Prime enrollees remains unaffected. MTFs also had no direct incentive to limit the use of purchased care, which is funded centrally, and the managed care contractors also lacked an incentive, since they were not at financial risk for Senior Prime.

---

<sup>13</sup>See appendix III for our analysis of utilization.

<sup>14</sup>See Joseph P. Newhouse, *Free for All: Lessons From the RAND Health Insurance Experiment* (Cambridge, MA: Harvard University Press, 1993). More recent evidence shows that beneficiaries with supplemental insurance covering most or all of their Medicare cost-sharing requirements have higher Medicare utilization and spending than otherwise similar people with Medicare coverage only. See Sandra Christensen and Judy Shinogle, "Effects of Supplemental Coverage on Use of Services by Medicare Enrollees," *Health Care Financing Review*, Fall 1997, and Physician Payment Review Commission, *Annual Report to Congress, 1997*, Chapter 15.

<sup>15</sup>Most Medicare beneficiaries have supplemental insurance, such as Medigap or employer coverage, that moderates the effect of Medicare cost-sharing requirements.

- 
- **Practice styles.** Military physicians' training and experience, as well as the practice styles of their colleagues, also affect their readiness to hospitalize patients as well as their recommendations to patients about follow-up visits and referrals to specialists.<sup>16</sup> Studies have shown that the military health system has higher utilization than the private sector.<sup>17</sup> Given that military physicians tend to spend their careers in the military with relatively little exposure to civilian health care's incentives and practices, it is not surprising that these patterns of high use would persist.

---

## Some Nonenrollees Could No Longer Use MTFs

Although nonenrollees generally were not affected by the demonstration, the minority who had been using space-available MTF care were affected because space-available care declined. This decline is shown in our survey results, and is confirmed by DOD's estimate of the cost of space-available care, which decreased from \$183 million in 1996<sup>18</sup> to \$72 million in 1999, the first full year of the demonstration. However, for most nonenrollees, this decline was not an issue, because they did not use MTFs either before or during the demonstration. Furthermore, of those who depended on MTFs for all or most of their care before the demonstration, most enrolled in Senior Prime, thereby assuring their continued access to care. (See figure 2.)

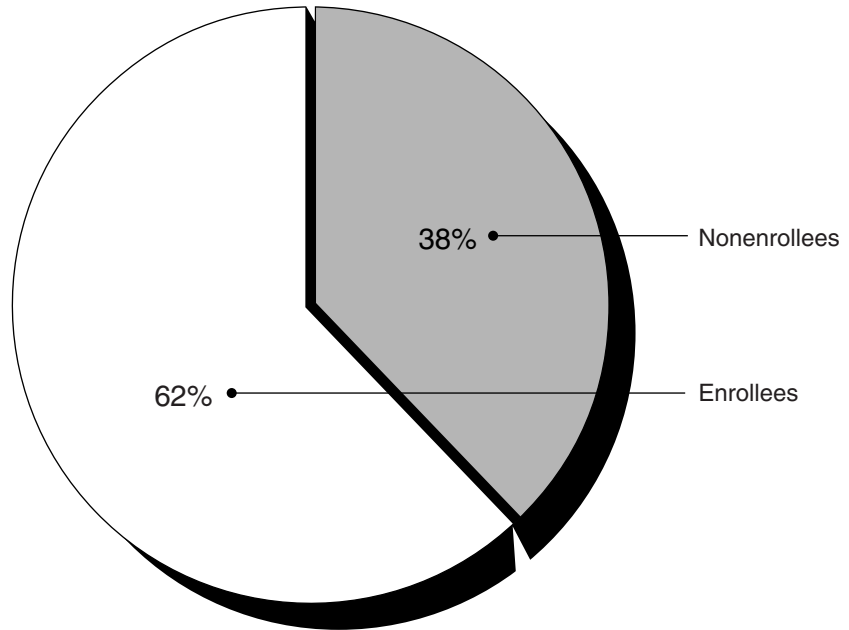
---

<sup>16</sup>In civilian health care, much of the variation in use of health care among states and counties is attributed to the clinical practice styles of their physicians. See W.P. Welch and others, "Geographic Variation in Expenditures for Physician Services in the United States," *New England Journal of Medicine*, Vol. 328, No. 621 (Mar. 4, 1993); John E. Wennberg and Alan Gittelsohn, "Small Area Variations in Health Care Delivery," *Science* Vol. 182, No. 4117 (Dec. 1973); and *The Quality of Medical Care in the United States: A Report on the Medicare Program* (American Hospital Association, 1999).

<sup>17</sup>See Susan D. Hosek and others, *The Demand for Military Health Care: Supporting Research for a Comprehensive Study of the Military Health Care System* (Santa Monica, Calif.: RAND, MR-407-PA&E, Jan. 1994) and The Institute for Defense Analysis and Center for Naval Analysis Corporation, *Evaluation of the TRICARE Program: FY1998 Report to Congress* (Washington, D.C.: 1998).

<sup>18</sup>In 1999 dollars.

**Figure 2: Three-fifths of Retirees Who Had Been Heavy MTF Users Before the Demonstration Enrolled in Senior Prime**



Note: Data are based on survey respondents who reported receiving all or most of their care at the MTF before the demonstration.

Sources: GAO Survey of Medicare-Eligible Military Retirees and Family Members and Iowa Foundation for Medical Care enrollment file.

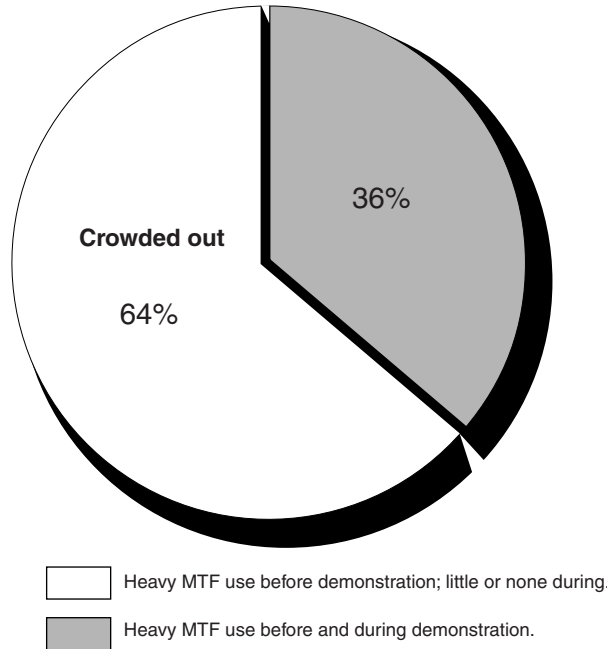
Since there was less space-available care than in the past, many of those who had previously used MTFs and did not enroll in Senior Prime were “crowded-out.” Crowd-out varied considerably, depending both on the types of services that nonenrollees needed and the types of physicians and space available at MTFs. Nonenrollees who required certain services were crowded out while others at the same MTF continued to receive care. We focus on nonenrollees who experienced a sharp decline in MTF care: those who said they had received most or all of their care at MTFs before the demonstration but got no care or only some care at MTFs during the demonstration.

Of those nonenrollees who had previously depended on MTFs for their care, over 60 percent (about 4,600 people) were crowded out. (See figure 3.)

---

---

**Figure 3: Many Nonenrollees Who Were Heavy MTF Users Before the Demonstration Were Crowded Out**



Note: Data are based on nonenrollees who received all or most of their care at the MTF before the demonstration.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

The small number of nonenrollees—10 percent of the total—that had depended on MTFs for their care before the demonstration limited crowd-out. (See figure 4.) Consequently, only a small proportion of all nonenrollees—about 6 percent—was crowded out.<sup>19</sup> Somewhat surprisingly, a small number of nonenrollees who had not previously used MTFs began obtaining all or most of their care at MTFs.

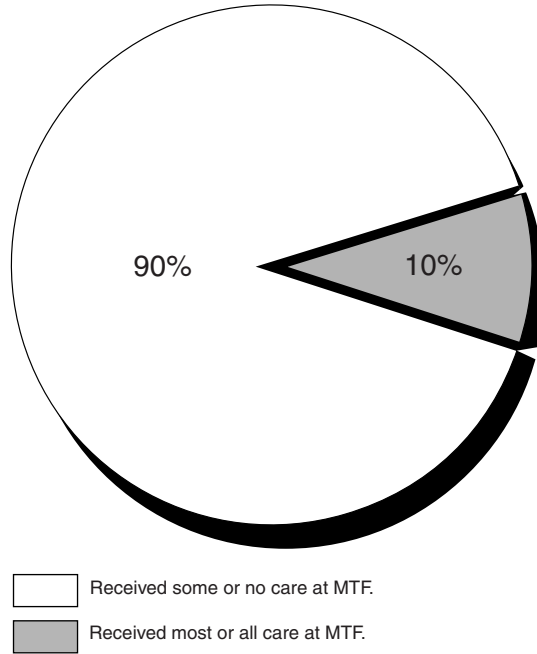
---

<sup>19</sup>Using a stricter definition—those who had previously received all of their care at the MTF before the demonstration and got no MTF care during the last year of the demonstration—about 1,500 or 2 percent of all nonenrollees were crowded out. This represents just over one-third of those who had previously depended on MTFs for all their care. For a further discussion of the range of estimates of crowd-out, see appendix IV.

---

---

**Figure 4: Few Nonenrollees Were Heavy MTF Users Before the Demonstration**

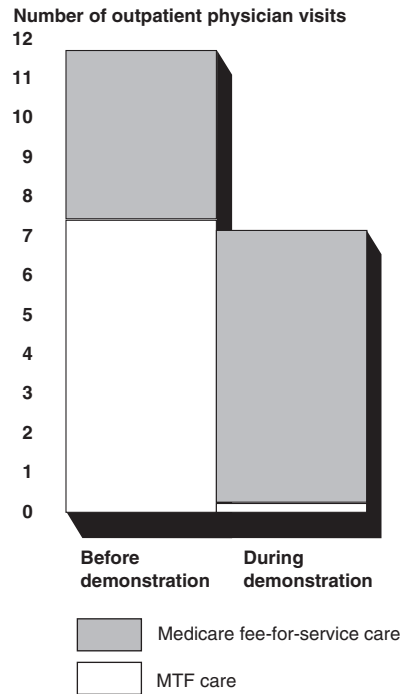


Note: Data are based on all nonenrollees' reports on the amount of care received at the MTF before the demonstration.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

Although Medicare fee-for-service care increased for those who were crowded out of MTF care, the increase in Medicare outpatient care was not nearly large enough to compensate for the loss of MTF care. (See figure 5.) Retirees who were crowded out had somewhat lower incomes than other nonenrollees and were also less likely to have supplemental insurance, suggesting that some of them may have found it difficult to cover Medicare out-of-pocket costs. By the end of the initial demonstration period, less than half of all nonenrollees said they were able to get care at MTFs when they needed it, a modest decline from before the demonstration.

**Figure 5: Medicare Fee-for-Service Care Did Not Offset Drop in MTF Care for Nonenrollees Who Were Crowded Out**



Sources: GAO survey of Medicare-Eligible Military Retirees and Family Members, and DOD and Medicare fee-for-service encounter data (1997-1999).

## Improved Enrollee Access Resulted In Higher Patient Satisfaction but Costs for DOD Were High

Enrollees' improved access to care had both positive and negative consequences. Many enrollees in Senior Prime reported that they were more satisfied with nearly all aspects of their care. Some results were neutral: enrollees' self-reported health status did not change and health outcomes, such as mortality and preventable hospitalizations, were no better than those achieved by nonenrolled military retirees. However, enrollees' heavy use of health services resulted in high per-person costs for DOD compared to costs of other Medicare beneficiaries.

## Enrollee Satisfaction Improved

Satisfaction with almost all aspects of care increased for enrollees. Moreover, by the end of the demonstration, their satisfaction was generally as high as that of nonenrollees.

Patients' sense of satisfaction or dissatisfaction with their physicians reflects in part their perceptions of their physicians' clinical and communication skills. Under Senior Prime, many enrollees reported greater satisfaction with both their primary care physicians and specialists. Specifically, enrollees reported greater satisfaction with their physicians' competence and ability to communicate—to listen, explain, and answer questions, and to coordinate with other physicians about patients' care.<sup>20</sup> (See table 5.)

**Table 5: Change in Satisfaction With Doctors for Enrollees**

Numbers in percent			
	Improved	Unchanged	Declined
<b>Quality—primary care doctor</b>			
Received excellent care	30	56	14
Thorough examination	33	48	19
Careful in taking medical history	33	52	16
Spent enough time with me	34	48	18
Skillful and competent	30	52	18
<b>Communication—primary care doctor</b>			
Explained things clearly	33	47	20
Really listened	31	51	18
<b>Quality—specialist</b>			
Skillful and competent	25	57	18
<b>Communication—specialist</b>			
Told me about my treatment	29	50	21
Answered all my questions	27	53	20
Doctors communicated with one another	32	47	22

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

<sup>20</sup>For the complete set of all patient satisfaction measures, see appendix II.



---

---

## Demonstration Did Not Affect Health Outcomes

Senior Prime did not appear to influence three key measures of health outcomes—the mortality rate, self-reported health status, and preventable hospitalizations.

- **Mortality rate.** Although there were slightly more deaths among nonenrollees, the difference between enrollees and nonenrollees disappears when we adjust for retirees' age and their health conditions at the start of the demonstration.
- **Health status.** We also found that Senior Prime did not produce any improvement in enrollees' self-reported health status. We base this on enrollees' answers to our questions about different aspects of their health, including their ratings of their health in general and of specific areas, such as their ability to climb several flights of stairs. This finding is not surprising, given the relatively short time interval—an average of 19 months—between our two surveys. We also found that, like enrollees, nonenrollees did not experience a significant change in health status.
- **Preventable hospitalizations.** The demonstration did not have a clear effect on preventable hospitalizations—those hospitalizations that experts say can often be avoided by appropriate outpatient care. Among patients who had been hospitalized for any reason, the rate of preventable hospitalizations was slightly higher for Senior Prime enrollees than for their Medicare fee-for-service counterparts. However, when all those with chronic diseases—whether hospitalized or not—were examined, the rate among Senior Prime enrollees was lower.<sup>21</sup>

---

## Access and High Utilization Resulted in High Costs for DOD

A less desirable consequence of enrollees' access to care was its high cost for DOD. Under Senior Prime, DOD's costs were significantly higher than Medicare fee-for-service costs for comparable patients and comparable benefits.<sup>22</sup> These higher costs did not result from Senior Prime enrollees being sicker or older than Medicare beneficiaries. Instead, they resulted from heavier use of hospitals and, especially, greater use of doctors and

---

<sup>21</sup>See appendix V for a discussion of our analyses of health outcomes.

<sup>22</sup>On average, providing Senior Prime enrollees with the Medicare benefits package (which excludes prescription drugs) cost DOD about \$6,400 per person annually—about 30 percent more than Medicare fee-for-service costs for comparable people in the demonstration areas. See *Medicare Subvention Demonstration: DOD Costs and Medicare Spending* (GAO-02-67, Oct. 31, 2001).

---

other outpatient services. In other words, the increased ability of Senior Prime enrollees to see physicians and receive care translated directly into high DOD costs for the demonstration.

---

## Concluding Observations

From the perspective of enrollees, Senior Prime was highly successful. Their satisfaction with nearly all aspects of their care increased, and by the end of the demonstration enrollees were in general as satisfied as nonenrollees, who largely used civilian care. However, enrollees' utilization and the cost of their care to DOD were both higher. Although subvention is not expected to continue, the demonstration raises a larger issue for DOD: can it achieve the same high levels of patient satisfaction that it reached in Senior Prime while bringing its utilization and costs closer to the private sector's?

---

## Agency Comments

We provided DOD and CMS an opportunity to comment on a draft of this report, and both agencies provided written comments. DOD said that the report was accurate. It noted that the report did not compare Senior Prime enrollees' utilization rates with those of Medicare+Choice plans and suggested that our comparison with fee-for-service might be misleading, because it did not take account of the richer benefit package offered by Senior Prime. DOD further stated that the utilization data should cover the full 3 years of the demonstration experience and that utilization might be higher during the initial phase of a new plan. Finally, DOD stated that access and satisfaction for TRICARE Prime enrollees were adversely affected by the demonstration. CMS agreed with the report's findings and suggested that higher quality of care might be an explanation for Senior Prime enrollees' higher use of services. (DOD and CMS comments appear in appendixes VI and VII.)

---

In comparing utilization rates with Medicare fee-for-service in the same areas, we chose a comparison group that would be expected to have higher utilization than Senior Prime or any other managed care plan. Fee-for-service beneficiaries can obtain care from any provider without restriction, whereas Medicare+Choice plans typically have some limitations on access. Consequently, the fact that Senior Prime utilization was substantially higher than fee-for-service utilization is striking. As mandated by law, our evaluation covers the initial demonstration period (through December 2000). We therefore did not attempt to obtain information on utilization during 2001 and, in any case, the lag in data reporting would have prevented our doing so. However, during the first 2 full years of the demonstration utilization declined slightly: outpatient visits in 2000 were 2 percent lower than in 1999. As we have reported elsewhere, site officials found little evidence that the demonstration affected TRICARE Prime enrollees' satisfaction or access to care.<sup>23</sup> Regarding the possible impact of quality of care on use of services, we examined several health outcome indicators and found no evidence of such an effect.

We are sending copies of this report to the Secretary of Defense and the Administrator of the Centers for Medicare and Medicaid Services. We will make copies available to others upon request.

If you or your staffs have questions about this report, please contact me at (202) 512-7114. Other GAO contacts and staff acknowledgments are listed in appendix VIII.



William J. Scanlon  
Director, Health Care Issues

---

<sup>23</sup>See *Medicare Subvention Demonstration: DOD's Pilot HMO Appealed to Seniors, Underscored Management Complexities* (GAO-01-671, June 14, 2001).

---

*List of Addressees*

The Honorable Carl Levin  
Chairman

The Honorable John Warner  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

The Honorable Max Baucus  
Chairman

The Honorable Charles E. Grassley  
Ranking Minority Member  
Committee on Finance  
United States Senate

The Honorable Bob Stump  
Chairman

The Honorable Ike Skelton  
Ranking Minority Member  
Committee on Armed Services  
House of Representatives

The Honorable W.J. 'Billy' Tauzin  
Chairman

The Honorable John D. Dingell  
Ranking Minority Member  
Committee on Energy and Commerce  
House of Representatives

The Honorable William M. Thomas  
Chairman

The Honorable Charles B. Rangel  
Ranking Minority Member  
Committee on Ways and Means  
House of Representatives

---

---

# Health Care Survey of Subvention Demonstration Beneficiaries

---

To address the questions Congress asked about Medicare subvention, we fielded a mail survey of military retirees and their family members who were eligible for the subvention demonstration. The survey had two interlocking components: a panel of enrollees and nonenrollees, who were surveyed both at the beginning and the end of the demonstration, and two cross sections or snapshots of enrollees and nonenrollees—one taken at the beginning of the demonstration and the other at the end.

---

## Panel Study

To assess those questions that involved change over time, we sampled and surveyed by mail enrollees and nonenrollees, stratified by site, at the beginning of the demonstration. These same respondents were resurveyed from September through December 2000, shortly before the demonstration's initial period ended.<sup>1</sup> Because a prior report describes our initial survey, this appendix focuses on our second survey.<sup>2</sup>

---

## Sample Design

To conduct the second round of data collection, we began with 15,223 respondents from the first round of surveys. To be included in the panel, three criteria had to be met: (1) the person must still be alive, (2) the person must still reside in an official demonstration area, and (3) the person must have maintained the same enrollment status, that is, enrolled or not enrolled. Based on these criteria we mailed 13,332 surveys to our panel sample of enrollees and nonenrollees.

---

## Response Rates

Starting with a sample of 13,332 retirees and their family members, we obtained usable questionnaires from 11,986 people, an overall response rate of 91 percent. (See table 6, which also shows the adjustments to the initial sample and to the estimated population size. See table 7 for the reasons for nonresponse.)

---

<sup>1</sup>The demonstration was initially authorized for 3 years, ending December 2000, but it was extended for 1 additional year.

<sup>2</sup>For a full discussion of the first survey, see *Medicare Subvention Demonstration: Enrollment in DOD Pilot Reflects Retiree Experiences and Local Markets* (GAO/HEHS-00-35, Jan. 31, 2000).

**Appendix I**  
**Health Care Survey of Subvention**  
**Demonstration Beneficiaries**

**Table 6: Sample and Population Sizes in the Panel**

	<b>Sample</b>	<b>Estimated population</b>
Initial unadjusted size	13,332	92,669
Exclusions		
Died before sampling	89	591
Final size	13,243	92,078
Respondents	11,986	
Nonrespondents	1,257	
<b>Response rate (percentage)</b>	<b>91</b>	

**Table 7: Reasons for Nonresponse in the Panel Sample**

<b>Reason</b>	<b>Number of people excluded from final response</b>
No information received	923
Moved out of the demonstration area or undeliverable address	138
Refused	97
Too sick to respond	27
Died after sampling	41
Others	31
<b>Total nonresponse</b>	<b>1,257</b>

---

## Cross Section Study

To enable comparisons between enrollees and nonenrollees at the end of the demonstration, the second survey was augmented to include persons who had enrolled since the first survey as well as additional nonenrollees. The overall composition of the Senior Prime enrollee population had changed from the time of our first survey. When we drew our second sample in July 2000, 36 percent of all enrollees were new—that is, they had enrolled since our first survey—and over two-fifths of them were age-ins who had turned 65 since the demonstration started. From the time of our first survey to the time of our second survey, only 861 people had disenrolled from Senior Prime. Therefore, we surveyed all voluntary<sup>3</sup> disenrollees. Data from all respondents—those we surveyed for the first time as well as those in the panel—were weighted, to yield a representative sample of the demonstration population at the end of the program.

---

## Sample Design

The sample for the cross section study included the panel sample as well as the augmented populations. We defined our population as all Medicare-eligible military retirees living in the demonstration sites and eligible for Senior Prime. The sample of new enrollees was drawn from all those enrolled in the demonstration according to the Iowa Foundation's<sup>4</sup> enrollment files. The supplemental sample of nonenrollees was drawn from all retirees age 65 and over in the Defense Enrollment Eligibility Reporting System who (1) had both Medicare part A and part B coverage, (2) lived within the official demonstration zip codes, (3) were not enrolled in Senior Prime, and (4) were not part of our first sample. We stratified our sample of new enrollees and new nonenrollees by site and by whether they aged in. We oversampled each stratum to have a large enough number to conduct analyses of subpopulations.<sup>5</sup> The total sample for all sites was 23,967, drawn from a population of 117,618.

---

<sup>3</sup>Voluntary disenrollees are persons who chose to disenroll from Senior Prime. Those who died, moved out of the service area, or lost their Medicare part A or part B coverage are excluded.

<sup>4</sup>The Iowa Foundation for Medical Care is a DOD contractor that handled enrollment.

<sup>5</sup>We specified a sample size sufficient to detect a minimum difference of 5 percent between enrollees and nonenrollees at each site, using a 95-percent confidence interval, with a power of 0.8 (the probability of rejecting the null hypothesis when it is false).



Response Rates

Starting with a sample of 23,967 retirees and their family members, we obtained complete and usable questionnaires from 20,870 people, an overall response rate of 88 percent. (See table 8, which also shows the adjustments to the initial sample and to the estimated population size. See table 9, which shows the reasons for nonresponse.) Response rates varied across sites and subpopulations. Rates ranged from 95.3 percent among aged-in new enrollees to 66.7 percent among disenrollees.

**Table 8: Sample and Population Sizes in the Cross Section**

	Sample	Estimated population
Initial unadjusted size	23,967	117,618
Exclusions		
Died before sampling	120	660
Moved out of official subvention zip code before sampling	14	37
Final size	23,833	116,921
Respondents	20,870	
Nonrespondents	2,963	
<b>Response rate (percentage)</b>	<b>88</b>	

**Table 9: Reasons for Nonresponse in the Cross Section Sample**

Reason	Number of people excluded from final response
No information received	2,275
Moved/undeliverable address	310
Refused	240
Too sick to respond	42
Died after sampling	61
Others	35
<b>Total nonresponse</b>	<b>2,963</b>

---

## Questionnaire Design

The original questionnaire that was sent to our panel sample was created based on a review of the literature and five existing survey instruments. In addition, we pretested the instrument with several retiree groups. For the second round of data collection, we created four different versions of the questionnaire, based on the original questionnaire. The four versions were nearly the same, with some differences in the sections on Senior Prime and health insurance coverage. (See table 10 for a complete list of all the survey questions used in our analyses.)

For the panel sample, our objective was to collect the same data at two points in time. Therefore, in constructing the questionnaires for the panel enrollees and panel nonenrollees we essentially used the same instrument as the original survey to answer questions about the effect of the demonstration on access to care, quality of care, health care use, and out-of-pocket costs. However, we modified our questions about plan satisfaction and health insurance coverage.

In constructing the questionnaires for the new enrollees, we generally adopted the same questions in the panel enrollee instrument to measure access to care, quality of care, health care use, and out-of-pocket costs. However, we also asked the new enrollees about their health care experiences in the 12 months before they joined Senior Prime. For new nonenrollees, we were able to use the same instrument as we had used for the panel nonenrollees, because their health care experiences were not related to tenure in Senior Prime. Finally, the disenrollee questionnaire, like the other versions, did not change from the original instrument in the measures on access to care, quality of care, health care use, and out-of-pocket costs. However, we added questions on the reasons for disenrollment.

**Appendix I  
Health Care Survey of Subvention  
Demonstration Beneficiaries**

**Table 10: Survey Questions Used in This Report**

Question	Possible answers
<b>Access to care</b>	
I could get health care when I needed it.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree, Not applicable
I could not get medical information by phone when I needed it.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree, Not applicable
I could not get care when I needed it at night or on weekends.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree, Not applicable
When you went to a civilian or military place during the past 12 months, how long did you USUALLY wait between the time you made an appointment for care and the day you actually saw a doctor or other health care professional? When going for:	Same Day, 1-3 Days, 4-7 Days, 8-14 Days, 15-30 Days, 31-60 Days, More than 60 days, Does not apply
Well-patient visit (like a physical)	
Routine visit for minor illness or injury (like a cold or sore throat)	
Urgent care visit for an acute injury or illness (like a broken arm or shortness of breath)	
<b>Access to military care</b>	
During the past 12 months, NOT including getting prescriptions filled, about how much of your health care was at military health care facilities?	None, Some, Most, All
I was able to get care at military health care facilities when I needed it during the past 12 months.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree, Not applicable
I prefer to get my health care at military health care facilities.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree, Not applicable
It was difficult for me to schedule appointments at military health care facilities during the past 12 months.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree, Not applicable
<b>Access to a primary care doctor</b>	
My primary care doctor's office was conveniently located.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
The hours when my primary care doctor's office was open were not convenient for me.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
I had to wait too long between making an appointment and seeing the doctor.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
I was able to choose my own primary care doctor.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
Once I got to the office, my doctor saw me promptly.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
<b>Access to a specialist doctor</b>	
I was satisfied with the choice of specialists available to me.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

**Appendix I  
Health Care Survey of Subvention  
Demonstration Beneficiaries**

*(Continued From Previous Page)*

<b>Question</b>	<b>Possible answers</b>
I did not have to wait a long time between making an appointment and seeing the specialist.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
<b>Quality of care</b>	
I am satisfied with the health care that I received.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
<b>Quality of military care</b>	
I am satisfied with the health care I received at military health care facilities during the past 12 months.	Strongly Agree, agree, Neither agree nor disagree, Disagree, Strongly disagree
Doctors and staff at military health care facilities did not treat me with courtesy and respect during the past 12 months.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
I would not recommend military health care to my family or friends who need care.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
<b>Quality of primary care doctor</b>	
I received excellent care from my primary care doctor.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My primary care doctor examined me thoroughly.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My primary care doctor was very careful in taking and understanding my medical history.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My primary care doctor did not explain things clearly.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My primary care doctor really did not listen to me.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My primary care doctor did not spend enough time with me during visits.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My primary care doctor was not skillful and competent.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
<b>Quality of specialist doctors</b>	
My specialists were skillful and competent.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My specialists did not tell me all I wanted to know about my condition or treatment.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My specialists did not answer all of my questions.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
My doctors did not communicate with each other about my care.	Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree
<b>Health status</b>	
In general, would you say your health status is:	Excellent, Very Good, Good, Fair, Poor

**Appendix I  
Health Care Survey of Subvention  
Demonstration Beneficiaries**

*(Continued From Previous Page)*

<b>Question</b>	<b>Possible answers</b>
The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so how much?  a. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?  b. Climbing several flights of stairs	Yes, limited a lot; Yes, limited a little; No, not limited at all.
During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?  a. Accomplished less than you would like  b. Were limited in the kind of work or other activities	Yes, No
During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?  a. Accomplished less than you would like  b. Didn't do work or other activities as carefully as usual	Yes, No
During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?	Not at all, A little bit, Moderately, Quite a bit, Extremely
How much of the time during the past 4 weeks...  a. Have you felt calm and peaceful?  b. Did you have a lot of energy?  c. Have you felt downhearted and blue?	All of the time, Most of the time, A good bit of the time, Some of the time, A little of the time, None of the time
During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?	All of the time, Most of the time, A good bit of the time, Some of the time, A little of the time, None of the time
Compared to one year ago, how would you rate your health in general now?	Much better than one year ago, Somewhat better than one year ago, About the same, Somewhat worse now than one year ago, Much worse now than one year ago
Because of your health, do you need help from another person with activities such as eating, bathing, dressing, or getting around the house?	Yes, No

**Appendix I  
Health Care Survey of Subvention  
Demonstration Beneficiaries**

*(Continued From Previous Page)*

<b>Question</b>	<b>Possible answers</b>
<b>Insurance and income</b>	
Do you currently have Medicare supplemental insurance?	Yes, No, Don't know
What was your family's TOTAL income last year BEFORE taxes? (Include wages before taxes; dividends; interest; social security; pensions; alimony; net business or farm income; and any other money income received by members of the family who are 15 years of age or older.)	Less than \$20,000, \$20,000-\$39,999, \$40,000-\$59,999, \$60,000-\$79,999, \$80,000 and over

Note: Our questionnaire included the SF-12™ Health Survey. Reproduced with permission of the Medical Outcomes Trust. Copyright © 1994 the Health Institute, New England Medical Center.

# Measures of Access to Care And Satisfaction With Care

## Measures of Change in Access and Satisfaction

To detect the effects the demonstration had on both enrollees' and nonenrollees' access to care and satisfaction with care, we compared the differences between survey responses at both points in time and among each demonstration site. For most questions, retirees were asked both before the demonstration and at the end of the demonstration how much they agreed or disagreed with each statement. They were given five possible answers: strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. To calculate change, responses were assigned a numeric value on a five-point scale, with five being the highest and one being the lowest. To properly quantify the response, some scales had to be reversed. Where necessary, questions were rescaled so that "agree" represents a positive answer and "disagree" a negative answer. To obtain a measure of change, the value of the response from the first survey was subtracted from the value of the response from the second survey. A positive value indicates improvement, a negative value indicates decline. The net improvement is calculated as the difference between the proportion of respondents within each sample population who improved and the proportion of those who declined.

Four separate significance tests were performed. (See table 11.) The first test was for net improvement (the difference between improved and declined) among enrollees. The second test was for net improvement among nonenrollees. The third test was for the difference of net improvement between enrollees and nonenrollees. Finally, we tested whether the net improvement for each site is significantly different from the net improvement of the other sites. (See tables 11 and 12.)

**Table 11: Net Improvement in Access and Quality**

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
<b>Access to care</b>							
I was able to get care when I needed it.	32	14	18 <sup>a</sup>	18	22	-4 <sup>a</sup>	22 <sup>a</sup>
Madigan	24	17	7 <sup>a</sup>	18	25	-7 <sup>a</sup>	14 <sup>a</sup>
San Antonio	38	12	26 <sup>a</sup>	19	22	-3	29 <sup>a</sup>
San Diego	26	13	13 <sup>a</sup>	16	22	-6 <sup>a</sup>	19 <sup>a</sup>

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
Keesler	27	17	10 <sup>a</sup>	20	20	0	10
Texoma	30	14	16 <sup>a</sup>	17	20	-3	19 <sup>a</sup>
Colorado	34	15	19 <sup>a</sup>	20	20	0	19 <sup>a</sup>
Dover	30	20	10 <sup>a</sup>	18	16	2	8 <sup>a</sup>
I was able to get info by phone when I needed it. <sup>b</sup>	37	26	11 <sup>a</sup>	30	33	-3	12 <sup>a</sup>
Madigan	31	26	5	30	28	2	3
San Antonio	37	27	10	30	33	-3	13
San Diego	38	22	16 <sup>a</sup>	29	35	-6	22 <sup>a</sup>
Keesler	37	27	10	32	28	4	6
Texoma	38	28	10	28	32	-4	14
Colorado	43	26	17 <sup>a</sup>	26	35	-9	26 <sup>a</sup>
Dover	43	25	18 <sup>a</sup>	34	30	4	14
I was able to get care on nights and weekends. <sup>b</sup>	34	23	11 <sup>a</sup>	29	30	-1	12 <sup>a</sup>
Madigan	31	20	11 <sup>a</sup>	31	28	3	8
San Antonio	34	27	7	27	34	-7	14
San Diego	31	19	12	29	29	0	12
Keesler	33	22	11	37	26	11	0
Texoma	35	23	12	28	27	1	11
Colorado	41	18	23 <sup>a</sup>	26	32	-6	29 <sup>a</sup>
Dover	46	11	35 <sup>a</sup>	33	24	9	26 <sup>a</sup>
<b>Military care</b>							
I am satisfied with care at military facilities.	26	14	12 <sup>a</sup>	20	29	-9 <sup>a</sup>	21 <sup>a</sup>
Madigan	21	17	4 <sup>a</sup>	17	27	-10 <sup>a</sup>	14 <sup>a</sup>
San Antonio	29	13	16 <sup>a</sup>	20	33	-13 <sup>a</sup>	29 <sup>a</sup>
San Diego	19	11	8 <sup>a</sup>	22	24	-2	10
Keesler	24	18	6 <sup>a</sup>	25	27	-2	8
Texoma	26	13	13 <sup>a</sup>	22	27	-5	18 <sup>a</sup>
Colorado	27	16	11 <sup>a</sup>	22	29	-7	18 <sup>a</sup>
Dover	27	13	14 <sup>a</sup>	19	31	-12	26 <sup>a</sup>



**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
I was able to get care at military facilities when I needed it.	35	12	23 <sup>a</sup>	19	33	-14 <sup>a</sup>	37 <sup>a</sup>
Madigan	26	15	11 <sup>a</sup>	21	31	-10 <sup>a</sup>	21 <sup>a</sup>
San Antonio	40	13	27 <sup>a</sup>	20	38	-18 <sup>a</sup>	45 <sup>a</sup>
San Diego	25	9	14 <sup>a</sup>	14	31	-17 <sup>a</sup>	31 <sup>a</sup>
Keesler	36	15	21 <sup>a</sup>	18	29	-11	32 <sup>a</sup>
Texoma	38	8	30 <sup>a</sup>	23	22	1	29 <sup>a</sup>
Colorado	42	12	30 <sup>a</sup>	23	26	-3	33 <sup>a</sup>
Dover	29	11	18 <sup>a</sup>	22	33	-11	29 <sup>a</sup>
I prefer to get my care at military facilities.	18	13	4 <sup>a</sup>	24	25	-1	5 <sup>a</sup>
Madigan	16	14	2	23	22	1	1
San Antonio	20	13	7 <sup>a</sup>	25	28	-3	10 <sup>a</sup>
San Diego	16	9	7 <sup>a</sup>	22	22	0	7
Keesler	12	17	5 <sup>a</sup>	24	29	-5	10
Texoma	19	14	5 <sup>a</sup>	20	32	-12 <sup>a</sup>	17 <sup>a</sup>
Colorado	17	13	4 <sup>a</sup>	25	23	2	6
Dover	21	13	8 <sup>a</sup>	22	25	-3	11
It was not difficult to schedule appointments at military facilities. <sup>b</sup>	47	17	30 <sup>a</sup>	26	35	-9 <sup>a</sup>	39 <sup>a</sup>
Madigan	35	22	13 <sup>a</sup>	23	36	-13 <sup>a</sup>	26 <sup>a</sup>
San Antonio	56	13	43 <sup>a</sup>	28	33	-5	48 <sup>a</sup>
San Diego	27	19	8 <sup>a</sup>	20	48	-28 <sup>a</sup>	36 <sup>a</sup>
Keesler	47	18	29 <sup>a</sup>	23	25	-2	31 <sup>a</sup>
Texoma	49	16	33 <sup>a</sup>	28	29	-1	34 <sup>a</sup>
Colorado	46	21	25 <sup>a</sup>	39	23	16 <sup>a</sup>	9
Dover	40	22	18 <sup>a</sup>	17	41	-24 <sup>a</sup>	42 <sup>a</sup>
Doctors and staff treated me with respect at military facilities. <sup>b</sup>	21	16	5 <sup>a</sup>	18	32	-14 <sup>a</sup>	19 <sup>a</sup>
Madigan	18	16	2	13	34	-21 <sup>a</sup>	23 <sup>a</sup>
San Antonio	24	15	9 <sup>a</sup>	20	29	-9	18 <sup>a</sup>

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
San Diego	15	13	2	19	33	-14	16
Keesler	16	20	-4	24	26	-2	-2
Texoma	22	17	5	21	37	-16	21 <sup>a</sup>
Colorado	22	21	1	17	39	-22 <sup>a</sup>	23 <sup>a</sup>
Dover	19	17	2	14	38	-24 <sup>a</sup>	26 <sup>a</sup>
I would recommend military care. <sup>b</sup>	18	16	2 <sup>a</sup>	25	27	-2	4
Madigan	16	16	0	26	24	2	-2
San Antonio	19	14	5 <sup>a</sup>	26	27	-1	6
San Diego	14	15	-1	23	27	-4	3
Keesler	17	20	-3	23	36	-13 <sup>a</sup>	10
Texoma	19	16	3	31	29	-2	5
Colorado	20	19	1	27	26	1	0
Dover	23	16	7	22	37	-15 <sup>a</sup>	22 <sup>a</sup>
<b>Satisfaction with care</b>							
I am satisfied with the care I received.	29	14	15 <sup>a</sup>	18	22	-4 <sup>a</sup>	19 <sup>a</sup>
Madigan	21	17	4	19	24	-5 <sup>a</sup>	9 <sup>a</sup>
San Antonio	33	13	20 <sup>a</sup>	19	22	-3	23 <sup>a</sup>
San Diego	25	11	14 <sup>a</sup>	17	22	-5 <sup>a</sup>	19 <sup>a</sup>
Keesler	23	19	4 <sup>a</sup>	21	22	-1	5
Texoma	28	12	16 <sup>a</sup>	16	20	-4	20 <sup>a</sup>
Colorado	38	13	25 <sup>a</sup>	18	21	-3	28 <sup>a</sup>
Dover	29	17	12 <sup>a</sup>	18	17	1	11 <sup>a</sup>
<b>Satisfaction with primary care providers</b>							
I received excellent care.	30	14	16 <sup>a</sup>	17	20	-3 <sup>a</sup>	19 <sup>a</sup>
Madigan	26	16	10 <sup>a</sup>	20	23	-3	13 <sup>a</sup>
San Antonio	32	13	19 <sup>a</sup>	18	19	-1	20 <sup>a</sup>
San Diego	26	12	14 <sup>a</sup>	14	20	-6 <sup>a</sup>	20 <sup>a</sup>
Keesler	22	19	3	20	16	4	-1
Texoma	29	11	18 <sup>a</sup>	19	17	2	16 <sup>a</sup>

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
Colorado	39	13	26 <sup>a</sup>	16	22	-6 <sup>a</sup>	32 <sup>a</sup>
Dover	23	14	9 <sup>a</sup>	18	17	1	8 <sup>a</sup>
The doctor's office was conveniently located.	28	16	12 <sup>a</sup>	17	23	-6 <sup>a</sup>	18 <sup>a</sup>
Madigan	23	17	6 <sup>a</sup>	19	23	-4	10 <sup>a</sup>
San Antonio	32	16	16 <sup>a</sup>	17	24	-7 <sup>a</sup>	23 <sup>a</sup>
San Diego	23	15	8 <sup>a</sup>	14	23	-9 <sup>a</sup>	17 <sup>a</sup>
Keesler	23	19	4	23	17	6	-2
Texoma	28	15	13 <sup>a</sup>	21	17	4	9 <sup>a</sup>
Colorado	32	18	14 <sup>a</sup>	16	24	-8 <sup>a</sup>	22 <sup>a</sup>
Dover	23	13	10 <sup>a</sup>	19	18	1	9 <sup>a</sup>
The doctor's hours were convenient. <sup>b</sup>	32	20	12 <sup>a</sup>	24	27	-3	15 <sup>a</sup>
Madigan	29	25	4	24	29	-5	9 <sup>a</sup>
San Antonio	33	20	13 <sup>a</sup>	27	24	3	10 <sup>a</sup>
San Diego	32	19	13 <sup>a</sup>	22	29	-7 <sup>a</sup>	20 <sup>a</sup>
Keesler	28	20	8 <sup>a</sup>	28	25	3	5
Texoma	39	16	23 <sup>a</sup>	25	23	2	21 <sup>a</sup>
Colorado	30	19	11 <sup>a</sup>	22	25	-3	14 <sup>a</sup>
Dover	29	22	7	28	20	8 <sup>a</sup>	-1
I did not have to wait long between making an appointment and seeing the doctor.	35	26	9 <sup>a</sup>	25	28	-3	12 <sup>a</sup>
Madigan	30	31	-1	25	27	-2	1
San Antonio	41	24	17 <sup>a</sup>	29	27	2	15 <sup>a</sup>
San Diego	34	20	14 <sup>a</sup>	22	30	-8 <sup>a</sup>	22 <sup>a</sup>
Keesler	27	30	-3	29	22	7	-10 <sup>a</sup>
Texoma	33	22	11 <sup>a</sup>	27	24	3	8
Colorado	34	30	4	25	27	-2	6
Dover	30	29	1	25	24	1	0
The doctor saw me promptly.	34	17	17 <sup>a</sup>	22	24	-2	19 <sup>a</sup>
Madigan	26	19	7 <sup>a</sup>	24	24	0	7 <sup>a</sup>

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
San Antonio	39	15	24 <sup>a</sup>	24	24	0	24 <sup>a</sup>
San Diego	34	16	18 <sup>a</sup>	20	25	-5	23 <sup>a</sup>
Keesler	27	22	5	25	22	3	2
Texoma	31	16	15 <sup>a</sup>	22	22	0	15 <sup>a</sup>
Colorado	38	16	22 <sup>a</sup>	18	27	-9 <sup>a</sup>	31 <sup>a</sup>
Dover	25	19	6	23	21	2	4
The doctor did a thorough examination.	33	19	14 <sup>a</sup>	20	25	-5 <sup>a</sup>	19 <sup>a</sup>
Madigan	27	23	4	21	26	-5 <sup>a</sup>	9 <sup>a</sup>
San Antonio	38	16	22 <sup>a</sup>	20	23	-3 <sup>a</sup>	25 <sup>a</sup>
San Diego	31	18	13 <sup>a</sup>	19	26	-7 <sup>a</sup>	20 <sup>a</sup>
Keesler	23	26	-3	21	20	1	-4
Texoma	32	16	16 <sup>a</sup>	20	23	-3	19 <sup>a</sup>
Colorado	38	19	9 <sup>a</sup>	20	27	-7 <sup>a</sup>	16 <sup>a</sup>
Dover	25	19	6	22	23	-1	7
The doctor was careful in recording my medical history.	33	16	17 <sup>a</sup>	19	23	-4 <sup>a</sup>	21 <sup>a</sup>
Madigan	28	18	10 <sup>a</sup>	21	25	-4	14 <sup>a</sup>
San Antonio	36	13	23 <sup>a</sup>	19	23	-4	27 <sup>a</sup>
San Diego	32	16	16 <sup>a</sup>	17	23	-6 <sup>a</sup>	22 <sup>a</sup>
Keesler	24	23	1	22	17	5	-4
Texoma	30	12	18 <sup>a</sup>	21	19	2	16 <sup>a</sup>
Colorado	38	18	20 <sup>a</sup>	19	25	-6 <sup>a</sup>	26 <sup>a</sup>
Dover	25	17	8 <sup>a</sup>	21	21	0	8
I was able to choose my own doctor.	32	36	-4 <sup>a</sup>	20	21	-1	-3
Madigan	27	37	-10 <sup>a</sup>	19	25	-6 <sup>a</sup>	-4
San Antonio	37	32	5	22	21	1	4
San Diego	32	34	-2	18	19	-1	-1
Keesler	24	44	-20 <sup>a</sup>	26	18	8 <sup>a</sup>	-28 <sup>a</sup>
Texoma	29	35	-6	19	15	4	-10 <sup>a</sup>
Colorado	25	47	-22 <sup>a</sup>	18	25	-7 <sup>a</sup>	-15 <sup>a</sup>

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
Dover	34	27	7	23	20	3	4
The doctor explained things clearly. <sup>b</sup>	33	20	13 <sup>a</sup>	22	24	-2 <sup>a</sup>	15 <sup>a</sup>
Madigan	30	22	8 <sup>a</sup>	22	25	-3	11 <sup>a</sup>
San Antonio	36	19	17 <sup>a</sup>	23	26	-3	20 <sup>a</sup>
San Diego	32	17	15 <sup>a</sup>	19	24	-5	20 <sup>a</sup>
Keesler	22	27	-5	26	21	5	-10 <sup>a</sup>
Texoma	34	16	18 <sup>a</sup>	24	23	1	17 <sup>a</sup>
Colorado	39	17	22 <sup>a</sup>	22	24	-2	24 <sup>a</sup>
Dover	29	19	10 <sup>a</sup>	21	22	-1	11
The doctor really listened. <sup>b</sup>	31	18	13 <sup>a</sup>	22	23	-1	15 <sup>a</sup>
Madigan	28	19	9 <sup>a</sup>	21	27	-6	15 <sup>a</sup>
San Antonio	33	17	16 <sup>a</sup>	23	24	-1	17 <sup>a</sup>
San Diego	30	16	14 <sup>a</sup>	22	21	1	13 <sup>a</sup>
Keesler	20	23	-3	26	21	5	-8
Texoma	33	14	19 <sup>a</sup>	22	24	-2	21 <sup>a</sup>
Colorado	38	19	19 <sup>a</sup>	20	23	-3	22 <sup>a</sup>
Dover	24	20	4	21	20	1	3
The doctor spent enough time with me. <sup>b</sup>	34	18	16 <sup>a</sup>	22	27	-5 <sup>a</sup>	19 <sup>a</sup>
Madigan	31	23	8 <sup>a</sup>	23	29	-6	14 <sup>a</sup>
San Antonio	36	16	20 <sup>a</sup>	24	27	-3	23 <sup>a</sup>
San Diego	35	15	20 <sup>a</sup>	21	26	-5	25 <sup>a</sup>
Keesler	23	27	-4	25	22	3	-7
Texoma	37	12	25 <sup>a</sup>	23	27	-4	29 <sup>a</sup>
Colorado	40	18	22 <sup>a</sup>	19	28	-9 <sup>a</sup>	31 <sup>a</sup>
Dover	28	19	9 <sup>a</sup>	23	23	0	9
The doctor was skillful and competent. <sup>b</sup>	30	18	12 <sup>a</sup>	20	22	-2	14 <sup>a</sup>
Madigan	29	19	10 <sup>a</sup>	19	24	-5	15 <sup>a</sup>
San Antonio	31	18	13 <sup>a</sup>	22	24	-2	15 <sup>a</sup>
San Diego	29	15	14 <sup>a</sup>	18	21	-3	17 <sup>a</sup>

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
Keesler	22	24	-2	23	20	3	-5
Texoma	33	14	19 <sup>a</sup>	20	26	-6	25 <sup>a</sup>
Colorado	36	16	20 <sup>a</sup>	19	21	-2	22 <sup>a</sup>
Dover	24	21	3	20	16	4	-1
<b>Satisfaction with specialists</b>							
I am satisfied with my ability to choose specialists.	27	17	10 <sup>a</sup>	18	21	-3 <sup>a</sup>	13 <sup>a</sup>
Madigan	22	18	4	22	22	0	4
San Antonio	31	16	15 <sup>a</sup>	20	19	1	14 <sup>a</sup>
San Diego	25	15	10 <sup>a</sup>	16	24	-8 <sup>a</sup>	18 <sup>a</sup>
Keesler	19	23	-4	17	15	2	-6
Texoma	26	17	9 <sup>a</sup>	18	20	-2	11 <sup>a</sup>
Colorado	32	16	16 <sup>a</sup>	18	22	-4	20 <sup>a</sup>
Dover	20	20	0	19	20	-1	1
I didn't wait too long for my appointment.	32	22	10 <sup>a</sup>	23	27	-4 <sup>a</sup>	14 <sup>a</sup>
Madigan	27	26	1	26	26	0	1
San Antonio	36	20	16 <sup>a</sup>	27	26	1	15 <sup>a</sup>
San Diego	33	18	15 <sup>a</sup>	19	30	-11 <sup>a</sup>	26 <sup>a</sup>
Keesler	26	24	2	23	21	2	0
Texoma	25	27	-2	20	22	-2	0
Colorado	33	22	11 <sup>a</sup>	21	26	-5	16 <sup>a</sup>
Dover	29	22	7	22	22	0	7
The doctor was skillful and competent.	25	18	7 <sup>a</sup>	18	20	-2	9 <sup>a</sup>
Madigan	22	19	3	21	22	-1	4
San Antonio	27	17	10 <sup>a</sup>	20	20	0	10 <sup>a</sup>
San Diego	25	14	11 <sup>a</sup>	15	21	-6 <sup>a</sup>	17 <sup>a</sup>
Keesler	19	23	-4	17	18	-1	-3
Texoma	26	20	6	17	19	-2	8
Colorado	25	18	7 <sup>a</sup>	18	21	-3	10 <sup>a</sup>
Dover	24	15	9 <sup>a</sup>	19	18	1	8

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

(Continued From Previous Page)

Numbers in percent

Question and site	Enrollees			Nonenrollees			Difference in net improvement between enrollees and nonenrollees
	Improved	Declined	Net change	Improved	Declined	Net change	
The doctor told me all I wanted to know about my treatment. <sup>b</sup>	29	21	8 <sup>a</sup>	24	25	-1	9 <sup>a</sup>
Madigan	27	23	4	26	26	0	4
San Antonio	30	21	9 <sup>a</sup>	23	27	-4	13 <sup>a</sup>
San Diego	32	19	13 <sup>a</sup>	25	24	1	12 <sup>a</sup>
Keesler	19	23	-4	21	25	-4	0
Texoma	29	20	9 <sup>a</sup>	26	24	2	7
Colorado	34	19	<b>15<sup>a</sup></b>	23	23	0	15 <sup>a</sup>
Dover	26	24	2	26	19	<b>7<sup>a</sup></b>	-5
The doctor answered all my questions. <sup>b</sup>	27	20	7 <sup>a</sup>	22	23	-1	8 <sup>a</sup>
Madigan	24	23	1	25	24	1	0
San Antonio	28	19	9 <sup>a</sup>	21	25	-4	13 <sup>a</sup>
San Diego	30	16	<b>14<sup>a</sup></b>	22	23	-1	15 <sup>a</sup>
Keesler	20	22	-2	21	25	-4	2
Texoma	24	18	6	22	23	-1	7
Colorado	34	17	<b>17<sup>a</sup></b>	22	22	0	17 <sup>a</sup>
Dover	21	25	-4	25	18	<b>7<sup>a</sup></b>	-11
The doctors communicated with one another. <sup>b</sup>	32	22	10 <sup>a</sup>	27	27	0	10 <sup>a</sup>
Madigan	31	25	6	32	24	<b>8<sup>a</sup></b>	-2
San Antonio	33	19	12 <sup>a</sup>	27	29	-2	14 <sup>a</sup>
San Diego	33	20	13 <sup>a</sup>	25	28	-3	16 <sup>a</sup>
Keesler	25	26	-1	26	26	0	-1
Texoma	30	20	10 <sup>a</sup>	25	24	1	9
Colorado	35	24	11 <sup>a</sup>	23	27	-4	15 <sup>a</sup>
Dover	25	25	0	26	23	3	-3

Note: Bold indicates that the demonstration site percentage is significantly different from the overall percentage.

<sup>a</sup>Significant at .05 level.

<sup>b</sup>Questions reversed, in order to calculate improvement or decline. The exact wording of all questions used in this analysis can be found in appendix I, table 10.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members

---

**Measures of Access  
and Satisfaction at the  
End of the  
Demonstration**

In addition to the change of access and quality among enrollees and nonenrollees, we also examined the level of access and quality at the time of the second survey among the cross section sample. (See table 12.)

Three separate significance tests were performed. The first test of significance was between enrollees and nonenrollees who said they strongly agreed with each statement. The second test of significance was between enrollees and nonenrollees who said they either strongly agreed or agreed with each statement. The final test was whether the site percentage differs significantly from the overall percentage.



---

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

---

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

**Table 12: Level of Access and Quality at the End of the Demonstration**

Numbers in percent

Question and site	Enrollees <sup>c</sup>				
	Strongly agree	Agree	Neither	Disagree	Strongly disagree
<b>Access to care</b>					
I was able to get care when I needed it.	48	42	5	3	1
Madigan	48	43	4	3	1
San Antonio	51	40	5	3	1
San Diego	51	40	5	4	1
Keesler	44	45	6	4	1
Texoma	45	44	6	3	1
Colorado	44	45	7	3	1
Dover	38	51	6	3	1
I was able to get info by phone when I needed it. <sup>b</sup>	26	31	15	17	11
Madigan	28	32	17	14	10
San Antonio	26	30	15	17	12
San Diego	27	30	19	15	10
Keesler	24	34	12	18	12
Texoma	22	30	14	22	11
Colorado	27	29	15	18	10
Dover	26	32	14	18	10
I was able to get care on nights and weekends. <sup>b</sup>	36	33	13	11	7
Madigan	39	38	10	7	5
San Antonio	39	32	12	10	7
San Diego	35	30	16	12	7
Keesler	32	37	11	13	8
Texoma	28	33	14	15	9
Colorado	32	35	14	12	8
Dover	27	31	16	15	11

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
42	49	5	3	1	6 <sup>a</sup>	90	91	-1
41	49	5	3	1	7 <sup>a</sup>	92	91	1
40	48	6	4	2	11 <sup>a</sup>	91	89	3 <sup>a</sup>
46	47	5	2	1	5 <sup>a</sup>	91	93	-2
39	53	4	2	2	5	89	93	-3 <sup>a</sup>
42	51	5	2	0	3	89	93	-3 <sup>a</sup>
37	54	5	4	1	7 <sup>a</sup>	89	91	-2
45	50	4	1	1	-6 <sup>a</sup>	90	94	-4 <sup>a</sup>
23	31	17	19	10	3 <sup>a</sup>	57	54	2
25	33	15	19	8	3	60	58	2
23	28	16	21	11	3	56	52	5
25	30	18	16	11	1	56	55	2
18	33	17	18	14	6 <sup>a</sup>	57	51	7 <sup>a</sup>
17	32	16	21	14	5 <sup>a</sup>	53	49	4
20	34	17	21	8	7 <sup>a</sup>	56	53	2
24	34	15	15	12	2	57	58	-1
30	32	16	13	10	6 <sup>a</sup>	69	61	8 <sup>a</sup>
34	29	16	12	9	6	77	63	15 <sup>a</sup>
28	31	16	15	10	11 <sup>a</sup>	71	58	13 <sup>a</sup>
33	31	15	11	10	2	65	64	0
21	38	17	13	11	11 <sup>a</sup>	69	59	10 <sup>a</sup>
23	34	18	13	11	5	61	58	3
22	38	15	16	9	10 <sup>a</sup>	66	60	6
29	29	18	13	11	-2	58	58	0

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent					
Enrollees <sup>c</sup>					
Question and site	Strongly agree	Agree	Neither	Disagree	Strongly disagree
<b>Military care</b>					
I am satisfied with care at military facilities.	56	36	4	2	1
Madigan	57	37	4	2	1
San Antonio	58	35	4	2	1
San Diego	58	36	3	2	1
Keesler	54	38	4	2	2
Texoma	53	37	6	2	2
Colorado	53	38	5	2	1
Dover	47	45	4	3	1
I was able to get care at military facilities when I needed it.	52	39	4	4	2
Madigan	52	42	4	2	1
San Antonio	53	38	4	4	1
San Diego	55	37	4	3	2
Keesler	48	38	5	6	4
Texoma	49	38	4	4	4
Colorado	49	38	5	5	3
Dover	44	45	5	3	2
I prefer to get my care at military facilities.	68	28	3	1	0
Madigan	67	29	3	1	0
San Antonio	71	26	2	0	0
San Diego	69	27	3	0	0
Keesler	68	28	3	1	0
Texoma	61	30	6	2	1
Colorado	64	31	4	0	1
Dover	58	33	7	1	0

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
24	38	18	8	12	32 <sup>a</sup>	93	63	30 <sup>a</sup>
26	38	18	9	10	31 <sup>a</sup>	93	63	30 <sup>a</sup>
29	36	14	8	13	29 <sup>a</sup>	93	65	28 <sup>a</sup>
24	43	20	6	7	34 <sup>a</sup>	94	67	27 <sup>a</sup>
18	30	14	9	30	37 <sup>a</sup>	92	47	45 <sup>a</sup>
15	31	19	12	23	38 <sup>a</sup>	90	46	44 <sup>a</sup>
16	43	20	8	13	37 <sup>a</sup>	91	60	32 <sup>a</sup>
18	29	23	11	18	29 <sup>a</sup>	92	47	45 <sup>a</sup>
15	29	17	13	26	36 <sup>a</sup>	90	44	46 <sup>a</sup>
17	28	16	13	25	34 <sup>a</sup>	93	45	48 <sup>a</sup>
18	30	14	14	24	36 <sup>a</sup>	92	48	43 <sup>a</sup>
16	34	24	9	17	39 <sup>a</sup>	92	50	42 <sup>a</sup>
8	14	10	11	57	39 <sup>a</sup>	86	22	63 <sup>a</sup>
11	20	14	16	39	38 <sup>a</sup>	88	31	57 <sup>a</sup>
10	26	15	15	34	38 <sup>a</sup>	87	36	51 <sup>a</sup>
11	21	24	11	33	33 <sup>a</sup>	89	32	57 <sup>a</sup>
27	22	22	15	14	42 <sup>a</sup>	96	48	48 <sup>a</sup>
32	21	21	13	13	35 <sup>a</sup>	96	53	43 <sup>a</sup>
29	25	20	14	13	42 <sup>a</sup>	97	54	44 <sup>a</sup>
21	18	28	19	15	48 <sup>a</sup>	96	39	58 <sup>a</sup>
28	21	17	14	19	40 <sup>a</sup>	96	50	46 <sup>a</sup>
19	21	20	18	23	42 <sup>a</sup>	91	39	52 <sup>a</sup>
30	26	20	13	11	34 <sup>a</sup>	95	56	39 <sup>a</sup>
16	21	26	16	22	43 <sup>a</sup>	92	36	55 <sup>a</sup>

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent					
Enrollees <sup>c</sup>					
Question and site	Strongly agree	Agree	Neither	Disagree	Strongly disagree
It was not difficult to schedule appointments at military facilities. <sup>b</sup>	38	35	10	11	6
Madigan	39	35	11	11	4
San Antonio	39	33	10	12	5
San Diego	42	35	10	8	4
Keesler	34	37	9	12	8
Texoma	38	35	8	10	9
Colorado	36	35	10	12	8
Dover	33	40	11	10	5
Doctors and staff treated me with respect at military facilities. <sup>b</sup>	61	32	4	2	2
Madigan	63	30	4	1	2
San Antonio	62	31	4	1	2
San Diego	62	31	3	1	2
Keesler	59	34	4	2	2
Texoma	56	33	6	3	2
Colorado	58	34	5	2	2
Dover	59	35	4	1	1
I would recommend military care. <sup>b</sup>	67	25	4	2	2
Madigan	68	23	5	2	1
San Antonio	68	24	4	2	2
San Diego	71	22	3	2	2
Keesler	64	27	5	2	2
Texoma	61	28	6	3	3
Colorado	64	28	5	1	2
Dover	60	30	6	3	1

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
11	15	22	23	30	27 <sup>a</sup>	73	25	47 <sup>a</sup>
12	14	23	23	28	27 <sup>a</sup>	74	26	48 <sup>a</sup>
12	16	16	23	33	27 <sup>a</sup>	72	28	44 <sup>a</sup>
10	15	33	23	19	32 <sup>a</sup>	77	25	52 <sup>a</sup>
9	8	12	19	53	26 <sup>a</sup>	71	16	55 <sup>a</sup>
10	8	19	23	39	28 <sup>a</sup>	73	18	55 <sup>a</sup>
11	17	21	21	31	25 <sup>a</sup>	71	28	43 <sup>a</sup>
9	10	22	26	32	24 <sup>a</sup>	73	19	55 <sup>a</sup>
33	30	25	6	5	28 <sup>a</sup>	93	64	29 <sup>a</sup>
33	32	24	8	4	30 <sup>a</sup>	94	65	29 <sup>a</sup>
41	30	21	3	5	21 <sup>a</sup>	93	70	23 <sup>a</sup>
29	29	31	7	4	33 <sup>a</sup>	94	58	36 <sup>a</sup>
27	26	27	8	12	32 <sup>a</sup>	93	53	40 <sup>a</sup>
23	31	27	10	10	33 <sup>a</sup>	88	54	34 <sup>a</sup>
28	36	26	6	4	29 <sup>a</sup>	91	64	28 <sup>a</sup>
25	31	32	8	5	34 <sup>a</sup>	94	55	39 <sup>a</sup>
32	23	22	11	11	35 <sup>a</sup>	92	55	37 <sup>a</sup>
35	23	23	10	10	34 <sup>a</sup>	92	58	34 <sup>a</sup>
35	23	20	12	9	33 <sup>a</sup>	92	59	33 <sup>a</sup>
32	23	25	10	11	39 <sup>a</sup>	94	55	39 <sup>a</sup>
25	19	22	13	20	39 <sup>a</sup>	92	44	47 <sup>a</sup>
20	23	21	16	20	40 <sup>a</sup>	88	43	45 <sup>a</sup>
30	26	20	13	10	34 <sup>a</sup>	92	57	35 <sup>a</sup>
18	23	29	13	17	42 <sup>a</sup>	90	41	49 <sup>a</sup>

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent					
Enrollees <sup>c</sup>					
Question and site	Strongly agree	Agree	Neither	Disagree	Strongly disagree
<b>Satisfaction with care</b>					
I am satisfied with the care I received.	52	39	5	2	1
Madigan	52	40	5	2	0
San Antonio	55	37	5	2	1
San Diego	53	37	5	3	2
Keesler	49	42	6	3	1
Texoma	50	41	6	3	1
Colorado	49	41	7	3	1
Dover	44	48	6	2	0
<b>Satisfaction with primary care providers</b>					
I received excellent care.	57	33	7	2	0
Madigan	56	35	7	1	0
San Antonio	59	32	7	1	0
San Diego	56	33	7	3	1
Keesler	57	33	7	2	0
Texoma	60	33	5	1	0
Colorado	55	33	9	3	1
Dover	55	39	6	1	1
The doctor's office was conveniently located.	51	41	5	2	1
Madigan	50	44	4	1	1
San Antonio	54	39	5	2	0
San Diego	49	42	6	2	1
Keesler	50	43	5	1	1
Texoma	52	40	4	2	1
Colorado	47	42	6	4	1
Dover	49	40	6	3	2



**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
43	47	6	2	1	9 <sup>a</sup>	91	90	1
43	47	7	2	1	9 <sup>a</sup>	92	90	2 <sup>a</sup>
42	48	5	3	1	13 <sup>a</sup>	92	91	2
47	44	7	1	1	6 <sup>a</sup>	90	91	-1
40	50	7	3	1	9 <sup>a</sup>	91	90	1
42	49	6	2	1	8 <sup>a</sup>	91	91	-1
36	53	7	3	1	13 <sup>a</sup>	90	89	1
45	48	5	2	1	-1	91	92	-1
50	40	7	2	0	7 <sup>a</sup>	91	90	1
49	40	8	2	0	7 <sup>a</sup>	91	89	2
52	38	6	2	1	7 <sup>a</sup>	92	91	1
51	39	8	2	0	5 <sup>a</sup>	89	90	-1
51	42	5	2	0	6 <sup>a</sup>	91	93	-2
54	37	7	2	0	6 <sup>a</sup>	93	91	2
44	43	10	3	0	10 <sup>a</sup>	87	87	0
52	40	7	1	0	3	93	92	1
47	42	7	3	1	5 <sup>a</sup>	92	89	3 <sup>a</sup>
44	45	7	4	1	7 <sup>a</sup>	94	89	5 <sup>a</sup>
47	42	6	4	1	7 <sup>a</sup>	93	88	5 <sup>a</sup>
50	40	7	2	1	-1	91	90	1
48	44	6	2	1	2	93	92	2
50	42	5	2	1	2	93	92	1
39	47	7	5	1	8 <sup>a</sup>	90	86	3 <sup>a</sup>
52	40	4	2	1	-4	89	93	-4 <sup>a</sup>

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent

Question and site	Enrollees <sup>c</sup>				
	Strongly agree	Agree	Neither	Disagree	Strongly disagree
The doctor's hours were convenient. <sup>b</sup>	36	43	12	6	3
Madigan	35	44	12	6	3
San Antonio	36	43	12	6	3
San Diego	37	41	12	7	3
Keesler	37	45	11	4	3
Texoma	36	42	12	6	4
Colorado	34	46	13	5	3
Dover	33	40	16	7	3
I did not have to wait long between making appointment and seeing the doctor.	29	36	18	13	5
Madigan	25	30	22	16	7
San Antonio	30	36	17	12	5
San Diego	34	38	15	9	4
Keesler	29	36	17	15	4
Texoma	31	38	15	12	4
Colorado	28	34	19	14	5
Dover	25	39	19	13	4
The doctor saw me promptly.	32	48	13	6	1
Madigan	29	50	14	6	1
San Antonio	33	46	14	6	1
San Diego	31	49	14	6	0
Keesler	32	48	13	7	1
Texoma	35	49	10	6	1
Colorado	32	50	11	6	1
Dover	28	53	13	5	0

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
33	45	13	7	3	3 <sup>a</sup>	79	78	1
30	46	13	9	3	6 <sup>a</sup>	79	76	3 <sup>a</sup>
33	46	12	6	3	4	79	78	1
35	45	13	6	2	2	78	79	-2
34	45	11	7	3	3	82	80	2
35	41	13	7	3	1	78	77	2
31	46	14	7	3	2	80	77	3
37	45	10	5	3	-4	73	82	-8 <sup>a</sup>
31	41	17	9	3	-1	65	71	-6 <sup>a</sup>
29	43	17	9	2	-4 <sup>a</sup>	55	72	-17 <sup>a</sup>
31	41	17	8	3	-1	66	71	-5 <sup>a</sup>
29	40	17	10	4	5 <sup>a</sup>	72	69	3
37	40	16	5	3	-8 <sup>a</sup>	64	76	-12 <sup>a</sup>
36	41	15	5	3	-5 <sup>a</sup>	69	76	-7 <sup>a</sup>
29	41	18	10	2	-1	62	70	-8 <sup>a</sup>
36	44	12	6	3	-11 <sup>a</sup>	63	79	-16 <sup>a</sup>
26	51	14	8	1	6 <sup>a</sup>	80	77	3 <sup>a</sup>
29	51	12	7	1	0	79	80	-1
25	49	16	9	1	8 <sup>a</sup>	79	75	4 <sup>a</sup>
26	51	14	7	1	5 <sup>a</sup>	80	78	2
25	52	13	9	1	6 <sup>a</sup>	79	77	3
30	48	13	8	1	5 <sup>a</sup>	84	78	6 <sup>a</sup>
22	55	14	9	1	11 <sup>a</sup>	83	76	6 <sup>a</sup>
24	54	14	8	1	4	81	78	3

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent

Question and site	Enrollees <sup>c</sup>				
	Strongly agree	Agree	Neither	Disagree	Strongly disagree
The doctor did a thorough examination.	36	46	12	5	1
Madigan	34	47	15	4	0
San Antonio	38	44	11	5	1
San Diego	35	46	13	5	1
Keesler	34	46	12	6	1
Texoma	39	46	10	4	1
Colorado	33	47	14	6	1
Dover	34	51	12	3	0
The doctor was careful in recording my medical history.	42	44	10	3	1
Madigan	40	45	11	3	0
San Antonio	45	41	10	3	1
San Diego	40	45	10	4	1
Keesler	41	45	10	3	1
Texoma	45	45	7	2	1
Colorado	37	45	13	4	1
Dover	37	52	8	3	0
I was able to choose my own doctor.	20	23	20	26	10
Madigan	14	16	22	35	14
San Antonio	22	21	21	26	11
San Diego	23	29	20	20	8
Keesler	18	21	20	29	12
Texoma	21	27	21	22	9
Colorado	21	29	17	22	10
Dover	23	33	20	21	4

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
31	49	13	5	1	4 <sup>a</sup>	82	81	1
31	49	12	6	2	2	81	81	0
32	51	9	6	1	6 <sup>a</sup>	83	84	-1
33	45	16	4	1	2	81	78	3
30	54	12	4	1	4	80	84	-3
35	49	10	5	1	4	85	84	1
26	51	15	6	1	7 <sup>a</sup>	79	77	2
32	53	12	3	1	2	84	84	0
37	49	10	3	1	5 <sup>a</sup>	86	86	0
37	48	10	4	1	4 <sup>a</sup>	86	85	1
36	50	9	4	1	9 <sup>a</sup>	87	86	1
39	47	11	3	1	2	85	85	0
37	52	7	3	0	3	86	89	-3
41	48	8	3	0	4	90	89	1
31	52	11	4	1	5 <sup>a</sup>	82	84	-2
38	51	9	2	0	-1	89	89	0
43	43	6	6	2	-22 <sup>a</sup>	43	86	-42 <sup>a</sup>
40	43	6	8	3	-26 <sup>a</sup>	29	83	-54 <sup>a</sup>
40	43	7	7	3	-18 <sup>a</sup>	43	82	-40 <sup>a</sup>
46	43	6	4	2	-23 <sup>a</sup>	52	87	-36 <sup>a</sup>
44	43	5	4	3	-26 <sup>a</sup>	39	87	-50 <sup>a</sup>
47	44	5	3	2	-26 <sup>a</sup>	48	91	-43 <sup>a</sup>
39	46	6	6	2	-18 <sup>a</sup>	50	86	-35 <sup>a</sup>
47	43	5	5	1	-24 <sup>a</sup>	56	90	-34 <sup>a</sup>

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent					
<b>Enrollees<sup>c</sup></b>					
<b>Question and site</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neither</b>	<b>Disagree</b>	<b>Strongly disagree</b>
The doctor explained things clearly. <sup>b</sup>	35	45	12	6	2
Madigan	34	47	13	5	2
San Antonio	37	44	12	6	2
San Diego	35	44	12	7	2
Keesler	35	45	12	6	2
Texoma	39	42	11	5	2
Colorado	32	47	13	7	2
Dover	35	49	10	4	2
The doctor really listened. <sup>b</sup>	40	44	10	4	1
Madigan	39	46	10	4	1
San Antonio	42	44	9	4	1
San Diego	40	44	9	5	2
Keesler	39	46	9	4	2
Texoma	44	42	9	4	2
Colorado	36	44	12	6	2
Dover	38	48	9	4	2
The doctor spent enough time with me. <sup>b</sup>	37	42	12	7	2
Madigan	34	43	15	6	2
San Antonio	39	43	11	6	1
San Diego	37	41	12	7	2
Keesler	36	44	11	7	2
Texoma	42	41	11	5	2
Colorado	32	40	16	10	3
Dover	36	45	11	5	2

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
35	46	12	6	2	0	80	81	-1
33	47	12	6	2	0	80	80	0
35	47	10	7	2	2	81	82	-1
35	46	13	4	2	0	79	81	-2
37	45	11	6	1	-3	80	83	-3
38	44	11	6	2	2	82	81	1
33	46	15	6	1	-1	78	78	0
36	47	10	5	1	-1	84	83	0
40	44	10	5	1	0	85	84	1
37	45	11	5	2	2	85	82	2
42	43	8	6	1	0	86	85	1
42	43	10	4	1	-2	84	85	-1
43	44	9	3	1	-4	85	87	-2
40	43	11	5	2	4	86	82	3
36	46	11	5	1	0	80	82	-2
41	44	9	4	1	-3	86	86	0
34	41	15	8	2	3 <sup>a</sup>	79	75	5 <sup>a</sup>
31	43	15	8	3	2	77	74	2
35	40	15	7	2	4 <sup>a</sup>	82	75	7 <sup>a</sup>
34	39	16	9	2	3	78	73	5 <sup>a</sup>
39	42	11	7	2	-2	81	81	0
36	42	12	7	3	6 <sup>a</sup>	83	79	4 <sup>a</sup>
29	43	16	9	2	3	72	73	-1
36	45	11	5	2	0	82	81	0

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent					
<b>Enrollees<sup>c</sup></b>					
<b>Question and site</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neither</b>	<b>Disagree</b>	<b>Strongly disagree</b>
The doctor was skillful and competent. <sup>b</sup>	48	38	10	3	2
Madigan	48	39	9	3	2
San Antonio	49	37	9	3	2
San Diego	48	38	9	3	2
Keesler	45	40	10	3	2
Texoma	50	36	9	3	1
Colorado	44	39	13	3	2
Dover	43	45	7	3	1
<b>Satisfaction with specialists</b>					
I am satisfied with my ability to choose specialists.	49	43	5	3	1
Madigan	52	41	5	2	0
San Antonio	52	41	4	2	0
San Diego	50	41	5	3	1
Keesler	45	44	5	4	2
Texoma	43	46	8	3	1
Colorado	44	46	7	3	1
Dover	40	47	8	4	1
I didn't wait too long for my appointment.	33	45	11	9	1
Madigan	30	45	12	11	2
San Antonio	34	45	11	9	1
San Diego	35	43	12	8	2
Keesler	33	47	10	9	1
Texoma	30	48	10	9	3
Colorado	29	48	11	10	1
Dover	31	46	11	9	2



**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
48	38	9	3	2	-1	86	87	-1
47	38	10	3	2	1	87	85	2
49	38	8	3	2	0	86	86	0
50	38	8	3	1	-2	86	88	-2
51	40	7	3	0	-6 <sup>a</sup>	85	90	-5 <sup>a</sup>
45	40	9	3	3	5 <sup>a</sup>	86	85	1
46	40	10	2	1	-2	83	86	-3
51	38	7	3	1	-6 <sup>a</sup>	89	88	1
43	49	5	2	1	6 <sup>a</sup>	92	92	0
43	47	6	3	1	8 <sup>a</sup>	93	90	3 <sup>a</sup>
47	47	4	2	1	5 <sup>a</sup>	93	93	0
41	50	6	2	1	9 <sup>a</sup>	91	91	0
42	52	4	2	0	3	89	94	-5 <sup>a</sup>
43	50	5	2	0	0	88	92	-4 <sup>a</sup>
40	53	5	1	1	4	90	93	-3 <sup>a</sup>
46	48	4	2	0	-5	87	93	-6 <sup>a</sup>
29	51	11	8	1	4 <sup>a</sup>	78	80	-2 <sup>a</sup>
27	49	12	9	2	2	75	77	1
34	48	11	7	1	1	79	82	-7
26	52	12	9	1	9 <sup>a</sup>	78	78	0
29	54	10	7	1	5	80	82	-2
32	53	8	6	1	-3	77	85	-8 <sup>a</sup>
27	53	10	9	1	2	77	80	-2
33	53	6	7	1	-2	78	86	-9 <sup>a</sup>

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent

Question and site	Enrollees <sup>c</sup>				
	Strongly agree	Agree	Neither	Disagree	Strongly disagree
The doctor was skillful and competent.	49	42	7	1	1
Madigan	50	43	5	1	0
San Antonio	51	41	7	1	1
San Diego	52	38	7	2	1
Keesler	48	43	7	2	0
Texoma	44	45	9	1	1
Colorado	45	45	8	2	1
Dover	44	46	9	0	1
The doctor told me all I wanted to know about my treatment. <sup>b</sup>	37	44	11	7	2
Madigan	36	45	12	6	2
San Antonio	39	43	10	7	1
San Diego	38	40	11	8	3
Keesler	35	46	9	7	2
Texoma	33	42	12	10	3
Colorado	33	46	13	6	2
Dover	30	48	12	9	2
The doctor answered all my questions. <sup>b</sup>	39	45	9	5	1
Madigan	38	46	10	4	2
San Antonio	42	44	8	5	1
San Diego	41	42	10	6	2
Keesler	36	47	9	6	1
Texoma	34	45	12	7	2
Colorado	37	46	11	4	2
Dover	31	49	11	8	1

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

Nonenrollees <sup>c</sup>					Difference between enrollees and nonenrollees in percentage strongly agreeing <sup>d</sup>	Enrollees Strongly agree or Agree	Nonenrollees Strongly agree or Agree	Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing <sup>d</sup>
Strongly agree	Agree	Neither	Disagree	Strongly disagree				
44	47	7	1	0	5 <sup>a</sup>	91	91	0
43	48	8	2	0	7 <sup>a</sup>	93	91	2 <sup>a</sup>
49	43	6	1	1	2	92	92	0
43	47	8	1	0	9 <sup>a</sup>	90	90	0
43	51	5	0	0	5	91	94	-3 <sup>a</sup>
43	50	6	1	0	1	89	93	-4 <sup>a</sup>
42	50	6	1	1	3	90	92	-2
46	47	5	1	0	-3	90	93	-3
33	45	12	7	2	3 <sup>a</sup>	81	79	2 <sup>a</sup>
30	48	10	10	2	6 <sup>a</sup>	81	78	3
35	46	10	7	2	4	82	81	1
34	44	13	7	3	4	78	78	0
34	46	11	7	2	1	81	80	1
31	48	12	7	2	2	75	80	-5 <sup>a</sup>
33	43	13	7	3	0	79	76	3
38	41	11	9	1	-8 <sup>a</sup>	78	79	-1
36	47	10	6	2	4 <sup>a</sup>	84	82	2 <sup>a</sup>
33	49	10	6	2	6 <sup>a</sup>	85	82	3
37	47	9	6	1	4 <sup>a</sup>	86	84	2
36	46	10	6	2	5	83	82	1
36	46	9	6	2	0	84	82	1
33	49	9	6	2	1	80	82	-3
35	45	12	7	1	1	83	80	3
40	43	9	7	1	-9 <sup>a</sup>	80	83	-3

**Appendix II**  
**Measures of Access to Care And Satisfaction**  
**With Care**

Numbers in percent

**Enrollees<sup>c</sup>**

<b>Question and site</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neither</b>	<b>Disagree</b>	<b>Strongly disagree</b>
The doctors communicated with one another. <sup>b</sup>	35	36	21	6	2
Madigan	34	39	21	4	2
San Antonio	37	36	20	6	2
San Diego	37	35	20	6	3
Keesler	32	36	22	7	3
Texoma	32	37	22	6	2
Colorado	30	33	29	6	2
Dover	29	38	21	10	1

**Appendix II  
Measures of Access to Care And Satisfaction  
With Care**

<b>Nonenrollees<sup>c</sup></b>					<b>Difference between enrollees and nonenrollees in percentage strongly agreeing<sup>d</sup></b>	<b>Enrollees Strongly agree or Agree</b>	<b>Nonenrollees Strongly agree or Agree</b>	<b>Difference between enrollees and nonenrollees in percentage strongly agreeing or agreeing<sup>d</sup></b>
<b>Strongly agree</b>	<b>Agree</b>	<b>Neither</b>	<b>Disagree</b>	<b>Strongly disagree</b>				
31	37	21	7	3	70	68	2 <sup>a</sup>	
31	42	19	6	2	72	73	0	
33	36	21	8	3	73	69	4	
30	36	25	7	3	71	65	6 <sup>a</sup>	
32	36	19	10	3	68	68	0	
33	38	18	8	3	69	71	-2	
30	36	22	9	3	62	66	-4	
36	38	18	7	1	67	74	-7 <sup>a</sup>	

Note: Bold indicates that the demonstration site percentage is significantly different from the overall percentage.

<sup>a</sup> Significant at .05 level.

<sup>b</sup> Question reversed so that a response of strongly agree is always a positive response. The exact wording of all questions in this table can be found in appendix I, table I0.

<sup>c</sup> Row percentages may not equal 100 due to the effects of rounding.

<sup>d</sup> Differences are based on numbers before rounding.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

---

# Models of Utilization

---

In this appendix, we describe the DOD and Medicare data that we used to analyze utilization. We also summarize the models that we developed to risk adjust acute inpatient care and outpatient care and give results both demonstration wide and by site.

---

## Data

For these analyses, we defined the Senior Prime enrollee population as those who had enrolled as of December 31, 1999. We used DOD data for 1999 as the source of our counts of hospital stays and outpatient visits to both MTF and civilian network providers.<sup>1</sup> We limited our analysis to hospital stays of 1 day or more to eliminate inconsistencies between Medicare and TRICARE in the use of same-day discharges. Our counts of outpatient utilization include (1) visits and ambulatory surgeries in MTF outpatient clinics and (2) visits to network providers—doctors' offices, ambulatory surgeries, hospital emergency rooms, and hospital outpatient clinics.

To identify our comparison group of fee-for-service beneficiaries in the demonstration areas, we used CMS<sup>2</sup> 20-percent Medicare sample, and extracted those beneficiaries residing in the subvention areas. We excluded anyone who had been in a Medicare+Choice plan for any part of the year. To make the comparison fair, we also excluded certain groups not represented or only minimally represented in Senior Prime: persons with end-stage renal disease (ESRD), Medicaid beneficiaries, persons with disabilities (under age 65), and people who lost Medicare part A or part B entitlement for reasons other than death. We derived our counts of Medicare fee-for-service utilization for the sample from Medicare claims files. For those who were in either Senior Prime or fee-for-service for less than a full year, we estimated full-year utilization counts.

We identified a separate comparison group of persons eligible for the demonstration who did not enroll. We collected both Medicare fee-for-service claims and DOD encounter data for the sample of enrollees and nonenrollees who answered both our first and second surveys.

---

<sup>1</sup>See *Medicare Subvention Demonstration CY 1999 Reconciliation Processing*, March 2001, SRA International, Inc.

<sup>2</sup>Formerly the Health Care Financing Administration.

## Models of Risk-Adjusted Utilization

In order to compare the utilization of Senior Prime enrollees to Medicare fee-for-service beneficiaries in the demonstration areas, we developed several models of fee-for-service utilization (for hospitalization, length of stay, and outpatient care). We then applied each model to Senior Prime enrollees—taking account of their demographic characteristics and health status—to predict what their utilization would have been in Medicare fee-for-service. The ratio of their predicted utilization to their actual Senior Prime utilization gives a measure of the amount by which Senior Prime utilization exceeded or fell short of fee-for-service utilization for people with the enrollees’ characteristics. Table 13 compares the characteristics of Senior Prime enrollees with Medicare fee-for-service beneficiaries in the demonstration area.

**Table 13: Comparison of Senior Prime Enrollees With Medicare Fee-for-Service Beneficiaries in the Demonstration Areas in 1999**

Characteristic	Senior Prime enrollees	Fee-for-service beneficiaries <sup>a</sup>
<b>Size</b>		
Sample size	30,216 <sup>b</sup>	84,523
Estimated population size	30,216	422,615
<b>Actual utilization (annualized)</b>		
Acute hospitalization rate	0.37	0.39
Average hospital stay (in days)	4.75	5.60
Outpatient physician visits	16.71	10.47
<b>Predicted utilization (annualized)</b>		
Acute hospitalization rate	0.26	<sup>c</sup>
Average hospital stay (in days)	4.96	<sup>c</sup>
Outpatient physician visits	10.59	<sup>c</sup>
<b>Ratio of actual to predicted utilization</b>		
Acute hospitalization rate	1.41	<sup>c</sup>
Average hospital stay (in days)	0.96	<sup>c</sup>
Outpatient physician visits	1.58	<sup>c</sup>

**Appendix III  
Models of Utilization**

*(Continued From Previous Page)*

<b>Characteristic</b>	<b>Senior Prime enrollees</b>	<b>Fee-for-service beneficiaries<sup>a</sup></b>
<b>Health status</b>		
Average HCC score <sup>d</sup>	0.94	1.19
Number of unique diagnoses per individual	15.34	16.13
Proportion deceased during 1999	0.02	0.05
<b>Demographics</b>		
Average number of months in program (Senior Prime or fee-for-service) in 1999	10.11	11.71
Average age	72.36	76.43
Proportion male	0.53	0.43

<sup>a</sup>We used the Medicare 20-percent sample of fee-for-service beneficiaries residing in the official demonstration areas. We excluded Medicare+Choice members, military retirees, persons with ESRD, Medicaid beneficiaries, persons with disabilities (under age 65), and people who lost Medicare part A or part B entitlement for reasons other than death.

<sup>b</sup>CMS identified 30,228 unique enrollees when calculating the final payment to DOD. Our number differs slightly because we used an earlier data file prepared by DOD's contractor.

<sup>c</sup>Our model of fee-for-service utilization has the property that the average predicted utilization equals the average actual utilization.

<sup>d</sup>A ratio derived from the Hierarchical Coexisting Conditions (HCC) concurrent model, which reflects the costliness of each person, based on clinical diagnoses and demographic traits, relative to the average Medicare fee-for-service beneficiary (who would have a score of 1.0). A lower score indicates lower-than-average costs.

Source: GAO analysis of DOD encounter and claims data and Medicare 20-percent fee-for-service sample.

## Acute Hospitalization Model

Acute hospitalization is a relatively rare event: only one out of five Medicare beneficiaries (in the counterpart 20-percent fee-for-service sample) is hospitalized during the year, and about half of those who are hospitalized are admitted again during the same year. We therefore used Poisson regression, which is designed to predict the number of occurrences (counts) of a rare event during a fixed time frame, to estimate the number of acute hospitalizations. Positive coefficients are interpreted as reflecting factors that increase the hospitalization rate while negative coefficients indicate a decrease in that rate. The strongest factor affecting the number of hospitalizations is the HCC score, which measures how ill and how costly a person is. Its effect is not linear—both squared and cubed terms enter the model. (See table 14.)



**Table 14: Estimated Effects of Selected Factors on Acute Hospitalization of Medicare Fee-for-Service Beneficiaries**

Characteristic	Coefficient	95% confidence interval	
HCC	1.081	1.067	1.095
HCC <sup>2</sup>	-0.090	-0.091	-0.088
HCC <sup>3</sup>	0.002	0.002	0.002
Age (continuous)	0.017	0.016	0.019
Gender – male	-0.047	-0.069	-0.025
Number of unique diagnoses	0.008	0.007	0.009

Note: All coefficients are significant at the .001 level.

Source: GAO analysis of Medicare 20-percent fee-for-service sample.

## Outpatient Physician Visit Model

Unlike hospitalizations, outpatient physician visits are relatively common events for most Medicare beneficiaries. Physician visits have a skewed distribution, with a small number of people having a very large number of visits. We categorized the number of visits into five groups and used an ordered logit model, which predicts the odds of each person belonging to each category, to estimate the number of outpatient visits. Positive coefficients indicate higher odds of belonging to the highest utilization category while negative coefficients indicate higher odds of belonging to the lowest utilization category. Both the HCC score and ICD-9 diagnostic categories<sup>3</sup> are major factors in the model. (See table 15.)

<sup>3</sup>Diagnostic groupings are based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM).

**Table 15: Estimated Effects of Certain Factors on Medicare Fee-for-Service Outpatient Utilization**

Characteristic	Coefficient	95% confidence interval	
HCC	0.471	0.445	0.497
HCC <sup>2</sup>	-0.062	-0.067	-0.057
HCC <sup>3</sup>	0.002	0.002	0.002
Male	0.639	0.613	0.665
Circulatory disease	0.643	0.614	0.672
Respiratory disease	0.572	0.542	0.601
Digestive disease	0.504	0.471	0.537
Infection	0.398	0.355	0.441
Neoplasm	0.842	0.811	0.874
Endocrine, nutritional, and metabolic diseases and immunity disorders	0.421	0.394	0.449
Diseases of the nervous system and sense organs	0.875	0.848	0.902
Diseases of the musculoskeletal system and connective tissue	0.859	0.830	0.888
Injury and poisoning	0.528	0.494	0.562
Supplementary classification (V01-V82)	0.805	0.777	0.833

Note: All coefficients are significant at the .001 level.

Source: GAO analysis of Medicare 20-percent fee-for-service sample.

## Profile of Sites' Utilization and Risk Factors

Using the same approach and models, we examined utilization at each site. (See table 16.) Adjusting for risk, both hospital stays and outpatient visits were substantially greater in Senior Prime than in fee-for-service at all sites. However, the differences in length of stay were small, with lengths of stay generally higher in fee-for-service.

---

**Appendix III**  
**Models of Utilization**

---

**Table 16: Site Profiles of Senior Prime and Medicare Fee-for-Service Utilization in 1999**

	Acute hospitalization		Actual/ predicted ratio
	Actual	Predicted	
<b>Senior Prime enrollees (n=30,216)</b>			
Madigan	0.32	0.27	1.19
San Antonio	0.40	0.26	1.54
San Diego	0.43	0.28	1.54
Keesler	0.37	0.27	1.37
Texoma	0.37	0.27	1.37
Colorado	0.26	0.21	1.24
Dover	0.28	0.22	1.27
<b>Fee-for-service sample<sup>a</sup> (n=84,523)</b>			
Madigan	0.33	0.35	0.94
San Antonio	0.43	0.43	1.00
San Diego	0.34	0.41	0.83
Keesler	0.51	0.41	1.24
Texoma	0.47	0.38	1.24
Colorado	0.38	0.37	1.03
Dover	0.42	0.42	1.00

**Appendix III  
Models of Utilization**

Outpatient visits			Average hospital stay			Average HCC Score	Proportion deceased during year	Average number of unique diagnoses
Actual	Predicted	Actual/predicted ratio	Actual	Predicted	Actual/predicted ratio			
15.87	10.23	1.55	4.78	5.19	0.92	0.97	0.03	15.07
18.56	11.55	1.61	4.76	4.86	0.98	0.95	0.03	16.49
15.40	9.79	1.57	4.40	5.00	0.88	1.00	0.03	14.07
15.45	10.42	1.48	5.26	5.04	1.04	0.97	0.03	14.76
16.22	10.12	1.60	5.07	5.00	1.01	0.98	0.02	15.84
15.24	9.53	1.60	4.25	4.89	0.87	0.80	0.01	13.91
13.76	9.47	1.45	5.30	4.84	1.10	0.84	0.02	13.92
10.46	10.04	1.04	4.97	5.48	0.91	1.07	0.05	15.49
10.19	10.43	0.98	6.34	5.85	1.08	1.27	0.06	15.90
10.87	10.56	1.03	5.37	5.74	0.94	1.19	0.05	16.70
10.13	10.56	0.96	5.98	5.42	1.10	1.22	0.05	16.80
10.31	10.70	0.96	5.60	5.43	1.03	1.20	0.06	16.09
9.40	10.02	0.94	5.30	5.56	0.95	1.18	0.04	15.30
11.46	11.39	1.01	5.78	5.63	1.03	1.30	0.05	17.33

<sup>a</sup>Represents about 422,615 Medicare fee-for-service beneficiaries in the demonstration area. Excludes members of Medicare+Choice plans at any time during 1999, military retirees, persons with ESRD, Medicaid beneficiaries, persons with disabilities (under age 65), and those who lost Medicare part A or part B entitlement for reasons other than death.

Source: GAO analysis of DOD encounter and claims data and Medicare 20-percent fee-for-service sample.

# Crowd-Out of Nonenrollees

“Crowd-outs” were nonenrollees who had used MTF care before the demonstration but were unable to do so after the demonstration started. In this report, we define crowd-outs as those 4,594 nonenrollees (6 percent of all nonenrollees) who had, according to their survey answers, received all or most of their care at an MTF before the demonstration but received none or only some of their care at an MTF after the demonstration started.<sup>1</sup>

However, as table 17 shows, crowd-out can be defined either more narrowly or more broadly. By the narrowest definition of crowd-out—those nonenrollees who received all of their care at an MTF before the demonstration but none of their care at an MTF after the demonstration started—only 1,498 persons (2 percent of all nonenrollees) were crowded out. However, if we count all those who received less care than before, 12,133 (16 percent of nonenrollees) nonenrollees were crowded out.

**Table 17: Change in MTF Utilization Among Nonenrollees**

		MTF use during demonstration				Total
		None	Some	Most	All	
MTF use before demonstration	None	51,261	2,413	167	693	54,534
	Some	<b>7,113</b>	4,424	403	313	12,253
	Most	<b>1,064</b>	<b>1,231</b>	699	222	3,216
	All	<b>1,498</b>	<b>801</b>	<b>426</b>	1,269	3,994
	Total	60,936	8,869	1,695	2,497	73,997

Note: Outlined box contains nonenrollees who were crowded out. Italicized number refers to narrowest definition of crowd-out. Shaded area represents broadest definition of crowd-out.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

## Change in Satisfaction With Access to Military Care Among Crowd-Outs

As expected, many of the 4,594 nonenrollees whom we characterized as crowd-outs changed their attitudes toward military care during the demonstration. As shown in table 18, they reported a decline in access to MTF care as well as lower satisfaction with care in MTFs. However, they did not report significant changes in satisfaction on issues not explicitly connected to MTFs.

<sup>1</sup>A small number of nonenrollees (428) answered this question in only one of the two surveys. In these cases, we used DOD and Medicare fee-for-service administrative data to impute the missing answer.

**Table 18: Change in Self-Reported Access to MTF Care and Satisfaction With MTF Care Among Crowd-Outs**

Numbers in percent

	Improved	Declined	Net change
<b>Satisfaction with access to military care</b>			
Able to get care at military facilities when I needed it.	10	53	-43 <sup>a</sup>
Difficult to schedule appointments at military facilities.	14	61	-47 <sup>a</sup>
I prefer to get my care at military facilities.	10	37	-27 <sup>a</sup>
<b>Satisfaction with military care</b>			
Satisfied with care at military facilities.	12	42	-30 <sup>a</sup>
Doctors and staff did not treat me with respect at military facilities.	14	40	-26 <sup>a</sup>
I would not recommend military care.	17	37	-20 <sup>a</sup>

<sup>a</sup>Significant at .05 level.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

## Trend in Utilization Among Crowd-Outs

DOD's MTF encounter data and network claims data confirmed the self-reports of crowd-outs. The crowd-outs' MTF outpatient care dropped dramatically during the demonstration and the increase in fee-for-service (FFS) outpatient visits was not sufficient to offset this decline. However, as shown in table 19, there was no decline in acute hospitalizations.

**Table 19: Changes in Utilization of Nonenrollees Who Were Crowded Out of MTFs**

Type of utilization	Before demonstration	During demonstration
MTF – Acute hospitalization <sup>a</sup>	0.14	0.14
MTF – Outpatient physician visits <sup>b</sup>	7.44	0.26
FFS – Acute hospitalization <sup>a</sup>	0.10	0.27
FFS – Outpatient physician visits <sup>b</sup>	4.30	6.93

<sup>a</sup>Number of hospital stays per person.

<sup>b</sup>Number of outpatient physician visits per person.

Sources: GAO Survey of Medicare-Eligible Military Retirees and Family Members and GAO analysis of DOD claims and encounter data and Medicare 20-percent fee-for-service sample.

# Health Outcomes Analysis

In this appendix, we describe our methods for analyzing the effects of the subvention demonstration on three indicators of health outcomes—mortality, health status, and preventable hospitalization.

## Mortality Analysis

Using our first survey, we calculated the mortality rate from the date of the survey response to January 31, 2001. The source of death information was the Medicare Enrollment Database. We excluded Medicare+Choice members because we could not obtain their diagnoses, which we needed to calculate risk factors.

The unadjusted 2-year mortality rate was 0.06 for Senior Prime enrollees and 0.08 for nonenrollees.<sup>1</sup> Although the difference is significant, it disappears when we adjust for individual risk. The adjusted 2-year mortality rate is 0.06 for both enrollees and nonenrollees. (See table 20.)

**Table 20: Profile of 2-Year Mortality Rate**

	Actual mortality rate	Adjusted mortality rate
Senior Prime enrollees	0.06	0.06
Nonenrollees	0.08	0.06

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members and the Medicare Enrollment Database

We used the Cox proportional hazard model to calculate individuals' risk-adjusted mortality rate. A hazard ratio greater than 1 indicates a higher risk of death while a hazard ratio less than 1 indicates a lower risk.<sup>2</sup> For example, a hazard rate for males of 1.5 means that males are 50 percent more likely to die than females, holding other factors constant. Similarly, a hazard rate of 0.5 for retirees with HCC scores in the lowest quartile means that they are 50 percent less likely to die than those with HCC scores in the middle two quartiles, holding other factors constant. Enrollment in Senior

<sup>1</sup>Using either the Kaplan-Meier method or the life-table method. See J. D. Kalbfleisch and R. L. Prentice, *The Statistical Analysis of Failure Time Data*, John Wiley & Sons, 1980, pp. 10–19.

<sup>2</sup>See J. D. Kalbfleisch and R.L. Prentice, *The Statistical Analysis of Failure Time Data*, John Wiley & Sons, 1980, pp.70-118. For the computational method, see *STATA Statistical Software, Release 5*, Estimate Cox proportional hazards model, pp. 252–271, Reference P-Z.



Prime did not have a significant effect on mortality. (See table 21 for a description of the factors that entered our model and of their estimated effects.)

<b>Table 21: Factors Affecting 2-Year Mortality Rate</b>				
<b>Characteristic</b>	<b>Hazard ratio</b>	<b>95% confidence interval</b>		<b>Significance level <sup>a</sup></b>
<b>Demographics</b>				
Age: 65 – 69	0.604	0.481	0.758	0.000 <sup>d</sup>
Age: 70 – 74	0.618	0.489	0.781	0.000 <sup>d</sup>
Age: 75 – 79	0.816	0.654	1.017	0.070
Age: 85+	1.426	1.072	1.898	0.015
Male	1.496	1.288	1.739	0.000 <sup>d</sup>
Marital status: Separated or divorced	1.351	1.004	1.817	0.047
<b>Health status at time of responding to first survey</b>				
SF-12 <sup>b</sup> physical score: 55+ (highest quartile)	0.701	0.515	0.954	0.024
Self-evaluated health status: very good	0.637	0.499	0.814	0.000 <sup>d</sup>
Self-evaluated health status: poor	2.106	1.747	2.540	0.000 <sup>d</sup>
<b>Prior utilization during the past 12 months</b>				
Number of outpatient visits: none	1.599	1.230	2.077	0.000 <sup>d</sup>
Number of hospitalizations: 5 - 9	1.663	1.145	2.413	0.007

(Continued From Previous Page)

Characteristic	Hazard ratio	95% confidence interval		Significance level <sup>a</sup>
<b>Coexisting clinical conditions</b>				
HCC score in the lowest quartile: 0.075 or lower	0.489	0.331	0.722	0.000 <sup>d</sup>
HCC score in the highest quartile: 1.31 or higher	5.425	4.494	6.547	0.000 <sup>d</sup>
Current smoker	1.625	1.329	1.986	0.000 <sup>d</sup>
Assistance required with activities of daily living	2.909	2.409	3.512	0.000 <sup>d</sup>
Neoplasm <sup>c</sup>	1.258	1.083	1.461	0.003
Mental disease <sup>c</sup>	1.395	1.124	1.733	0.003
<b>Enrollment status at time of first survey</b>				
Senior Prime enrollee	0.977	0.842	1.134	0.762

<sup>a</sup>The significance level applies to the z-test.

<sup>b</sup>A standard scale for measuring self-reported health status.

<sup>c</sup>ICD-9 classification.

<sup>d</sup>Significance level is less than 0.0005.

Sources: GAO Survey of Medicare-Eligible Military Retirees and Family Members and the Medicare Enrollment Database and GAO analysis of DOD claims and encounter data and Medicare 20-percent fee-for-service sample.

## Health Status Analysis

We used the SF-12, a standard scale<sup>3</sup> for measuring self-reported physical and mental health status. At the beginning of the demonstration, the enrollees had slightly higher SF-12 scores than nonenrollees (that is, they reported that they were healthier), but the difference between enrollees and nonenrollees was very small and not significant. This was also true when we repeated the scale at the end of the demonstration. (See table 22.)

<sup>3</sup>See Ware, J. E., Kosinski, M., and Keller, S. D., *SF-12: How to Score the SF-12 Physical and Mental Health Summary Scales*, The Health Institute, New England Medical Center, Second Edition, pp. 12-13.

**Table 22: Profile of SF-12 Scores**

	Average SF-12 score in first survey	Average SF-12 score in second survey	Actual change of SF-12 score	Adjusted change of SF-12 score <sup>a</sup>
Senior Prime enrollees	42.73	43.05	0.32	0.18
Nonenrollees	42.10	42.23	0.13	0.19

Note: The difference in the average SF-12 score between Senior Prime enrollees and nonenrollees was not significant ( $p > 0.05$ ) in either the first or second survey. The change in SF-12 score did not differ between enrollees and nonenrollees.

<sup>a</sup>A linear regression was used to adjust for demographic and other factors.

Source: GAO Survey of Medicare-Eligible Military Retirees and Family Members.

The change in the score between the two times was also insignificant. We examined both the unadjusted score and the adjusted score, using a linear regression model (see table 23), but neither was significant, and enrollment in Senior Prime was not a significant factor in the model.

**Table 23: Factors Affecting Change in SF-12 Score**

Characteristic	Coefficient	95% confidence interval		Significance level <sup>a</sup>
<b>Demographics</b>				
Age > 75	-1.836	-2.322	-1.350	0.000 <sup>b</sup>
Female	-0.953	-1.441	-0.465	0.000 <sup>b</sup>
<b>Health status at time of responding to first survey</b>				
Self-evaluated general health status: Excellent or very good	1.694	1.083	2.307	0.000 <sup>b</sup>
Self-evaluated general health status: Fair or poor	-1.548	-2.288	-0.807	0.000 <sup>b</sup>
SF-12 physical health score	-0.369	-0.398	-0.339	0.000 <sup>b</sup>
SF-12 mental health score	0.151	0.119	0.183	0.000 <sup>b</sup>
<b>Health conditions</b>				
HCC score	-0.443	-0.649	-0.237	0.000 <sup>b</sup>
Change in number of chronic conditions	-1.421	-1.764	-1.078	0.000 <sup>b</sup>
History of heart disease	-1.170	-1.745	-0.594	0.000 <sup>b</sup>

**Appendix V**  
**Health Outcomes Analysis**

*(Continued From Previous Page)*

<b>Characteristic</b>	<b>Coefficient</b>	<b>95% confidence interval</b>		<b>Significance level<sup>a</sup></b>
History of diabetes	-0.995	-1.649	-0.342	0.003
History of lung disease (COPD)	-2.032	-2.913	-1.152	0.000 <sup>b</sup>
Overweight	-0.741	-1.334	-0.149	0.014
Current smoker	-0.443	-0.938	0.053	0.080
<b>Others</b>				
Two or more outpatient visits during the past 12 months	-0.721	-1.280	-0.161	0.012
Would recommend military health care at time of first survey	0.822	0.168	1.474	0.014
Senior Prime enrollee	0.209	-0.186	0.605	0.300

<sup>a</sup>The significance level applies to the t-test.

<sup>b</sup>Significance level is less than 0.0005.

Sources: GAO survey of Medicare-Eligible Retirees and Family Members and GAO analysis of DOD claims and encounter data and Medicare 20-percent fee-for-service sample.

---

## Preventable Hospitalizations

We analyzed preventable hospitalizations—hospital stays that can often be avoided by appropriate outpatient care—using several alternate models.<sup>4</sup> Specifically, we estimated the effect of Senior Prime enrollment on the likelihood of having a preventable hospitalization, adjusting for age, sex, and health conditions. Measures of a person’s health conditions included the HCC score, an index of comorbidities,<sup>5</sup> and the number of recent hospitalizations. In addition, we controlled for the number of outpatient clinic and physician visits, since outpatient care is considered a means of preventing hospitalization.

We analyzed data on Senior Prime enrollees and on Medicare fee-for-service beneficiaries who were not military retirees and who lived in the demonstration areas. Within this combined group of enrollees and fee-for-service beneficiaries, we modeled preventable hospitalizations for two populations: (1) those who had been hospitalized in 1999 and (2) those who had at least one chronic disease<sup>6</sup> in 1999—whether they had been hospitalized or not.

Our analysis of the demonstration’s effect on preventable hospitalizations yielded inconsistent results. For the first population (hospitalizations), we found that Senior Prime enrollment was associated with more preventable hospitalizations. By contrast, for the second population (the chronically ill), Senior Prime enrollment was associated with fewer preventable hospitalizations.

---

<sup>4</sup>Our models were formulated as logistic regressions.

<sup>5</sup>This index, known as the Deyo-Charlson Comorbidity Index, enables patients to be classified from less ill to more ill. See Deyo, R.A., Cherkin, D.C., & Ciol, M.A., “Adapting a Clinical Comorbidity Index for Use with ICD-9-CM Administrative Databases,” *Journal of Clinical Epidemiology*, 1992, 45:6, pp. 613-619.

<sup>6</sup>Chronic diseases that may result in preventable hospitalizations include angina, chronic obstructive pulmonary disease, hypertension, congestive heart failure, diabetes, and urinary tract infection.

# Comments From the Department of Defense



HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

OCT 4 2001

Mr. William J. Scanlon  
Director, Health Care Issues  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Scanlon:

This is the Department of Defense response to the General Accounting Office (GAO) draft report GAO-01-1106, "MEDICARE SUBVENTION DEMONSTRATION: Greater Access Improved Enrollee Satisfaction but Raised DoD Costs," dated September 10, 2001 (GAO Code 290035). Overall, the Department of Defense finds the report to be accurate and thorough. It adequately describes the improved satisfaction rates due to increased access and the complexities the Department has encountered in implementing, administering, and managing the Medicare Subvention Demonstration.

The draft report does not address utilization rates of comparative Medicare+ Choice Plans with TRICARE Senior Prime. Additionally, data used in establishing utilization should include the entire three years of demonstration experience rather than two years. Finally, access and satisfaction for Prime enrollees were also affected. The enclosed comments elaborate on these issues and a detailed discussion will be provided in the Department of Defense's final report to Congress.

The Department appreciates the opportunity to comment on the draft report and we have prepared the most thorough and comprehensive response possible given the brief time allotted for review. I trust these comments will strengthen the GAO final report. Please feel free to address any questions or concerns regarding this matter to my project officers, Dr. Richard Guerin, Director, Health Program Analysis and Evaluation (functional) at (703) 681-3636, or Mr. Gunther J. Zimmerman, GAO/IG Liaison at (703) 681-7889.

Sincerely,

A handwritten signature in black ink, appearing to read "Jarrett Clinton".

J. Jarrett Clinton, MD, MPH  
Acting Assistant Secretary

Enclosure:  
As stated

**GAO DRAFT REPORT – DATED SEPTEMBER 10, 2001  
(GAO CODE 290035)**

**“MEDICARE SUBVENTION DEMONSTRATION: Greater Access Improved Enrollee  
Satisfaction but Raised DOD Costs”**

**DEPARTMENT OF DEFENSE COMMENTS**

The draft report contains no recommendations, however, the Department would like to offer several comments and observations regarding the report and the financial impact experienced by the Department of Defense in supporting the Medicare Subvention Demonstration.

Overall Comments:

- The report’s facts are fundamentally correct, and the Department has no major objection with the conclusions. This report supports the findings in the GAO Draft Report “Medicare Subvention Demonstration, DoD Costs and Medicare Spending.” However, as stated in our response to that document, the data to support both of these reports was taken from a short period of time during the start-up phase of the subvention demonstration. Demonstration utilization rates were compared to Medicare fee-for-service rates in the same community. This comparison can be misleading due to the enriched benefit offered to DoD enrollees. For example, demonstration enrollees were scheduled for an initial intake visit, which is not a covered benefit under Medicare fee-for-service. Additionally, no comparison is offered to utilization rates of Medicare+ Choice plans offering a similar benefit that were also in the initial start-up phase.
- The report concluded that the Department of Defense met the goal of increasing access and improving enrollee satisfaction. These are conditions you would hope to find in the initial phase of a new plan. However, it is also realistic to expect utilization to be higher during the initial phase of enrollment as the plan learns to manage this challenging population. Since new enrollee thresholds were added in 2000 and 2001, the only accurate way to develop utilization forecasts would be to extract data for only those enrolled in the demonstration the full three years of the demonstration (1999, 2000, and 2001). Until this data is available, the Department’s efficiency in managing the utilization of this population will not be fully understood.
- Finally, the report does not address the impact of TRICARE Senior Prime (TSP) on Prime enrollees. There is some evidence, at some sites, that active duty members suffered decreased access and satisfaction as a result of TSP.

# Comments From the Centers for Medicare and Medicaid Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care  
Financing Administration

OCT - 5 2001

**Memorandum**

**TO:** William J. Scanlon  
Director, Health Care Issues  
General Accounting Office

**FROM:** Thomas A. Scully *TAS*  
Administrator  
Centers for Medicare & Medicaid Services

**SUBJECT:** General Accounting Office (GAO) Draft Report: *Medicare Subvention Demonstration: Greater Access Improved Enrollee Satisfaction but Raised DOD Costs* (GAO-01-1106)

We appreciate the opportunity to review and comment on the above-referenced subject report. Although we agree with the findings and believe the conclusions reached are appropriate, we have the following comments.

While the study considered health outcomes such as survival and preventable hospitalizations, in the context of higher usage it did not consider higher quality of care as a possible explanatory factor. We suggest the extensive data that were collected on quality of care measures during the demonstration be used in later analyses.

We look forward to working with GAO on this and other issues.

*The Health Care Financing Administration (HCFA) was renamed to the Centers for Medicare & Medicaid Services (CMS). We are exercising fiscal restraint by exhausting our stock of stationery.*



# GAO Contacts and Staff Acknowledgments

---

---

## GAO Contacts

Phyllis Thorburn, (202) 512-7012  
Jonathan Ratner, (202) 512-7107

---

## Staff Acknowledgments

Other GAO staff who made significant contributions to this work included Jessica Farb, Maria Kronenburg and Dae Park. Robin Burke provided technical advice and Martha Wood provided technical advice and assistance.

---

# Related GAO Products

---

*Medicare Subvention Demonstration: DOD Costs and Medicare Spending* (GAO-02-67, Oct. 31, 2001).

*Medicare Subvention Demonstration: DOD's Pilot Appealed to Seniors, Underscored Management Complexities* (GAO-01-671, June 14, 2001).

*Medicare Subvention Demonstration: Enrollment in DOD Pilot Reflects Retiree Experiences and Local Markets* (GAO/HEHS-00-35, Jan. 31, 2000).

*Defense Health Care: Appointment Timeliness Goals Not Met; Measurement Tools Need Improvement* (GAO/HEHS-99-168, Sept. 30, 1999).

*Medicare Subvention Demonstration: DOD Start-up Overcame Obstacles, Yields Lessons, and Raises Issues* (GAO/GGD/HEHS-99-161, Sept. 28, 1999).

*Medicare Subvention Demonstration: DOD Data Limitations May Require Adjustments and Raise Broader Concerns* (GAO/HEHS-99-39, May 28, 1999).

---

## GAO's Mission

The General Accounting Office, the investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

---

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents is through the Internet. GAO's Web site ([www.gao.gov](http://www.gao.gov)) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO E-mail this list to you every afternoon, go to our home page and complete the easy-to-use electronic order form found under "To Order GAO Products."

---

## Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office  
P.O. Box 37050  
Washington, D.C. 20013

To order by Phone:   Voice: (202) 512-6000  
                                  TDD: (301) 413-0006  
                                  Fax: (202) 258-4066

---

## Visit GAO's Document Distribution Center

GAO Building  
Room 1100, 700 4th Street, NW (corner of 4th and G Streets, NW)  
Washington, D.C. 20013

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact:  
Web site: [www.gao.gov/fraudnet/fraudnet.htm](http://www.gao.gov/fraudnet/fraudnet.htm),  
E-mail: [fraudnet@gao.gov](mailto:fraudnet@gao.gov), or  
1-800-424-5454 (automated answering system).

---

## Public Affairs

Jeff Nelligan, Managing Director, [NelliganJ@gao.gov](mailto:NelliganJ@gao.gov) (202) 512-4800  
U.S. General Accounting Office, 441 G. Street NW, Room 7149,  
Washington, D.C. 20548

---

**Related GAO Products**

---



---

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

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

**Address Correction Requested**

---

**Presorted Standard  
Postage & Fees Paid  
GAO  
Permit No. GI00**

