Evaluation of the Medicare–DoD Subvention Demonstration

Final Report

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PREFACE

The Balanced Budget Act of 1997 (BBA) directed the Department of Health and Human Services (HHS) and the Department of Defense (DoD) to conduct a subvention demonstration to test the feasibility of establishing Medicare managed care plans within the DoD TRICARE program for beneficiaries who are eligible for both DoD and Medicare health insurance coverage. Within HHS, the Health Care Financing Administration (HCFA), now the Centers for Medicare & Medicaid Services (CMS), worked with DoD to implement this demonstration. Two models to be tested in the subvention demonstration were TRICARE Senior Prime (TSP) and Medicare Partners, but only Senior Prime was implemented. The demonstration terminated as of the end of December 2001. TSP was not continued because the TRICARE for Life program had been enacted that provides supplemental DoD coverage for Medicare-eligible DoD beneficiaries.

Under a memorandum of agreement, DoD and HHS authorized an independent evaluation of the demonstration to be performed for CMS and DoD. In September 1998, CMS awarded RAND the contract to perform the evaluation, with DoD providing the funding for the contract. This report presents the findings of the RAND evaluation of the demonstration. It synthesizes the evaluation results on the demonstration start-up reported in the interim report, published in July 1999 (Farley et al., 1999a), and the report on the first year of the demonstration operation, published in December 2000 (Farley et al., 2000). It also addresses the policy questions posed by the Congress in the Balanced Budget Act of 1997 that authorized the demonstration. The original contract provided for analysis of all years of Senior Prime operation, but DoD discontinued funding for any analyses beyond the first year because of the high costs of the demonstration and resource constraints. In presenting our evaluation findings, we note areas where this reduction in funding limited our ability to document Senior Prime effects and related policy implications.

The Summary of this document is structured as a free-standing, abridged version of the evaluation findings and policy implications. The body of the document reports the full detail of the evaluation background, methods, results, and discussion of policy implications. It is intended to be used as reference for those who wish to pursue more detailed information on specific aspects of the evaluation.

The work presented in this report was performed for the Centers for Medicare & Medicaid Services under Task 6 of Contract Number CMS-500-96-0056 (Project Officer Vic McVicker), which is funded by Inter-Agency Agreement CMS-98-76 with the Office of the Assistant Secretary of Defense (Health Affairs), LTC Pradeep Gidwani, DoD Assistant Project Officer.

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SUMMARY

The Centers for Medicare & Medicaid Services (CMS), formerly the Health Care Financing Administration (HCFA), and the Department of Defense (DoD) have been testing the feasibility of making Medicare-covered health care services available to Medicare-eligible DoD beneficiaries through the TRICARE program (the managed care program of the Military Health Service) and military medical treatment facilities (MTFs). The vehicle used was the Medicare-DoD Subvention Demonstration, which was established by the Balanced Budget Act of 1997 (BBA). The goal of the demonstration was to implement cost-effective alternatives for care for this dually eligible population while ensuring budget neutrality, that is, neither CMS's nor DoD's total costs increase. The Secretaries of the Department of Health and Human Services and of the Department of Defense executed a memorandum of agreement (MOA) that specified how the subvention demonstration was to be designed and operated. The memorandum provided for an independent evaluation of the demonstration, which RAND conducted. This report describes the final results of the RAND evaluation.

The demonstration tested TRICARE Senior Prime (TSP) plans, which were Medicare managed care plans that DoD operated at six demonstration sites. Senior Prime plans were certified by CMS as Medicare+Choice (M+C) health plans, which are alternatives to the standard fee-for-service Medicare program. The M+C program, which replaces the previous Medicare managed care program, allows a variety of managed care organizations to contract with CMS as capitated health plans. CMS pays these plans capitation payments, which are county rates adjusted by enrollees' risk factors. In the TSP model, enrollees received health care services through the TRICARE system, including primary care and other services at MTFs, and had access to civilian providers in the Senior Prime network when needed.

The demonstration included a second model, called Medicare Partners, which were to be formal agreements between civilian M+C plans and MTFs in the demonstration sites, under which the MTFs would provide specialty services for DoD beneficiaries enrolled in the civilian plans. The Medicare Partners model was not implemented by DoD because of limited interest by local M+C plans, as well as concerns by CMS and DoD regarding possible negative effects on access to care and financial issues for Senior Prime.

Under the terms of the memorandum of agreement, DoD had to spend at least as much on care for dually eligible beneficiaries as it spent in 1996, the baseline level-of-effort year, before it was eligible to receive capitation payments from CMS for Senior Prime enrollees. Furthermore, DoD spending for dually eligible beneficiaries had to meet several tests before it could retain any of those payments. DoD spending did not meet all the level-of-effort tests for the first period of the demonstration, which was a four-month period at the end of calendar year 1998. Therefore, it did not retain any capitation payments for this payment period. Although interim payments were made by CMS, DoD had to return these payments because of failure to meet the tests.[1]

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[1] We note here the distinction between calendar year and federal fiscal year (FY). The fiscal year begins on October 1. Because the subvention demonstration began operation close to the start of FY1999, we used the fiscal year as the time basis for our evaluation, where we compared costs and service utilization for FY1998 (before the demonstration) and FY1999 (the first year of the demonstration). Capitation payment calculations are based on calendar year.

DoD did not retain payments for calendar year 1999 either. In this case, low utilization of space-available care by non-enrollees reduced the amount of payments allowed, and the remaining payments were disallowed because there was positive selection in enrollment resulting in an average 7.6 percent reduction in payments when risk adjustment was applied. Computations for calendar year 2000 payments had not begun at the time this report was written.

The BBA provided for operation of the subvention demonstration through the end of 2000, and later legislation extended it through the end of 2001. The Senior Prime plans were discontinued at the end of 2001, as specified by legislation. DoD notified CMS that it was terminating the M+C contracts for the Senior Prime plans, and the two agencies carried out the necessary procedures to notify enrollees and provide for their smooth transition to other Medicare coverage.

KEY FINDINGS

Six key findings emerged from our evaluation:

- The demonstration sites successfully obtained Medicare certification for the Senior Prime plans, organized the plans, enrolled beneficiaries, and provided services for enrollees. Enrolled beneficiaries were reported to be pleased with improved access to MTF care and the services provided. However, the program involved a substantial administrative burden for staff in the MTFs, lead agent offices, and managed care support (MCS) contractors.
- Enrollment rates in the six Senior Prime plans generally were consistent with the planned enrollment levels, although a few sites did not reach those levels. Enrollments continued throughout the demonstration, including age-in enrollments by beneficiaries who were in TRICARE Prime and became eligible for Medicare when they turned 65. Evidence of weak positive selection was found for enrollments from the fee-for-service Medicare, but no risk selection was identified for enrollees who switched from M+C plans to Senior Prime.
- The overall government cost for health care services for the demonstration sites (excluding administrative costs) was an estimated $659 million during the first year of Senior Prime (FY1999), which was 5.1 percent higher than the $627 million in cost estimated for the baseline year (FY1998). (Refer to Table S.1.) When normalized to an estimated 4.3 percent increase in aggregate costs for the control sites, which is an estimate of what costs would have been in the absence of the Senior Prime plans, the demonstration yielded a slight cost increase (0.8 percent). Results might differ if a different set of MTFs had been selected as control sites. However, the observed changes in Medicare and DoD costs for the control sites between FY1998 and FY1999 are consistent with known service use trends, where access to MTF care was declining for Medicare-eligible DoD beneficiaries.
- Costs shifted from Medicare to DoD in the first year of Senior Prime. Aggregate Medicare costs for dually eligible beneficiaries in the demonstration sites declined by a modest 3.4 percent with the introduction of Senior Prime, while DoD costs increased by 29.8 percent (Table S.1). The size of the cost shift was mitigated because beneficiaries who chose Senior Prime were already heavy users of MTF services. Those who enrolled in Senior Prime in FY1999 had $282 in DoD costs per beneficiary in the FY1998 baseline year compared to $75 in baseline DoD costs for those who did not enroll (refer to Table S.2).

- The Medicare cost savings were obtained primarily from reductions in M+C capitation payments for beneficiaries formerly in M+C plans who switched to Senior Prime, and these savings were offset partially by increased fee-for-service expenditures for beneficiaries who did not enroll in Senior Prime.
- Any capitation payments made in the second or third payment periods of the demonstration would not affect overall government costs, but the payments would reduce the cost shift by increasing Medicare costs and reducing DoD costs (net of capitation revenue).

SENIOR PRIME MET ONE OF ITS GOALS

It is clear from the evaluation results that it would be costly to DoD, and to a lesser extent to the overall U.S. government, to continue Senior Prime in its current form. Despite the slight savings obtained for Medicare, the first year of Senior Prime increased government costs. Barring substantial reductions in service utilization by Senior Prime enrollees, we would expect these cost effects to continue in the second and third years of the demonstration.

It is important to consider these financial results in the context of overall performance relative to the goals of the subvention demonstration. Senior Prime had three basic goals: (1) provide accessible quality care to dually eligible beneficiaries, (2) maintain budget neutrality, and (3) provide cost-effective care. Senior Prime appears to have met the first goal for accessible and quality care, but it did not meet the financial goals.

Provide Accessible Quality Care to Dually Eligible Beneficiaries

There is weak evidence from the evaluation that the demonstration met this goal. At our initial site visits, providers and clinic staff reported that beneficiaries enrolled in Senior Prime were enthusiastic about having improved access to MTF services. The sites also reported that they maintained compliance with the TRICARE access standards for clinic appointments throughout the first year of operation. Our evaluation was not able to address this goal in greater depth, however, because the impact analysis for the second year of the demonstration was not funded. The analysis of effects on beneficiaries was scheduled for later in the demonstration to allow sufficient time for effects to occur and be captured in DoD survey data.

With respect to quality, the sites applied proactive quality management techniques for care to enrollees in compliance with the Medicare Quality Improvement System for Managed Care (QISMC) requirements, including a collaborative approach for disease management of diabetes. The sites reported low rates of grievances and appeals, suggesting that beneficiaries enrolled in Senior Prime were basically satisfied with their care. On the other hand, we found that dually eligible beneficiaries who did not enroll in Senior Prime experienced reduced access to MTF care because MTF capacity for space-available care declined. At the same time, they increased their use of Medicare providers in the community.

The General Accounting Office (GAO) documented similar beneficiary responses from its site visits and beneficiary survey, including survey findings that retirees expressed preferences for military health care and Senior Prime enrollees reported they could get the care they needed at no extra cost (GAO, 2002). Satisfaction with access and quality of care increased during the demonstration for Senior Prime enrollees but decreased for non-enrollees. However, the GAO survey results suggested that the TRICARE access standards were not met as consistently as reported by the sites.

Maintain Budget Neutrality

Senior Prime did not meet this goal of not increasing the federal government's net costs. Medicare service delivery costs declined by 3.4 percent in the first year of Senior Prime, but DoD net aggregate costs increased by 29.8 percent, with a resulting net increase in government costs. Furthermore, net Medicare savings in the first year were smaller than might be expected because of two opposing trends. Costs for capitation payments declined because payments were eliminated for M+C enrollees who switched to Senior Prime. At the same time costs for fee-for-service Medicare increased for beneficiaries who did not enroll in Senior Prime.

DoD administrative costs for startup and operation of the Senior Prime sites as M+C plans also were higher than expected. We report these costs separately because they are "high-level" estimates provided by the demonstration sites and DoD that are less precise than the estimated service delivery costs (see Section 5). These costs totaled an estimated $41 million, of which $33 million were for MCS contractor services, $3 million were start-up costs for the demonstration sites, and $5 million were first-year costs for the demonstration sites. The size of these estimated costs was 6 percent of the total of $659 million in DoD service delivery costs for FY1999.

Provide Cost-Effective Care

The demonstration did not appear to meet this goal, based on observed changes in DoD service delivery patterns and costs. DoD costs increased substantially because greater numbers of beneficiaries used MTF care and those beneficiaries had higher per-capita utilization rates than those of dually eligible beneficiaries using space-available care in previous years. The high rates of use for clinic visits suggest that there was overutilization during the first year of the demonstration, although use rates began to decline slowly toward the end of the year. We did not have the data to track continuing trends in use rates, nor could we assess the extent to which the high utilization rates contributed to improved outcomes for enrollees or how declining access to MTF care for non-enrollees affected their outcomes.

The RAND evaluation could not assess this goal directly because it was not designed to perform a formal cost-effectiveness analysis. The evaluation focused on how Senior Prime affected DoD and CMS costs and utilization. Drawing conclusions about cost-effectiveness would require information about costs and outcomes of care for both Senior Prime enrollees and non-enrollees.[2]

BACKGROUND AND POLICY FRAMEWORK

An estimated 1.5 million U.S. military retirees and their elderly dependents are eligible for both Medicare health coverage in the private sector and health care services from military treatment facilities. Under current law, these dually eligible individuals are free to choose where they will obtain their health care. However, if they receive care in the military health system, Medicare is prohibited by law from reimbursing DoD for its services.

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[2] Ideally, to assess effects on all potentially affected groups, the same information for other DoD beneficiaries using the MTFs and other Medicare beneficiaries in the service areas should be included in an analysis.

Many dually eligible beneficiaries prefer to use the military health system, but their access is limited under TRICARE, the managed care program established in 1995 by the Military Health System. The highest priority for care at MTFs is given to all active-duty military personnel, dependents, and other retirees enrolled in TRICARE Prime, the program's HMO option. Because elderly Medicare-eligible beneficiaries are excluded from TRICARE, they are in the lowest priority group and receive care only on a *space-available* basis.[3] The situation for dually eligible beneficiaries age 65 or older has deteriorated as growing TRICARE Prime enrollments use increasing shares of the service capacity of MTFs. Consequently, these beneficiaries are obtaining larger portions of their health care in the civilian sector, despite their preferences to the contrary.

The subvention demonstration tested TSP, a Medicare managed care plan, as an alternative way to meet the health care needs of this population. For the demonstration, the BBA authorized Medicare to make payments to DoD for health care services provided for dually eligible beneficiaries, subject to requirements that DoD first meet its baseline level of effort for this group. The term *subvention* refers to these payments from CMS to DoD, that is, payments from one government agency to another.

Both CMS and DoD, the two major stakeholders in the subvention demonstration, had their own goals for program structure and performance. CMS has responsibility for the integrity of the Medicare program. From the CMS perspective, the demonstration needed to be structured to (1) protect the solvency of the Medicare trust funds, (2) provide for beneficiary choice and protections, and (3) ensure effective plan performance. DoD is seeking ways for the military health system to better serve its Medicare-eligible retirees and dependents. However, this goal has to be pursued within the framework of DoD's dual mission to maintain readiness for wartime medical care needs and to provide comprehensive peacetime health care services for active duty personnel, dependents, and retirees. From the DoD perspective, the subvention needed to (1) help fulfill DoD's moral obligation to provide DoD beneficiaries health care for life, (2) maintain budget neutrality in the military health system, and (3) strengthen DoD's capability to provide cost-effective managed care in the TRICARE program.

THE MEDICARE-DoD SUBVENTION DEMONSTRATION

The subvention demonstration established Senior Prime plans as Medicare+Choice health plans operated by DoD, in which participating MTFs were the principal health care providers for enrolled beneficiaries. The Senior Prime plans were certified by CMS, and they were subject to the same performance standards as all other Medicare+Choice plans, with some exceptions where requirements were waived because of the unique circumstances of military health care. A complex payment methodology was developed that determined capitation payments from CMS to DoD for services to Senior Prime enrollees.

The covered benefits were defined as the "richer of DoD or Medicare benefits." Senior Prime enrollees chose a military primary care manager (PCM) at a participating MTF where they would receive their primary care as well as most other covered services. For services the MTF did not provide, enrollees were referred to other MTFs or to civilian providers in the Senior

[3] Those under age 65, including end-stage renal disease beneficiaries, are eligible for TRICARE coverage.

Prime network (network providers). Enrollees had no cost sharing for services provided by MTFs, but they did pay part of the costs for services obtained in the civilian provider network.

Beneficiary participation in Senior Prime was voluntary and did not involve any premium. Eligible beneficiaries who chose to participate agreed to receive all covered services through Senior Prime. DoD beneficiaries who were Medicare-eligible due to end-stage renal disease or who were younger than 65 and Medicare-eligible due to disability were excluded from the demonstration. These beneficiaries still could receive care from MTFs on a space-available basis, and those younger than age 65 could join TRICARE Prime.

Six demonstration sites with ten participating MTFs were selected by DoD with CMS approval. The sites represent a diversity of characteristics for the participating MTFs and the Medicare managed care markets in which they are located.

- Dover Air Force Base (AFB) in Delaware
- Keesler AFB in Biloxi, MS
- Region 6 site—two MTFs in San Antonio and two MTFs in the Texoma area on the Texas-Oklahoma border
- Colorado Springs—two MTFs
- Naval Medical Center (NMC) San Diego in California
- Madigan Army Medical Center (AMC) in Tacoma, WA

The total planned enrollment for these six Senior Prime sites was 27,800 Medicare-eligible DoD beneficiaries. The sites began enrollments soon after they met all the requirements for certification as Medicare health plans. The Madigan site was the first to start operation, enrolling beneficiaries for coverage effective September 1, 1998. All sites were operational by January 1999.

At each site, three organizations had important roles in operating Senior Prime: (1) The TRICARE regional lead agent (LA) office served as the official plan that CMS held accountable for plan performance and compliance with Medicare requirements; (2) the MTF(s) were the principal service providers for Senior Prime enrollees; and (3) the region's MCS contractor provided administrative support functions for marketing and enrollment, maintenance of provider networks, quality and utilization management, and claims processing.

SUMMARY OF EVALUATION RESULTS

Senior Prime Start-Up and Operation

Start-Up Experiences. Working within demanding time deadlines, the TSP plans were designed, certified, and into operation in about six to nine months. CMS and DoD completed the terms of the MOA and provided direction to the demonstration sites as they prepared for Medicare certification. The Medicare certification process required substantial investment of staff resources. Difficulties with the financial provisions of Senior Prime were encountered early because the payment methods were complex and the sites were uncertain they would ever see Senior Prime revenues, even if DoD obtained net payments from CMS after each year's reconciliation. Given these challenges, the sites initially focused on effective service delivery for their Senior Prime enrollees. Their primary yardsticks for success during early operations were quality of care, compliance with access standards, and satisfied enrollees. The participating MTFs were cautious about increasing staff, however, because they did not expect to get

additional financial support for new staff. Some staff reallocations were made to provide support to the enrollees as efficiently as possible.

Perspectives After One Year of Operation. A year later, the demonstration sites stated they continued support provision of services to the Medicare-eligible DoD beneficiaries, but they also expressed concerns that participation in Medicare involved a heavy administrative burden, especially in the absence of capitation payments. Despite these concerns, the demonstration sites reported they were transferring procedures and skills gained in Senior Prime to TRICARE Prime. Many of these capabilities are central to effective service delivery in a managed care environment, such as case management and disease management, quality monitoring, grievances and appeals procedures, and directing contractor activities for managed care support. The sites also recognized the value of having external oversight of their activities (by CMS), which provided performance accountability. With respect to readiness, when providers were involved in deployments and during annual rotations of military personnel, all the sites reported they had to balance conflicting demands and incur additional costs for temporary personnel. Care for Senior Prime enrollees continued to make a positive contribution to medical education.

Enrollment Demand

Positive early responses of the beneficiaries, as reported by site staff and representatives of military retiree associations, testify to the apparent success of the Senior Prime plans in delivering services. Although few of the sites reached their planned enrollments immediately, their enrollment rates generally were faster than Medicare enrollments in many private health plans. Those who chose not to enroll had a variety of reasons for their decisions, perhaps the most significant one being the short two-year life of the demonstration.

Sources of Senior Prime Enrollments. Beneficiaries switched at similar rates from both fee-for-service Medicare and other M+C health plans to enroll in Senior Prime. In some of the demonstration sites, Senior Prime drew large numbers of enrollees from single M+C plans. These beneficiaries represented substantial shares of total enrollments in M+C plans serving some of the sites, suggesting that Senior Prime was having noticeable effects on their local Medicare managed care markets.

Medicare Part B Coverage. To enroll in Senior Prime, dually eligible beneficiaries had to be enrolled in Medicare Part B. A small fraction of Medicare-eligible DoD beneficiaries in the demonstration sites had only Medicare Part A coverage. Of this group, about 13 percent enrolled in Part B by the start of the demonstration. Although many of these beneficiaries subsequently enrolled in Senior Prime, others did not. Those who did not enroll in Senior Prime may have picked up Medicare Part B coverage in anticipation of needing to use Medicare providers in the community because their already low priority for access to MTF direct care services would decline further after Senior Prime began.

Risk Selection. We found evidence that beneficiaries leaving fee-for-service Medicare to enroll in Senior Prime were slightly healthier than those who chose to stay in that sector (favorable selection). We found no evidence of selection for those leaving M+C plans to enroll in Senior Prime. Those switching to Senior Prime from M+C plans appeared to be of similar health status to those who remained in the M+C plans.

Age-in Enrollments. Enrollments by newly eligible Medicare beneficiaries (age-in enrollments) became an important component of total Senior Prime enrollment activity. The

popularity of the program with beneficiaries was reflected in the actions they took to position themselves for Senior Prime enrollment when they reached age 65, as reported to us by the demonstration sites.

Impacts on Service Utilization and Costs

We report in Table S.1 the overall costs estimated for the FY1998 evaluation population in the demonstration and control sites. Costs are presented for the year before the demonstration (FY1998) and the first year of the demonstration (FY1999). The FY1999 costs are discounted for inflation (described in the table footnote). A summary of our key findings follows.

Net Government Costs. For the first year of the demonstration, Senior Prime slightly exceeded budget neutrality for total government costs (Medicare plus DoD) for services to dually eligible beneficiaries in the demonstration sites, when normalized to the trend of increased costs for the control sites (estimated 5.1 percent cost increase for the demonstration sites between FY1998 and FY1999 versus 4.3 percent increase for the control sites). This result is the net effect of a small decrease in aggregate costs estimated for Medicare (–3.4 percent in constant FY1998 dollars) and a fairly large increase in estimated aggregate costs for DoD (29.8 percent).

Table S.1.
Total Medicare and DoD Costs for the FY1998 Index Population, Before (FY1998) and During (FY1999) the Demonstration, by Demonstration and Control Sites

	Demonstration Sites		Control Sites	
	Payments ($1,000)	Payment Per Beneficiary Month	Payments ($1,000)	Payment Per Beneficiary Month
FY1998 spending				
Total Medicare	$466,080	$338	$441,385	$314
Total DoD	161,058	117	179,895	128
Combined total	627,138	455	621,280	442
FY1999 spending *				
Total Medicare	$450,177	$325	$478,846	$339
Total DoD	209,049	151	169,436	120
Combined total	659,225	475	648,281	459
Percentage change— in constant dollars				
Total Medicare	–3.4%	–4.1%	8.5%	8.2%
Total DoD	29.8	28.9	–5.8	–6.1
Combined total	5.1	4.4	4.3	4.0

* Discounted to FY1998 dollars for Medicare payments and DoD network provider payments. DoD costs for MTF direct-care services in FY1999 did not have to be discounted because both FY1998 and FY1999 costs were estimated using unit costs developed in FY1998 dollars.

Shifts in Utilization and Costs. The cost shift from Medicare to DoD in the first year of Senior Prime was smaller than might have been the case because beneficiaries who chose to enroll in Senior Prime were already heavy users of MTF direct-care services during FY1998, as shown by the cost comparisons in Table S.2. Those who did not enroll were using services primarily in the Medicare sector in FY1998. After the introduction of Senior Prime, monthly

costs of care for enrollees increased 15.9 percent from $478 per capita in FY1998 to $553 per capita in FY1999. This increase was the net result of a 72.0 percent reduction in Medicare costs coupled with a 77.0 percent increase in DoD costs. Total costs per capita for non-enrollees increased only 2.4 percent, with cost for MTF services decreasing by 21.8 percent and costs for Medicare services increasing by 7.3 percent.

Table S.2.
Medicare and DoD Costs Per Beneficiary Month for the Demonstration Site Population, by Senior Prime Enrollment Status, FY1998 and FY1999

	Payment Per Beneficiary Month	
	Senior Prime Enrollees (enrolled at least 1 month)	Non-Enrollees (never enrolled)
FY1998 spending		
Total Medicare	$196	$375
Total DoD *	282	75
Combined total	478	450
FY1999 spending		
Total Medicare	55	402
Total DoD *	498	59
Combined total	553	461
Percentage change— FY1998 to FY1999		
Total Medicare	–72.0%	7.3%
Total DoD *	77.0	–21.8
Combined total	15.9	2.4

NOTE: The sample was divided into the groups of Senior Prime enrollees (enrolled for at least one month) and non-enrollees (never enrolled) to compare their utilization and costs for the two years.

* Estimated DoD costs include payments for network providers for the Senior Prime enrollees.

The estimated DoD monthly cost of care of $498 per capita for Senior Prime enrollees in FY1999 compares reasonably closely with the GAO estimate of $483 per capita (GAO, 2001b). The GAO also estimated monthly per-capita costs for enrollees for prescription drugs and administrative costs. When added to the estimated costs for care, the GAO estimated a total monthly cost of $586 per beneficiary enrolled in Senior Prime.

To the extent that DoD retained any Senior Prime capitation payments in the remaining two payment periods of the demonstration, this transfer payment would reduce the cost shift from Medicare to DoD by offsetting DoD costs. However, even with the additional cost of payments to DoD, Medicare would probably continue to experience either budget neutrality or cost savings because CMS would pay only an incremental share of the DoD capitation rate above the DoD level of effort. Medicare would also save costs for M+C plan enrollees who switched to Senior Prime because the DoD capitation rates are lower than the rates that CMS would pay for these beneficiaries when enrolled in M+C plans. Thus, DoD health care costs can be viewed as the key determinant of net government budget neutrality.

Utilization of MTF Services. Before Senior Prime became available, beneficiaries in both the Medicare fee-for-service and M+C sectors used MTF direct-care services while also utilizing Medicare-covered services. During the first year of Senior Prime, use of MTF services by Senior Prime enrollees increased from their FY1998 use rates, while use rates fell for dually eligible beneficiaries who did not enroll in Senior Prime. Use of MTF outpatient visits by non-enrollees declined to 75 percent of their FY1998 use rates (= 192/257), and rates of MTF inpatient stays declined to 83 percent of FY1998 rates (= 4.8/5.8). (Refer to Section 5, Tables 5.15 and 5.18, for source numbers.) This reduction in use can be attributed to heavier use of MTF services by Senior Prime enrollees that further restricted access to space-available care for non-enrollees.

Sources of Medicare Savings. The M+C sector was the source of cost savings for Medicare under Senior Prime. In constant FY1998 dollars, M+C plan costs declined an estimated 6 percent [= (201M – 214M)/214M] because of elimination of M+C capitation payments for enrollees who switched to Senior Prime, whereas fee-for-service Medicare costs declined by only 1 percent [= (249M – 252M)/252M]. (Refer to Section 5, Table 5.4, for source numbers.[4])

Counter-Balancing Fee-for-Service Medicare Costs. The small change in fee-for-service Medicare spending with implementation of Senior Prime is the net effect of two opposing spending shifts for dually eligible beneficiaries. Fee-for-service Medicare spending decreased for Senior Prime enrollees as they began to use MTF services. At the same time, dually eligible beneficiaries who did not enroll in Senior Prime moved away from MTF care to use of Medicare providers since declining space-available care restricted their access to the MTFs.

DoD Network Provider Costs. Payments to network providers represent a potentially important portion of the DoD costs, reaching an estimated 10.3 percent of the total DoD spending in FY1999 (=21.5M/209M). (Refer to Section 5, Tables 5.3 and 5.4, for source numbers.) The demonstration sites reported that network providers were used more heavily when military providers were unavailable because of deployments or rotations. The current payment system also creates an incentive for the sites to refer patients to network providers to avoid MTF costs for their care (TRICARE Management Activity (TMA) pays the network providers directly). It will be important to assess empirically whether patients were actually shifted to network providers.

SHOULD DoD CONTINUE TO OFFER A PLAN SIMILAR TO SENIOR PRIME?

In considering whether Senior Prime should be continued in some form, it is important to understand the features and limitations of this model and how they differ from those of other models for enhancing health benefits for Medicare-eligible DoD beneficiaries. As decisions are made on which options to offer, the relative importance of the features of each option should be assessed (along with other criteria).

We illustrate the effects of differences in plan features by comparing the Senior Prime and TRICARE for Life models, as summarized in Table S.3. Senior Prime was a managed care model in which TMA and the MTFs incurred the costs for MTF and network provider services

[4] The Medicare fee-for-service costs for each year are the sum of the Part A and Part B costs. The FY1999 costs are converted to FY1998 dollars by dividing by 1.014 (for 1.4 percent inflation).

provided to enrollees (net of any beneficiary copayment liability), and Medicare capitation payments were intended to generate new DoD revenues to offset these costs. In addition, the MTFs were to develop new managed care skills that could be transferred to providing care for TRICARE Prime enrollees.

Table S.3.
Applicability of Senior Prime and TRICARE for Life to DoD Goals

Goal	Senior Prime	TRICARE for Life
Improve benefits for beneficiaries, supplemental to Medicare benefits	Only for beneficiaries residing in MTF areas	For all Medicare-eligible beneficiaries
Improve access to MTF care	Yes, where offered	Unknown
Generate revenue to cover costs of care	Yes, but not achieved	No
Control size of new DoD costs	Liable for costs of all covered care	Liable for costs not covered by Medicare
Strengthen managed care capability	Yes (managed care)	No (fee-for-service care)

TRICARE for Life provides new fee-for-service benefits for all beneficiaries, regardless of location. Even a fully implemented Senior Prime program could not provide this kind of coverage because it is MTF-based. TRICARE for Life also controls the extent of DoD financial liability by covering only beneficiary cost sharing and costs of supplemental services not covered by Medicare. However, it is not designed to improve access to MTF care, to generate new revenue to offset costs of additional services, or to strengthen managed care capability.

The comparison in Table S.3 highlights how plan features affect the likelihood that DoD's goals can be met. In the discussion below, we draw on our evaluation results to explore how Senior Prime or a similar DoD model might be designed to improve its feasibility. Specifically, we examine Senior Prime performance relative to the distinct sets of principles that guided CMS and DoD in negotiating its design and operation. We note any modifications that would improve the plan's effectiveness and financial viability.

Performance Relative to CMS Principles

As discussed previously, CMS is responsible for the integrity of the Medicare program, including effective service to beneficiaries for Medicare-covered benefits, timely and appropriate payments to Medicare providers, protection against fraud and abuse, and the financial viability of the program. From the perspective of CMS, the subvention demonstration needed to conform to three basic principles that are important factors for all Medicare policy formation: (1) protect the solvency of the Medicare trust funds, (2) provide for beneficiary choice and protections, and (3) ensure effective plan performance.

The Senior Prime demonstration performed well on all three of these principles because the demonstration was designed to be responsive to them. CMS protected the Medicare trust funds through the capitation payment formula and the baseline level of effort (LOE) provisions, which were structured to maintain budget neutrality for Medicare. This is likely to remain a baseline requirement for any program affecting Medicare spending, given the priority placed on Medicare solvency by the Congress and U.S. public. Freedom of beneficiary choice and beneficiary protections have long been Medicare priorities, as reflected in the rules of the M+C program in which Senior Prime plans were participants. Beneficiary protections are provided

through the grievance and appeals processes and compliance monitoring for effective plan performance. As long as Senior Prime plans are certified M+C plans, CMS is likely to require them to meet the standards applicable for all M+C plans, with limited exceptions for issues that clearly are unique to military medicine (e.g., not requiring military physicians to be licensed in the state where they are practicing).

Performance Relative to DoD Principles

DoD encouraged authorization of the subvention demonstration to test how well Senior Prime (and Medicare Partners) could achieve three basic DoD goals: (1) contribute to fulfilling the moral obligation to provide military personnel health care for life, (2) maintain budget neutrality in the military health system, and (3) strengthen DoD's capability to provide cost-effective managed care in the TRICARE program. The goal of improving health care coverage for beneficiaries has two components: ***improving benefits for beneficiaries*** for services not covered by Medicare and ***improving access to MTF care***. The goal of budget neutrality was to be achieved by ***generating revenue*** from Medicare capitation payments for beneficiaries enrolled in Senior Prime that would offset health care cost increases and by ***controlling the size of new DoD costs.*** We consider each of these four components.

Improve Benefits for Beneficiaries. This principle encompasses the scope of benefits provided by Senior Prime, the costs of these benefits to beneficiaries, and beneficiaries' response to the program. Benefits for Senior Prime enrollees were expanded by enhancing access to MTF care with no cost sharing and by offering additional benefits not covered by Medicare. As discussed above, Senior Prime enrollees appeared to be satisfied with what Senior Prime offered them. Those who did not enroll in Senior Prime did not have those expanded benefits, and they also experienced reduced access to space-available MTF care.

Improve Access to MTF Care. The Senior Prime model increased access to MTF care for enrollees by (1) establishing the participating MTFs as the primary sites of health care for enrollees and (2) giving enrollees priority for clinic appointments at the same level as TRICARE Prime enrollees. This effect is reflected in the large increase in aggregate and per-capita utilization and costs for MTF care. However, as discussed above, we also found that use of space-available care declined for other dually eligible beneficiaries.

Generate Revenue to Cover Costs of Care. One of the most informative outcomes of the demonstration was the failure of DoD to obtain capitation payments to offset costs for the incremental volume of care provided to Senior Prime enrollees. Three major factors contributed to this negative result: levels of the capitation rates, the baseline LOE, and the complex payment formula. For 1998, DoD did not retain any capitation payments because the sum of applicable capitation amounts and the costs of care for non-enrollees did not exceed the LOE. No payments were retained for 1999 either, with payments being cut because of low costs for space-available care by non-enrollees and risk adjustment for positive selection in enrollment.

The legislation set Senior Prime capitation rates at levels lower than the local M+C rates, which CMS sets annually for each county. For each county in the service area of MTFs participating in Senior Prime, a capitation rate was established at 95 percent of the county-level M+C rates, after removing components attributable to medical education and capital costs. In addition, the Senior Prime payments were adjusted for demographic factors and a retrospective adjustment was also applied for selection bias. Thus, only part of the standard M+C prospective

risk adjustment method (the demographic factors) was applied to Senior Prime payments. It is our understanding that these Senior Prime rates were designed to help control Medicare costs. Any changes in these provisions would have to be negotiated by CMS and DoD. It is not likely that CMS would agree to capitation rates higher than the local M+C rates, or to a risk adjustment method that treated DoD plans more favorably than the standard Medicare risk adjustment method.

The baseline LOE was the level of aggregate spending that DoD had to reach before capitation payments would begin to be credited for Senior Prime care. The LOE was determined using cost estimates based on 1996 service activity. However, between 1996 and the start of Senior Prime, DoD made numerous changes in the amount and mix of services provided to dually eligible beneficiaries. Some MTFs reduced or eliminated inpatient capacity and reconfigured their outpatient services. For example, Dover AFB closed its inpatient service effective 1998, and Brooke AMC opened a completely new hospital building in 1997. Furthermore, the new TRICARE program was being phased in by region during the years following 1996. The amount of space-available care the MTFs were able to provide declined, as TRICARE Prime enrollments grew while service capacity remained fixed. As a result, the baseline LOE was holding DoD accountable for a higher level of space-available care for dually eligible beneficiaries than what probably was being provided by 1998, the year immediately preceding the start of Senior Prime.

If Senior Prime were continued as a certified M+C plan, it is almost certain that DoD would be expected to continue to finance its historical level of health care for dually eligible beneficiaries, as measured by the LOE. To establish a more relevant LOE, the baseline year would need to be updated and the methodology for calculating DoD's LOE obligation should be adjusted for changes in MTF service mix over time.

Another factor that may have influenced revenue was the sheer complexity of the payment formula, provisions for interim payments, and rules for determining whether capitation payments will be made. In addition to being difficult for participants to understand, this multiplicity of rules offered opportunities for perverse payment outcomes. For example, the rules included thresholds that defined limits for the share of DoD costs attributable to Senior Prime enrollees and to non-enrollees receiving space-available care. The existence of these thresholds created some confusion and inappropriate financial incentives. However, they turned out not to be constraining factors in determining payment eligibility or amounts, in that DoD exceeded the minimum threshold for enrollee costs of care, thus meeting one test for payments. On the other hand, costs for space-available care were below the maximum threshold, which contributed to decreasing the amount of total payments that DoD could retain.

Control the Size of New DoD Costs. As discussed above, the substantial increase in DoD health care costs in the first year of Senior Prime was due to a combination of increased numbers of MTF users and increased use rates for those users. Much of the increased use stemmed from initial evaluation visits, which all M+C plans are required to provide for new enrollees. Furthermore, the sites reported that they expected the evaluation visits to identify health problems requiring follow-up care, but they found more problems than anticipated, which further increased visit rates. The monthly rates of DoD outpatient visits shown in Figure 5.1 reflect these early events in the operation of each site; use was slightly reduced during the later part of the year. It is not known if the Senior Prime sites were more proactive than other M+C plans in evaluation scheduling and follow-up for new enrollees.

The Senior Prime sites recognized the importance of effective utilization management, which they pursued to achieve more cost-effective levels of care. However, they were not uniformly successful in managing care during the first year of the demonstration. Barriers they identified included:

- problems coordinating utilization management (UM) activities performed by the MTFs and the MCS contractors
- ineffective UM provisions in some MCS contracts that took a long time to change
- MTF staffing levels and mix that were fixed by annual budgets
- lack of financial incentives to encourage effective management of care
- confusion regarding how reducing utilization would affect payments under the complex threshold provisions of the payment formula.

The financial incentive and payment formula issues may have contributed to increased utilization because the site teams reported that they focused on providing high-quality care for enrollees and had less concern about these financial issues. At the same time, MTF commanders reported that they were very concerned about the escalation of service delivery costs, but they lacked the authority to overcome the barriers and adjust the resources required.

Strengthen Managed Care Capability. The demonstration sites appear to have achieved improved capability in managed care techniques as a result of Senior Prime. Two factors seem to have driven this effect. First, the presence of an external CMS oversight function through the M+C contracts gave sites an incentive to implement new procedures to comply with Medicare requirements. The sites speculated that without this oversight, they might have made slower progress in such areas as quality assurance initiatives and care management. Second, all the sites reported they had begun to transport several of the new procedures required by Medicare for use in TRICARE Prime. Most of these were techniques for managing care. Although many improvements were accomplished at participating MTFs, some were also made by the MCS contractors because the Senior Prime plans were operating partnerships that included those led by the LA offices, MTFs, and MCS contractors.[5]

Seeking a Feasible DoD Managed Care Option

Senior Prime met all the CMS principles with respect to the Medicare program; it also met the DoD principles of improving benefits for some dually eligible beneficiaries and helping to strengthen the TRICARE managed care capability. However, despite these positive results, its failure to achieve budget neutrality for DoD suggests that Senior Prime, as designed for the demonstration, is a costly option for enhancing health care coverage for dually eligible beneficiaries. We summarize in Table S.4 the factors that contributed to this outcome and suggest changes that might be made to improve performance. We consider possible changes for both a modified Senior Prime model (Medicare certified) and for a DoD managed care plan model that does not involve Medicare.

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[5] As described in Section 1, each TRICARE region is commanded by a LA, and each service has designated responsibility for managing some of the regions. Senior Prime was operated out of the LA offices.

Table S.4.
Comparison of Senior Prime Performance Issues for a Modified Senior Prime and Similar DoD Plans Not Certified as Medicare+Choice Plans

Senior Prime Performance Issues	Status in a Modified Senior Prime	Other Form of DoD Managed Care Plan	
		Does Issue Apply?	Comments
Limited DoD revenue			
Medicare capitation formula	Revise closer to M+C rate	No	No capitation to offset new costs for a DoD-only plan
Baseline level of effort	Update	No	Not relevant
Payment formula rules	Simplify	No	Not relevant
Escalation of DoD costs			
Increased MTF enrollments	Limit sites and # of enrollments	Yes	MTFs serve enrollees; can limit sites and enrollments
High utilization rates	Strengthen management of care	Yes	Can decide on use of initial evaluations; should strengthen management of care
MCS contractor services	Use fixed price contract	Depends on design	Depends on use of network providers; less administration
Administrative burden & costs			
M+C plan qualification and start-up	Rules remain; lower burden w/experience	Yes	Start-up costs will occur but no costs for M+C application and certification process
Medicare compliance process	Same	No	Only internal compliance rules
Data system duplication	Same	Depends on design	No interface with Medicare enrollment data system; perhaps with MCS contractors

We discuss each performance issue briefly below. Note that the issues are stated from the perspective of DoD implementation because DoD would probably take the lead in choosing between a modified Senior Prime and a DoD-only plan. CMS policies would need to be considered as well for a plan that is Medicare certified.

Limited DoD Revenue. Only a Medicare certified managed care plan would give DoD the opportunity for revenues to offset health care costs. All the design elements affecting revenue could be revised to some extent to enhance DoD's potential to obtain revenue under such a plan, subject to CMS policies designed to protect the Medicare program. In our opinion, the increase in revenue that could be achieved by such revisions would not be sufficient to offset the large incremental costs of care that DoD incurred for Senior Prime enrollees.

Escalation of DoD's Costs of Care. We believe this is the single most important issue to be addressed in either a modified Senior Prime or a DoD-only managed care plan. If the MTFs' care management capabilities were not strengthened, DoD would have high costs for any MTF-based model. The costs of care are driven by both the number of beneficiaries and their use rates, and explicit actions would need to be taken to address both factors.

Limiting either the number of sites or total enrollments could control the number of participating beneficiaries. Ways to monitor both use and quality of care for those enrolled could include the following actions:

- Integrating consistent performance standards into health care delivery processes for key health conditions across the MTFs and network providers.
- Proactive case management for enrollees with chronic health conditions, multiple morbidities, or episodes of severe or costly illness.
- Focused pre-authorization and review activities to improve service components that have been identified as problem areas for inappropriate utilization.
- Management of the structural issues the sites identified as barriers to their progress in strengthening care management processes.
- Updating MCS contract provisions to ensure that contractors are using the most effective care management techniques and are collaborating with the MTFs.
- Consistent quality and utilization monitoring across the Senior Prime sites (or programs in the future) with feedback reported regularly to providers.

Administrative Burden and Costs. Given the M+C regulations, most of the administrative costs experienced in the demonstration would continue in any modified Senior Prime that is Medicare certified. These costs include staff time to prepare applications, implement enrollment and startup, and document performance compliance, all of which are an integral part of being a M+C plan. If the current Senior Prime structure were continued, the LA offices, MTFs, and MCS contractors would have to spend time coordinating activities. Based on estimates of the Senior Prime administrative costs prepared by the sites and TMA, we have concluded that these costs would be measurably lower for a DoD-only plan because none of the activities required for M+C plans would be applicable, and the plan administrative structures could be simplified. Existing MTF care delivery provisions, e.g., quality management, would support care for all patients, including dually eligible beneficiaries enrolled in the DoD managed care plan.

It is difficult to assess how MCS contractor costs might change under a modified Senior Prime plan or a DoD-only plan. Some of the contractor costs incurred during the demonstration reflected the newness of the program and would not occur in an ongoing program. Contractors participated with TMA in defining the detailed scope of work that is documented in Chapter 20 of the *TRICARE Operations Manual*, and they also worked closely with the LA office and MTFs in developing the many enrollment and service delivery procedures involved in Senior Prime. Recognizing the many uncertainties involved, TMA paid the contractors on a cost-plus basis for the demonstration. To the extent that MCS contractors have a role in a future managed care plan for dually eligible beneficiaries, fixed-price contracts should be established for those services, and DoD might consider provisions to share some of the risk with the MCS contractors.

Geographic Scope of a Managed Care Model

If DoD decides to continue to offer an MTF-based managed care option for dually eligible beneficiaries, choices will need to be made regarding the geographic scale of the program. Two basic choices are available: (1) continue to offer a managed care model in the six

sites that participated in the subvention demonstration or (2) expand the program to enhance access to this model by including additional MTFs. We have learned from the evaluation that either option would involve some challenges, which are summarized here and discussed in greater detail at the end of Section 6.

Several of the demonstration sites expressed caution regarding the extent to which the program could be expanded in the existing facilities. The sites believe that a permanent program would create additional enrollment demand by beneficiaries who had been reluctant to sign up for the demonstration because it was temporary. The Madigan and the Region 6–San Antonio MTFs, for example, already have people on their Senior Prime waiting lists. Three possible constraints to expanding the Senior Prime model need to be considered: (1) the capacity of primary care clinics to serve additional patients, (2) the capacity of current MTF budgets to provide the administrative staff support, and (3) the ability to expand the number of network providers. Several site teams suggested that the policy of limiting PCMs to military providers needs to be reconsidered. The capacity limits of MTF clinics could be accommodated at some sites if enrollees could use network providers as PCMs, similar to TRICARE Prime. An assessment of such an approach should consider potential effects on the ability to manage care effectively.

If DoD decided to expand the program, it would need to choose the most feasible locations. Factors that should be considered include the size of the local dually eligible population, characteristics of the Medicare managed care market, and features of the MTFs that are candidates for participation. Choices regarding governance structure would also need to be made.

CONCLUSION

The Medicare-DoD Subvention Demonstration tested TSP as a managed care approach for enhancing access to affordable health care for Medicare-eligible DoD beneficiaries. While Senior Prime achieved solid beneficiary participation and satisfaction, it also raised a difficult set of challenges involved in applying managed care to the DoD health care system. These challenges included financial issues such as establishing equitable capitation rates and an appropriate level-of-effort baseline, as well as management issues such as effective care management and administrative processes for health plan sites. The basic structures of TRICARE and the DoD health system, including separate management jurisdictions and hierarchical budgeting methods, contribute to the challenges by creating incentives that discourage delivery of cost-effective care. MTFs need to be motivated not only to provide excellent care but also to manage appropriateness of care and related costs. Although DoD has decided to discontinue the Senior Prime model, many of the lessons learned from this demonstration are applicable to any managed care program that DoD may contemplate in the future.

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We acknowledge with pleasure the contributions made by numerous people to the evaluation process and generation of this evaluation report on the first year of the Medicare-DoD Subvention Demonstration. The DoD staff members participating in Senior Prime at the six demonstration sites continued to offer valuable information and perspectives based on their experiences delivering care to Medicare-eligible beneficiaries and working within the Medicare+Choice program. Several individuals at the TRICARE Management Activity office and their contractors helped us obtain the needed data and refine analytic methods to ensure that our results were based solidly on appropriate measures. These include representatives of SRA International, Inc., Standard Technology, Inc., and Mathematical Policy Research.

Fu Associates, Ltd., performed the extensive data management activities involved in extracting the data required for our impact analyses, generating data files for RAND use, and documenting the contents of those files. The rich experience that Fu Associates staff have had with Medicare data and other large data systems enabled us to develop our analytic data files effectively and efficiently.

Thanks also are extended to the many individuals at CMS, TMA, and RAND who reviewed earlier drafts of this report and previous reports from the evaluation, helping to clarify presentation and strengthen focus on key policy issues and findings. Our RAND colleagues Susan Hosek, Michael Schoenbaum, Catherine Jackson, and Jeffrey Wasserman offered helpful perspectives on both policy and methodological issues. We also appreciate the insights provided by John Moxley, Joseph Newhouse, and Richard Southby, members of our Technical Advisory Panel.

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ACRONYMS

ACH	Army Community Hospital
ACR	Adjusted Community Rate
ADS	Ambulatory Data System
AF	Air Force
AFB	Air Force Base
AMC	Army Medical Center
BBA	Balanced Budget Act of 1997
CBOC	community-based outpatient clinic (VA)
CDR	commander
CEIS	Corporate Executive Information System
CI	confidence interval
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
CHCS	Composite Health Care System
CMS	Centers for Medicare & Medicaid Services
CRIS	CHAMPUS Regional Intermediary System
DEERS	Defense Eligibility Enrollment Reporting System
DHHS	U.S. Department of Health and Human Services
DME	durable medical equipment
DMIS	Defense Medical Information System
DoD	Department of Defense
DRG	Diagnostic Related Group
EDB	Enrollment Database (CMS)
EEAP	Enlisted Education Advancement Program
ESRD	end-stage renal disease
FY	fiscal year
GAO	General Accounting Office
GHP	Group Health Plan
GME	graduate medical education
HCFA	Health Care Financing Administration
HEDIS	Health Plan Employer Data and Information Set
HHS	U.S. Department of Health and Human Services
HMO	health maintenance organization
ICU	intensive care unit
JCAHO	Joint Commission for Accreditation of Healthcare Organizations
LA	lead agent
LOE	level of effort
MC	Medical Center
MCFAS	Managed Care Forecasting and Analysis System
MCP	managed care program
MCS	managed care support
MEPRS	Medical Expense and Performance Reporting System
MEQS	MEPRS Executive Query System
MHS	Military Health System
MOA	memorandum of agreement
MOU	memorandum of understanding
MPC	Medicare Processing Center
M+C	Medicare+Choice
MTF	medical treatment facility

NH	Navy hospital
NMC	Naval Medical Center
OBD	occupied bed day
PCM	primary care manager
PGBA	Palmetto Government Benefits Administrators
PIP-DCG	Principal Inpatient Diagnostic Cost Group
PLCA	Patient Level Cost Allocation
PMO	Program Management Office (CEIS)
POC	point of contact
PPRC	Physician Payment Review Commission
PPS	Prospective Payment System
PRO	professional review organization
PROFIS	Professional Filler System
PTDS	Pharmacy Transaction Data System
QA	quality assurance
QISMC	Quality Improvement System for Managed Care
QM	quality management
RO	regional office (CMS)
SADR	Standard Ambulatory Data Record
SIDR	Standard Inpatient Data Record
SNF	skilled nursing facility
SSN	Social Security number
STI	Standard Technology, Inc.
TEFRA	Tax Equity and Fiscal Responsibility Act
TFL	TRICARE for Life
TMA	TRICARE Management Activity
TSP	TRICARE Senior Prime
UM	utilization management
USAF	U.S. Air Force
USPCC	U.S. per-capita costs
VA	U.S. Department of Veterans Affairs
VRI	Vector Research, Inc.
WPS	Wisconsin Physicians Service
Y2K	Year 2000

Section 1.
Introduction

The Medicare-DoD Subvention Demonstration tested the feasibility of making cost-effective, Medicare-covered health care services available to Medicare-eligible Department of Defense (DoD) beneficiaries through the military TRICARE health insurance program and military medical treatment facilities (MTFs). The Centers for Medicare & Medicaid Services (CMS), formerly the Health Care Financing Administration (HCFA), and the DoD implemented the demonstration at six sites in response to the Balanced Budget Act of 1997 (BBA).

The Secretaries of the Department of Health and Human Services (DHHS) and DoD executed a memorandum of agreement (MOA) in 1998 that specified how to establish and operate the Medicare-DoD Subvention Demonstration, in accordance with the BBA provisions. Two distinct models were to be implemented. The first was a new Medicare managed care plan option, called TRICARE Senior Prime (TSP). Under contract with CMS, DoD operated the Senior Prime plans at the six demonstration sites as Medicare+Choice (M+C) health plans. These plans were administered under both Medicare and TRICARE rules and regulations. Wherever possible, the plans built on the infrastructure of the TRICARE Prime program, which is the existing managed care option for military beneficiaries under age 65.

The second authorized model was Medicare Partners, but no Medicare Partners agreements were established during the demonstration. Therefore, this model was not included in our evaluation. Medicare Partners is an arrangement through which Medicare+Choice organizations could contract with MTFs in the demonstration sites to serve as providers for dually eligible beneficiaries enrolled in the plans. Several sites had expressed interest in Medicare Partner agreements, and the Region 6 site (two MTFs in San Antonio and two MTFs in the Texoma area on the Texas-Oklahoma border) initiated discussions with local M+C plans. However, the M+C plans had little incentive to establish a pricing agreement for services many of their enrollees have obtained previously at no cost to the plans.[1] The plans also identified several concerns regarding compliance with Medicare standards for provider credentialing and access to providers if MTFs were added to the M+C plans' networks of providers. According to CMS, MTFs were exempted from these standards by the BBA and Title 10, but TRICARE Management Activity (TMA) preferred to obtain waivers from CMS before entering into any formal agreements. In addition, both CMS and DoD were concerned that introduction of Medicare Partners agreements could negatively affect Senior Prime. Access for Senior Prime enrollees could be compromised at MTFs with limited space-available care capacity. Furthermore, until Senior Prime had reached a more stable financial situation, there was reluctance to introduce new billing and data management demands on the DoD system.

In September 1998, CMS awarded a contract to RAND to perform an evaluation of the demonstration, with DoD providing the funding for the contract. This report presents the findings from that evaluation, encompassing the early findings on the start-up of the demonstration presented in our interim report (Farley et al., 1999b) and the assessment of effects

[1] This issue is discussed in some detail in RAND's *Interim Report: Evaluation of the Medicare-DoD Subvention Demonstration* (Farley et al., 1999b).

on costs and utilization presented in our evaluation report on the first year of operation (Farley et al., 2000). DoD decided not to fund further analysis of impacts for the second year of the demonstration because of resource constraints and the high costs of the demonstration. Therefore, our evaluation was not able to assess changes in costs and utilization through the remainder of the demonstration or examine effects on beneficiaries. In our discussion of the limitations of our findings in Section 6, we consider which information was not obtained because of the discontinuation of the evaluation analyses.

POLICY FRAMEWORK FOR THE DEMONSTRATION

The MOA for the demonstration begins with the following goal statement:

> The goal of this demonstration is, through a joint effort by DHHS and DoD, to implement a cost-effective alternative for delivering accessible and quality care to dual-eligible beneficiaries while ensuring that the demonstration does not increase the total federal cost for either agency.

The Military Health System (MHS) has been seeking ways to better serve its Medicare-eligible retirees and dependents, who continue to be eligible to use MTF services. DoD pursues this goal within the framework of the dual MHS mission to maintain readiness for wartime medical care needs and to provide comprehensive peacetime health care services for active duty personnel, dependents, and eligible retirees. The DoD encouraged authorization of the subvention demonstration to test how well alternative models could achieve three basic principles that guide DoD health policy formation: (1) contribute to fulfilling the moral obligation to provide DoD beneficiaries health care for life, (2) maintain budget neutrality in the military health system, and (3) strengthen DoD's capability to provide cost-effective managed care in the TRICARE program.

CMS has responsibility for the integrity of the Medicare program, including ensuring effective service to beneficiaries for Medicare-covered benefits, timely and appropriate payments to Medicare providers, protection against fraud and abuse, and ensuring the financial viability of the program. In this context, from CMS's perspective, the subvention demonstration needed to conform to three basic principles that, indeed, are important factors for all Medicare policy formation: (1) protect the solvency of the Medicare trust funds, (2) provide for beneficiary choice and protections, and (3) ensure effective plan performance.

The BBA provided for operation of the subvention demonstration through the end of 2000, and later legislation extended it through the end of 2001. The Senior Prime plans then were discontinued as specified by legislation. DoD notified CMS that it was terminating the M+C contracts for the Senior Prime plans, and the two agencies carried out the necessary procedures to notify enrollees and provided for their smooth transition to other Medicare or DoD coverage options.

Effective October 1, 2001, a new entitlement program, called TRICARE for Life (TFL), began offering Medicare supplemental insurance for Medicare-eligible DoD beneficiaries. To be eligible for TFL, a DoD beneficiary must be entitled to Medicare Part A and enrolled in Medicare Part B. TFL is a secondary payer to fee-for-service Medicare and covers the following benefits:

- Medicare deductibles and copayments for services covered by both Medicare and TRICARE.
- Payments for other services covered by TRICARE subject to TRICARE copayments. These services include inpatient hospitalization and skilled nursing care when the Medicare benefits are exhausted, skilled nursing care without at least three days prior hospitalization (Medicare requires prior hospitalization for coverage), and care for individuals residing in foreign countries.
- Prescription drugs from MTF pharmacies, the TRICARE National Mail Order Pharmacy, or TRICARE retail pharmacies (called the TRICARE Senior Pharmacy Program).
- A family catastrophic cap of $3,000 in out-of-pocket costs for TRICARE-allowable medical expenses in any fiscal year, above which TRICARE will pay 100 percent of allowable charges for the rest of the year.

DoD also examined alternatives for providing an option for MTF-based care for dually eligible beneficiaries, for possible introduction in October 2002. The alternatives considered were (1) continuation of a program similar to Senior Prime, (2) a model that provides MTF services to the extent space is available and refers other care to community providers with Medicare as primary payer and TFL as second payer, and (3) reliance primarily on a civilian network of providers with referrals to MTFs for certain specialty care. The delay in offering such an option was caused by the differing capabilities of the MTFs and the need to renegotiate contracts with the TRICARE network contractors. According to DoD, program design issues being addressed included the relative priority for access to MTF services and provisions for transition for current TRICARE Prime enrollees who will age into Medicare eligibility.[2]

THE DoD AND MEDICARE HEALTH PROGRAMS

Senior Prime brought together the health benefits and service delivery capabilities of two major federal health programs. DoD and CMS had to achieve effective linkages between their respective legal requirements and operational policies to ensure access to benefits for the dually eligible beneficiaries they both serve. A brief description of each of these systems is provided here as background information for consideration of the Senior Prime program.

The Military Health System

The peacetime military health strategy of the DoD is to provide comprehensive, cost-effective care to active duty members, their families, and other eligible beneficiaries in all the uniformed services. Much of this health care is provided directly through several hundred military hospitals and clinics that constitute the system of military treatment facilities. MTFs provide care to all military beneficiaries free of charge as capacity permits. Each MTF has a defined service area, called a catchment area, that generally includes the zip code areas within a

[2] Information as of May 4, 2001, in a brochure entitled *TRICARE for Life: The Road to Honoring Health Care Commitments*, published on the web site of The Retired Officers Association (TROA), http://www.troa.org/legislative/healthcare/TRICAREForLife.pdf.

40 mile radius of the MTF. Although most military beneficiaries live within such a catchment area, more than half of the older, Medicare-eligible beneficiaries do not.[3]

MHS provides health care to approximately 8.2 million beneficiaries. In FY1997, an estimated 15.5 percent of this population were elderly military beneficiaries (those age 65 or older), and 24.5 percent were younger retirees and their dependents. According to DoD projections, the elderly retiree population will continue to increase as retired military beneficiaries age into Medicare eligibility.

The TRICARE health insurance program began operation in 1995. The TMA office is responsible for overall management of this program. In addition, each of the 11 TRICARE service regions in the United States, Europe, the Pacific, and Latin America is managed by the military in partnership with civilian managed care support (MCS) contractors. A senior military health care officer is designated as the TRICARE lead agent (LA) for each region, and the lead agent's office is responsible for coordinating the delivery of health care to eligible beneficiaries living in that region. Day-to-day service delivery and clinical decisionmaking is done by the primary care managers (PCMs) in the MTFs, with oversight by local MTF commanders. The TMA contracts directly with an MCS contractor for each region to provide support services for the region's LA office. The terms of the MCS contracts are established between TMA and the contractors, in consultation with the LA offices.

The TRICARE system offers expanded access to care, a choice of health care options, consistent high-quality health care benefits, and reduced health care costs for beneficiaries and taxpayers alike. TRICARE is a managed care program modeled after civilian standards. The program offers beneficiaries three choices for their health care: TRICARE Standard, a fee-for-service option that replaced Civilian Health and Medical Program of the Uniformed Services (CHAMPUS); TRICARE Extra, a preferred provider option; and TRICARE Prime, an HMO model option. MTFs are the principal sources of health care for TRICARE Prime enrollees, and civilian network providers supplement their services when needed. All active duty members and their families, retirees and their families, and survivors may participate in one of the three TRICARE options if they are not eligible for Medicare. Additionally, those individuals under age 65 who are eligible for Medicare because of disability or end-stage renal disease may participate. However, Medicare beneficiaries who are age 65 and over and otherwise eligible for military benefits may not enroll in TRICARE.

Under TRICARE, access to MTF services is offered to beneficiaries in the following order of priority: (1) active duty service members, who are enrolled in TRICARE Prime automatically; (2) family members of active duty service members enrolled in Prime; (3) retirees, their family members, and survivors enrolled in Prime; (4) family members of active duty service members who are not enrolled in Prime; and (5) all other beneficiaries. Because Medicare-eligible beneficiaries had been excluded from TRICARE, they were in the lowest priority group.

All beneficiaries not enrolled in TRICARE have access to MTF services only if space is available (called space-available care). A combination of an MTF's service capacity limits (usually clinic staffing levels) and the volume of services provided to Prime enrollees determines

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[3] Testimony of the Military Coalition on Health Care Concerns of the Uniformed Services Community provided to the Senate Appropriations Committee, Subcommittee on Defense, May 11, 1998.

the amount of space-available care an MTF can provide. Since Prime enrollment has grown and budgets have not, space-available care has declined, although at varying rates across MTFs.

Medicare Managed Care

Managed care options have been an official part of the Medicare program since 1985, after the Tax Equity and Fiscal Responsibility Act (TEFRA) established provisions for risk and cost contracting HMOs. Medicare beneficiaries living in areas served by Medicare HMOs could elect to join one of these plans; they could also disenroll from a plan at the end of any month. HMOs could participate as either a risk contractor (by far the most common type), a cost-based contractor, or a health care prepayment plan. Risk contracting plans received capitation payments to provide Medicare-covered services to enrollees, based on separate capitation rates established for each county in the country. CMS calculated a health plan's capitation payments each month as the sum of the products of the capitation rate for each enrollee's county of residence and the enrollee's risk factor. Cost-based plans and health care prepayment plans were paid based on actual costs of care. Medicare managed care enrollment grew rapidly during the 1990s. As of December 1998, 6.1 million Medicare beneficiaries, accounting for 16 percent of the total Medicare population, were enrolled in 346 risk contracting plans.

The BBA replaced the existing Medicare managed care program with the M+C program established under a new Medicare Part C. As of January 1999, a variety of managed care organizations were authorized to contract as M+C organizations on a capitated payment basis. Existing risk plans could convert to the new program, and the two cost-based options were discontinued (with few exceptions, such as union-based plans). The BBA used the TEFRA risk contracting program as a template for the M+C program, including a number of beneficiary protections, conditions for participation for contracting plans, and Adjusted Community Rate (ACR) requirements intended to limit windfall profits for health plans in areas with high capitation rates.[4]

The BBA also adopted a new methodology for establishing the county-level Medicare capitation rates, which went into effect in 1998. The BBA required development of an improved risk adjustment method, which CMS began to implement in January 2000.

Since the M+C program was initiated, a large number of managed care organizations have discontinued their Medicare contracts. As a result, Medicare beneficiaries enrolled in these M+C plans either had to return to standard Medicare or switch to other M+C plans serving their areas. The Dover Air Force Base (AFB) site was affected by this phenomenon; three M+C plans in its service area discontinued their Medicare contracts at approximately the same time the Dover Senior Prime plan began being offered.

THE MEDICARE-DoD SUBVENTION DEMONSTRATION

Medicare-eligible DoD beneficiaries are free to choose where they get their health care, either through the military or through Medicare health plans serving their local markets. Under

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[4] Adjusted Community Rates are rates that plans estimate they would have received for their Medicare enrollees if they had been paid at levels equal to their private market premiums, adjusted for demographic differences. Each year, plans are required to return to enrollees any Medicare revenue in excess of their ACRs by reducing premiums or increasing benefits for the following year.

current law, however, when these dually eligible individuals obtain health care services at treatment facilities operated by DoD or by the Department of Veterans Affairs (VA), Medicare cannot reimburse either organization for those services.[5] As a result, the health care costs of this elderly population are shared by Medicare, DoD, and VA, according to the mix of service sectors that beneficiaries use.

Medicare-eligible DoD beneficiaries who prefer to get their care at MTFs face the problem of limited access because their care at MTFs is provided on a space-available basis. Their access to MTF services has become more and more limited as high-priority TRICARE Prime enrollees use growing shares of the MTF service capacity. This combination of restricted Medicare reimbursement and limited access to MTF care was the impetus for the Medicare-DoD Subvention Demonstration, using Senior Prime as a Medicare managed health care option through TRICARE for dually eligible beneficiaries.

Provisions for TRICARE Senior Prime

The subvention demonstration established TSP as M+C health plans operated by DoD, in which participating MTFs were the principal health care providers for enrolled beneficiaries. The Senior Prime plans were certified by CMS, and they were subject to the same performance standards as all other M+C plans, with some exceptions where requirements were waived because of the unique circumstances of military health care.

TSP enrollees chose a military PCM at a participating MTF where they received their primary care as well as most other covered services. For services the MTF did not provide, enrollees were referred to other MTFs or to civilian providers in the Senior Prime network (network providers).

Participation in TSP was voluntary and did not involve any premium. To be eligible, beneficiaries had to be age 65 or older; be eligible for Medicare Part A and enrolled in Medicare Part B; be residents of a demonstration site's service area; and either have used MTF services prior to January 1, 1998, or have become eligible for Medicare after December 31, 1997.[6] In addition, enrollees agreed to receive all of their covered services through Senior Prime. DoD beneficiaries who were Medicare eligible due to end-stage renal disease or who were younger than 65 and Medicare eligible due to disability were excluded from the demonstration. These beneficiaries still could receive care from MTFs on a space-available basis, and those younger than age 65 could join TRICARE Prime.

The MOA gave DoD discretion to expand coverage for Senior Prime beyond the standard Medicare benefits to include additional TRICARE benefits. For example, Senior Prime covered up to 100 days of extended skilled nursing facility (SNF) care as well as TRICARE Prime pharmaceutical benefits. Senior Prime enrollees did not have to pay any copayments or coinsurance for services provided in the MTFs, but they did have to pay part of the costs for network provider services. Copayments for network provider outpatient services ranged from

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[5] Section 1814(c) of the Social Security Act.

[6] DoD is not able to verify prior use of MTF services through its administrative data. Senior Prime applicants needed to complete an item on the application form stating whether they met this eligibility criterion. It is not possible to assess the extent to which this requirement constrained enrollment, but the sites have not reported any issues regarding such an effect.

$12 to $30 per unit of service. For acute inpatient services, there was a copayment of $11 per day with a minimum of $25 per admission. Enrollees also paid $40 per day for partial hospitalization or inpatient mental health or substance abuse services by network providers. For ostomy supplies, prosthetic devices, therapeutic shoes, and durable medical equipment (DME), the cost sharing was 20 percent of the negotiated fee.

Operation as Medicare+Choice Plans

To participate in Senior Prime, the demonstration sites had to meet the conditions for participation required for all M+C plans. An exception was made if requirements were determined not applicable or waived by the Department of Health and Human Services (HHS)/DoD MOA under authority of the BBA. Senior Prime plans were expected to comply with the following categories of standards:

- Satisfactory administrative and management arrangements, including a policymaking body, adequate management systems, and an executive manager.
- Effective procedures for utilization management.
- A service delivery system capable of providing all Medicare-covered services, including proper licensure or certification for providers.
- Appropriate access to services and continuity of care for enrollees, including provisions to cover services through another organization in urgent or emergency situations.
- Internal quality assurance programs and external reviews, including systematic collection and reporting of performance data.
- Non-discrimination in screening of enrollees and with respect to provider participation, payment, or indemnification.
- Full disclosure of information to enrollees on the plans' benefits, features, service area, provider network, coverage policies, etc., with all marketing materials submitted to CMS for approval before use.
- Compliance with all requirements for processing enrollment applications, membership information, voluntary and involuntary disenrollments, payments by enrollees, and submittal of related records to CMS.
- Compliance with standards for beneficiary protection, including grievances and appeals processes, confidentiality, and information on advance directives.

In an April 2000 letter to TMA, CMS transmitted a consolidated list of waivers to the M+C regulations for the subvention demonstration. This letter updated and replaced Enclosure B of the original MOA for the demonstration. This list of waivers was the product of discussions between CMS and TMA as the demonstration sites gained operating experience. Four provisions were also approved by CMS that did not require formal waiver. The four provisions, followed by the waivers, are as follows:

> *Provision 1: Access standards.* DoD may enroll throughout a 40-mile catchment area, but beneficiaries residing more than 30 miles from the MTF must sign an acknowledgement that the usual M+C plan access standard is 30 minutes or 30 miles to reach a provider. Furthermore, age-in beneficiaries may enroll outside

the 40-mile areas if they sign the acknowledgement. To qualify for age-in enrollment, beneficiaries must be enrolled in TRICARE Prime before their 65th birthday with a primary care manager at an MTF participating in the subvention demonstration.

Provision 2: Open enrollment periods. DoD does not need to comply with the November open enrollment and special election periods. DoD may stop accepting members when the site-specific enrollment limits are reached.

Provision 3: Effective enrollment date. DoD may continue to provide a "proposed effective date" for new enrollees before confirmation of Medicare eligibility is obtained from CMS.

Provision 4: Beneficiary notifications. In the event of deployment or other unforeseen change in provider availability, DoD will not need to comply with the notification timeline requirements for changes in the provider network. However, this notification remains a requirement when providers are reassigned under normal circumstances.

Waivers allowed for the Senior Prime sites:

State licensure requirement. DoD facilities are not state licensed, but they are accredited by the Joint Commission for Accreditation of Healthcare Organizations (JCAHO), which is similar to Medicare certification. Any non-DoD facility in the provider network must be licensed in the state where it operates.

Provider credentialing. Military physicians and other clinical professionals are required to be licensed in at least one state to participate in Senior Prime. This waiver acknowledges that military personnel are not required to be licensed in the state in which they are located, as long as they have a valid license from one state. Network providers, however, must be licensed in the state where they are serving Senior Prime enrollees.

Financial requirements. These standards are waived because they are not relevant to the DoD system. They ensure fiscal soundness and insolvency protection for civilian Medicare plans.

Physician incentive plans. These requirements are not applicable to physicians practicing at the MTFs, but any network physicians or physician groups must comply with the rules.

Adjusted Community Rate submittal. This requirement initially was waived only for calendar year 2000. CMS has issued an extension of the waiver through 2001, anticipating extension of the Senior Prime program.

Risk adjustment. This waiver confirmed that DoD would not be subject to the prospective risk adjustment being implemented for M+C plans in 2000. Instead, a "risk corridor" adjustment method is being used for the subvention demonstration to protect against adverse selection.

Reporting requirements. Reporting requirements were waived for reporting year 2000 for administration of the Consumer Assessment of Health Plans Survey and for selected Health Plan Employer Data and Information Set (HEDIS) measures.

These measures include all of the HEDIS health plan stability and costs of care measures, an access to care measure on language interpretation, and two effectiveness of care measures that are measured using survey data.

Financial Provisions

The capitation payment rates for Senior Prime enrollees were based on the county-level Medicare capitation rates for the counties in which the enrollees resided, which were adjusted by the average demographic factors for the Medicare beneficiaries residing in each county. The Senior Prime capitation rates were set at 95 percent of these county rates, after deducting the cost of direct and indirect medical education, disproportionate share payments, and a portion of hospital capital payments.[7] These costs were deducted based on agreement by CMS and DoD that they would not be applicable to MTF care. In addition, Medicare paid for enrollees' care only after DoD had spent as much for health care services to dually eligible beneficiaries in the demonstration sites (enrollees and non-enrollees) as it spent in the past; this is referred to as level of effort (LOE). The MOA defined the baseline LOE as the FY1996 DoD expenditures for dually eligible beneficiaries at each site. The LOE was kept constant for the duration of the demonstration. Exceptions were provided for adjustments due to substantial changes in overall defense health spending or Base Realignment and Closure actions that reduced DoD's ability to serve dually eligible beneficiaries, but these exceptions did not have to be activated.

The MOA also established expense thresholds for Senior Prime enrollees and non-enrollees that were used to determine whether CMS would make payments to DoD and the levels of those payments. The thresholds were set originally at 30 percent of LOE for enrollee expenses and 70 percent for non-enrollee expenses in the first year of the demonstration; the thresholds then became a 40/60 split in the second year and a 50/50 split in the last year. Because the demonstration was originally to operate for only 28 months, an MOA clarification applied these thresholds to shorter payment periods: a ten-month period from September 1998 to June 1999, followed by a nine-month period through March 2000 and another nine-month period through December 2000. With the extension of the demonstration through 2001, the 50/50 split for thresholds was continued.

The BBA authorized CMS to make interim payments to DoD, and it established annual limits on Medicare spending for Senior Prime enrollees. The MOA defined thresholds to trigger interim payments, methods to determine these payments, provisions for retrospective risk adjustment of payments, and methods for annual reconciliations of payment amounts. Given these provisions, the payment policy for Senior Prime consists of the following components:

1. If total expenses for enrollees and non-enrollees exceeded the LOE—***and***—the expenses for enrollees exceeded the relevant threshold (30/40/50), then DoD was eligible to retain payments from CMS. The payments being retained were interim payments already made by CMS during the year, when enrollee expenses exceeded 30 percent of the (prorated) LOE. The amounts retained (or returned to CMS) were reconciled annually by calendar year.

[7] For clarity, we note that the county capitation rates are grounded in the historical Medicare capitation rates, which were set at 95 percent of the average per-capita costs for Medicare fee-for-service beneficiaries. Thus the Senior Prime rate is discounted to 95 percent of the "95 percent Medicare capitation rates."

2. However, DoD actually retained payments in each calendar year only if the net payment amount calculated using the following formula was greater than zero:

   Net payment made to DoD = gross capitation payments + allowed cost for non-enrollees baseline–LOE–user fee.

   Where:

   a. The Senior Prime gross capitation payment is the allowed cost for enrollees.

   b. The allowed cost for non-enrollees is the minimum of the actual DoD cost or the relevant threshold (70/60/50).

   c. The user fee is an advertising charge that CMS places on retained capitation payments.

   Net return (or cost) for Senior Prime can be estimated as the net payment made to DoD minus any expenses *in excess of LOE* that were incurred by the sites for serving dually eligible beneficiaries.

Using this payment policy, four tests were made to determine the amount of capitation payment, if any, that DoD would retain in each calendar year established for the demonstration (or partial calendar year for 1998):

Test 1—Total spending for dually eligible beneficiaries must exceed the LOE, which is prorated for the first calendar year (September through December 1998).

Test 2—Spending for Senior Prime enrollees must exceed the relevant threshold percentage (30/40/50) of LOE.

Test 3—Net interim payments must be positive after adjusting interim payments for any months with enrollment shortfalls resulting in return of payments to CMS.

Test 4—The net payment amount from the calculation in payment component 2 above must be positive, that is, the sum of the gross capitation payments and allowed cost for non-enrollees must exceed the sum of baseline LOE and the Medicare user fee.

In the first calendar year payment period (September through December 1998), DoD did not retain any payments because it failed to meet the last of these four tests. As a result of substantial enrollments and service use activity, DoD exceeded requirements for total spending, spending for Senior Prime enrollees, and enrollment thresholds for interim payments. However, spending on MTF space-available care for non-enrollees was below the upper limit of 70 percent of the prorated LOE. Furthermore, several months were required to achieve the higher levels of Senior Prime enrollments in some sites, so total capitation payments were lower than expected. DoD estimates that all four tests were met in the last two calendar years of the demonstrations, which will allow DoD to retain Senior Prime payments.

DoD did not retain any payments for calendar year 1999 either. Again, low costs incurred for space-available care for non-enrollees limited the extent to which the sum of capitation payments and space-available care costs exceeded the LOE. Further, all the demonstration sites except one had positive selection in enrollments, resulting in a 6.7 percent reduction in payments when risk adjustment was applied. Computations for calendar year 2000 had not yet begun at the time this report was written.

The payment mechanism for the Senior Prime plans, and the financial risk assumed by each participating entity, differed substantially from those of private Medicare health plans. Any capitation payments from CMS were to be paid to TMA, which then would allocate the payments to the individual military services. No payments were allocated to the military services during the demonstration, reflecting uncertainty about the extent to which DoD could retain the capitation payments. TMA and the MTFs assumed the financial risk for Senior Prime because TMA was paying for all services provided by Senior Prime network providers, and the MTFs were incurring costs for the services they provided to enrollees. This system created an incentive for MTFs to avoid costs by referring patients to network providers.[8] Unlike private health plans, the LA offices assumed no financial risk for management of care for Senior Prime enrollees. The flow of funds to the MTFs occurs through a complex budgeting process, where it often is difficult to observe direct relationships between changes in programs and related budgetary support from DoD.

DEMONSTRATION SITES AND THEIR MARKETS

The six demonstration sites selected by DoD and CMS and the ten MTFs participating in the sites are listed in Table 1.1. The total planned enrollment for the six Senior Prime plans was 27,800 Medicare-eligible DoD beneficiaries. Each site identified its own enrollment level using a variety of techniques; some were targeted enrollments based on market analyses and others were more measures of the number of enrollees that existing MTF treatment capacity (e.g., available staffing or facility space) could serve.[9] The sites began enrollments soon after they met all the requirements for certification by CMS as Medicare health plans.

Table 1.1.
Subvention Demonstration Sites and Planned Enrollment Levels

Demonstration Site	TRICARE Region	Start Service Delivery	Planned Enrollment
Dover Air Force Base (AFB)	1	January 1999	1,500
Keesler AFB Medical Center	4	December 1998	3,100
Southwest (Region 6) site:	6		
Brooke Army Medical Center (AMC)		October 1998	5,000
Wilford Hall Medical Center [Air Force (AF)]		October 1998	5,000
Reynolds Army Community Hospital (ACH), Ft. Sill, OK		December 1998	1,400
Sheppard AFB Hospital		December 1998	1,300
Colorado Springs site:	8		
Evans ACH, Ft. Carson, CO		January 1999	2,000
Air Force Academy		January 1999	1,200
Naval Medical Center (NMC) San Diego	9	November 1998	4,000
Madigan AMC	11	September 1998	3,300

[8] It would be difficult to assess this issue empirically, however, because this incentive would be only one of several possible explanations for any observed increases in use of network providers.

[9] Examples are the Region 6 site that set enrollment targets based on expected market penetration as well as on MTF capacities, and the Dover site that views its "target" level as its maximum MTF capacity.

The six subvention demonstration sites were selected by DoD, with approval by CMS, to represent a diversity of characteristics for the participating MTFs and the Medicare managed care markets in which they are located. Recognizing that these six sites may not be representative of the MHS as a whole, we identified a comparable set of control sites with which to compare observed changes in service use and costs during the demonstration. In Section 2, we discuss our criteria for control site selection and describe the control sites as well as related issues of comparability between demonstration and control sites.[10] We interpreted findings with caution, understanding that the types of locations and treatment facilities that participate in a larger program could be quite different from those in the demonstration.

Demonstration Site Participants and Relationships

The treatment facilities operated by the three Armed Services are the organizational and resource foundation for the MHS. The MTFs are managed as components of medical command structures, with differing structures across the military services.[11] The facilities are organized to support the primary mission of the MHS to maintain a fit and healthy fighting force.

When TRICARE was introduced to lead the peacetime health care mission, it was established as a separate organization apart from the health systems of the three military services. TMA manages the central TRICARE operation, serving in policy, support, and oversight functions for this system. The regional LA offices are responsible for field operations to ensure that beneficiaries receive covered benefits and support services. The lead agents do not have line authority over the MTFs; rather, they serve in roles of coordination, facilitation, and communication with the MTFs for the management of care for DoD beneficiaries. Similarly, TMA does not have authority over the lead agents.

Senior Prime required a stronger leadership role for the lead agents than they perform for TRICARE. The subvention demonstration sites were located in six different TRICARE regions. Each regional LA office was designated as the Senior Prime plan for the site in its region, and CMS held the LA offices accountable for fulfilling Medicare requirements for plan performance. Using a private health plan model, the lead agent was responsible for all operational functions of the Senior Prime plan, and the participating MTF(s) served as the primary provider(s) of clinical care services for enrollees.

In addition to the lead agent and TMA, the third key participant at each Senior Prime site was the MCS contractor, each of which is under contract with TMA to perform many of the administrative functions for the TRICARE program, working closely with the LA office. The MCS contractor also performed these functions for the Senior Prime plan, including maintaining a network of civilian providers, marketing, enrollment, beneficiary services, utilization management, and claims processing. The contractor established contracts with the Senior Prime network providers for services that the participating MTFs did not provide, such as services of subspecialty physicians, skilled nursing care, home health, and DME.

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[10] See also our evaluation plan (Farley et al., 1999a), which gives details on control site selection.

[11] The Army Surgeon General heads the Army medical command, within which the MTF commanders report upward through regional medical commands. The Navy has a similar structure, although MTF commanders at Marine bases also have "dotted line" reporting relationships to the base commanders. Air Force MTF commanders report directly to the line commander at the bases where the MTFs are located.

Four MCS contractors supported the demonstration sites' activities. Foundation Health Federal Services, Inc., was the contractor for three of the subvention sites: Region 6, Naval Medical Center (NMC) San Diego, and Madigan Army Medical Center (AMC)/Region 11. TriWest Healthcare Alliance served the Colorado Springs site; Humana Military Healthcare Management served the Keesler AFB site; and Sierra Military Health Services, Inc., served the Dover AFB site.

Characteristics of the MTFs in the Demonstration Sites

Some of the basic structural characteristics of any medical facility are the size of the population it serves, the size of the facility, and the facility's involvement in graduate medical education (GME). As shown in Table 1.2, the MTFs participating in the Senior Prime demonstration varied substantially in these characteristics. Dover AFB, the smallest MTF, had no inpatient service capacity, a small population base, and no involvement in GME. The NMC San Diego is at the other extreme—it had a large population base, a large inpatient capacity, and several GME programs. The larger MTFs tended to be in locations with larger Medicare-DoD dually eligible populations. In addition, dually eligible beneficiaries tended to be large fractions of the total DoD beneficiary populations residing in these locations, compared with populations in more remote areas.

Table 1.2.
Characteristics of the Treatment Facilities in the Demonstration Sites, 1998

	Catchment Area Populations			Annual	Average	Graduate
MTF	No. Dually Eligible	Number of Active Duty	Ratio of AD/DE *	Discharge Rate	Daily Census	Medical Education
Dover AFB	3,730	4,184	1.12	—	—	No
Keesler AFB MC	7,601	10,473	1.38	5,115	69.7	Yes
Region 6 site:						
Brooke AMC	21,220	12,989	0.61	9,493	129.8	Yes
Wilford Hall MC	13,967	18,385	1.32	15,404	189.2	Yes
Sheppard AFB	2,592	3,875	1.49	2,091	33.1	No
Reynolds ACH, Ft. Sill	4,744	14,906	3.14	3,229	22.8	No
Colorado Springs site:						
Evans ACH, Ft. Carson	6,162	15,621	2.54	5,226	37.4	No
USAF Academy	8,184	12,485	1.53	2,201	12.2	No
NMC San Diego	36,184	68,789	1.90	21,983	200.6	Yes
Madigan AMC	19,565	24,624	1.26	10,686	117.1	Yes

* The "Ratio of AD/DE" is the ratio of active duty personnel to dependents.

Two of the demonstration sites had more than one participating MTF. In Region 6, the LA office worked with four MTFs in two separate market locations. Brooke AMC and Wilford Hall Medical Center (MC), both located in San Antonio, are large specialty hospitals that share a service area in which a large population of dually eligible beneficiaries resides. Reynolds Army Community Hospital (ACH) and Sheppard AFB are in rural locations near the Texas-Oklahoma border with relatively small dually eligible populations. In the Colorado Springs site, the Central Region LA office worked with Evans ACH and the U.S. Air Force (USAF) Academy, both in the Colorado Springs market. In the other four sites, the LA office had a one-on-one working

relationship with an MTF and, with the exception of Dover AFB, the lead agent was also the commander of the MTF. Dover is located in Region 1, where the MTFs with inpatient capacity are clustered in the national capital area, and the LA office is housed at Walter Reed AMC.

The Medicare Markets in the Demonstration Sites

The six demonstration sites were located in Medicare markets with a diversity of managed care profiles. As shown in Table 1.3, there was considerable Medicare managed care in the markets for the Colorado Springs, San Diego, and Madigan sites, and in the San Antonio portion of the Region 6 site when Senior Prime began. The average base rates for the 1999 monthly M+C capitation payments varied moderately across the sites.[12] The Senior Prime base capitation rates were calculated as modifications to these M+C county rates, as described above. The highest average 1999 rates were $560 per member per month for the Keesler AFB market and $528 for the NMC San Diego market. The Texoma market had the lowest average rate of $381 per member per month.

Table 1.3.
Medicare Managed Care Market Profiles for the Demonstration Site Service Areas

	1999 Medicare Capitation Rate *	Number of Medicare Beneficiaries	Percentage of Medicare Beneficiaries Enrolled	Number of Medicare HMOs >1% Share **	Largest HMO Market Share
Dover AFB	$479	148,361	6.1%	1	59.7%
Keesler AFB ***	560	108,501	12.3	1	78.5
Region 6–San Antonio	472	203,871	33.8	4	41.5
Texoma area	381	54,199	4.2	2	70.8
Colorado Springs	426	146,363	38.6	6	55.8
NMC San Diego	528	339,309	49.4	5	62.3
Madigan AMC	422	373,649	28.2	6	37.2

SOURCE: Analysis of January 1999 Medicare market penetration data, published 1999 Medicare capitation rates, DoD data on zip codes in MTF catchment areas, and zip code/county crosswalk files.

* Average M+C base rates for the counties in each catchment area, weighted by number of beneficiaries in each county. These are *not* the base capitation rates for the subvention sites.

** The number of HMOs does not include the Senior Prime plan.

*** The only substantial Medicare health plan enrollment is on the edge of the Keesler service area in Alabama.

THE RAND EVALUATION

Attachment E to the MOA specifies evaluation questions in four areas that define the scope of the evaluation. Those areas are benefits for enrollees, cost of program, impact on other DoD and Medicare beneficiaries, and enrollment demand. Within each area, the evaluation must assess if the demonstration succeeded. It also must analyze details of program dynamics. CMS and DoD have emphasized the importance of obtaining information and tools from the

[12] To establish actual payments to a M+C organization, these base rates are adjusted by the Medicare demographic factors (risk adjusters) for the organization's enrollee mix.

demonstration that will enhance their ability to effectively expand Senior Prime plans across the military health system, should such a decision be made. This applies as well to Medicare Partners agreements if they are implemented in the future. Working with these specifications, RAND designed its evaluation to include[13]

- a process evaluation of implementation activities
- analyses of enrollment demand and disenrollments
- effects of the demonstration on beneficiaries
- effects on government costs.

The process evaluation gathers and analyzes information on the implementation activities of demonstration participants. Each site's experience with Senior Prime is documented, and operational successes and challenges in program implementation are identified. The implications for a permanent, systemwide program are assessed. This qualitative information also guides interpretation of findings from our quantitative outcome analyses.

The RAND evaluation was one of two independent assessments of the subvention demonstration. The BBA directed the Inspector General to perform an evaluation, which is being carried out by the General Accounting Office (GAO). We considered the published findings from the GAO evaluation as part of the information available to our evaluation. The GAO performed some data collection and analyses that were not within the scope of our work, for example, surveys of the beneficiary population. We cite pertinent findings from this GAO work together with our results in our assessment of the performance of the demonstration and implications for future applications. Where both our evaluation and the GAO evaluation addressed the same issues, such as enrollment demand and effects on costs, we examined the similarities and differences in our results to gain a richer perspective on the demonstration.

SCOPE OF THE FINAL EVALUATION REPORT

The remainder of this report is organized as follows. Section 2 describes the methods and data used for the evaluation analyses of the first year of Senior Prime operation. Section 3 presents the results of the process evaluation regarding implementation of Senior Prime and associated effects on other aspects of the Medicare and military health care markets. Section 4 presents the results of the analysis of enrollment demand, including examination of factors that contributed to demand for Senior Prime and some early disenrollment patterns. Section 5 reports changes in service utilization in the Medicare and DoD sectors and the aggregate effects of the demonstration on Medicare and DoD costs. A discussion of the implications of the evaluation's findings is provided in Section 6. Appendices A through C contain additional information on the process evaluation methods, and Appendix D gives details on methods for estimation of unit costs.

[13] Refer to "Evaluation Plan for the Medicare-DoD Subvention Demonstration," by Donna O. Farley, Dana P. Goldman, Grace M. Carter, and Lois M. Davis (NTIS accession number PB-99-149056) (Farley et al.,, 1999a).

Section 2.
Evaluation Methods and Data

In this section, we describe the general approach used for the evaluation, data requirements and limitations, choices for MTFs to serve as control sites for evaluating the demonstration's effects, and methods used for analyses.

OVERVIEW OF DESIGN AND METHODS

We used a combination of process and outcome evaluation methods to develop a comprehensive picture of the experiences and effects for CMS, DoD, and the individual demonstration sites in implementing TSP. The process evaluation gathered and analyzed information on the implementation activities and behavioral interactions among demonstration participants during implementation and operation of Senior Prime. The quantitative evaluation was designed to assess effects of subvention on

- enrollment demand, disenrollment rates, and related selection issues
- costs for Medicare and DoD, and net costs for the federal government
- access, quality, satisfaction, health status, and out-of-pocket costs for dually eligible beneficiaries and other DoD and Medicare beneficiaries.

For the *process evaluation*, we used case studies at the start of the demonstration to gather information on the experiences of CMS, DoD, and the demonstration sites during the start-up of Senior Prime. These site visits were followed by teleconference sessions with each of the demonstration sites after the first year of operation to monitor local activities, the sites' experiences operating as Medicare+Choice plans, and issues that arose with implications for decisions regarding systemwide implementation of Senior Prime. We collected information through individual and group interview methods.

The *enrollment analysis* documented and characterized the market demand for Senior Prime plans, the extent to which the characteristics of enrollees differed from those of non-enrollees (selection), and rates of disenrollment that might indicate dissatisfaction with the plans. These analyses relied on a combination of Medicare and DoD administrative data on enrollments and process evaluation information from site visits and teleconferences. Descriptive analyses were performed of Senior Prime enrollment trends and differences in characteristics of enrollees and non-enrollees. We also estimated separate logit models of determinants of enrollment for two groups of beneficiaries: those who enrolled from fee-for-service Medicare and those who left M+C plans to enroll.

To analyze *effects of the demonstration* on costs and beneficiaries, we used a pre/post-intervention and demonstration/control research design. The original design called for comparative analyses at the end of each of Year 1 and Year 2 of the demonstration, as shown in the Figure 2.1. We performed the Year 1 analyses but did not do the Year 2 analyses because of the discontinuation of DoD funding. These analyses relied on CMS and DoD data on enrollments and service use. We compared effects on aggregate service delivery costs (for all

sites) across the individual cells in the figure. Where appropriate, we also estimated effects of the demonstration at the level of the Senior Prime plan.

	Baseline	Year 1 (Early Operation)	Year 2 (Fully Implemented)
Demonstration	No change	Subvention	Subvention
Control	No change	No change	No change

Figure 2.1—Design of the Evaluation of the Subvention Demonstration

Because this evaluation uses data from a demonstration, the study population is considered to be a sample drawn from the larger population of dually eligible beneficiaries. Therefore, the statistical significance of comparisons should be considered in interpreting the study results. However, the sample is so large that almost any observable difference in measures is statistically significant. Therefore, we do not report the significance of differences in presenting our results.

Since the effects of introducing Senior Prime were influenced by the operational successes and challenges at each site, findings from the process evaluation were used to inform interpretations of our quantitative analyses. In particular, the information obtained in the first round of site visits guided judgments regarding which observed effects (or absence of effects) were short term and might change as sites learned from their experiences with Senior Prime. The teleconferences held in early 2000 supported further interpretation of these issues.

The *data sources* for the enrollment analysis and estimation of effects of the demonstration were the Medicare and DoD administrative data systems, which included master file data on each beneficiary as well as data on encounters or claims for health services they utilized. The set of dually eligible beneficiaries for our study was identified by linking records from the DoD master file to beneficiary records in the Medicare enrollment database, using a matching algorithm. For those beneficiaries, we then extracted encounter and claims records for all Medicare Part A and Part B services, MTF inpatient and outpatient services, and Senior Prime network provider services. Cost data were available on the Medicare claims and network provider claims, in the form of payment amounts. We estimated unit costs for different types of MTF encounter data, using data from the MTF accounting system, and applied those unit costs to the encounters to impute costs for these services.

PROCESS EVALUATION

The process evaluation of the Medicare-DoD Subvention Demonstration is designed to

- document the activities and experiences of CMS, DoD, the demonstration sites, beneficiaries, and other stakeholders during implementation of TSP
- generate qualitative information to help interpret the findings from quantitative analyses of the demonstration's effects on utilization patterns, access, quality, and costs
- evaluate the implications of the documented experiences of stakeholders for broader implementation of Senior Prime across the military health system.

Overview of Process Evaluation Methods

The process evaluation schedule is presented in Table 2.1. The process evaluation consisted of a combination of individual interviews with key staff at CMS and DoD and on-site visits to the six demonstration sites, as well as interviews with other stakeholders in the demonstration. The round of site visits was conducted January through April 1999, and baseline CMS and DoD interviews were conducted March through June 1999.

The site visits focused on documenting the strategies and early experiences of the sites as they initiated Senior Prime. The follow-up round of telephone conferences, which were conducted in early 2000, documented the status and activities of the sites after they had a full year of operation to establish routine procedures and learn from their earlier experiences. Individual reports for each of the six site visits are provided in Appendix C of the interim report (Farley et al., 1999b). Similarly, reports for the teleconferences with each of the demonstration sites are provided in Appendix C of the report on the first year of the demonstration (Farley et al., 2000).

Table 2.1.
Process Evaluation Approach and Schedule

Methods	Schedule
Individual interviews with CMS, DoD staff	At start-up, annually
Site visit interviews with: • lead agents • MTF command staff • MCS contractor personnel • physician managers • clinical and business managers • military retiree organizations • VA hospital representatives	At start-up (January–April 1999)
Mid-demonstration update on site strategies using telephone interviews with site leaders, DoD, CMS, LAs	Early 2000
Beneficiary feedback documented in MTF records for enrollments, complaints, grievances, others to be explored with sites	Early 2000
Second round of site visits	Late 2000 (not performed)
Document MTF organization and operation from the sites' written materials	As needed

We present here our data collection methods for the first round of interviews and site visits, including the types of baseline information we sought and the interview or focus group techniques used to collect that information. Then we describe the interviews conducted with CMS and DoD staff, the structure and processes used for the site visits, and methods for the teleconference interviews conducted after the first year of operation.

Data Collection Methods

The methods used to collect data for the demonstration activities of interest to the evaluation are listed in Table 2.2. Standard formats and procedures were used for data collection

to ensure consistency across interviewers, sites, and time periods. To enhance our ability to capture the diversity of perspectives on implementation issues, we addressed many of the questions with several different stakeholders.

Individual and Group Interviews. We prepared a semistructured interview guide containing the questions to be addressed for the topics in Table 2.2. This master list of questions is presented in Appendix A. Working from the master list, we developed several interview guides that were tailored toward topics or issues relevant to specific stakeholders. For example, we prepared separate interview guides for CMS central office staff, TMA staff, and CMS regional office staff.

Although we used the question list and interview guides to ensure we obtained all the desired information, we found that each interview had its own unique orientation, and we allowed flexibility for the order in which topics were addressed. The group interviews, in particular, tended to move in unpredictable directions as the group members engaged in discussion and interactions that often yielded rich insights into the dynamics underlying particular topics. Guided by the circumstances of each interview, we probed specific issues in greater depth to help guide our interpretation of the information obtained.

Table 2.2.
Process Evaluation Data Collection Methods

	Personal Interviews	Group Discussions	Provider Focus Groups	Retiree Assn. Leaders
Overall strategies	X	X		
Initial views on demo	X	X	X	X
Execution of MOA	X	X		
Flow of funds	X	X		
Organization of system	X	X		
Meet CMS requirements	X	X	X	
Training and education	X	X	X	
Provider networks	X	X	X	
Enrollment and marketing	X	X		
Quality assurance	X	X	X	
Actions and experience	X	X	X	
Effects on stakeholders:				
CMS and DoD	X	X		
Lead agents	X	X		
MTF management	X	X		
Physicians	X		X	
Clinical and other staff	X		X	
Dually eligible beneficiaries			X	X
Other beneficiaries			X	X
TRICARE contractors	X	X		
Medicare plans, providers	X			

Provider Focus Groups. We used the focus group format to gather information on the perspectives of three key provider groups within each site: the PCMs, who are physicians who manage clinical care for Senior Prime enrollees; the other "frontline" clinical and support staff involved in clinical care delivery; and subspecialty physicians who treat enrollees referred to

them by the PCMs. The use of the focus group format enriched the information we collected on provider experiences in serving the dually eligible beneficiaries by (1) involving a greater number of individuals than would be feasible to interview individually and (2) encouraging exchange of ideas and perspectives among the group participants.

Written protocols were used to establish the format for discussion, guide each focus group's discussion, and ensure that all topics of interest were covered. A separate protocol was developed for each of the three provider groups. Depending on the site, 5 to 15 individuals participated in the focus groups. Typically, we started the focus group by asking each participant in turn to express some thoughts on his or her experiences with Senior Prime. Then we continued with specific questions covering the topic areas included in the written protocol.[1] Individuals with management responsibility were not participants in the focus groups, although some clinical managers observed the sessions at many sites. With few exceptions, the discussion was candid and thoughtful, and participants shared their experiences and those reported to them by patients.

Focus Groups with Retiree Association Representatives. In designing the process evaluation, we chose to rely on a combination of information sources to obtain information on the early viewpoints of dually eligible beneficiaries, including focus groups with military retiree association representatives and the provider focus groups. We conducted focus groups with retiree association representatives at all but one of the sites, following the same basic format used for the provider focus groups. We also elicited information from the sites' management teams about what they heard from beneficiaries as they worked with them during Senior Prime start-up, enrollment, and service delivery. GAO reports from its evaluation provided additional information on beneficiary impacts and perceptions. We also had planned to conduct focus groups with dually eligible beneficiaries during the second round of site visits at the end of 2000, to learn about their perspectives after having more experience with Senior Prime plans. (These focus groups were not performed because of discontinuation of funding.)

Interviews with CMS and DoD Participants

Interviews conducted with staff at the CMS central and regional offices and staff in the DoD Office of Health Affairs and TMA provided important system-level perspectives that, along with the site visits discussed below, allowed us to triangulate multiple perspectives regarding the subvention demonstration. The demonstration was conceived at the top levels of government several years ago. It was important to learn its history to understand the origins of the policy issues currently being argued and monitored. We also wanted to understand the complexity of the activities and issues involved in implementing the demonstration, which could be achieved only by hearing it from multiple perspectives.

Interviews were conducted with a total of 15 staff in the CMS central and regional offices. We conducted individual interviews with the CMS staff who negotiated the terms of the demonstration, as well as with staff in the Health Plans Benefits Group, who handle the operational aspects of certification and compliance for Medicare health plans, including the Senior Prime plans. Individual interviews and a group interview were also held with staff in the

[1] The focus group format used for the Region 6 site differed substantially from this standard approach because the focus groups were conducted by videoconference with participants from all four MTFs. Because each group had only 15 minutes to share its views and concerns, we asked the participants to focus on selected topics.

demonstrations office who oversaw the demonstration itself. Participants in the group interview were several individuals who had been project officers for the subvention demonstration (and the VA subvention demonstration), with whom we tracked the history of subvention negotiations from inception through its inclusion in the BBA and early implementation. Finally, individual interviews (five by telephone and one in person) were conducted with staff in six CMS regional offices, each of which is responsible for one of the demonstration sites, to learn their roles and perspectives on Senior Prime.

We interviewed ten staff persons at Health Affairs and TMA, all of which were individual interviews except for a few that included two or three persons. Several interviews were with leaders or technical staff who had participated in the formulation of subvention policy and design for legislation and the MOA, including the Health Affairs staff person who led the DoD negotiations. These interviews offered information on the DoD perspective of the history of the demonstration and related issues. Additional interviews were held with TMA staff involved in the ongoing policy, operation, or oversight of the demonstration. These include the staff who provided policy and technical support to the demonstration sites on a daily basis, as well as staff in the marketing department where the Senior Prime marketing materials were prepared.

Structure of the Initial Site Visits

The first round of site visits was performed as specified in Table 2.3. Preparation for these site visits began with a meeting with representatives of the Surgeons General for the Army, Air Force, and Navy, at which we described our plans and study design for the process evaluation. These individuals gave us contact information for the TSP points of contact (POCs) in the LA offices for the six sites, with whom we worked to schedule the site visits and organize the interview agendas. We prepared a template for a site visit agenda that we provided to each site POC (see Appendix B). Working with the template, the POC tailored the agenda to the site's situation and made scheduling arrangements with the site's participants.

Table 2.3.
Schedule for the First Round of Site Visits, Subvention Evaluation

Site	Date of Visit
Dover AFB	April 12–14 1999
Keesler AFB Medical Center	April 27–29 1999
Southwest (Region 6) site: Brooke AMC, Wilford Hall AMC, Reynold ACH, Ft. Sill, Sheppard AFB	April 22–25 1999
Follow-up informal visit to Ft. Sill and Sheppard AFB to see the facilities	May 5 and 7 1999
Colorado Springs site: Evans ACH, Ft. Carson Air Force Academy	April 19–21 1999
NMC San Diego	January 20–22 1999
Madigan AMC	February 23–25 1999

We provided a copy of the master interview guide to the site POCs before the site visits, which allowed the sites to prepare for the topics of interest to us and enabled us to cover a great deal of information efficiently. Throughout each site visit, representatives from the LA office, participating MTF(s), and MCS contractors were active participants in the interviews. We also conducted a group interview with just the MCS contractor staff to capture the full scope of their roles and issues. During each site visit, we obtained written materials that described the site and its Senior Prime program.

In our introductory meeting for each site visit, we indicated our desire that the site visits be a shared-learning process for RAND and the sites. Our goal was to provide actionable information to CMS and DoD that could help them strengthen the Senior Prime program in the future, should it be decided to make the program permanent. Following each site visit, we prepared a written report that summarized information from the team interviews and focus group discussion and presented the key lessons and issues identified from the site visit.

Mid-Demonstration Telephone Conferences

In preparation for the mid-demonstration telephone conferences, we developed a list of questions based on the issues raised during the initial round of site visits, as itemized in the interim report. The master list of questions for the follow-up conferences is presented in Appendix C. We scheduled a two-hour telephone conference interview with each demonstration site in March and April 2000. These teleconferences provided the most current information on the status of the sites after more than one year of experience operating Senior Prime.

In addition to the interview questions, we asked the sites to provide us with documentation of two key aspects of Senior Prime operation: the administrative costs of start-up and ongoing management of Senior Prime, and the record of grievance and appeals for Senior Prime enrollees. The estimated administrative costs for the sites were an important component of the total administrative costs of the program.

CONTROL SITES FOR THE EVALUATION

Two types of comparisons were made to assess changes in utilization and cost patterns for the demonstration sites. First, use and costs after the start date of the demonstration were compared to those for a similar time period before the demonstration. Second, we compared demonstration site utilization and costs to those for the same time periods at a set of control sites.

There was substantial heterogeneity across demonstration sites, as shown in Tables 2.4 and 2.5. This suggested that the demonstration could have differing effects on enrollment demand and on outcomes such as patient satisfaction and access. Thus, it was important to minimize bias by matching control sites, but it also might make it difficult to draw inferences from pooled analyses. We relied on case studies to assess the observed effects by demonstration site, and where there was variation, we used our process evaluation to help identify reasons.

Table 2.4 compares the characteristics of the demonstration sites to their matched control sites, including information profiling catchment area populations, levels of inpatient activity, and the local Medicare managed care markets.

Table 2.4.
Comparison of Treatment Facilities in the Demonstration and Control Sites, 1998

Demonstration Site Control Site	Catchment Area Population: Number of Dually Eligible Beneficiaries	Catchment Area Population: Number of Active Duty	Average Daily Inpatient Census	Medicare Plan Enrollment Rates	1999 Medicare Capitation*
Dover AFB	3,976	4,184	0	6.1%	$479
McGuire AFB	19,706	12,706	0	0	na ***
**Keesler AFB ** **	7,271	10,473	69.7	12.3	560
Wright-Patterson AFB	6,695	7,245	45.0	17.6	459
Region 6–San Antonio	33,662	31,374	319.1	33.8	472
Walter Reed AMC/ National NMC Bethesda	39,482	46,033	331.9	11.8	546
Region 6–Texoma	6,991	18,781	56.0	4.2	381
Kirtland/Holloman AFB	9,474	9,823	4.8	34.3	380
Colorado Springs	13,866	28,106	49.6	38.6	426
NH Jacksonville	15,203	26,367	36.2	27.4	518
NMC San Diego	34,661	68,789	200.6	49.4	528
NMC Portsmouth	21,429	92,281	157.9	7.2	429
Madigan AMC	19,330	24,624	117.1	28.2	422
Tripler AMC	9,919	47,074	170.2	33.3	390

SOURCE: Analysis of January 1999 Medicare market penetration data, published 1999 Medicare capitation rates, merged CMS/DoD enrollment data for dually eligible beneficiaries.

* Average Medicare+Choice base rates for the counties in each catchment area, weighted by number of beneficiaries in each county. These are NOT the base capitation rates for the subvention sites.

** The only substantial Medicare health plan enrollment is on the edge of the Keesler service area in Alabama.

*** Not available.

Table 2.5 provides summary profiles of the characteristics of the dually eligible beneficiaries residing in the demonstration sites and control sites. Overall, the demonstration and control sites have similar demographics. An estimated 87.7 percent of the dually eligible beneficiaries residing in demonstration sites and 83.6 percent of those in the control sites are white. Relatively small fractions of the populations are African American (5.1 percent in the demonstration sites and 9.1 percent in the control sites). The demographics vary somewhat across sites, and in most cases, the profiles are similar for the demonstration site and related control site. Two exceptions are the San Diego and Madigan sites, where differences are found for both the racial/ethnic and age distributions.

In selecting control sites, we looked for areas that were similar to the demonstration sites in three broad categories: demographics, MTF characteristics, and the Medicare market. Several key decisions were made at the outset:

1. The Region 6 site was treated as two separate locations for matching with control sites. The two locations were identified as Region 6–Texoma (to include Reynolds ACH at Ft. Sill and Sheppard AFB) and Region 6–San Antonio (to include Brooke AMC at Ft. Sam Houston and Wilford Hall MC at Lackland AFB).

Table 2.5.
Comparison of Dually Eligible Populations in the Demonstration and Control Sites, 1998

	Percentage by Race/Ethnicity			Percentage by Age Category		
Demonstration Site Control Site	White	African American	Other	64 to 74 Years	75 to 84 Years	85 Years or Older
All demonstration sites	87.7	5.1	7.2	62.0	33.4	4.6
All control sites	83.6	9.1	7.3	61.6	33.9	4.5
Dover AFB	89.5	7.6	2.9	70.6	26.9	2.5
McGuire AFB	81.9	14.9	3.2	60.1	35.6	4.3
Keesler AFB *	95.5	2.4	2.1	67.6	28.8	3.6
Wright-Patterson AFB	90.3	7.6	2.1	68.3	29.0	2.7
Region 6–San Antonio	90.3	5.2	4.5	60.2	35.1	4.7
Walter Reed AMC/ National NMC Bethesda	86.2	11.1	2.7	54.6	38.9	6.5
Region 6–Texoma	87.2	8.1	4.7	69.4	27.6	3.0
Kirtland / Holloman AFB	91.5	2.7	5.8	62.1	34.0	3.9
Colorado Springs	90.3	5.2	4.5	66.9	30.5	2.6
NH Jacksonville	93.5	3.6	2.9	64.0	32.4	3.6
NMC San Diego	84.2	4.1	11.7	57.1	36.6	6.3
NMC Portsmouth	85.5	10.8	3.7	67.7	29.1	3.2
Madigan AMC	85.5	6.7	7.8	63.9	31.9	4.2
Tripler AMC	45.6	1.6	52.8	70.4	25.8	3.8

SOURCE: Analysis of merged master file of dually eligible beneficiaries residing in the demonstration or control sites at the end of FY1998.

* The only substantial Medicare health plan enrollment is on the edge of the Keesler service area in Alabama.

2. Institutions with similar catchment areas (e.g., Evans ACH and the Air Force Academy, which form the Colorado Springs demonstration site) were matched to a single control MTF with characteristics similar to the combined areas within the demonstration site.

3. In some cases (i.e., Region 6–San Antonio, NMC San Diego, and Keesler AFB), CMS, DoD, and RAND staff determined that there was a unique match based solely on MHS characteristics.

A set of candidate matches for the demonstration sites was created by selecting—from all MTFs nationwide—those that were in the same military service, were of similar size in terms of the populations served (dually eligible as well as active duty), and had similar caseloads. The final selection of matches for these sites was made in collaboration with CMS and DoD staff. The data elements used to make this assessment included[2]

[2] Average Medicare capitation rates and per-capita costs are weighted using the number of Medicare beneficiaries residing in the market as the weight.

- service branch (Army, Navy, Air Force)
- TRICARE region
- number of non–active duty beneficiaries over age 65 (proxy for dually eligible)
- number of active duty personnel
- ratio of dually eligible to active duty personnel
- dispositions (inpatient hospital stays)
- average daily inpatient census
- case mix
- number of Medicare plans in the market
- number of Medicare beneficiaries
- number and percentage of Medicare beneficiaries enrolled in health plans
- Senior Prime share of plan enrollments
- average 1999 M+C capitation rate
- average 1997 adjusted average per-capita cost rate (proxy for per-capita health care costs).

THE IMPACT ANALYSES AND STUDY POPULATION

Enrollment, claims, and encounter data from both DoD and CMS sources were used in our analyses of the effects of the subvention demonstration on service utilization and costs. This evaluation was performed using a subset of a larger database developed by Fu Associates for another project that contained seven years of data on enrollments and service utilization for Medicare-eligible DoD beneficiaries. Fu Associates also was a subcontractor to RAND for this evaluation. The company had established a master enrollment file for the dually eligible population by merging data from the Medicare and DoD enrollment databases, as described below. For our evaluation, we used data for the federal fiscal years 1997 through 1999 (October 1996 through September 1999). To establish our study populations, we extracted from this master file the enrollment records for all dually eligible beneficiaries residing in the demonstration and control sites. For this set of beneficiaries, we then extracted all claims or encounter records for the following Medicare and DoD health care service sectors:

Medicare:	
Fee-for-service Part A	Short-stay hospital inpatient care
	Long-stay hospital inpatient care
	Skilled nursing facility care
	Home health agency services
	Hospice services
Fee-for-service Part B	Institutional outpatient services
	Physician/supplier services
	Durable medical equipment
Managed care	Group health plan enrollments
	Monthly capitation payments
Military Health System:	
DoD direct care	MTF hospital inpatient care [Standard Inpatient Data Record (SIDR)]
	MTF clinic outpatient services [Standard Ambulatory Data Record (SADR)]
Network providers [Health Care Service Record (HCSR)]	Inpatient care
	Outpatient services

As discussed in Section 1, the supplemental benefits available through Senior Prime included prescription drug benefits. All DoD beneficiaries, including Medicare-eligible beneficiaries, have MTF pharmacy benefits. However, only through Senior Prime could these older beneficiaries obtain pharmaceuticals through the DoD mail-order pharmacy program or network retail pharmacies. Because direct-care or mail-order pharmacy data were not available, we could not analyze utilization and cost trends for pharmacy benefits for the year's evaluation. We identified some retail pharmacy data in the HCSR network provider data, but the data quality and completeness are uncertain.

Because dually eligible beneficiaries have had ongoing access to direct-care pharmacy benefits, the introduction of Senior Prime should have had a small impact on use patterns for this benefit, compared with its effects on inpatient and outpatient services. In addition, it was not clear what directions these effects on pharmacy benefits might take. As more beneficiaries used MTF services under Senior Prime, they also could increase their use of the MTF direct-care pharmacies. Conversely, to the extent that beneficiaries switched from direct-care pharmacies to mail-order or retail pharmacies, costs would shift away from direct-care pharmacies. Despite data challenges, this cost sector merited analytic attention.

Matching DoD and Medicare Enrollment Records

The source of Medicare enrollment data was the Enrollment Database (EDB), which contains master enrollment records for all Medicare beneficiaries, including information on entitlement, enrollment, and Medicare status. DoD enrollment data come from the Defense Eligibility Enrollment Reporting System (DEERS), which records basic information on each eligible DoD beneficiary, including residence information and demographic data. These data were obtained from Standard Technology, Inc. (STI), a TMA data and analytic contractor. We had requested records for all beneficiaries who were age 65 or older at any time during the relevant years, but STI reported that only year-end "point-in-time" cohorts were available. STI provided us DoD enrollment data for three cohorts of beneficiaries, one for each fiscal year of 1996 through 1998. For each cohort, DEERS enrollment records were extracted for DoD retirees and their dependents who had attained age 65 or older as of the end of the fiscal year (September 30). Thus, the FY1998 cohort of beneficiaries was the group of beneficiaries who had the option of Senior Prime enrollment.

The first step Fu Associates took to build the subvention beneficiary master file was to obtain the DoD DEERS enrollment records for all DoD beneficiaries in the country who were age 65 or older at the start of each fiscal year.[3] The second step was to match these records against the Medicare EDB enrollment records to find these beneficiaries in the Medicare system.

Creating a dually eligible population file that was as complete as possible required advanced database merging and sophisticated algorithm programming techniques. The DoD DEERS and the Medicare EDB data sources use different systems for beneficiary identification, and therefore matching was done using common fields [i.e., Social Security number (SSN), date of birth, and gender]. Using a matching methodology provided by the National Center for Health Statistics, Fu Associates created a master file containing a unique Medicare Current

[3] DoD beneficiaries were also identified by applying criteria for eligibility for DoD health benefits. Because of errors in the DEERS records in eligibility coding, Fu Associates obtained records for all beneficiaries based on age 65 or older, and then applied a set of rules provided by STI to identify eligible DoD beneficiaries.

Health Insurance Claim number, sponsor SSN, date of birth, and gender. This master file was used to assign a common person identifier to all data source records. Social Security numbers appear in two locations in each of the DEERS (sponsor or dependent SSN) and EDB (claim account number or person SSN) enrollment files. All valid sponsor and dependent Social Security numbers from the DoD DEERS file were used to merge against the Medicare EDB. The EDB returned all records where the SSN was found in either the claim account number or the person SSN. The following algorithm was applied to determine a valid match:

For Sponsor Records

With sponsor SSN, match on: sponsor SSN, last name, month of birth, and gender. If the SSN matches between the DEERS and EDB files, but there is no match on the last name, month of birth, or gender variables, then match on sponsor SSN plus:

a. (if not last name) year of birth, month of birth, day of birth, and gender
b. (if not month of birth) last name, year of birth, day of birth, and gender
c. (if not gender) last name, year of birth, month of birth, and day of birth

For Dependent Records

With dependent SSN, match on: dependent SSN, last name, month of birth, and gender. If SSN matches between the DEERS and EDB files, but there is no match on the last name, month of birth, or gender variables, then match on dependent SSN plus:

a. (if not last name) year of birth, month of birth, day of birth, and gender
b. (if not month of birth) last name, year of birth, day of birth, and gender
c. (if not gender) last name, year of birth, month of birth, and day of birth

When using sponsor SSN instead of dependent SSN to match with EDB, there is *no* SSN match since the sponsor SSN is not the dependent's SSN. Therefore, match on last name, year of birth, month of birth, day of birth, and gender.

The Dually Eligible Population and Evaluation Sample

The matching process to identify Medicare-DoD beneficiaries nationwide yielded match rates from 93.5 percent for the 1992 cohort to 96.3 percent for the 1998 cohort. The best match rates were obtained for the most recent years, for which the most current data were available. Match rates for 1995 through 1998 are shown in Table 2.6. A total of 1.3 million dually eligible beneficiaries are in the 1998 cohort with both Medicare and DoD enrollment records. This is the population from which we identified the beneficiaries residing in the demonstration sites and our evaluation control sites.

Table 2.6.
Percentages of DoD DEERS and Medicare EDB Records Matched for All Identified Dually Eligible Beneficiaries, FY1995 through FY1998

Year	Eligible Beneficiaries	Number Matched	Match Rate
1995	1,185,794	1,129,010	95.2
1996	1,234,640	1,181,963	95.7
1997	1,302,959	1,251,048	96.0
1998	1,353,275	1,303,592	96.3

We also checked the completeness of match rates for dually eligible beneficiaries who were known to be enrolled in TSP based on the Medicare Group Health Plan (GHP) enrollment records. This is shown in Table 2.7. Enrollee match rates of 97 percent or better were achieved in January 1999. Match rates were lower for enrollees as of October 1999 because there were larger numbers of age-in enrollees who were not in the FY1998 cohort of dually eligible beneficiaries. With these match rates, we had a high level of confidence in the completeness of the denominator for our evaluation analyses with these beneficiary samples.

Table 2.7.
Percentage of DEERS and EDB Records Matched for Senior Prime Enrollees, for Cohorts in October 1998, January 1999, and October 1999

Date and Senior Prime Sites	Number Enrolled per GHP File	Number Matched with DEERS	Percentage of Enrollees Matched
October 1998:			
Region 6	3,757	3,737	99.5
Madigan AMC	3,138	3,131	99.8
January 1999:			
Dover AFB	426	414	97.3
Keesler AFB	2,160	2,098	97.1
Region 6	10,874	10,617	97.6
Colorado Springs	902	872	96.7
NMC San Diego	2,284	2,222	97.3
Madigan AMC	3,436	3,360	97.8
October 1999:			
Dover AFB	856	758	88.6
Keesler AFB	3,072	2,703	88.0
Region 6	13,491	12,118	89.8
Colorado Springs	3,533	3,111	88.1
NMC San Diego	3,869	3,413	88.2
Madigan AMC	4,020	3,542	88.1

It is noted that this match process began with DEERS enrollment data and then searched for matching Medicare EDB records. The reverse approach, of starting with EDB records of Medicare beneficiaries and searching for them in the DEERS, probably would generate a slightly different set of matched beneficiary records. TMA staff report that they attempted such a match and obtained low match rates. For either matching strategy, the issue remains that some people were lost to the information base. We have confidence in data completeness for Senior Prime enrollees because they are processed by both the Medicare and DoD systems. However, non-

enrollees who were missing from the DEERS data would not be identified unless they took an action that interacted with DEERS. For the evaluation, this issue resulted in underestimating the size of the denominator used to calculate Senior Prime enrollment rates. It also introduced some bias by inflating MTF use and cost estimates and deflating Medicare use and cost estimates for non-enrollees, because beneficiaries who were missing from our data were some fraction of those who did not use MTFs. This bias would not have much effect on our comparative results, however, because these individuals were missing for all years of data included in the analysis.

Inconsistencies in Service Area Boundaries and Senior Prime Enrollments

According to the Medicare+Choice program rules, only beneficiaries residing in the officially designated M+C plan service areas are eligible to enroll in M+C plans. This rule also applied to Senior Prime plans. The service area zip codes are listed in an attachment to the M+C contract that CMS executes with each M+C organization operating a health plan. However, CMS allowed sites to enroll beneficiaries residing in a participating MTF's 40-mile catchment area if the beneficiaries signed statements acknowledging their location and accepting possible effects on access to care. We learned in the evaluation analyses that substantial numbers of dually eligible beneficiaries took advantage of the flexibility offered by this waiver.

The study population we originally identified for our evaluation included all beneficiaries residing in zip codes in the Medicare service areas for the subvention demonstration sites or residing in zip codes in the control site catchment areas. We used the lists of zip codes in the Senior Prime contracts for the demonstration sites to identify the populations of dually eligible beneficiaries in the sites' service areas. We found that two demonstration sites had enrolled large numbers of Senior Prime beneficiaries from parts of their catchment areas that were not included in their Medicare service areas (refer to our interim report for further discussion of this issue). An estimated 30 percent of Senior Prime enrollees in the Region 6–San Antonio site and 10 percent of those in the San Diego site resided outside the sites' service areas but within the MTFs' catchment areas. We identified and included in our evaluation population an additional 19,219 dually eligible beneficiaries residing in catchment-area zip codes outside of sites' official Senior Prime service areas, of whom 3,593 had enrolled in Senior Prime.[4] These beneficiaries represented 15.5 percent of the total dually eligible population in the demonstration sites. Table 2.8 reports counts of beneficiaries in our evaluation population for the demonstration and control sites, by site. Total numbers of dually eligible beneficiaries are similar for the two sets of sites.

[4] We also identified another 1,986 Senior Prime enrollees who were not in the matched master file of beneficiaries, many of whom were age-in enrollees who were not yet Medicare eligible at the time our DoD/Medicare cohort was matched.

Table 2.8.
FY1998 Sample Sizes of Dually Eligible Medicare-DoD Beneficiaries Used for the Evaluation, by Demonstration and Control Sites

Demonstration Site	Number	Control Site	Number
Grand total for all sites	241,665		
Dover AFB	3,976	McGuire AFB	19,706
Keesler MC	7,271	Wright-Patterson AFB	6,695
Region 6–San Antonio	33,662	Walter Reed AMC/National NMC Bethesda	39,482
Region 6–Texoma	6,991	Kirtland AFB/Holloman AFB	9,474
Colorado Springs	13,866	NH Jacksonville	15,203
NMC San Diego	34,661	NMC Portsmouth	21,429
Madigan AMC	19,330	Tripler AMC	9,919
Total for demonstration sites	119,908	Total for control sites	121,908

DATA SOURCES AND LIMITATIONS

As discussed earlier, the data used for the subvention evaluation came from the Medicare and DoD data systems. Each program's data system consists of a master file containing descriptive data on the beneficiaries who are eligible for benefits, as well as centralized records on the health care utilization and payment claims for health care services delivered to its beneficiaries.

Medicare Data Sources

Medicare's various data systems maintain data for beneficiaries in both the Medicare fee-for-service and managed care sectors. The following were the four main sources of Medicare data:

- EDB—the master file that contains the basic eligibility and enrollment data for all Medicare beneficiaries.
- National Claims History data system—contains records of payment claims for all fee-for-service providers for services to Medicare beneficiaries. CMS generates standard analytic files from this database for use by CMS and others for analyses.
- GHP database—the master file that contains managed care enrollment data for all beneficiaries who enrolled in a Medicare health plan at any time (previously Medicare HMOs and currently the M+C plans). It maintains data on a beneficiary's health plan for each month of plan enrollment.
- Monthly payment files—contain the capitation amounts paid to Medicare managed care plans for each enrolled beneficiary.

The GHP file contains enrollment records for the dually eligible beneficiaries enrolled in the TSP plans at the six demonstration sites because these plans are part of the Medicare+Choice program. We worked with this file, along with Medicare eligibility data from the EDB file, to define month-to-month enrollments in Senior Prime, in other Medicare managed care plans, or in the fee-for-service sector.

With few exceptions, Medicare data are of high quality in terms of both accuracy and completeness, reflecting their long use in processing payments to Medicare providers. One exception is data for the Medicare managed care enrollees. Because monthly capitation

payments to the contracting health plans are the only payments that CMS makes in the managed care sector, no historical data have been collected on health care encounters for health plan enrollees. Only since 1998 have plans been required to submit data for inpatient encounters. This information is being used to calculate risk scores to adjust capitation payments based on the relative costliness of each beneficiary. Beginning in late 2000, plans were also expected to submit encounter data for physician visits and outpatient visits for institutional providers. Therefore, we were not able to profile service utilization rates for enrollees of M+C plans other than the Senior Prime plans (for which we obtained DoD data).

DoD Data Sources

The DoD data systems maintain data for DoD beneficiaries who are eligible for DoD health benefits and who are utilizing health care services provided by the MTFs or by TRICARE network providers. The DoD data systems are less centralized than the Medicare systems, and this has implications for our ability to obtain the comprehensive data required for this type of evaluation analysis. The five main sources of DoD data for our analyses were

- DEERS—the TRICARE master file that contains the basic eligibility and enrollment data for all DoD beneficiaries.
- Composite Health Care System (CHCS)—the data system installed locally at each MTF that provides the information management support for MTF delivery of health care services. This system contains data on appointments, inpatient stays, ancillary services, MTF pharmacy services, and other aspects of MTF activities.
- Ambulatory Data System (ADS)—contains records of ambulatory care encounters at the MTFs, which are recorded and scanned into the system by each clinic within an MTF. This system operates completely separately from the CHCS.
- CHAMPUS data system—contains records of payment claims for network providers serving DoD beneficiaries, which are maintained in the HCSRs.
- Medical Expense and Performance Reporting System (MEPRS)—the DoD financial management data system that maintains facility-level financial data for all MTFs. Using a standard book of accounts, this system maintains records of operating costs, staff time and costs, and units of activities for each cost center.

The data contained in the CHCS and the ADS are collected locally by the MTFs in their normal course of service delivery. Standard records are extracted from these systems on a regular schedule and transported to a central DoD data facility. The SIDRs are extracted from the CHCS data, and the SADRs are extracted from the ADS data. The SIDR and SADR files were the sources of data on utilization of MTF direct-care services by the dually eligible beneficiaries in our evaluation population. Data on ancillary services or pharmacy prescriptions are not extracted for the central DoD data system, so we were are not able to obtain data for these MTF services.

Although the SIDRs and SADRs contain the detailed data for health care encounters that were required for the analyses, these records do not provide cost information because they are not claims for service payments. Therefore, cost estimates were developed separately and added to the SIDR and SADR encounter records. Clinic-level estimates of cost per unit of service for inpatient and outpatient services were derived using data from the MEPRS. We then applied the

MEPRS unit cost estimates to each SIDR and SADR to assign a cost for each inpatient or outpatient encounter. The methodology used to derive the unit costs and apply them to the encounter data is described later in this section.

The ADS was implemented in 1997 to collect outpatient encounter data because CHCS does not maintain records for outpatient visits to MTF clinics. To enter data into the ADS, each provider was expected to complete a "bubble sheet" with data for each outpatient encounter. The bubble sheets were then scanned into data files by staff in the MTF clinics. Not surprisingly, there was some resistance to the additional workload created by this documentation requirement, and compliance rates for ADS form completion varied widely across MTFs, as well as across clinics within each MTF.

The ADS data limitations affect our analyses in several ways. First, 1998 is the first year for which reasonably reliable ADS outpatient service data are available. Second, for those years that ADS data were available, records are less than complete, which would yield low estimates of the MTF outpatient activity and costs. Third, varying levels of data completion rates across MTFs and over time introduce bias in estimates within the demonstration and control sites. We addressed these measurement issues by limiting the evaluation timeframe to fiscal years 1998 and 1999, which allowed us to work with ADS data that were approaching completeness, and we also apply adjustment factors to the ADS counts of visits and related costs that were ratios of visit counts recorded by MEPRS and ADS. This adjustment method is described below.

The ADS completeness issues are illustrated in Tables 2.9 and 2.10, which present SADR completion ratios by site and over time for the demonstration sites and control sites. The data used in calculating these completion ratios were counts of visits by MTF, by clinic (by MEPRS code), and by month of year from both SADR and MEPRS records. These data were developed by STI at our request, using the standard DoD methods for establishing counts of SADR encounters, and were provided to us for the evaluation analysis. The completion ratios are the ratios of the SADR counts to the MEPRS counts. The average ratios reported in the tables were obtained by summing the SADR and MEPRS counts to the level of interest and then calculating the ratios. For example, the FY1998 ratio for a given demonstration site is the sum of all SADR encounters for that site during FY1998 divided by the FY1998 counts of outpatient visits obtained from the MEPRS data.

Table 2.9 clearly demonstrates the issue of underestimation of costs involved with the SADR completion rates. In this table, we report the completion ratios expressed as percentages (multiplying the ratio by 100). In FY1998, the SADRs completed by MTFs in the demonstration and control sites represented only 76.7 percent and 65.9 percent, respectively, of the total counts reported in MEPRS. The completion rates improved for both groups of MTFs in FY1999, but still were below the desired 96–100 percent levels. This improvement between the two years could yield overestimates of the effects of Senior Prime on increasing MTF outpatient service utilization without adjusting for the incomplete records. Completion rates for MTFs in the demonstration sites ranged from 59.1 to 96.7 percent in FY1998 and from 69.6 to 97.3 percent in FY1999. Similar variations are observed for MTFs in the control sites.

Table 2.9.
SADR Data Completion Rates for Demonstration and Control Site MTFs, FY1998 and FY1999 (in percentage)

Demonstration Sites			Control Sites		
Treatment Facility	1998	1999	Treatment Facility	1998	1999
Average for all facilities	76.7	87.1	Average for all facilities	65.9	74.9
By MTF:			By MTF:		
Dover AFB	59.1	69.6	McGuire AFB	74.8	75.4
Keesler AFB	59.9	84.7	Wright-Patterson AFB	60.1	76.1
Brooke AMC	94.4	97.3	National NMC Bethesda	73.4	76.4
Wilford Hall MC	61.4	79.2	Walter Reed AMC	89.0	93.9
Reynolds ACH	88.7	89.9	Kirtland AFB	49.1	68.8
Sheppard AFB	90.4	91.9	Holloman AFB	65.6	88.8
Evans ACH	96.7	97.0	NH Jacksonville	69.6	74.2
Air Force Academy	83.5	94.0	NMC Portsmouth	40.5	54.9
NMC San Diego	66.1	75.6	Tripler AMC	84.9	84.9
Madigan AMC	83.9	94.6			

SOURCE: Analysis of outpatient visit counts reported by SADR and MEPRS data.

The trends in completion rates shown in Table 2.10 highlight the importance of considering both the location and month of service when applying any adjustments to MTF costs for the incompleteness of the SADRs. This issue is especially important for the FY1998 data because completion ratios increased steadily each month as the new system continued to be implemented. These trends leveled off somewhat in FY1999.

Table 2.10.
Monthly Trends in ADS Data Completion Rates for the Demonstration and Control Sites, FY1998 and FY1999 (in percentage)

	Demonstration Sites		Control Sites	
FY Month	1998	1999	1998	1999
1	70.3	85.4	61.5	70.9
2	74.5	83.9	63.3	72.8
3	74.1	85.3	62.4	71.0
4	75.5	86.4	65.4	73.9
5	79.2	86.1	65.8	74.1
6	79.0	87.6	66.5	74.4
7	78.3	88.8	66.9	75.2
8	79.5	88.1	68.3	76.0
9	71.9	87.7	64.7	76.1
10	74.2	88.6	67.0	77.6
11	81.0	88.4	69.1	78.5
12	83.7	88.9	70.7	78.9

SOURCE: Analysis of outpatient visit counts reported by SADR and MEPRS data.

The source of data on use of network providers by Senior Prime enrollees is the CHAMPUS claims data maintained in the HCSRs. The HCSRs, which are the analogue to the Medicare fee-for-service claims records, contain data for each claim on the nature and number of services provided, the provider identification, and financial data on the amount billed, allowed, and paid by the TMA claims processing contractor. We obtained separate files for inpatient and outpatient claims for fiscal years 1998 and 1999. Under TRICARE rules, only TRICARE enrollees are eligible to use network providers, so there should be no HCSR claims records for Medicare beneficiaries age 65 or older unless they are enrolled in Senior Prime.

In the evaluation of the first year of the demonstration, we did not attempt to assess the accuracy or completeness of the HCSR data for Senior Prime network provider services. Because these records are payment claims, the providers have an incentive to submit claims quickly, and they expect timely processing of claims so they can receive payments. Our process evaluation did not identify issues regarding systematic problems regarding completeness of claims. However, network provider costs were becoming an increasingly important component of total DoD costs. We had planned to assess trends in use of network providers as well as test the integrity of the data itself through examination of data for the second year of the demonstration.

ANALYSIS OF SENIOR PRIME ENROLLMENT DEMAND

Monitoring Enrollment Trends

To monitor the pace of enrollment, we examined Senior Prime enrollment in each demonstration site on a monthly basis for 12 months beginning in the month prior to site-specific initiation of enrollment. We defined the month prior to the start of enrollment as the "decision month" because it corresponded to the period when marketing efforts were well under way, when the Senior Prime plans had started to accept applications, and when dually eligible beneficiaries were likely to have assessed the new set of service delivery options open to them. We also used the Medicare sector in which a beneficiary was obtaining services during the decision month to characterize the sector viewed as most desirable to the beneficiary before the start of the demonstration. For example, we assumed that an individual in the Medicare fee-for-service sector during the decision month found fee-for-service to be more desirable than the Medicare+Choice plans available in his or her market area.

We constructed a series of tables showing the rate at which dually eligible beneficiaries enrolled in Senior Prime and left Senior Prime to enroll in other options or as a result of death. To assess the effects of Senior Prime on the local markets, we compared the rates at which dually eligible beneficiaries left the Medicare fee-for-service or managed care sectors for Senior Prime enrollment. Likewise, we compared the rates at which disenrollees from Senior Prime returned to each of these sectors in each demonstration month. We also compared the average health risks in each of the three sectors at selected months during the demonstration year.

Evaluating Enrollment Demand

Multivariate models were used to estimate effects of various factors on enrollment demand. Here we explain enrollment into Senior Prime using variables measuring health status, hospital inpatient experience in civilian and DoD facilities, hospice use, proximity to MTFs, eligibility category, and other sociodemographic characteristics. Unfortunately, we found that

these factors are highly correlated within and across sites. Without sufficient variation in these factors across demonstration sites, we could not consider separately the independent effect of each factor on enrollment.

In such a situation, one alternative would be to select a small number of site-specific factors (e.g., the generosity of the Medicare+Choice capitation payment or the per-capita Senior Prime marketing expenditures) and include these factors in our enrollment model. Instead, we selected a more conservative approach of estimating a model with fixed effects for the sites (i.e., using indicator variables for the sites) and interpreting the coefficient as the joint effect of a constellation of factors unique to each site, such as the competitiveness of the local Medicare supplemental insurance market and the marketing and management practices at each MTF. We were particularly interested in determining (1) if the factors that influenced enrollment differed depending on whether the dually eligible beneficiary was enrolled in the Medicare fee-for-service sector or in a M+C plan during the decision month and (2) if risk selection patterns we found in the descriptive comparisons remain when we control for other factors.

We divided the population into fee-for-service and M+C plan subgroups (y_0) based on status in the decision month. We estimated one model conditional on fee-for-service status and the other model conditional on M+C plan status. We estimated separate models to minimize the bias created by differences in the way in which our summary measure of health risks was created for beneficiaries in fee-for-service Medicare or M+C plans (see discussion below).

We estimated two binary logit models of the probability of being enrolled in Senior Prime at any time during the first three months following the start of the demonstration, conditional on enrollment in the decision month. We write this probability as

$$Pr[y_i = 1 \mid y_0] = \frac{1}{1 + exp(-1 * (\theta Z_i + \alpha H_i + \gamma S_i))} \qquad i = 1,..., N \qquad (2.1)$$

where i indexes dually eligible beneficiaries, y_i takes on the value 1 if the dually eligible beneficiary has been in enrolled in Senior Prime the first three months of the demonstration conditional on Medicare sector (fee-for-service or M+C plan) in the decision month (y_0), H_i is a vector of health status and service use measures, Z_i is a vector of sociodemographic characteristics of the dually eligible beneficiary, and S_i is a vector of dummy variables indicating the site in which the beneficiary resides.

We considered a number of alternative approaches for defining our dependent variable before deciding to measure enrollment as the probability of enrolling in Senior Prime within the first three months of the demonstration. We chose this approach for a number of reasons. First, more than 75 percent of enrollments occurred within the first three months of the demonstration, and only small numbers of Senior Prime enrollees died or disenrolled in the subsequent nine months. Second, unlike multivariate models that consider enrollment at a particular cross section in time, our model accounts for the enrollment behavior of the dually eligible beneficiaries who died some time during the first three months. In addition, this specification of the dependent variable represents a parsimonious approach to dealing with supply constraints created when enrollment ceased at the Madigan and Region 6–San Antonio sites because enrollment targets had been met. We explored the alternative of estimating site-specific models over different time periods depending on when and if enrollment targets had been met. However, the results did not differ after the third month of enrollment.

Calculation of Beneficiary Risk Scores

One of the issues of interest in any evaluation of managed care plan enrollments is the extent to which risk selection occurs in the beneficiaries who choose to enroll in the available health plans. The tendency of healthier individuals to enroll in managed care plans has been well documented in the privately insured market as well as for Medicare managed care plans (refer to Section 3 for discussion). As the subvention demonstration started, however, it was not clear whether or how risk selection might occur in Senior Prime plans. In the first round of process evaluation site visits, some sites reported they were enrolling sicker patients, and others reported their enrollees were either healthier or similar to Medicare beneficiaries they had served but were not enrolling in Senior Prime.

We used the Medicare Principal Inpatient Diagnostic Cost Group (PIP-DCG) risk adjustment method to calculate risk scores for all the beneficiaries in our sample and then used these scores to test the selection bias issue. The PIP-DCG method, which CMS applied for the first time in 2000 to risk adjust M+C capitation payments, uses inpatient encounter and claims records to identify diagnosis codes and classify individuals into risk categories based on those diagnoses. We used inpatient data for FY1998 to group the dually eligible beneficiaries into DCGs. For beneficiaries without inpatient stays during this baseline year, we used the standard Medicare demographic factors as the risk score. Therefore, the risk scores reflect differences in beneficiaries' health status before Senior Prime started, so we can interpret the risk scores as predictors of Senior Prime enrollment decisions.

For the dually eligible Medicare-DoD population, we had FY1998 Medicare inpatient claims data for fee-for-service beneficiaries, as well as FY1998 SIDR inpatient encounter records for those who used MTF inpatient services. We did not have available any inpatient encounter data for M+C plan enrollees who used hospitals in the private sector, although records were available for any M+C enrollees who used MTF inpatient care.[5] Therefore, despite the improvement introduced by using both Medicare and DoD inpatient utilization data to calculate risk scores, the resulting risk scores for managed care enrollees were underestimated to the extent that their inpatient encounters were not included in the data. We took this limitation into account as we designed our enrollment analysis and interpreted the results.

Interpreting Odds Ratios

Although logit models are a standard method for analyzing data when the behavior of interest is measured discretely, raw logit coefficients are difficult to interpret. For this reason, we transformed our logit coefficients into a measure, called an *odds ratio*, of the effect of the variable on the odds of enrolling in Senior Prime in the first three months of the demonstration. The odds of enrolling in Senior Prime given the group of covariates can be written

$$\Omega(x \mid y_0) = \frac{Pr(y = 1 \mid x\beta, y_0)}{Pr(y = 0 \mid x\beta, y_0)} \tag{2.2}$$

[5] Calendar year 1999 was the first year for which the M+C plan inpatient encounter data were sufficiently complete to use for calculating risk scores.

where x summarizes the three groups of covariates. We can measure the effect of changes in these odds by raising the logit coefficient β_k to the inverse of the natural log of 1

$$\frac{\Omega(x, x_k + \delta \mid y_0)}{\Omega(x, x_k \mid y_0)} = exp(\beta_k \delta) \tag{2.3}$$

where δ represents the change in the covariate x_k.

Thus, $exp(\beta_k)$ represents the effect of a unit change in the covariate x_k on the odds that a dually eligible beneficiary enrolls in Senior Prime. Suppose, for example, we are interested in understanding the effect of a 10-mile change in residential distance from the MTF on the odds that someone will enroll in Senior Prime and the estimated coefficient on distance is –0.005. We calculate *exp*(–0.005 x 10 miles) = 0.951 and interpret the result to mean that living 10 miles farther from the MTF reduces the odds of enrolling in Senior Prime by a factor of 0.951, or by almost 5 percent. Odds ratios less than 1 mean that changes in the covariate of interest reduce the odds of enrolling in Senior Prime and likewise, odds ratios greater than 1 mean changes in the covariate increase the odds.

In interpreting odds ratios, it is important to calibrate them to the size of the overall odds of enrolling. Large odds ratios do not necessarily imply large substantive changes if the chances of enrollment are very small to begin with. An estimated 18.9 percent of the dually eligible beneficiaries in our sample enrolled in Senior Prime within the first three months, which translates into odds of Senior Prime enrollment equal to 0.233, that is, 0.189/(1 – 0.189). Following the example above, a 5 percent reduction in the odds of enrolling in Senior Prime resulting from an increase of 10 miles distance from the MTF would reduce the probability of enrollment only slightly, from 18.9 percent to 18.2 percent (odds = 0.233 x 0.951 = 0.222).

ANALYSIS OF EFFECTS ON SERVICE UTILIZATION AND COSTS

To assess the effects of Senior Prime on service use patterns and costs, we used comparative analyses for two distinct comparison groups. The analytic approach was guided by the basic policy questions that the evaluation is intended to answer. First, we summarized overall utilization rates and costs for the demonstration sites and control sites, comparing their rates for one baseline year before the demonstration started (FY1998) and for the first full year of the demonstration (FY1999). Second, we compared service use and costs for the same two years for two subgroups of dually eligible beneficiaries within the demonstration sites—(1) those who chose to enroll in Senior Prime for at least one month (enrollees) and (2) those who remained in other Medicare sectors (non-enrollees). With the second approach, we sought to identify the extent to which baseline patterns of service use and costs differed for these two groups, and what, if any, contributions those differences made to demonstration effects for Medicare, DoD, and the beneficiaries involved.

Another basic design decision we made was to fix the comparison years based on fiscal year, using FY1998 (October 1997 through September 1998) as the baseline year, and FY1999 as the first full year of the demonstration. This definition allowed comparisons for annual cycles that are well established for the federal government. However, because the demonstration sites kicked off Senior Prime at different times from September 1998 through January 1999, the FY1999 estimates do not capture a full first year of Senior Prime operation for all of the sites. In

addition, the Madigan site started operation in September 1998, so the first month of its service delivery falls within FY1998. We compensated for this by annualizing service utilization rates and calculating estimated costs per beneficiary month. To the extent that use rates and costs for Senior Prime enrollees were substantially higher in the first months of operation, which was indicated from process evaluation findings, we overestimated the first-year effects of the demonstration. We explored this issue by tracking monthly trends in utilization and costs for MTF services during FY1999.

Our choice of beneficiary cohort for these analyses was guided by both our analytic approach and the data that were available to us at the time of the analyses. We used the FY1998 cohort of beneficiaries, which consisted of all beneficiaries who were dually eligible for Medicare and DoD benefits as of the end of September 1998. Use of this point-in-time cohort controlled for changes in case mix by making "before and after" comparisons for the same group of beneficiaries. However, such a year-end cohort had the disadvantage of losing a fraction of the population in each year being compared. Those who died during the first year and those who became Medicare eligible during the second year did not get picked up in the cohort.

We used beneficiary months of eligibility as the denominator for calculating utilization rates and costs per beneficiary month. This measure accommodated the movement of beneficiaries between Medicare sectors, as well as the entry and exit of beneficiaries from Medicare and DoD eligibility due to aging in or death. Medicare eligibility was determined using data on eligibility and date of death from the EDB master file. For each month of a year, beneficiaries were classified as Senior Prime enrollees if they had Medicare eligibility, were alive, and had a Senior Prime plan number in the GHP enrollment data. They were classified as M+C enrollees if they had a M+C plan number in the GHP data. Otherwise, they were classified as fee for service if they had Medicare eligibility and were alive in that month. Beneficiaries were classified as DoD eligible in a month if they were in the relevant cohort of beneficiaries and were alive in that month. For each beneficiary, we then summed the number of months of Medicare eligibility and DoD eligibility in each year, and we also summed the number of months in Medicare fee for service, managed care, or Senior Prime.

Changes in Medicare and DoD Service Utilization

An essential requirement for effective analysis of the effects of Senior Prime on service utilization within Medicare and DoD was the availability of comprehensive and complete data for all sectors of health care services. The majority of our efforts during data acquisition and preparation were directed toward establishing a database with consistently measured service use and costs across Medicare fee-for-service participants, M+C plan enrollees, DoD MTF direct-care service users, and Senior Prime network provider users. For each claims or encounter data set, we defined categories of service that were homogenous with respect to the types of units of service and that accounted for substantial shares of total spending in that sector. For example, six categories of services were defined within the Medicare institutional outpatient service claims, but all home health services were included in one category. On the DoD side, we aggregated all SIDR encounters, but we established separate groupings for the SADR outpatient

data for primary care, specialty care, and other types of visits. SADRs for scheduled visits, walk-in visits, and sick call visits were included in the analysis.[6]

Files were constructed that contained a record for each dually eligible beneficiary, with utilization and cost measures for each service category aggregated for each month in the full four-year time period of the data (FY1996 through FY1999). This file structure gave us the flexibility to aggregate the data for each fiscal year or other sub-year intervals, depending on the research questions being addressed.

We used total Medicare beneficiary months to calculate utilization rates, normalizing to annualized rates per 100 beneficiaries. With total beneficiary months as the denominator, movement out of Medicare fee-for-service or managed care sectors into Senior Prime can be observed as a decline in utilization rates for the sector of origin and an increase for the other sector. We also calculated rates of DoD service utilization and costs for subgroups of Medicare fee-for-service or M+C plan enrollees, using beneficiary months for those in each group, which provided group-specific information.

Changes in Medicare and DoD Costs

We estimated the effect of the demonstration on Medicare costs for both fee-for-service beneficiaries and M+C health plan enrollees. The actual payments for Medicare Part A and Part B services were obtained by summing the "paid amounts" in the fee-for-service claims. Medicare M+C costs consisted of the actual capitation payments to Medicare health plans for beneficiaries enrolled in the plans; these figures were obtained from the monthly payment files. Payment amounts were aggregated first at the person level, and then they were aggregated by site, Senior Prime enrollment status, and other comparative groupings of interest.

The introduction of Senior Prime affected DoD costs for both MTF direct-care services and services by Senior Prime network providers. It was important to look at these two cost impacts separately because the MTFs incurred the direct-care costs, whereas TMA incurred the network provider costs through its centralized risk pool. MTF direct-care costs were estimated separately because SIDRs and SADRs are not claims records for payments. HCSRs for network provider services are claims that include the amounts paid by the TMA contractor for inpatient and outpatient services provided. Only Senior Prime enrollees should have HCSR claims because other Medicare-eligible beneficiaries were not eligible for TRICARE enrollment.[7]

DoD incurred administrative costs for Senior Prime in addition to the costs of health care services for dually eligible beneficiaries. As discussed in Section 1, the MCS contractors performed a variety of administrative functions for processing Senior Prime enrollments, providing support services for enrollees, managing referrals and payments for use of network providers, and utilization management activities. The costs for these services were substantial. In addition, the teams responsible for management of the Senior Prime plans at the demonstration sites committed considerable time and resources to the program, during both start-up and ongoing operation. To assess these administrative costs, we obtained estimates from

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[6] Records for telephone consults and cancelled visits were also in the SADR files. These were deleted from the analysis because they did not represent actual clinic visits.

[7] We found some HCSR claims for non–Senior Prime enrollees in our data, but we were not able to confirm their validity. We include these costs in our analysis because they may be for care received before age 65.

TMA and each of the individual sites of the staff time and costs invested in their respective roles for the Senior Prime program, which we summarize in Section 5.

The participants found it difficult to establish these cost estimates for several reasons. For the MCS contractor costs, the actual costs will be known only when final agreements are reached between TMA and each of the contractors on contractor reimbursement for their Senior Prime activities. These amounts were still being negotiated as of the end of 2000. For the sites' costs, the Senior Prime staff at the lead agent offices and MTFs prepared their cost estimates manually because the automated information systems do not capture staff time at this level of detail. Additionally, staff time spent on Senior Prime at most of the sites was time taken away from other activities. Such opportunity costs are difficult to quantify, but they are important to know because the costs provide an estimate of value for other foregone activities.

Adjustment for ADS Completion Rates

Given the low ADS record completion rates for outpatient visits, it was necessary to adjust our estimates of total utilization and costs using ratios of ADS visits to total visits from the MEPRS data. RAND obtained FY1998 and FY1999 data from STI on counts of SADR encounter records and MEPRS visits for all MTFs, summarized by MTF, clinic, and month using the standard DoD methodology. We used these data to calculate average completion ratios to adjust the SADR service counts and costs for unreported outpatient encounters. We first calculated completion ratios for each MTF clinic and month and used them to calculate averages by MTF and month (for all clinics). These averages were weighted by the number of SADR records for the dually eligible beneficiaries in our FY1998 cohort, to give heavier weight to adjustments for clinics actually used by these beneficiaries. We chose this method to smooth out fluctuations in clinic-level ratios due to small numbers of visits in many clinics, while retaining adjustments for differing completion ratios over time.

MTF/month completion ratios were calculated for all the MTFs participating in the demonstration or control sites, as well as for several outpatient clinics in the San Diego site that are coded as distinct MTFs even though they operate as part of the NMC delivery system. Additional MTFs were included if they had more than 500 outpatient visits for the beneficiaries in our evaluation population, based on summaries of our FY1999 SADRs. These included several facilities in the San Antonio area, facilities used by beneficiaries in the Dover demonstration site, and several facilities in the National Capital Area (in addition to Walter Reed AMC and National NMC, which are a control site). Together, these facilities account for an estimated 98 percent of the total MTF outpatient visits by these beneficiaries in 1999. Completion ratios of 1.0 were used for services provided by all other MTFs because dually eligible beneficiaries had few visits at these MTFs, and thus, we could not calculate weighted MTF-level average ratios. This choice should not affect results because the number of visits at these MTFs was small.

We note that such adjustments involved an assumption that the ADS record completion rates were the same for older beneficiaries as for all others served by an MTF clinic. Some have argued that providers are more likely to complete ADS forms for the Senior Prime enrollees because of the strong attention being given to the demonstration. On the other hand, experience with a variety of changes in clinical practices has shown that providers tend to use the same practices with all patients (probably because it is easier to use one consistent way of working with patients). Given the large discrepancies found between ADS records and MEPRS counts,

the use of completion ratios offers more acceptable estimates of true activity levels even if some error may be introduced because of higher ADS completion rates for the Senior Prime population.

Estimation of MTF Unit Costs

To estimate the effect of Senior Prime on the DoD costs of care, MEPRS financial data were used to develop sets of unit costs for inpatient and outpatient services that were applied to each unit of service included in the SIDR and SADR encounter records. Unit costs were calculated for each MTF in the DoD system, thus providing unit cost information for care provided by demonstration MTFs as well as for out-of-area care by other MTFs. We note that there has been some criticism within the DoD that the MEPRS data overestimate the MTFs' costs of doing business. This criticism reflects a reported overestimation of the available military personnel time for patient care activities because personnel often do not record time spent on military activities. While acknowledging this issue, we also understand that MEPRS is the best available data, and it is the basis for all other cost estimations for the demonstration.

In developing our unit cost estimation methodology, our goal was to derive cost estimates that captured all MTF costs of care for inpatient or outpatient events and that were sensitive to variations in the intensity of resources required to provide health care for an older population. We worked closely with SRA International, the TMA contractor that developed the Patient Level Cost Allocation (PLCA) method to estimate the level of effort for the demonstration and also prepared the financial data used by TMA and CMS in the year-end reconciliation of Senior Prime payments. SRA provided us valuable information on the strengths and limitations of the MEPRS data, which we applied in designing the costing methodology. We wrote specifications for calculating inpatient and outpatient unit costs, and SRA generated these cost estimates for us.

The cost estimation methodology we developed differs somewhat from the PLCA method but mirrors its approach. SRA International generated the cost and workload data for MTF outpatient clinics or inpatient wards for all MTFs in the DoD system for fiscal years 1996 through 1998. As of the writing of this report, data were not yet available for 1999, although we will obtain these data from SRA as they become available. The estimated unit costs included total direct and indirect expenses for each MTF cost center (ward or clinic), including direct expenses for staff time and supplies as well as indirect expenses for ancillary clinical services, administrative services, and maintenance and other support services. We summarize here the methodology for calculating the inpatient and outpatient costs. Additional documentation prepared by SRA is provided in Appendix D.

Inpatient Stays. We estimated the cost per inpatient stay for each MTF inpatient stay using the following formula:

$$\begin{aligned}\text{Cost for inpatient stay } i \text{ in ward } j \;=\; & (\text{medical per-diem cost})_{ij} \times (\text{number of days})_{ij} + \\ & (\text{surgical per-diem cost})_{ij} \times (\text{number of days})_{ij} + \\ & \text{surgical cost for surgical DRG}_i\end{aligned}$$

where the number of bed days for each type of inpatient ward—medical or surgical—is the sum of the ward and intensive care unit (ICU) days in the SIDR. DRG is the Diagnostic Related Group assigned to each inpatient stay based on the patient's principal diagnosis and treatment. Medicare uses DRGs as the basis for payments for inpatient services, and DoD uses DRGs to establish amounts billed to third-party insurers for MTF inpatient services.

For each inpatient ward in an MTF identified by the MEPRS level-3 accounts (the level that inpatient wards are coded in the SIDRs), we obtained the following MEPRS data that we used to calculate average total per-diem expenses:

a. Total expenses including all stepped-down expenses from MEPRS accounts D and E [8] *except for* surgical expenses (anesthesia, surgery suite, and recovery room expenses). These costs included clinical salaries, direct operating costs, support costs, allocated ICU and ancillary service costs, allocated costs from purification of cost pools that contain costs related to more than one account, and resource sharing costs that SRA International assigned to the inpatient ward.

b. Total number of occupied bed days (OBDs) during the year, which were used with total expenses to generate an estimated total expense per OBD.

For each surgical DRG, we obtained an estimated average MTF-level surgical expense that included expenses for anesthesia, surgery suite, and recovery room. This cost estimate was derived as the total MTF surgical expenses divided by the total weights of surgical DRGs during the year, where surgical costs were estimated using the same method that SRA International applied for the PLCA calculations. For each surgical disposition, we multiplied the MTF average surgical cost by the DRG weight for the DRG assigned to the patient stay.

This approach allowed us to capture all expenses for an inpatient disposition using a consistent methodology across all the years of inpatient records included in our analysis. This method smoothes out errors in reporting movement of patients between ICUs and regular inpatient wards by estimating average per-diem costs that include costs for the regular ward services plus related ICU services. At the same time, it captures the one-time costs associated with the surgical procedure performed for each surgical stay by applying these costs separately for each event. The method also allows costs to increase with length of stay, thereby capturing some of the additional costs incurred by the older population. However, this approach assumes that ancillary costs are a linear function of days, whereas it is known that these costs tend to be concentrated in the early days of an inpatient stay (Carter and Melnick, 1990). Therefore, the method sacrifices some precision in estimating ancillary service costs, although SRA International has informed us that total MTF ancillary costs correlate strongly with length of stay.

Outpatient Visits. For each clinic in an MTF identified by the MEPRS level-4 accounts (the level that clinics are coded on the SADRs), we obtained the following MEPRS data that we used to calculate average total expenses per outpatient visit:

a. Total MEPRS level-4 expenses for the clinic for each year, including the resource-sharing expenses that SRA International has estimated and assigned to each clinic.

b. The MEPRS count of total outpatient visits in the clinic during the year.

c. Within the total expenses, separate identification of the expenses for laboratory, radiology, pharmacy, all other ancillary services (including allocated costs from purification of cost pools), and resource sharing.

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[8] The MEPRS D accounts are clinical ancillary services (e.g., pharmacy, pathology, intensive care), and the E accounts are support services (e.g., administration, housekeeping, laundry, depreciation).

These data allowed us to calculate the average total cost per visit for each clinic in an MTF and to estimate the shares of the total clinic expenses that are attributable to ancillary services.

Estimation of Payments for Medicare+Choice Health Plan Enrollees

The costs to Medicare for beneficiaries enrolled in M+C plans consist of the monthly capitation payments made to the health plans. We obtained data on actual payments for each month of enrollment for all health plan enrollees from December 1997 through December 1999. CMS adjusts some of these payments by the Medicare demographic factors in later months as it receives updated information from plans about changes in status that affect the risk adjustment calculations. We did not attempt to reconcile these adjustments, given the potential difficulty in achieving accuracy for what we felt would be secondary effects on payment estimates.

In cases where a beneficiary was enrolled in a health plan earlier than December 1997, we used the December 1997 payment amount for each enrollment month during the 1997 calendar year. If the payment file did not provide a December 1997 payment, we applied the 1997 county rate for the beneficiary's county of residence. For enrollments during the last quarter of 1996 (the earliest time period included in our analyses), we calculated a ratio of the 1996 to 1997 county capitation rates for county of residence and applied that ratio to the earliest payment available during 1997.

Adjustment of Costs for Inflation

To compare spending levels between FY1998 and FY1999, it was necessary to adjust for inflation so that spending for both years was presented in constant (real) dollars. We did not have to adjust the estimated costs for MTF direct-care services for inflation because the estimated unit costs we applied to the encounter data for both years were in 1998 dollars. We discounted Medicare spending and the DoD spending for network provider services in FY1999 to 1998 dollars using a 1.4 percent inflation rate.

We tested two references for Medicare cost increases to determine the inflation rate. The first was the trend in the U.S. per-capita costs (USPCC) for fee-for-service beneficiaries that the CMS Office of the Actuary calculates each year. For the years 1996 through 1999, the USPCC increased at an annual rate of 1.4 percent. We also used the annual rate of increase in the M+C county-level capitation rates, which the Balanced Budget Act of 1997 mandated is to be equal to the rate of increase in Medicare fee-for-service costs. The annual updates used by CMS to establish the capitation rates for calendar years 1999 and 2000 were 1.88 percent and 0.90 percent increases, respectively, over the previous year. These also average to 1.4 percent. Because DoD payment policies mirror Medicare policies, payments discounted using this inflation rate represent increases in what either DoD or Medicare would have paid community providers if the service had been provided in FY1998 instead of FY1999.

Section 3.
Senior Prime Implementation and Market Entry

The first tasks undertaken by TMA and the demonstration sites were the design of the Senior Prime program, at both the corporate and site levels, and the preparation of written applications for certification as Medicare managed care plans. After the Medicare application for each Senior Prime plan had been submitted, and CMS had deemed it complete, CMS conducted a certification site visit to review the application and related documents. As CMS approved each application, it sent a contract letter to DoD confirming the establishment of the Senior Prime plan. The contract defined the plan's service area by county and zip code, specified the waivers from Medicare rules established for the subvention demonstration, and approved the Senior Prime marketing materials and the form for civilian network provider contracts. Each site began marketing and enrollment activities as soon as the DoD received its Medicare contract from CMS.

In this section we present the results of our evaluation of the implementation process and sites' experiences operating as M+C plans, and we explore some of the consequences of these new Medicare managed care options for other M+C plans and VA facilities in the local markets. We first describe our process evaluation findings on the roles and experiences of TMA, CMS, and the Senior Prime sites in the initial design and start-up of the program. Then we discuss the sites' status after one year of operation. Finally, we examine possible effects of Senior Prime entry on M+C market shares in the demonstration sites, on use of MTFs by enrollees in other M+C plans, and on VA facilities in the local markets.

SENIOR PRIME PROGRAM DESIGN

TMA Functions and Responsibilities

Operational oversight for the Senior Prime plans was provided by TMA, which has overall responsibility for management of the TRICARE program. TMA established the Senior Prime benefits package, the basic program structure, and national marketing materials to be used by all sites. It also negotiated the specifications for the payment system and LOE calculations with CMS. TMA developed a template for the Medicare application, which each site then used to prepare its application to establish a Senior Prime plan. At the same time, TMA developed the terms for roles and performance of the MCS contractors for the Senior Prime plans. These were delineated in an addition (section N) to Chapter 20 of the *TRICARE Operations Manual*. The MCS contractors function under a combination of provisions in their existing TRICARE contracts and in Chapter 20 of the manual. The Chapter 20 provisions were reviewed in detail at a meeting in spring 1998 that was attended by the site teams and by MCS contractor representatives. Revisions continued to be made as issues arose during the demonstration.

Regular videoconference meetings were held with the sites to communicate TMA activities, get the sites' input on policies being developed, and help coordinate their work. Technical support was provided to the demonstration sites on a daily basis by two full-time TMA staff who had hands-on Medicare experience. TMA left to the sites the design details for the Senior Prime plans. The sites developed the local plan organizational structures and processes,

guided by the CMS conditions for participation for Medicare managed care and by the consultants the sites hired with TMA funding support to provide them Medicare expertise.

The MCS contractors are responsible for processing payments for network provider services which, during the demonstration, included the Senior Prime providers. TMA pays these claims directly. A separate risk pool was set up for Senior Prime network provider claims. The MCS contractors subcontract the claims processing function to two contractors, Palmetto Government Benefits Administrators (PGBA) and Wisconsin Physicians Service (WPS). As TRICARE was initiated in each region, there had been problems with the timeliness of claims processing that led the network providers to express dissatisfaction with TRICARE and to the cancellation of contracts by some providers. Although these problems had been resolved in most locations by the time Senior Prime began, they continued to discourage providers in some sites from participating as Senior Prime contractors, as discussed below.

The Senior Prime Plans

As described in Section 1, the Senior Prime plans were housed in the regional LA offices and the MTFs and MCS contractors participated in service delivery and administrative capacities. Within this general form, the six sites shared many elements in organizational structure, benefits covered, and service delivery system, but they differed somewhat in the roles and relationships of the LA office, participating MTF(s), and the MCS contractors. In particular, the Colorado Springs and Region 6 sites were organized to accommodate multiple MTFs, which was not needed for the other four sites, which each had only one MTF.

Infrastructure. The Senior Prime plans were integrated into TRICARE at the governance level. Each site had a Senior Prime governing board that reported into the overall TRICARE governance structure. Each Senior Prime governing board had a quality committee that typically had broad jurisdiction over quality, utilization, appeals, and grievance activities. Anticipating the possibility that Senior Prime might become a permanent part of TRICARE, the sites chose governance structures that could absorb an expanded program without having to reorganize.

The Senior Prime management team of each site reported to its governing board, and each management team was led by staff in the LA office. The sites varied substantially in the depth of staffing committed to this program. The Region 6 site had five full-time LA staff who accumulated in-depth technical knowledge of Medicare managed care and Senior Prime, which they made available as a technical resource to the site's MTFs. The Colorado Springs site had a plan coordinator and three full-time staff to operate the program and coordinate work with the two participating MTFs. Other LA offices had less staffing depth, reflecting their less complex structures, and in most of these sites, almost every LA staff person with Senior Prime responsibility also performed other TRICARE functions.

Management Leadership. The LA office was responsible for overall management of the Senior Prime plans. The LA staff had established working teams consisting of staff counterparts from the LA, MTF(s), and MCS contractor, which worked together on specific Senior Prime functions (e.g., utilization management, grievances, and appeals). For clinical functions, such as quality management, the MTF staff typically had responsibility for MTF services and the contractor staff handled the network provider services. Monitoring, appeals, and Medicare compliance activities typically were retained centrally by the LA staff with

participation by the MTF(s) and MCS contractor staff. The LA office for the Dover site (Region 1) implemented Senior Prime simultaneously with the entire TRICARE program. As a result, the MTF assumed a leadership role in organizing and leading Senior Prime early in the start-up, with the LA office picking up the lead later.

The Region 6 and Colorado Springs sites had more complex organizations than the other sites because they had more than one MTF participating in their Senior Prime plans. The Region 6 LA office negotiated an agreement with its four participating MTFs regarding their respective roles and responsibilities, which it executed as written memoranda of understanding (MOUs) with the MTFs. It was the only site to take this formalized approach, which it did because the LA office did not have formal line authority over the multiple MTFs in the site. The LA office at Colorado Springs chose to lead its program actively, drawing upon the two MTFs and the MCS contractor to build teams and collaborate on activities, but it did not use MOUs to formalize these relationships. Each of the remaining sites had a one-on-one relationship between an LA office and one MTF, often with the same officer as commander. They established verbal agreements on the respective responsibilities of the LA, MTF, and MCS contractor.

Provider Networks. The basic design of the demonstration specified that the site MTFs were the principal providers for Senior Prime enrollees, and civilian network providers were to be used only for services the MTFs did not provide. The sites differed widely in the scope of services provided by the MTFs. The medical centers (Brooke AMC, Keesler MC, Madigan AMC, NMC San Diego, and Wilford Hall MC) provided a full range of inpatient and outpatient services, including many subspecialty services. At the opposite extreme, the clinic at Dover AFB provided only outpatient primary care and a few specialty services. The four community hospital MTFs (Evans ACH and USAF Academy Hospital in Colorado Springs; Reynolds ACH and Sheppard AFB in Texoma) provided inpatient and outpatient care, but they could provide only a limited number of specialty services. None of the MTFs officially provided other services specifically needed by an older population such as SNF care, home health care, or durable medical equipment services.

The MCS contractors established and managed contracts with the Senior Prime network providers. Community providers with TRICARE Prime contracts were the first providers tapped by the MCS contractors for participation in Senior Prime. Then they reached into the community to recruit other types of providers that were not available from the Senior Prime network. All sites reported that it was relatively easy to recruit institutional providers such as SNFs, home health agencies, or DME suppliers because there were adequate suppliers in the community and they all were Medicare-certified providers.

Challenges were faced by some sites in recruiting subspecialty physicians who were not already participating in TRICARE Prime. Recruitment proceeded with relative ease in Region 11, San Diego, and the San Antonio portion of the Region 6 site, all of which were in large markets with managed care presence. The Dover, Keesler, and Colorado Springs sites, and the Texoma (Reynolds and Sheppard) portion of the Region 6 site faced continuing recruitment difficulties, although they were able to recruit sufficient network providers to handle the amount of care for which MTF providers referred enrollees.

Many physicians with full private practices saw no advantage to participating in Senior Prime. One reason cited for resistance by community physicians was general dislike of managed care arrangements, which was encountered in the Texoma, Dover, and Keesler markets.

Physicians in some markets (Dover, Keesler, and Colorado Springs) also reported dissatisfaction with the low military fee schedule, late claims payments, and other negative experiences with CHAMPUS. Physicians in the Colorado Springs market remembered especially painful experiences with TRICARE. Soon after TRICARE was initiated in the region, physicians became so dissatisfied with low prices and slow payments that large numbers of them canceled contracts, and the MCS contractor had to rebuild the TRICARE provider network. Despite perceptions that military prices were low, we have been told that the prices improved in the past few years and that they were quite similar to the Medicare fee-schedule rates for physician services.

Benefit Package. Senior Prime health care benefits were the "richer of the Medicare or TRICARE Prime benefits," thus providing the same health benefits at all Senior Prime sites. Because outpatient pharmacy coverage is an open benefit for DoD beneficiaries, it was not a competitive advantage for Senior Prime plans, despite its popularity, because beneficiaries were free to enroll in another Medicare plan and still use MTF pharmacies.

Under this policy of national benefits, the sites in the more competitive Medicare managed care markets did not have the flexibility to adjust Senior Prime benefits to compete more effectively. For example, non-competitiveness of benefits may have contributed to unexpectedly low enrollment rates for the San Diego site. This site was in a very competitive market with high Medicare capitation rates, where existing health plans offered rich benefits to attract enrollees. The other three markets with Medicare managed care competition—Madigan, Colorado Springs, and San Antonio—had lower capitation rates, which may have mitigated this issue for those locations because Medicare plans tended to offer fewer supplemental benefits.

Another benefit issue was two-tier cost sharing, where Senior Prime enrollees received MTF services at no cost but they were required to pay either copayments (fixed amounts) or coinsurance (percentage of charges) for services obtained from network providers. Senior Prime enrollees had to use MTF services when available and otherwise had to use network providers and pay the cost sharing. This provision may have weakened the market positions of Senior Prime sites whose enrollees use network providers regularly (e.g., the Colorado Springs site) because the vast majority of Medicare health plans covered all but a small amount of enrollee cost sharing.

CMS regional offices expressed concerns that this cost sharing policy may have confused beneficiaries, leaving them unaware of their potential financial liability, which could become quite large for coinsurance for extensive treatment. Although this two-tiered structure might look similar to a private-sector point-of-service plan, it was fundamentally different because Senior Prime enrollees were not free to choose providers and the associated cost sharing. In a point-of-service plan, insured persons have lower cost sharing when they use network providers, or they may choose nonnetwork providers if they are willing to pay higher costs.

Quality and Utilization Management System. The placement of the quality management (QM) committee high in the sites' Senior Prime governance structure reflected the importance placed on these functions by CMS, TMA, and the demonstration sites. All sites structured their Senior Prime QM plans and activities as extensions of the regional TRICARE quality assurance programs, and they drew upon existing monitoring protocols and measures. The QM and utilization management (UM) functions were defined as distinct aspects of a unified care management function, with the goal to provide appropriate care for enrollees at reasonable

costs. In all six sites, the QM/UM team consisted of clinical and administrative staff from the LA office, each MTF in the site, and the MCS contractor. In three regions (Dover, Keesler, and San Antonio), some or all of the UM functions were purchased from the MCS contractor for TRICARE, and the contractor also performed these functions for Senior Prime. In the other regions, these functions were performed by MTF staff for MTF services and by the MCS contractor for network providers.

Information System Requirements and Resources

Four major functions of the Senior Prime program depended on multiple data systems operated by the DoD itself, DoD contractors, and CMS: (1) the processing of Senior Prime enrollments, (2) the quality assurance and utilization management programs of the sites and TMA, (3) processing of payment claims for network providers and nonnetwork providers that provide out-of-area care for enrollees, and (4) the determination of DoD costs, level of effort, and capitation payments from CMS. The DoD systems included data storage systems [DEERS enrollment system; Corporate Executive Information System (CEIS); MEPRS Executive Query System (MEQS); and HCSR database] and data capturing systems (the MTFs' CHCS and ADS clinical data, and the MEPRS data on MTF workloads and finances). Contractors' systems included the MCS contractors' enrollment systems and the Enlisted Education Advancement Program (EEAP) and CHAMPUS Regional Intermediary System (CRIS) claims processing systems operated by WPS and PGBA, respectively. The CMS Medicare Processing Center (MPC) is an external system that processes applications for Medicare+Choice enrollments, including Senior Prime. The MPC generated reports on new Senior Prime enrollments and disenrollments for use by the MCS contractors in their enrollment functions.

As might be expected from the number of systems listed, several data system challenges were encountered during the demonstration. Specific issues are discussed below, in the context of the functions being performed.

EARLY IMPLEMENTATION EXPERIENCES

This subsection summarizes how the six demonstration sites prepared for and began operations as Senior Prime plans, and it identifies some of the key events and issues that emerged during those activities. This discussion drew parsimoniously from the wealth of information collected during the site visits and interviews with staff at TMA and the CMS central and regional offices. The richness of information was due to the openness of the sites' leadership teams and their commitment to learning from this demonstration.

Getting Certified as Senior Prime Plans

The preparations to establish the Senior Prime plans in the six demonstration sites were carried out in a compressed time period, given the short time available from passage of the BBA in late 1997 to the goal for all sites to begin service delivery no later than January 1999. Negotiations to revise the MOA to reflect the BBA provisions proceeded through the end of 1997, as TMA began work on the national Senior Prime marketing materials and the Chapter 20 provisions for the MCS contractor roles and responsibilities.

With TMA support, the sites began to prepare the Medicare health plan applications in early 1998. The BBA specified that the sites were to be certified as M+C plans, but CMS was

still developing many of the M+C implementing regulations in early 1998 when the sites needed to begin preparing applications. To allow applications to move ahead quickly, the sites worked under the rules and forms for Medicare Section 1876 risk contracting plans, and CMS provided the M+C rules to TMA and the sites as they became available. These changes in Medicare policy had differing effects on the sites. As shown in Section 1, Table 1.1, the Madigan AMC, Region 4, Region 6, and NMC San Diego sites began service delivery in 1998, before M+C was in effect. All of these sites had to revise and resubmit applications under the new M+C rules, in some cases within weeks before the scheduled CMS certification site visit. The two sites processed for a January 1999 start dates had slightly more time to prepare.

With little in-house Medicare expertise, the sites reported they had difficulties preparing the applications. TMA committed financial support for the sites' MCS contractors to hire consultants to provide the needed Medicare knowledge and experience. The consultants turned out to be critically important resources, helping the sites to prepare the Medicare applications, guiding the plan's design, and training the sites on the unique aspects of serving an older population. The consultants for some of the sites conducted mock site visits to prepare the Senior Prime teams for the CMS certification site visits.

CMS staff in the central office and regional offices reported that the final applications from the demonstration sites were of high quality, and CMS staff participating in the site visits were impressed with the sites' careful preparation, strong organization, and commitment to serving the Medicare-eligible DoD beneficiaries. The application process was the first time that the CMS and DoD field staff had direct contact with each other, and it provided the start for their working relationships. CMS staff reported that, with the perspective they acquired from these contacts, they gained confidence in the commitment and ability of the DoD sites to perform as Medicare plans. In turn, LA staff at the demonstration sites reported they were pleased with the responsiveness and support of the CMS regional office staff.

One of the most challenging aspects of the certification process was the sheer number of Medicare performance requirements that the Senior Prime plans were required to meet in their applications and practice.[1] Accustomed to making their own decisions on MHS policies and practices, TMA and the sites had to adjust to complying with an external party's rules, a process that was complicated by periodic frustration when they felt that some of the rules were unnecessary or not meaningful in the military health system. Negotiations of issues continued into the demonstration period, as the sites identified rules or written forms that did not work well for them in practice. At the same time, the sites found that some of the Medicare requirements (e.g., grievances and appeals) were effective tools, and they began to apply them to TRICARE Prime operational practices as well. This transfer of practices became a useful product of the demonstration, as documented during the follow-up teleconference interviews.

As Senior Prime moved from the certification process to enrollment and service delivery, the CMS central office decreased its direct role in the demonstration and shifted the lead for compliance monitoring to the CMS regional offices. The LA staff for several of the sites visited their CMS regional offices after their Senior Prime plans became operational, to get better acquainted and provide the CMS staff with more detailed information on their activities. The

[1] CMS central staff informed us that Senior Prime plans share this experience with other new Medicare plans, many of which complain about the amount of work required to become Medicare certified.

CMS central office and regional office staff coordinated policy and activities through regular conference calls. Wherever possible, CMS tried to resolve issues and establish national policy for the Senior Prime plans.

The Enrollment Process

Staff of the sites' LA office, MTF(s), and MCS contractors worked as teams in conducting the start-up marketing and enrollment process. The MCS contractor provided the administrative support for the activities, hiring temporary staff to handle appointments and schedules for the orientation sessions. The sites all reported that they presented themselves to the beneficiaries as "people who will serve them in Senior Prime," making no distinction between the different organizations. The MCS contractor was responsible for processing enrollment applications and managing all other enrollment materials and activities.

Marketing Activities. Some sites had little time to initiate marketing for Senior Prime enrollments, given the compressed start-up schedule. As soon as each site's contract was executed by CMS, the site initiated these activities. Marketing began with advertising through selected media that they determined would be effective at reaching the Medicare-eligible DoD beneficiaries, including ads in local newspapers, press releases, public service announcements, notices to elected officials, and communications with local retiree associations. One site used direct mail marketing. Local military retiree associations made important contributions to reaching this population, which was a large share of their memberships, by running articles and notices in their newsletters and otherwise keeping their members informed about Senior Prime. National marketing materials were prepared by TMA for the sites' use in enrollment, and these materials were reviewed by CMS and approved as part of the Senior Prime applications.

The sites ran intense schedules of orientation meetings for interested beneficiaries, which started within a week or two after the marketing began. Groups of 50 to 200 beneficiaries were scheduled for meetings that were held as frequently as twice a day for the first few weeks, with declining frequency in later weeks. Thousands of beneficiaries at the six sites were reached through these sessions. Clinical and administrative staff briefed the attendees on Medicare managed care and TSP and answered their questions. Staff were available after the briefing to work individually with beneficiaries as they considered this managed care option. This was the start of personalized support strategies that the sites organized to serve their beneficiaries and enrollees.

The sites reported that an essential element of preparation for Senior Prime enrollment and service delivery was the careful training of the MTFs' frontline clinical and support staff, PCM physicians, and specialty physicians. These training activities typically focused on informing providers about Senior Prime rules, techniques for working with older patients, and managing intake of new enrollees. A series of briefings was held for these staff before marketing and enrollment activities began, and many of the PCM physicians had leadership roles in conducting the beneficiary orientation meetings. The credibility of the physicians at the meetings helped to build trust in the program because attendees knew these physicians would be their primary care providers. This training also helped the staff work with beneficiaries in the clinics because they could answer their questions and refer them to others who could help them.

Other provider training activities were also performed as the sites identified needs. For example, physicians in all sites participated in QM/UM activities and disease management

initiatives, and at least one site provided training to physicians on proper coding of diagnoses and procedures on ADS bubble sheets. In the larger medical centers, it was reported that attempts were made to improve referrals and communications between PCMs and specialty physicians. As time passed, the sites also learned that these training activities needed to continue and be reinforced, especially as CMS rules and guidelines changed (see discussion later in this section).

Enrollment Processing. Madigan/Region 11 was the first site to begin enrollments, and it experienced strong demand for Senior Prime by its beneficiaries. Over 3,300 new enrollees were processed for start of service delivery in September 1998, and the initial screening visits and PCM visits for those enrollees almost swamped Madigan's clinic capacity. Learning from this site, staged enrollments were used by Brooke AMC, Wilford Hall MC, Evans ACH, and Keesler MC, anticipating that the level of demand could overload their facilities. The remaining facilities had small enrollments that could be managed more easily, although they still had to manage peaks of activity when service delivery began. Only Madigan AMC, Brooke AMC, and Wilford Hall reached their planned enrollments. As shown in Section 4, enrollments for some facilities leveled off after the first few months, while those for other facilities continued to grow at steady rates. All sites received age-in enrollments that were not counted toward enrollment targets.

Senior Prime enrollments were processed by the sites' MCS contractors. Beneficiaries mailed in their applications to the MCS contractors, which dated and entered the applications through the MPC, an automated data system established by CMS to process health plan enrollments (including Senior Prime). Each application was verified with the beneficiary by telephone, including review of the Senior Prime rules for eligibility and service delivery. With the need to verify eligibility for both DoD and Medicare benefits, and to get beneficiaries correctly recorded in the DoD enrollment and claims processing data systems, the contractors' enrollment staff worked with three to four independent data systems. They entered the application data into the MCP, then worked through CHCS to record the beneficiary status in DEERS and, finally, entered the record into the data systems (EEAP or CRIS) of the claims processing subcontractor that processed network provider claims for the beneficiary. Such a system was cumbersome and vulnerable to errors.

Early Service Delivery

The site visit information on service delivery experiences of the sites offered a glimpse into the early service needs, but it was not clear how service patterns would evolve as the enrollee population stabilized and care management practices matured. This was one of the key areas we continued to track in the follow-up teleconferences.

MTF Services. PCM clinics at each site were busy in the first few months after Senior Prime began service delivery. Each site and MTF established a distinct strategy for educating their new enrollees, for example, the five-hour training and screening sessions held by Evans ACH, the Enrollee Education and Health Assessment Strategy meetings conducted by Keesler MC, and comprehensive rounds of PCM initial clinic visits performed by the remaining sites. These strategies were undertaken to educate enrollees on how to use Senior Prime services, assess health status and identify health problems that needed attention, and prepare for existing health care needs during the transition into Senior Prime.

PCM choices made by new enrollees revealed the strong preference that older beneficiaries generally have for internists as their primary care physicians. In some sites, the supplies of internal medicine PCMs were exhausted early, and later enrollees had to be enrolled with family practice or nurse practitioner PCMs. Some of the later enrollees had health problems that were better served by internists, while some early enrollees were healthy and their care could be managed effectively by nurse practitioners. The PCM teams worked with enrollees to change their provider choices, when appropriate, to match provider to enrollee's need and to distribute enrollees more evenly across the available clinics.

The clinic teams relied on nurse coordinators to process and educate new enrollees and help coordinate visit appointments. The coordinators, clerks, and other frontline staff found they had to spend substantial time with enrollees, responding to demands for instant appointments, coaching them in making the appointment telephone calls, and reinforcing their medical instructions. The Senior Prime enrollees complained a great deal about using "800" numbers or telephone systems with electronic menus. In some regions, the MCS contractors handled TRICARE appointments centrally, including those for Senior Prime. Other sites made appointments locally, which frontline staff report to be the preference of many enrollees.

Early service delivery experiences of the Region 11 and Region 6 sites highlighted the importance of preparing to protect enrollees' ongoing care during their transition to the Senior Prime plan. Services of concern included oxygen and other DME, prescription medications for chronic conditions, and patients undergoing a current course of therapy. Some sites initiated contact with applicants even as their enrollments were being processed to gather this information, and some sites contacted local DME suppliers to prepare for transitions.

The sites' PCM clinics expected the intense workload that occurred as Senior Prime began service delivery, but they also expected a subsequent decline as initial visits were completed and enrollees' health care needs were treated. The sites reported that they found a high prevalence of untreated health problems for enrollees, and at that time realized that service activity could remain elevated longer than planned. In addition, peaks of activity in the PCM clinic were being transferred to some of the specialty clinics as patients were referred for treatment of their health problems. Some of the specialty clinics (e.g., dermatology, neurology, and pulmonology) experienced increased activity. Ancillary departments also reported increases in service volumes when Senior Prime started, with the exception of pharmacies in some sites, where the older population had already been using the benefit. (These activity patterns were observed in our analysis of MTF clinic utilization. See Figure 5.1 in Section 5. However, we did not have data to verify the accuracy of the sites' reports of health problems for new enrollees.)

Referrals to Network Providers. When enrollees required services not provided by the MTFs, they might be referred to network specialty practitioners or institutional providers, such as hospitals, SNFs, or home care providers. Some sites also referred patients to other MTFs nearby that were not in the Senior Prime network. For example, enrollees at the Dover site had the option of using one of the large, specialty MTFs in the National Capital Area, which is a two-hour drive away. The Region 6 site could refer patients to other Senior Prime MTFs in the site, other nearby MTFs, or civilian network providers, depending on the enrollees' needs and preferences and the locations of the providers.

There was limited network provider activity early in the demonstration, with the exception of Dover, which provided only primary care in its MTF. Some sites reported that referrals for network provider services increased after several months. Few problems with access or satisfaction were reported, although MTF physicians reported that improvements could be made in the communication and transfer of patient records between the PCM and network physicians, to develop a greater sense of professional partnership. Some enrollees at Keesler complained about long travel distances to network providers, reflecting the site's difficulty in recruiting physicians close to Biloxi (see earlier in this section, Senior Prime Program Design).

The sites reported few problems with referrals to civilian institutional providers, although some of them stated that they wanted to perform closer oversight and coordination of care for enrollees using those services. Dover AFB was the only site that used civilian community hospitals because Dover had no inpatient capacity; three hospitals were in Dover's network. Dover physicians had staff privileges at one of these hospitals so they could extend their care for enrollees to the hospital setting and avoid referring to network physicians.

Plan Performance

Quality and Utilization Management. The demonstration sites' Medicare applications included plans for QM and UM that were extensions of the TRICARE Prime processes. All of the sites established QM and UM teams consisting of the staff responsible for these functions in the LA office, the MTFs, and the MCS contractor. These teams met regularly from the inception of Senior Prime, and they reported their activities and monitoring results to the quality committees of the plans' governing boards.

With the introduction of the M+C program, CMS was implementing its Quality Improvement System for Managed Care (QISMC) requirements with which all M+C plans must comply. The Texas professional review organization (PRO) was performing the diabetes quality study for CMS, and all the sites were to work with their PROs for QM reviews. In response to the CMS requirements, TMA contracted with FMAS Corp., the contractor for the National Quality Review Program, to establish measures on selected quality topics, which the sites first learned about in February 1999.

In spring 1999, the six sites filed updated QM plans with CMS in preparation for QISMC implementation. Yet they continued to struggle with selection of monitoring indicators and the second of two special studies required by QISMC (diabetes was the first), measurement issues involving the limitations of the DoD data systems, and obstacles to coordination of a variety of quality initiatives within DoD. The sites concluded they could work more effectively if they jointly established a consistent plan for all the demonstration sites, and they began to design a demonstration-wide quality assurance plan. Staff in the CMS regional offices were pleased to learn about this approach because it could reduce duplication of effort and establish measures that could be compared across sites and to national benchmarks.

Approaches to utilization management differed somewhat across the sites, although they shared the goal of improving the appropriateness of services delivered for Senior Prime enrollees. The sites recognized the need to manage the multiple health problems and chronic conditions that are prevalent in the older population. At the time of our site visits in spring 1999, they were at differing stages in expanding case management and disease management activities. Work remained to be done to achieve coordinated case management functions that were

seamless across clinics in an MTF and between services provided by MTFs and network providers. In some sites, case management activities were performed by both the MTF staff and MCS contractor, some of which overlapped in some areas and left gaps in others. The sites were also revising pre-authorization policies and procedures to discontinue pre-authorizations that were documented to bring little or no added value to practice improvement. For case management and pre-authorizations performed by the MCS contractor, improvements in procedures likely would require modifications to the Chapter 20 provisions or TRICARE contracts.

Grievances and Appeals. The rigor of the Medicare grievance and appeals requirements caused the sites to focus closely on effective implementation of their grievance and appeals processes. The sites reported they had to adjust the philosophy of the MTF customer service activities to fulfill the grievance process requirements. Typically, the MTF staff were strongly conscious of customer service, and they were accustomed to taking action in response to a problem reported by a patient and then considering the matter resolved. For Senior Prime enrollees, the staff began to keep logs of the complaints reported and they communicated in writing to the enrollees about actions taken to resolve the complaint and the enrollee's grievance rights. The appeals process also caused changes in the sites' procedures. In most sites, appeals were handled by the LA office, to prepare documentation of cases that arose from service denials at the MTF or for network providers. Some sites reported they were considering extension of these provisions to TRICARE Prime.

As of the time of our site visits, few appeals had been filed for the Senior Prime plans, and the rates of grievances appeared to be low. This item was addressed in the follow-up teleconference interviews (see methods in Section 2 and Appendix A).

Compliance Activities. The CMS compliance review process involves a four-person site visit conducted within one to two years after plan contract date, at which they perform full review of the plan's performance, working with the monitoring *Review Guide*. The demonstration sites began to prepare for the CMS compliance process in the first quarter of 1999, preparing the materials and report formats they would use. CMS regional offices reported that the sites were given the existing *Review Guide*, which was replaced in the summer of 1999 with the new M+C *Review Guide* based on the QISMC requirements. The regional offices kept the sites advised of progress and provided information as they obtained it. Compliance visits conducted by CMS in the first year of the demonstration are discussed below.

SENIOR PRIME EARLY FINANCIAL PERFORMANCE

The backdrop for this discussion of Senior Prime financial performance is the relatively fixed MTF budgets created by the DoD budgeting system. As MTFs incurred new costs for Senior Prime, they reported they had to either accept financial losses or forgo other activities to remain within budget. For patient care, this meant that every encounter for a new Senior Prime enrollee replaced another encounter, probably for a beneficiary seeking space-available care. Because Senior Prime enrollees used more health care than younger individuals, each enrollee potentially displaced more than one younger retiree or family member. In addition, growth in both Prime and Senior Prime enrollments led to shrinkage in revenues from third-party reimbursements, as Prime enrollees dropped private insurance coverage and Senior Prime enrollees no longer used supplemental insurance. The MTFs stated they had not yet received

incremental revenue for services to the Senior Prime enrollees, and few of them were prepared to expand staffing to accommodate new service activity without it.

Effects of the Payment Method on the Sites

The components of the Senior Prime payment method included modified Medicare capitation rates paid by CMS to DoD for Senior Prime enrollees, a requirement that the aggregate baseline LOE for the six sites be exceeded before DoD may retain payments, minimum percentages of LOE for spending on enrollees before DoD may retain payments, maximum percentages of LOE for spending on non-enrollees, rules for triggering interim payments, and year-end reconciliation and risk adjustment. The sites reported that they left the main financial considerations to TMA, apparently because of their concerns about the financial provisions and because TMA was performing much of the financial work centrally. They focused instead on performing well clinically and administratively. The sites expressed several concerns regarding possible negative effects of the payment provisions on their Senior Prime financial performance, which we summarize here.

Complexity of the Financial Provisions. The intricacy of the methods for determining Senior Prime payments confused many participants at the demonstration sites, and the sites tended to be suspicious of how these rules might be affecting their financial performance. Without clear understanding of the financial consequences, the sites found it difficult to discern which management strategies were appropriate. Interactions between the enrollment and service activities of TRICARE Prime and Senior Prime made it yet more difficult to manage under the Senior Prime financial rules. For example, enrollment growth in Prime probably was squeezing out non-enrollee costs for space-available care, which would reduce sites' allowed payments under the LOE thresholds. The only effective way to compensate for that loss would be to increase Senior Prime enrollments (and associated revenue), which would not be feasible in some markets.

Interim Payments, Reconciliation, and Cash Flow to the Sites. The sites expressed frustration that they had not received any share of the interim payments made by CMS for their Senior Prime enrollees, as well as doubt that they would ever see any payments. As discussed above, the MTFs bore some risk (as did TMA) for enrollee services, and they did so within fixed budgets. TMA was reluctant to distribute funds from the interim payments because the year-end reconciliation might determine that DoD had to return payments to CMS (which indeed turned out to be the case for both 1998 and 1999).

LOE Calculation. The LOE was based on FY1996 MEPRS data for the participating MTFs. In addition to the complexity of the LOE, several of the sites reported that the FY1996 estimates did not represent their most recent baseline LOE accurately because their facilities or services were altered between FY1996 and the start of the demonstration. Discrepancies in LOE could hold some downsized sites accountable for past levels of service that would be impossible to meet in their current configurations, in the absence of Senior Prime. Other sites might not be held sufficiently accountable for higher service levels immediately preceding introduction of Senior Prime, although this was less likely than the other scenario because most changes had been downsizing.

Thresholds to Determine Payments. In early 1999, the sites became more aware of the potential financial effects of the threshold for space-available care for non-enrollees, which

limited payment credit to the minimum of actual costs or a percentage of the LOE. The sites stated they had little flexibility to adjust space-available service utilization, for which they might be penalized financially.

Capitation Payment Adjustments. The exclusion of GME, disproportionate share payments, and a portion of capital costs from the capitation payments was an appropriate adjustment for MTF services because these costs were already included in the MTF budgets. This approach ignored services purchased from network providers, however, and providers with these costs likely had set their fees to cover them. This inconsistency had a disproportionate effect on smaller facilities with fewer specialty services that relied upon community providers for those services. The Dover site was especially affected because much of the inpatient care for its Senior Prime enrollees was provided by network hospitals (although some patients obtained inpatient care from the specialty MTFs in the National Capital Area).

Risk Adjustment. The retrospective method that CMS and DoD used to adjust 1999 and 2000 capitation payments for positive or adverse selection in enrollment had the advantage of generating payments that closely mirrored expected costs for differing patient mixes. Its disadvantage was that, like other provisions in the payment methods, the sites did not know how risk adjustment would affect them until the end of each fiscal year, again creating uncertainty regarding their financial performance. Although the sites had a qualitative sense of the acuity of their Senior Prime enrollees, they were not able to verify their assessment until risk adjustment results were reported to them.

Financial Strategies of the Sites

In the face of the various financial uncertainties summarized above, and the availability of only limited financial information, the sites focused initially on making Senior Prime the best possible program for their enrollees. Their primary yardsticks for success during early operations were quality of care, compliance with access standards, and satisfied enrollees. This strategy had the advantage of encouraging enrollments and associated capitation payments. The participating MTFs were very cautious about increasing staff, however, because they assumed they would get no additional financial support for new staff. Some staff reallocations were made, especially within the primary care clinics, to provide support to the enrollees as efficiently as possible. Early service delivery costs were reported to be high, reflecting large numbers of initial PCM office visits and follow-up visits to the PCMs or specialty physicians. Many sites believed these early operating levels would not be sustainable financially.

The next operational challenges were for the sites to establish priorities for their Senior Prime activities and to pursue active management of costs. As service delivery proceeded, the MTFs began to monitor service activity and costs for the Senior Prime enrollees. Many of the MTFs planned to begin detailed analyses after they had six to eight months of service delivery experience, waiting to accumulate sufficient service activity to obtain stable estimates of service use and costs. They also wanted to obtain reasonable estimates of ongoing average costs for enrollees, which were not represented well by the initially high rates of service use by new enrollees during Senior Prime intake and follow-up visits.

STATUS OF THE SENIOR PRIME SITES AFTER ONE YEAR

When we conducted the first round of site visits, the six Senior Prime sites had just completed the intense activities involved in start-up and enrollment of new Senior Prime members. The sites reported they were pleased with their progress in achieving Medicare certification and completing the initial marketing and enrollment processes. They also had identified some problems with the financial provisions and had begun to learn the implications for administrative overhead of being a M+C plan.

A year later, the sites gave us feedback during the mid-demonstration teleconferences that reflected the maturation of the Senior Prime plans and the realities of ongoing operation as M+C health plans. The teams at all the sites continued to be positive about serving the Senior Prime enrollees, and they documented continued positive enrollee responses from consumer surveys and patient comments in the clinics. They also expressed varying degrees of frustration with the administrative demands of the Medicare compliance process.

Administrative costs did not decline over time, as the sites had hoped, because staff resources were shifted from the early marketing and enrollment functions to ongoing operation and compliance activities. The sites reported they had to absorb this work with existing staff, thus making them unavailable for work on other operating priorities. Refer to Section 5 for the sites' estimates of the administrative costs incurred for start-up and ongoing operation. Some of the sites began to question the value of formal status as Medicare health plans, with its associated compliance requirements, especially given the absence of payments for services rendered. While emphasizing their continued commitment to serving the older beneficiaries, they believed that more efficient approaches needed to be explored.

We report here our findings regarding the status of the Senior Prime sites after one year of operation. First, we summarize several specific issues that the sites identified as important based on their operating experiences. Then we report the sites' progress and status in the following four areas, which we had identified as issues during our earlier site visits:

- Case management and service use monitoring activities.
- Experiences with the Medicare compliance process.
- Transferring of techniques developed in Senior Prime to TRICARE Prime.
- Effects on other MTF services and readiness.

Key Issues Identified by the Demonstration Sites

Substantial Effects on Site Resources. The factors involved in this issue reflected Medicare policies, other accreditation obligations, and the interaction of two large governmental organizations—CMS and DoD. Because the Senior Prime plans were M+C plans, they were required to comply with the rules that Medicare applies for all its contracting M+C plans. These rules involved extensive requirements for documentation of policies and procedures, as well as for monitoring and reporting on compliance with those procedures. In addition, implementation of the new M+C program was accompanied by frequent changes in Medicare policies, generating new work for the sites with the issuance of each new operating policy letter by CMS. (We note they shared these challenges with all other M+C plans.)

The new Medicare performance requirements had been superimposed on existing TRICARE Prime managed care requirements as well as JCAHO requirements. Differences in

performance measures for TRICARE and Medicare increased workload because relevant personnel had to document compliance with both sets of measures.

Early in the demonstration, the sites had identified the need for education on how Medicare and Senior Prime operate. They reported that they had underestimated the amount of staff time they would continue to spend in this area. Because of annual rotations of military personnel, Senior Prime education was provided routinely for incoming staff. In addition, the Senior Prime staff spent time educating the CMS regional office staff on military health care. Some sites expressed concern that TMA was not staffed adequately to support the demands of Senior Prime, and they identified education as one of the areas where additional TMA leadership would be helpful to them.

Inequitable Payment Method. The site teams reminded us that there were two contrasting points of view within DoD regarding Senior Prime. The clinical and management staff perceived the program to be a success in offering access to military health care and providing quality services. Yet the MTF command leadership tended to view the program as a financial failure because of the large incremental costs being incurred, despite being committed to such a program to fulfill the health care promise made to retirees and dependents. The MTF commanders were struggling with managing the impact of these additional costs.

The sites believed that the terms of the Senior Prime financing structure were not consistent with the principle of receiving fair payment for services rendered. In particular, they pointed to the low capitation rates as well as to the 1996 baseline levels of effort that were not relevant to the MTFs' current service configurations. The Colorado Springs and Madigan sites were counting on risk adjustment to help compensate for low base capitation rates. Madigan has a very low capitation rate because the local Medicare capitation rates are low, but the 1999 risk adjustment increased its payments only slightly. Colorado Springs anticipated adverse selection (enrollment of less healthy beneficiaries) that would yield higher payments, but instead it had positive selection that led to payment reductions for 1999.

Relevance of Medicare Requirements. Several site teams noted that the Medicare rules are designed to protect beneficiaries in private-sector health plans, which operate under financial incentives that differ greatly from those in military health care. The teams believed that many of the compliance requirements were appropriate but that some were excessive for military health care applications. We discuss this issue in more detail under the compliance subsection below.

Perceived Policy Inconsistencies Across CMS Regional Offices. Each of the CMS regional offices (ROs) is responsible for implementing Medicare policy within its region, including the performance of M+C plans. The CMS central office guides ROs on M+C policies and often participates with the RO staff in the contracting and compliance monitoring processes. According to central office policy, however, the ROs took the lead in the compliance monitoring activities. On a few occasions, one RO took the lead role for a policy issue that applied for all the Senior Prime plans, with the participation of the other ROs.

The Senior Prime plans reported that their experiences with the compliance process varied substantially across the ROs. While confirming that all the ROs followed the formal M+C rules, some sites believed they incurred larger compliance workloads than their colleagues at other sites. Our review of correspondence between the ROs and the Senior Prime plans confirms that the frequency and timing of visits by the ROs varied, as did the amount of follow-up documentation generated as a result of visits. This issue affected both the ability of a larger

Senior Prime program to achieve effective compliance consistently and the staff resources required to do so. Such observed variations in compliance workload could be due to differences in either or both the RO approach or plan performance. Any efforts to streamline the compliance process would need to respect CMS's underlying obligation to ensure plan performance.

Aging-In to Senior Prime. To the surprise of the demonstration sites, the phenomenon of "aging-in" to Senior Prime became an important issue. The demonstration had a provision that allowed DoD beneficiaries in the demonstration sites to enroll in Senior Prime as they reached age 65 and became eligible for Medicare, as long as they were enrolled in TRICARE Prime and had a military primary care manager at one of the demonstration MTFs. No limit was placed on whether they lived within the defined Senior Prime service area. The popularity of the program led to higher rates of age-in enrollment than expected, with the result that the original age-in estimates were surpassed in many of the sites.

Beneficiaries used creative strategies to position themselves to qualify for Senior Prime. Some beneficiaries had civilian PCMs in catchment areas of participating MTFs, and they changed to military PCMs at these MTFs. Others switched TRICARE Prime memberships from other local MTFs to enroll at Senior Prime MTFs. Yet others relocated their homes into Senior Prime service areas to enroll in TRICARE Prime and then age-in to Senior Prime.

Dealing with age-in enrollments raised issues about beneficiary information as well as constraints in the DoD information systems. Many beneficiaries were confused about when and how to file their applications for Senior Prime, which preceded their entry into the Medicare data system as beneficiaries. Those residing outside the catchment areas of the MTFs were not in the facilities' databases, so the Senior Prime staff could not notify them of their age-in option and assist them through the application process. The staff wished to take this step to reduce later problems with enrollments because beneficiaries did not understand the rules.

Delays in Implementing Medicare Policy Changes. DoD does not have the capability to rapidly modify operating policies and procedures in response to Medicare policy changes. As a large governmental entity, DoD has a structured system of contracts that must be modified to achieve these changes. In particular, many Medicare policy changes required changes to Chapter 20 of the *TRICARE Operations Manual*, which is a key component of the contracts under which the MCS contractors operate. The result often was several months of delay before new policies for Senior Prime could go into effect.

Capacity Constraints for Expansion. Many sites expressed caution regarding possible expansion of Senior Prime in their existing facilities. If the program were made permanent, the sites would expect additional enrollment demand by beneficiaries who had been reluctant to sign up for a temporary program. The Madigan and the Region 6–San Antonio MTFs, for example, already had people on waiting lists to join Senior Prime. The sites identified three possible constraints to expanding Senior Prime: (1) the capacity of primary care clinics to serve additional patients, (2) the capacity of MTF budgets to provide the administrative staff support, and (3) the ability to expand the number of network providers. In this context, several site teams suggested that the policy of limiting PCMs to military providers needed to be reconsidered. The capacity limits of MTF clinics could be accommodated at some sites, if enrollees could use network providers as PCMs, similar to TRICARE Prime. In considering such an approach, potential effects on the ability to manage care would need to be evaluated.

Variations in State Health Care Regulations. This issue affected only the Region 6 demonstration site because it was the only site with MTFs in more than one state. For example, the site found that Texas and Oklahoma had different licensure requirements for custodial care facilities, and the site had to ensure compliance with both sets of rules. If Senior Prime were to be expanded to multiple locations within regions that crossed state borders, the regions would have to manage a diversity of state regulations.

Progress Made on Issues Identified During Site Visits

Management of Service Delivery. Case management was a central topic in our discussions with the sites about their activities in managing service delivery for Senior Prime enrollees. As a result of our site visits early in the demonstration, we believed that their ability to achieve appropriate, efficient service delivery would be key to maintaining per-capita costs at reasonable levels and, hopefully, within the capitation payments defined for their areas.

All sites reported progress in establishing effective case management programs, but they varied in the pace at which they proceeded. These programs included components for screening and identification of vulnerable enrollees as well as proactive management of the care these enrollees are provided. Several sites developed proactive programs for coordination of care between inpatient and outpatient settings and between military and network providers. Both of these activities involved close working relationships between case managers at the MTFs and the MCS contractors. All sites established targeted disease management programs for diabetes as well as for other conditions that were prevalent among their enrollees. The Dover site had the greatest difficulty converting from retrospective utilization review to proactive case management. The contract for its regional MCS contractor called for the contractor to perform all utilization management functions for all patients, whether they were served by the MTF or network providers. The site and contractor were working together to move ahead in this area. We asked the sites to assess their current service use trends, which were as follows:

- ***Dover***—Service utilization has decreased since Senior Prime start-up, but use rates have remained higher than expected.
- ***Keesler***—Primary care utilization stabilized at 10–12 visits per enrollee annually. Utilization declined for emergency room and specialty clinic visits; fewer specialty clinic visits led to a decrease in waiting time for specialty visits from 20 to 7 days.
- ***Region 6***—Outpatient visits leveled off to two visits per member per month (which equates to 24 visits annually). The frequency of grievances and appeals decreased as beneficiaries and providers gained experience with service delivery processes.
- ***Colorado Springs***—Service volumes have not declined since start-up. The site attributed this result to initial services provided to growing numbers of age-in enrollees as they entered Senior Prime, as well as to patient demands for unnecessary visits. The site was trying to change the demand for unneeded visits through patient education. Activity increased for some specialty clinics.
- ***San Diego***—Use rates were declining for both inpatient and outpatient services. The site experienced high use rates for cardiovascular procedures and hip replacements, which was expected.

- ***Madigan***—Utilization rates were still as high as they were during the initial months of the program. The site attributed this status to the high level of clinical acuity of their Senior Prime enrollees, with many of the enrollees having chronic health problems.

CMS Compliance Status. Information on the M+C compliance activities for the Senior Prime plans was obtained from a combination of teleconferences with the site teams and review of CMS RO reports and correspondence provided by the CMS central office. All the demonstration sites had at least one CMS visit during the first year of operation. As shown in Table 3.1, the earliest visits were conducted in March 1999 at the Colorado Springs and Madigan sites. The most recent site visit was to Dover in February 2000. The Keesler, Region 6, and Madigan site visits were characterized by the CMS ROs as post–contract award visits.

During these visits, CMS reviewed compliance with Medicare requirements and provided technical assistance to the sites. Typically, the visit format allowed CMS and the site to work together and learn from each other. The purpose of the San Diego and Dover site visits was to determine their plans' compliance with Medicare regulations and with the MOA for the demonstration. The Denver RO took quite a different approach with the Colorado Springs site visit. The RO performed two site visits seven months apart, reviewing compliance with service delivery and access regulations during the first visit and compliance with quality improvement regulations during the second visit.

Table 3.1.
Schedule of Site Visits Performed by CMS Regional Offices

Demonstration Site	CMS Site Visit	Date of Visit
Dover AFB	Contract compliance visit	February 14–18 2000
Keesler AFB	Post–contract award visit	December 7–9 1999
Region 6	Post–contract award visit	September 20–24 1999
Colorado Springs	Service delivery, access compliance visit	March 22–25 1999
	Quality improvement visit	October 25–27 1999
NMC San Diego	Contract compliance visit	July 27–29 1999
Madigan AMC	Post–contract award visit	March 3 1999

Both positive and negative feedback were received from the demonstration sites about the Medicare compliance regulations. In general, the sites acknowledged the value of having an external review to stimulate actions needed to carry out Senior Prime effectively. They felt that many of the performance rules were appropriate and helped them improve their programs. With the exception of the quality monitoring rules, however, the sites reported that the Medicare requirements had their greatest effects on documentation and monitoring of the administrative aspects of the plans. Several sites expressed the view that Medicare compliance had little effect on improving the clinical care provided to the enrollees. The sites also questioned the relevance of some Medicare requirements in the military setting.

Several sites believed that the compliance burden associated with being a M+C plan was greater than the benefit gained, especially in the absence of any payments for additional health care the MTFs were providing to enrollees. Factors contributing to this apparent discontent appeared to include insufficient staff resources to perform the work involved, negative reactions to unrealistic financial provisions, and a genuine sense that their staff time was being spent

unproductively. The sites suggested alternative approaches to being a certified Medicare plan, for example: (1) extension of full TRICARE Prime benefits to older beneficiaries or (2) enrolling beneficiaries at an MTF with a military PCM, supplemented by referrals to community providers under Medicare coverage for services not provided by the MTF.

Transfer of Capabilities to TRICARE Prime. We asked each site to identify the components of Senior Prime they found useful enough to implement in their TRICARE Prime plan. These knowledge transfers to strengthen services to the larger TRICARE population could have a potentially large clinical or financial effect. A combined list of the identified techniques or features is presented in Table 3.2, listed in order of the number of sites that identified each item. The sites identified a total of 17 items, revealing the diversity of skills and experiences they appeared to be gaining. The most frequently cited item, identified by five sites, was techniques for case management and disease management. This was followed by quality outcomes monitoring, knowledge of managed care techniques (focusing on financial risk), and grievance and appeals processes. Together, these four items represent the core of an effective managed care program.

Interactions with the Readiness Mission. Four issues need to be considered when examining the effects of Senior Prime on readiness, and vice versa: (1) the MTF GME programs that train physicians and other clinical personnel, (2) effects on access to MTF care for other DoD beneficiaries due to the high levels of service activity for Senior Prime enrollees, (3) the management of deployments by both line and medical military personnel, and (4) the annual rotations that contribute to readiness by forging a unified military resource regardless of location.

In general, the sites reported that Senior Prime continued to have a positive effect on medical education. In addition to having the clinical challenges of treating more complicated health problems, residents were learning to manage the continuity of care between primary and specialty care for an older population, rather than the more episodic care that takes place under the traditional GME model. In a few facilities, however, some of the specialty clinics had difficulty finding patients with health problems among the Senior Prime enrollees because the clinics had less flexibility to select Senior Prime patients based on health status, which they could do with space-available care patients.

The analyses presented in Section 5 reveal the large increases in use of MTF direct-care services that occurred when Senior Prime began at the demonstration sites. As reported by the sites, they were operating under fixed budgets and, therefore, growth in Senior Prime activity was accompanied by shortage of services for other beneficiaries, including active duty personnel. This difficult situation could be exacerbated at times of large deployments that placed the needs of active duty personnel and Senior Prime enrollees in opposition.

Both deployments and rotations inevitably had negative effects on access to care for Senior Prime enrollees when the supply of providers was reduced or otherwise was occupied preparing troops for deployment or rotation. The sites used a variety of techniques to compensate for those losses, including planned backfill personnel, resource sharing providers, call-up of reserve providers, and network providers—all of which involved incremental costs. The sites reported they managed deployments and the summer rotations effectively with these techniques, minimizing violation of the access standards for Senior Prime enrollees.

Table 3.2.
Senior Prime Techniques or Features That Sites Are Extending to TRICARE Prime

	Senior Prime Demonstration Site					
	Dover AFB	Keesler AFB	Region 6	Colorado Springs	NMC San Diego	Madigan AMC
• Case management and disease management		X	X	X	X	X
• Quality outcomes monitoring and reporting processes		X		X	X	X
• Knowledge of managed care techniques (financial risk)			X		X	X
• Grievances and appeals			X	X	X	X
• Prevention and patient self-care education			X		X	
• Use of HEDIS measures		X		X		
• Orientation program for new enrollees	X			X		
• Information capability and data quality, including coding		X			X	
• Network provider referral processes, pre-authorizations			X	X		
• Working relationship among LA, MTF, MCS contractor					X	X
• Techniques for lead agent to administer MCS contract	X					
• Collaboration among MTFs			X			
• Emergency room standards				X		
• Mechanisms to ensure that covered services are provided					X	
• Newsletter for MTF and network providers	X					
• Critical evaluation of the provider network					X	
• Claims processing standards				X		

SENIOR PRIME INFLUENCE ON LOCAL HEALTH CARE MARKETS

Before Senior Prime was available, Medicare-eligible DoD beneficiaries residing in the subvention demonstration sites had the choice of enrolling in a private-sector Medicare managed care plan (the predecessors to M+C plans) or obtaining benefits through fee-for-service Medicare. Dually eligible beneficiaries are free to use the MTFs for services, whether enrolled in Medicare managed care plans or in fee-for-service Medicare. Some beneficiaries also were eligible for VA health benefits and were obtaining health care at VA facilities.

The entry of Senior Prime into these local markets would be expected to affect both private-sector Medicare managed care plans and VA facilities serving beneficiaries in the demonstration sites. As a new competitor, Senior Prime could change market shares of Medicare

health plans, access to MTF care for their enrollees, and utilization of VA facilities. Using personal interviews and analysis of available administrative data, we examined possible Senior Prime market effects on these stakeholders, the results of which we report here.

Effects on Medicare Managed Care

Many of the dually eligible beneficiaries in the demonstration sites were enrolled in Medicare managed care plans at the time Senior Prime was introduced, although enrollment rates varied across sites depending on the availability of plans, benefits offered, and the receptiveness of the local population to managed care. We describe here how the entry of Senior Prime changed local Medicare managed care markets as both fee-for-service beneficiaries and M+C plan enrollees switched to Senior Prime. We also examine how the introduction of Senior Prime affected MTF service use patterns for enrollees of other M+C plans.

Medicare Market Changes in the Demonstration Sites. The quarterly enrollment data files generated by CMS provide information on M+C plan enrollment counts by health plan, state, and county. As the Senior Prime plans began operation in each of the six sites, Senior Prime enrollment counts were included in these files. We used these files for the quarters of December 1997 through December 1999 to describe market profiles before and during the demonstration. The results are presented in Table 3.3.[2]

We observe clear contrasts between the markets for sites with active Medicare managed care plans and those with no other Medicare plans. The Keesler and Region 6–Texoma sites essentially had no Medicare managed care before the introduction of Senior Prime. The Medicare market for the Dover site changed as the demonstration started, with several health plans dropping Medicare contracts at about that time. A few new plans later entered this market. As a result, Medicare managed care penetration in the Dover market declined from 10.6 percent in late 1997 to 3.2 percent in late 1999. All the other sites had strongly competitive Medicare managed care markets, as measured by market penetration and by the number of Medicare plans serving the markets. The San Diego site had the highest managed care market penetration, with 49 percent of Medicare beneficiaries in the market enrolled in a plan.

As Senior Prime plans entered their respective markets, the market shares they attained varied widely, depending on their enrollments and the amount of managed care in their markets. The Senior Prime plans at the Keesler and the Region 6–Texoma sites were the only significant players in their markets. In the Dover site, the Senior Prime market share increased because of the combined effect of its enrollment growth and the decline in presence of other M+C plans. The Colorado Springs, San Diego, and Madigan sites all had small market shares, reflecting the large Medicare populations and high market penetration of Medicare plans in their markets. These sites would need to have much larger Senior Prime enrollments to have an observable effect on the overall markets. Most interestingly, Senior Prime at the San Antonio demonstration site appeared to be changing the local Medicare managed care market. With a combined enrollment of over 11,000 in the San Antonio MTFs, Senior Prime attained a 15.4 percent market share and was contributing to an overall increase in market penetration.

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[2] We found an error in the CMS quarterly enrollment files for enrollments in the Colorado Springs site, which we corrected with the enrollment counts available to us. This adjustment decreases total managed care enrollment for this site by approximately 1,000 enrollees. We did not change enrollee counts for other M+C plans in the market.

Table 3.3.
Enrollment Trends in Medicare Managed Care Plans in Senior Prime Markets

Subvention Site and Quarter	Number of Medicare Beneficiaries	Medicare Managed Care Penetration (%)	Number of Plans w >1% enrollees (including Sr. Prime)	Percentage of Enrollment: Senior Prime	Percentage of Enrollment: Largest Plan by % enrolled
Dover AFB					
December 1997	145,527	10.6	6		36.6
June 1998	146,806	12.1	6		44.0
December 1998	148,361	6.0	4	6.0	58.5
June 1999	149,507	7.0	4	7.0	52.5
December 1999	151,274	3.2	5	18.3	75.6
Keesler AFB					
December 1997	49,291	0.1	2		na *
June 1998	49,843	0.1	2		na *
December 1998	50,300	4.7	1	98.5	98.5
June 1999	50,929	5.5	1	99.4	99.4
December 1999	51,547	6.0	1	99.4	99.4
Region 6–San Antonio					
December 1997	201,645	29.8	4		52.6
June 1998	203,587	30.6	5		51.4
December 1998	205,664	33.2	5	14.0	41.9
June 1999	207,000	34.4	5	14.9	40.2
December 1999	209,274	34.8	5	15.4	44.3
Region 6–Texoma					
December 1997	69,823	<0.1	1		na *
June 1998	69,751	0.5	2		na *
December 1998	69,784	3.3	3	70.8	70.8
June 1999	69,746	4.0	3	69.2	69.2
December 1999	69,837	4.2	3	73.9	73.9
Colorado Springs					
December 1997	142,166	32.8	6		53.5
June 1998	144,162	36.8	8		49.3
December 1998	146,362	38.1	7	3.2	56.5
June 1999	148,034	39.3	7	4.4	56.9
December 1999	149,974	38.8	6	5.2	61.3
NMC San Diego					
December 1997	339,309	47.5	5		66.3
June 1998	341,304	48.2	5		64.3
December 1998	344,239	48.9	6	1.4	62.8
June 1999	346,596	49.8	5	1.9	61.7
December 1999	349,453	49.8	6	2.3	60.2
Madigan AMC					
December 1997	370,489	26.2	6		41.5
June 1998	371,637	27.0	7		39.7
December 1998	373,649	28.0	7	3.3	37.5
June 1999	374,748	28.8	7	3.5	35.7
December 1999	376,768	28.4	8	3.8	36.2

SOURCE: CMS quarterly enrollment files. Medicare health plan enrollments are effective the following month, so the December 1998 file contains Senior Prime plan enrollment counts for January 1999.

* Not applicable.

Use of Demonstration Site MTFs by Other Plan Enrollees. In addition to competing with private-sector M+C plans for enrollments, the introduction of Senior Prime was expected to reduce utilization of MTF direct-care services for M+C plan enrollees because of declines in availability of space-available care. Such a shift in service utilization would result in increased medical care costs for the other M+C plans because the plans do not have to pay for MTF care but they would need to pay for care in other facilities.

To examine the effects of Senior Prime on MTF use by M+C enrollees, we classified each MTF inpatient encounter for a dually eligible beneficiary based on the user's enrollment category in the month the encounter occurred: fee-for-service Medicare, Senior Prime, or other M+C plan. Table 3.4 shows the number of bed days used by Medicare managed care plan enrollees in fiscal years 1997, 1998, and 1999, reported both as numbers of days and as percentages of the total bed days used by dually eligible beneficiaries.

Table 3.4.
Inpatient Utilization of Demonstration MTFs by Enrollees in Private-Sector Medicare Managed Care Plans

	Bed Days of Inpatient Care M+C Plan Enrollees			Percentage of Total Bed Days for Dually Eligible Beneficiaries		
Demonstration Site MTF	FY1997	FY1998	FY1999	FY1997	FY1998	FY1999
Dover AFB	1	0	0	2.0	na *	na *
Keesler AFB 81st	3	58	0	0.1	1.4	0.0
Brooke AMC	3,315	2,772	910	19.6	19.3	6.5
Wilford Hall MC	4,984	4,533	1,741	32.4	34.2	12.5
Reynolds ACH	0	0	1	0.0	0.0	0.1
Sheppard AFB 82nd	0	0	0	0.0	0.0	0.0
Evans ACH	206	196	163	16.1	34.8	19.1
Air Force Academy 10th	85	48	21	8.4	20.3	3.7
NMC San Diego	2,540	2,416	1,312	27.7	27.7	15.9
Madigan AMC	2,830	2,688	2,047	25.4	44.6	22.5

NOTE: Dover AFB had inpatient beds through 1997 when the facility converted to only outpatient services. The one bed day of care for Dover in FY1997 reflects the presence of its inpatient service at that time.

* Not available.

Before Senior Prime started, there was substantial variation across demonstration sites in utilization of demonstration MTF inpatient services by Medicare M+C plan enrollees. MTFs in the Region 6–San Antonio (Brooke and Wilford Hall), Madigan, and San Diego sites historically had the heaviest use by Medicare managed care plan enrollees. In both 1997 and 1998, their usage of these facilities ranged from 19.6 percent of total dually eligible bed days for Brooke AMC to 44.6 percent for Madigan AMC. At Evans ACH and the Air Force Academy in the Colorado Springs site, the percentages of total bed days were smaller in 1997 but increased in 1998. Facilities at the Dover, Keesler, and Region 6–Texoma (Reynolds ACH and Sheppard AFB) sites were not used by Medicare plan enrollees because only one or two plans were in their markets and market penetration was quite low.

As Senior Prime began operation in 1999, there were sharp reductions in both the number of bed days used by other M+C enrollees and the percentages they represented of total bed days

for dually eligible beneficiaries. The greatest declines occurred for the Region 6–San Antonio MTFs. Inpatient utilization by other M+C enrollees at Brooke AMC decreased from 2,772 bed days (19.3 percent of total) in 1998 to 910 bed days (6.5 percent of total) in 1999, and use at Wilford Hall MC declined from 4,533 to 1,741 bed days (from 34.2 percent to 12.5 percent of total). Utilization at the San Diego site was cut almost in half between these two years, and Madigan AMC, Evans ACH, and the Air Force Academy had reductions of similar sizes.

Effects on Veterans Affairs Health Facilities

DoD medical treatment facilities and VA health facilities have established extensive networks of relationships, many of which go back 40 years or longer. As new developments have taken place in either organization, resource sharing and other relationships have adjusted to encompass the new circumstances.[3] One of the recent developments was the establishment of TRICARE by DoD, under which many of the regional MCS contractors contracted with VA hospitals and clinics to serve as TRICARE network providers. Similarly, as the VA configured its Veterans Integrated Service Networks, VA facilities sought new resource sharing and support contract opportunities with DoD facilities.

DoD and VA providers recognize that beneficiaries who are eligible for benefits in both systems will migrate freely between the systems seeking the most advantageous benefits and health care services.[4] These beneficiaries include individuals who are eligible for Medicare—making them triply eligible beneficiaries—many of whom are using health care resources in all three sectors. The health care systems can serve them best when boundaries between the DoD and VA service providers are transparent.

Effects on Utilization of VA Facilities. The introduction of TSP in the six demonstration sites is likely to have corollary effects on service delivery and costs for VA facilities in those locations. Ideally, an evaluation of the cost effects of the Medicare-DoD Subvention Demonstration would include estimates of its effects on the workload and costs of local VA hospitals and clinics. Unfortunately, the absence of data prevented us from evaluating these effects. Furthermore, Senior Prime effects could affect VA facilities in different directions, so it is not possible to predict net effects for these facilities without utilization and cost data. Possible effects on VA caseload include

- reduction of VA service activity with loss of patients to Senior Prime enrollment
- increase in VA service activity to serve patients who leave MTF care when they are crowded out by reductions in space-available care
- increase in VA service activity as Senior Prime stimulates beneficiaries to evaluate options and they become more aware of their health benefits, including VA benefits.

VA Facilities as TRICARE Network Providers. Notably absent from this list of potential caseload changes for VA facilities is patient activity generated by serving as network providers for TSP. Although many VA facilities are network providers for the TRICARE Prime

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[3] These relationships are formalized in writing as "Sharing Agreements" with specified start and end dates.

[4] Veterans who received honorable discharges from military service are eligible for VA benefits. Veterans have differing priorities for VA enrollment and access to services based on the nature and extent of their military service, extent of service-connected disability, and current financial status.

program, CMS did not permit these facilities to participate in Senior Prime networks unless they were essential to serve a specific access need. The federal law that prohibits Medicare from paying DoD for health care services for dually eligible beneficiaries also applies to VA facilities. Eligible beneficiaries are free to choose where they obtain their health care, and when they choose DoD or VA facilities, those organizations pay for their care. It is less clear whether this restriction extends to Medicare funds paid to a M+C plan that the plan then pays for MTF care. CMS reported that one reason it did not allow VA facilities to be Senior Prime network providers was that VA facilities are not Medicare certified. The Medicare-DoD Subvention Demonstration established an exemption from this requirement for DoD facilities, but the exemption did not extend to VA facilities.

For a more permanent Senior Prime program, we believe it would be important to reexamine the policy regarding the role of VA facilities as Senior Prime network providers. We learned in our evaluation that DoD and VA facilities have extensive networks of working relationships. By and large, these relationships have been established locally, with participating facilities seeking ways to gain synergy from their combined capabilities. Prohibiting participation of VA facilities as Senior Prime network providers could interrupt already existing service delivery and referral patterns for DoD facilities that serve Senior Prime enrollees, which could reduce access to some specialty services for those enrollees.

Table 3.5 summarizes the existing relationships between MTFs in the demonstration sites and a variety of VA facilities that serve these areas. We were able to identify four basic types of arrangements: (1) shared siting of clinics or other facilities, (2) resource sharing of specialty clinical care services, (3) support and maintenance services, and (4) VA facilities serving as TRICARE network providers. This information was collected through personal and telephone interviews with personnel at the MTFs and the VA facilities. In the first three types of arrangements, either the DoD or VA facilities may be providing services, depending on their respective capabilities. In the TRICARE program, VA facilities serve as providers in the TRICARE networks with the same status as private-sector network providers.

The longest standing and most active relationships were found at Keesler MC and in the Region 6–San Antonio area. Sheppard AFB has no sharing arrangements because the closest VA facilities are more than 140 miles away (in Dallas and Oklahoma City). Clinical services are shared in all of the sites except Dover, ranging from clinical rotations through facilities to extensive sharing of specialty care capabilities. Both VA hospitals and VA community-based outpatient clinics (CBOCs) serve as TRICARE Prime network providers, depending on proximity to the MTF involved.

Table 3.5.
MTF Relationships with Veterans Affairs Medical Facilities in the Demonstration Sites

		Type of Shared Arrangements			
Demonstration Site	VA Facilities	Physical Siting	Clinical Services	Support Services	Prime Provider
Dover AFB	Wilmington VA Medical Center				✓
Keesler MC	Biloxi/Gulfport VA Medical Center (two facilities)		✓	✓	✓
Region 6–San Antonio	Audie Murphy Memorial Veterans Hospital		✓	✓	✓
Region 6–Texoma	VA clinic at Ft. Sill; hospital in Oklahoma City	✓	✓	✓	
Colorado Springs	VA CBOC in town; hospital in Denver		✓		
NMC San Diego	2 VA CBOCs in network; San Diego VA Med. Center		✓	✓	✓
Madigan AMC	VA Puget Sound Health Care System; CBOC close to AMC		✓		

DISCUSSION

The demonstration sites achieved a productive start-up of the Senior Prime demonstration, and they became a visible presence in their local health care markets. This beginning was followed by active service delivery for a rapidly growing enrollee population. Our enrollment analysis in the next section explores the patterns of Senior Prime enrollment and factors contributing to the observed trends. After the first year of operating experience, the sites were expressing concerns about the administrative burden involved in functioning as Medicare health plans and examining whether they would gain a return on this investment in being part of the Medicare program. These operational concerns provide an operational context for our assessment of the cost effects of the demonstration.

The entry of Senior Prime changed the local Medicare managed care markets, decreasing market shares for other M+C plans and increasing overall managed care enrollment rates in several sites. Senior Prime also affected the mix of service use for beneficiaries who were eligible to use VA services, thus influencing utilization of local VA facilities and their relationships with the MTFs.

Section 4.
The Beneficiary's Perspective: Enrollment Demand and Perceptions of Senior Prime

Military retirees and dependents have long been seeking initiatives like Senior Prime with the hope of regaining access to the military health care system. There is strong sentiment among this population that the military has broken its promise to provide them health care coverage for life. After a series of military installation closures and introduction of TRICARE, older beneficiaries found they were last in line for MTF services on a space-available basis. Retiree associations had been pushing DoD hard to fulfill that promise, and they lobbied Congress for legislation to create programs they feel are their due. These associations supported subvention as one means to improve access to military health care for Medicare-eligible beneficiaries; some even questioned the need to do a demonstration to test the models before full implementation.

In this section, we examine Senior Prime from the perspective of the dually eligible beneficiaries, including responses reported during the initial round of site visits and an analysis of enrollment demand using enrollment data. We also summarize findings from relevant GAO reports that addressed enrollments and beneficiaries' perceptions reported in a survey performed as part of the GAO evaluation of the demonstration.

VIEWS EXPRESSED DURING THE SITE VISITS

Information about beneficiaries' interest in Senior Prime, and how it affected them, was obtained during the initial site visits from interviews with retiree association representatives, MTF patient representatives, Senior Prime marketing staff, and frontline clinical and administrative staff involved in delivering care to Senior Prime enrollees. Although this information did not come directly from the beneficiaries, some consistent themes emerged from the site visit interviews about beneficiaries' perceptions of the demonstration.

It was reported that, after years of seeing changing signals from the government, many older beneficiaries did not trust the government and remained suspicious that the subvention demonstration would be short-lived. Thus, it was not surprising that responses from dually eligible beneficiaries ranged from enthusiastic embracing of Senior Prime to adamant refusal to enroll because it was only a partial government response and many of their peers still had no real access to military health care. The short two-year life of the demonstration was reported to be an important reason why some people did not join Senior Prime. Many feared they would have to return to fee-for-service Medicare or switch to another Medicare+Choice plan when the demonstration ended, and they could lose their supplemental insurance coverage.

As might be expected, respondents also stated that beneficiaries considered Senior Prime to be one of the choices they made among available options. The beneficiaries who chose to enroll in Senior Prime typically did so either because they could return to military health care, or it compared favorably to other choices of fee-for-service Medicare or M+C plans (or both). Some beneficiaries were satisfied with the health care they were getting from fee-for-service civilian providers or VA facilities, and they did not want to change providers. Others were enrolled in Medicare health plans and preferred the benefit coverage they had to what was offered by the Senior Prime plan.

CONCEPTUAL FRAMEWORK FOR ENROLLMENT DEMAND

Medicare-eligible DoD beneficiaries have a diversity of benefit options available to them. They can be covered under the Medicare+Choice plans, fee-for-service Medicare with private supplemental insurance ("Medigap" plans),[1] non-DoD employer-sponsored retiree health benefits, and in rare cases, Medicaid. In addition, they are eligible to obtain direct-care services from DoD treatment facilities, although they have the lowest priority for access to MTF care and access has declined with the reduction in space-available care capacity. The introduction of Senior Prime provided these dually eligible beneficiaries with elevated priority for MTF services and a range of supplemental benefits not covered by fee-for-service Medicare, and they received these benefits at no additional premium. As with any other Medicare health plan, however, Senior Prime enrollees were required to use MTF services or Senior Prime network providers; they did not have free access to outside providers.

During the demonstration, dually eligible beneficiaries could choose their health care coverage from one of three Medicare options:

- TSP (a Medicare+Choice plan) with high-priority MTF access.
- Traditional fee-for-service Medicare.
- Private-sector Medicare+Choice plan.

It is expected that dually eligible beneficiaries would enroll in Senior Prime if they viewed it as a more desirable option than the other two alternatives. Their Senior Prime enrollment decision would depend on a variety of factors, including access to other coverage options, scope and generosity of supplemental benefits, prior experience with MTF direct care, proximity of their residence to an MTF, perceptions of the quality of care provided at MTFs compared with that at civilian providers, and expected out-of-pocket costs. The plan choices would also be influenced by beneficiaries' health status, where those who chose to enroll in Senior Prime might be healthier or sicker than those who did not (i.e., risk selection).

Because Senior Prime was offered as a demonstration, the beneficiaries who enrolled in Senior Prime were a self-selected subgroup with preferences and incentives that differed from those of others who might have enrolled if Senior Prime was a permanent option. Thus, although this enrollment demand analysis provides useful information on factors in Senior Prime enrollments under demonstration conditions, we advise caution in generalizing the findings to a permanent program.

In our analysis of enrollment demand, we examined the following hypotheses:

- Larger and more rapid enrollments will occur in sites that have strong enrollment marketing and support programs.
- If Senior Prime has generous benefits relative to the local private-sector Medicare+Choice plans, we expect higher enrollment, especially from those enrolled in M+C plans at the start of the demonstration.

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[1] Note that from our data we are not able to determine if dually eligible beneficiaries in fee-for-service Medicare have supplemental coverage.

- Dually eligible beneficiaries with prior experience using MTFs are more likely to enroll in Senior Prime.
- Dually eligible beneficiaries with the poorest health status and those in the best health will be less likely to enroll in Senior Prime than those with average health status. The sickest are unlikely to enroll in Senior Prime because that would reduce their access to civilian providers, which would disrupt existing provider relationships. By contrast, those in the best health are less likely to find their current coverage lacking.
- At the start of the demonstration, beneficiaries in the poorest health will be using Medicare fee-for-service benefits and those in the best health will be M+C plan enrollees. To the extent that this is true, the entry of Senior Prime into local markets will reduce the average health status of the group remaining in traditional fee-for-service Medicare and increase the average health status of those remaining in M+C plans.

The last hypothesis is based on a growing body of research published during the 1990s documenting that Medicare managed care plan enrollees are found to be healthier on average than those who remain in the Medicare fee-for-service sector (Brown et al., 1993; Riley et al., 1996; PPRC, 1996). Results of these studies are summarized in an issue brief by the Center for Studying Health System Change (1996).

There was considerable debate about risk selection in Senior Prime enrollments. Some sites expected to experience enrollment of beneficiaries who were sicker on average than non-enrollees (adverse selection) because beneficiaries in their areas had strong loyalty to MTF care and the older beneficiaries they were serving before the demonstration tended to have poor health status. In addition, individuals with poorer health status were expected to be as willing as others to use Senior Prime, even though it is managed care, because of their loyalty to MTF health care services.

TRENDS IN ENROLLMENTS AND DISENROLLMENTS

We examine Senior Prime enrollment trends and the relationship between enrollment and health status in demonstration sites during the first 12 months of Senior Prime operation. Our evaluation population consisted of all dually eligible beneficiaries residing in the demonstration sites as of the end of FY1998. Each member of the cohort was enrolled in Medicare Parts A and B, had attained age 65 as of September 1998, and was alive in the decision month. Table 4.1 shows the size of this population by demonstration site. The size of the dually eligible population varied considerably across sites. The San Diego site had the largest number of beneficiaries and Dover had the smallest.

Table 4.1.
Sample Population of Eligible Beneficiaries Residing in the Demonstration Sites in the Month That Senior Prime Began Operation

Demonstration Site	Dually Eligible Beneficiaries	Percentage
Dover	3,647	3.4
Keesler	6,678	6.2
Region 6–San Antonio	30,172	27.9
Region 6–Texoma	6,461	6.0
Colorado Springs	12,768	11.8
San Diego	31,087	28.8
Madigan	17,241	16.0
Total	108,054	100.0

Changes in Medicare Coverage Prior to the Demonstration

In the first round of site visits for our process evaluation, some of the site teams reported that many dually eligible beneficiaries who originally had not signed up for Medicare Part B outpatient benefits were doing so to qualify for Senior Prime enrollment, despite a financial penalty. We looked for evidence of this behavior in our enrollment analysis. In the year before the demonstration started, roughly 7 percent of the dually eligible beneficiaries in our baseline population had only Part A coverage. At the start of the demonstration, almost 13 percent of those individuals had enrolled in Part B. Table 4.2 shows that after six months of the demonstration, those with new Part B coverage had enrolled in Senior Prime at a higher rate than the general dually eligible population (31.1 percent versus 20.0 percent).

Table 4.2.
Senior Prime Enrollment at Six Months for Those Who Obtained Medicare Part B During Year Before Demonstration Start Versus Total Dually Eligible Population

Enrollment Status at Six Months	Number with New Part B Coverage	Percentage with New Part B Coverage	Percentage of Total Dually Eligible
Dead	14	1.4	1.8
Fee for service	440	45.4	49.7
HMO	214	22.1	28.5
Senior Prime	301	31.1	20.0
Total	969	100.0	100.0

Monthly Enrollment Counts

Table 4.3 reports monthly enrollment in Senior Prime by site for the first 12 months of the demonstration. The information is organized so that the enrollment counts for the first month that each site was operational are presented in month 1 (and subsequent months are arrayed accordingly), even though sites began service delivery at different times between September 1998 and January 1999. The first month of service delivery for each site is shown in the first row of the table. Three locations achieved their planned enrollments within the first 11 months of operation (shown in bold italics in the table).

Table 4.3.
Monthly Enrollment Counts by Demonstration Site for the First 11 Months

	Dover	Keesler	San Antonio	Texoma	Colorado Springs	San Diego	Madigan	Total
First month	Jan 99	Dec 98	Oct 98	Dec 98	Jan 99	Nov 98	Sept 98	
Planned enrollment	1,500	3,100	10,000	2,700	3,200	4,000	3,300	27,800
Enrollment counts:								
Month 1	426	1,085	3,757	1,196	903	1,380	2,966	11,713
Month 2	537	2,160	6,752	1,540	1,773	2,054	3,139	17,955
Month 3	588	2,391	8,871	1,646	2,613	2,285	3,243	21,637
Month 4	647	2,470	9,337	1,696	2,774	2,466	***3,332***	22,722
Month 5	675	2,586	9,693	1,791	2,881	2,611	3,436	23,673
Month 6	708	2,663	9,843	1,830	2,998	2,782	3,508	24,332
Month 7	733	2,741	***10,167***	1,876	3,094	2,888	3,550	25,049
Month 8	755	2,823	10,401	1,932	3,157	3,030	3,584	25,682
Month 9	778	2,862	10,577	1,990	***3,229***	3,280	3,645	26,361
Month 10	803	2,907	10,743	2,036	3,307	3,403	3,686	26,885
Month 11	827	2,962	10,871	2,077	3,396	3,533	3,739	27,405

SOURCE: Enrollment counts reported in the TMA DataBook prepared by SRA International.

Enrollments in excess of the planned levels can be attributed to age-in enrollees. These individuals were DoD beneficiaries enrolled in TRICARE Prime who turned 65 in the first year of the demonstration, at which time they enrolled in Senior Prime. Some of the enrollees included in the counts for sites that had not reached planned levels were also age-in enrollees. The sites reported that this group accounted for a larger share of enrollments than expected.

Total enrollments as of the end of 2000 are shown in Table 4.4, breaking out open enrollments and age-in enrollments for each site. The three sites that had not reached their planned open enrollments in the first year of the demonstration—Dover, Keesler, Region 6–Texoma—still had not reached those levels by the end of the second year, although their total enrollments continued to increase. Age-in enrollments indeed were an important contributor to that growth, reaching an average of 20.7 percent of total enrollments for all sites. Percentages of age-in enrollments ranged substantially across individual sites; the smallest percentage was 9.3 percent for Dover, and the highest was 29.3 percent for Madigan.

Table 4.4.
Total Senior Prime Enrollments at the End of 2000, by Open Enrollment and Age-Ins, by Demonstration Site

Demonstration Site	Enrollment Counts			Age-Ins as Percentage of Total
	Open	Age-In	Total	
Dover	963	99	1,062	9.3
Keesler	2,806	701	3,507	20.0
Region 6–San Antonio	9,927	2,524	12,451	20.3
Region 6–Texoma	2,108	433	2,541	17.0
Colorado Springs	3,178	943	4,121	22.9
San Diego	3,958	793	4,751	16.7
Madigan	3,303	1,371	4,674	29.3
Total	26,243	6,864	33,107	20.7

SOURCE: GAO analysis of data from DoD's TRICARE Senior Prime Operation Report, January 29, 2001 (GAO, 2001a).

Overview of Enrollment Transitions Into and Out of Senior Prime

Table 4.5 compares the relationship between beneficiaries' Medicare coverage status during the month before the start of the demonstration and their Senior Prime enrollment status at 3 months and 12 months after each site began service delivery. The month before the initial Senior Prime month is called the *decision month* because this was when beneficiaries first had the option to join Senior Prime. (This month is specific to each site as defined by its start-up schedule.) During this decision month, about 64 percent of eligible beneficiaries were in fee-for-service Medicare and 36 percent were enrolled in M+C plans.[2]

Table 4.5.
Enrollment of Eligible Beneficiaries in Senior Prime During the First 3 Months and 12 Months of the Demonstration

	Sector Where Enrolled Before Senior Prime	Percentage Who Enrolled in Senior Prime at Any Time During:	
		First 3 Months	First 12 Months
Total sample size	108,054	18.8	22.2
By Medicare sector:			
Fee for service	64.0%	19.0	22.3
M+C Plan	36.0%	18.8	22.1

NOTE: Eligible beneficiaries consist of the cohort of beneficiaries in the DEERS enrollment file as of the end of September 1998 that matched to the Medicare master enrollment file and met the eligibility criteria of being age 65 or older, having both Part A and Part B Medicare coverage, and not having end-stage renal disease.

[2] The percentage of eligible beneficiaries in M+C plans is substantially higher than the 16 percent enrolled in Medicare+Choice nationally at the end of 1998. This reflects the relatively high Medicare managed care penetration in the markets where the demonstration sites are located.

By the end of the first year of the demonstration, 22.2 percent of the dually eligible beneficiaries in our evaluation population had spent some period of time enrolled in Senior Prime. In fact, by three months, this had reached roughly 85 percent of the ultimate 12-month level, reflecting the rapid pace of early enrollment shown in Table 4.3. As evident in Table 4.5, Senior Prime has drawn about equally from the fee-for-service Medicare and managed care sectors. After 12 months, 22.3 percent of fee-for-service beneficiaries in the decision month had spent time enrolled in Senior Prime, compared to 22.1 percent of those who were enrolled in a Medicare+Choice plan.

This enrollment pattern is displayed in Figure 4.1, which shows the quarterly trend in beneficiary months by Medicare sector. The distribution of fee-for-service and M+C plan beneficiaries was stable through FY1998, with approximately two-thirds of the beneficiary months being fee for service. The very small portion of Senior Prime in the last quarter of FY1998 represents the first month of enrollment for the Madigan site. The Senior Prime share of enrollments grew during the subsequent quarters of FY1999.

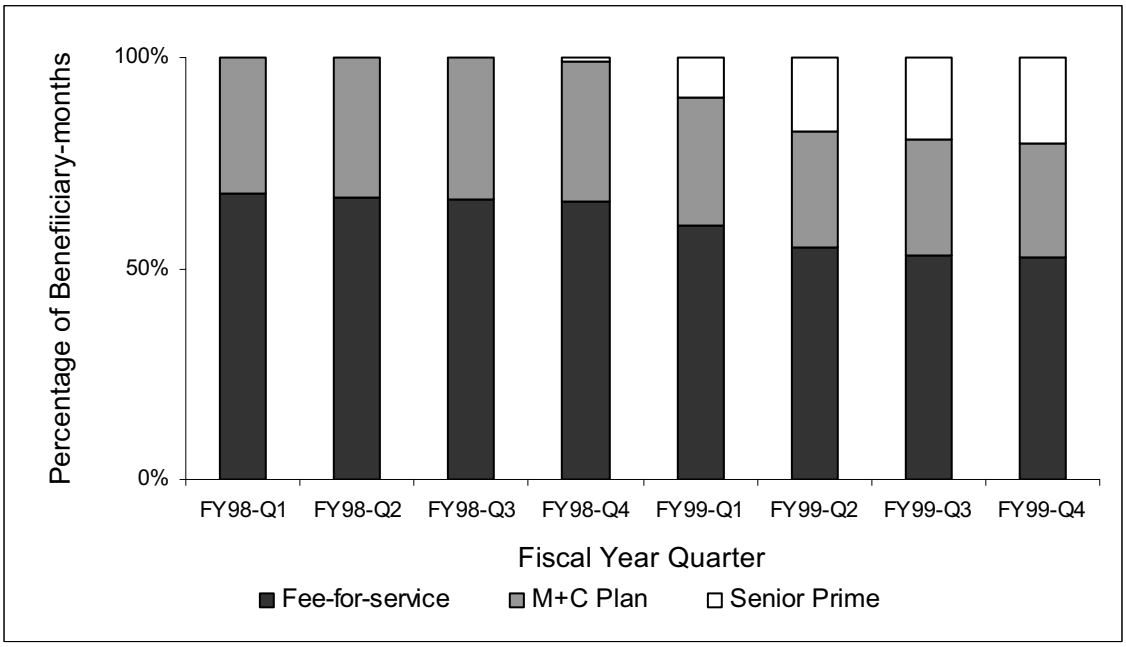

Figure 4.1—Trends in Mix of Medicare Status for Dually Eligible Beneficiaries in the Subvention Demonstration Sites

In some sites, the entry of Senior Prime had a large effect on individual Medicare+Choice plans and on the overall Medicare managed care market. Table 4.6 shows that in the Region 6–San Antonio site, Senior Prime drew 2,991 enrollees from a single plan during the first 12 months of the demonstration. These enrollees represented 28.7 percent of the Senior Prime enrollees in the San Antonio site. Senior Prime also drew 819 enrollees from one plan in San Diego, but these enrollees were only 5.4 percent of the total Senior Prime enrollees. These enrollments are large enough to have potentially important effects on the local Medicare managed care markets, which we discussed in Section 3.

Disenrollment from Senior Prime

By the end of 12 months, only 5 percent of the Senior Prime enrollee group had died or disenrolled. An estimated 48 percent of exits from Senior Prime had occurred by the third month of the demonstration, and 73 percent had occurred by the sixth month. Enrollee exits included deaths, disenrollments related to relocations out of the plan area, and voluntary disenrollments. We examine here disenrollment rates due to death versus all other live disenrollments, regardless of reason. Because the bulk of Senior Prime enrollment occurred in the first three months, and so few disenrolled, 85 percent of the enrollees had spent at least ten months in Senior Prime by the end of the first year.

Table 4.6.
Impact of Senior Prime Enrollment on Medicare+Choice Market by Site

Demonstration Site	Maximum Number of Enrollees from a Single M+C Plan	Percentage of Senior Prime Enrollees Who Switched from the Single M+C Plan
Dover AFB	90	35.0
Keesler AFB	2	0
Region 6–San Antonio	2,991	28.7
Region 6–Texoma	4	0
Colorado Springs	892	29.9
NMC San Diego	819	5.4
Madigan AMC	909	15.8

Table 4.7 shows that death accounted for approximately 36 percent of the exits from Senior Prime, whether they were in fee-for-service or in M+C plans before entering Senior Prime. Thus, there appeared to be no relationship between Medicare sector in the decision month and exit from Senior Prime due to death.

Table 4.7 also shows that beneficiaries who left Senior Prime alive tended to return to the sector where they had been during the decision month. This relationship was stronger for fee-for-service beneficiaries than for M+C plan enrollees. Of the disenrollees who had switched to Senior Prime from the fee-for-service sector, the 60.2 percent who returned to that sector represented 95 percent of the live fee-for-service disenrollees. The 54.8 percent of M+C plan enrollees who returned to that sector represented 85 percent of the live M+C plan disenrollees.

Table 4.7.
Destination of Senior Prime Disenrollees After Exit, by Enrollment in the Decision Month

Medicare Status in Decision Month	Number of Disenrollees	Percentage by Destination After Disenrollment		
		Death	Fee for Service	M+C Plan
Fee for service	911	36.7	60.2	3.2
M+C plan	385	35.3	9.9	54.8
Total	1,296	36.3	45.2	18.5

Enrollment and Health Status

As discussed earlier, we hypothesized that Senior Prime would draw enrollees from the middle of the health risk distribution by attracting the relatively healthy from the fee-for-service sector and the relatively sick from Medicare+Choice plans. To the extent that this selection occurred, the average health risk score of those who remained in the fee-for-service sector should be higher than the average scores for both the total starting population and the Senior Prime enrollees coming from fee for service. For M+C plan enrollees, the average health risk score of those who remained in the M+C sector should be lower than the average for both the starting M+C population and the Senior Prime enrollees from the M+C sector.

In Table 4.8 we present bivariate comparisons of average health risk scores for dually eligible beneficiaries who were alive during the month when Senior Prime first became available in the site where they reside, and who either enrolled at any time during the first year of the demonstration or did not. These risk scores are the CMS PIP-DCG scores that we calculated for each beneficiary (refer to Section 2 for details on the calculations). As discussed in Section 2, we were concerned about bias in the PIP-DCG measures we used because we had inpatient encounter data only for fee-for-service Medicare and MTF direct care to use for sorting beneficiaries into risk groups. Inpatient encounter data for 1998 were not available for M+C plan enrollees. We structured the comparisons in Table 4.8 to control for this potential bias.

Table 4.8.
Comparisons of Average Health Risk Scores for Beneficiaries Who Were in Fee for Service or Managed Care At Baseline and After Senior Prime Enrollees Left Each Sector

	Mean Risk Scores (and Standard Errors)						
Medicare Sector	Dover AFB	Keesler MC	Reg. 6-San Antonio	Reg. 6-Texoma	Colorado Springs	NMC San Diego	Madigan AMC
Fee for service							
Before Senior Prime	0.990	1.063	1.052	0.998	0.987	1.066	1.043
	(0.0118)	(0.0092)	(0.0049)	(0.0088)	(0.0073)	(0.0052)	(0.0066)
After enrollees left	1.012	1.102	1.061	1.017	1.006	1.067	1.053
	(0.0135)	(0.0122)	(0.0056)	(0.0106)	(0.0084)	(0.0055)	(0.0074)
M+C plans							
Before Senior Prime	0.826	0.882	0.937	0.896	0.832	0.947	0.906
	(0.0200)	(0.0429)	(0.0055)	(0.0739)	(0.0044)	(0.0041)	(0.0059)
After enrollees left	0.855	0.880	0.922	0.871	0.841	0.946	0.906
	(0.0260)	(0.0424)	(0.0068)	(0.0570)	(0.0052)	(0.0043)	(0.0063)
Senior Prime enrollees							
From fee for service	0.890	0.998	1.024	0.947	0.903	1.055	1.001
	(0.0215)	(0.0138)	(0.0099)	(0.0153)	(0.0137)	(0.0158)	(0.0144)
From M+C plans	0.751	0.916	0.956	1.033	0.807	0.964	0.903
	(0.0239)	(0.2529)	(0.0090)	(0.3687)	(0.0083)	(0.0164)	(0.0165)

NOTE: To assist in comparisons, risk scores are standardized to a total average risk score equal to 1.000 for all beneficiaries in the demonstration sites, by multiplying all risk scores by a constant factor.

The results shown in Table 4.8 support our hypothesis for favorable selection in Senior Prime enrollments from fee-for-service Medicare but not for adverse selection from the M+C

plan sector. Higher risk scores signify poorer health and higher expected health care costs. The average health risk scores were consistently higher for those who stayed in fee-for-service Medicare than for those who left this sector for Senior Prime. The differences in average risk scores for these two groups tended to be small in size, but the small standard errors indicate they were significant differences. By contrast, no consistent differences in risk scores were found for the M+C plan enrollees.

Enrollment and Death

To explore the selection issue further, we examined differences in death rates across sites. Table 4.9 shows that 4.4 percent of the dually eligible beneficiaries in the demonstration site population died during the 12 months of the demonstration. Death occurred among those *not* enrolled in Senior Prime at a higher rate than it did among Senior Prime enrollees, and these differences are statistically significant. These results should be interpreted cautiously because they undoubtedly were being affected by small numbers of deaths. The lower death rates for Senior Prime enrollees are consistent with favorable risk selection, but there are other possible explanations. For example, lower death rates may also be positive results from the high intensity of health screenings, primary care evaluations, and follow-up health care that the sites reported to be providing new Senior Prime enrollees, although this is unlikely in the one-year life of the demonstration. Death rates among Senior Prime enrollees varied almost threefold across sites.

Table 4.9.
Twelve-Month Standardized Death Rates by Enrollment in Senior Prime, by Site

	Death Rates for the Full Sample		Standardized Death Rates by Ever Enrolled in Senior Prime	
	Actual	Standardized	Enrolled	Not Enrolled
All demonstration sites	4.4%	4.4%	3.1%	4.8%
By site:				
Dover AFB	3.3	3.7	2.2	3.9
Keesler AFB	5.0	5.3	4.0	6.0
Region 6–San Antonio	4.7	4.7	3.2	5.2
Region 6–Texoma	4.3	4.9	3.2	5.5
Colorado Springs	3.0	3.3	1.7	3.8
NMC San Diego	4.5	4.2	2.9	4.3
Madigan AMC	4.8	4.8	3.7	5.1

NOTE: Death rates are measured as number of deaths per 100 beneficiaries (percentage). Standardized death rates are standardized by age (five-year categories) and gender, using the life table methodology.

FACTORS ASSOCIATED WITH BENEFICIARY CHOICE OF SENIOR PRIME

In this subsection we use a multivariate model of enrollment to investigate the factors contributing to Senior Prime enrollment decisions. Our dependent variable is a dichotomous variable that indicates if a beneficiary enrolled in Senior Prime at any time during the first three months of the demonstration. We selected three months because a large share of the enrollments occurred in the first three months of a site's operation (see Table 4.5), but enrollment targets had

not yet been reached (i.e., enrollment was not constrained by capacity). Thus we could include all sites in the same logit model.[3] (Refer to Section 2 for details on the model.) We estimated separate models for two subgroups based on whether they were in (a) fee-for-service Medicare or (b) M+C plans in the decision month. This model specification allowed full freedom to estimate differences in effects for fee-for-service beneficiaries and M+C plan enrollees. It also controls for the source of potential bias in our PIP-DCG risk score measures because of the absence of inpatient encounter data for M+C enrollees. Likelihood ratio tests confirmed the appropriateness of estimating the separate models.

Four sets of variables were used as predictors of Senior Prime enrollment: (1) health status and prior health service use, (2) beneficiary characteristics, (3) DoD beneficiary category, and (4) demonstration site indicators. The variables are defined in Table 4.10.

Table 4.10.
Definitions of Variables Used in the Models of Senior Prime Enrollment

Predictor Variable	Measurement
Health risk	The PIP-DCG risk score
Use of DoD inpatient care	Any MTF hospital stay during the 12 months before the start of the demonstration
Ever in hospice	Indicator if in hospice during the 12 months before the start of the demonstration
Months in a M+C plan	For the 12 months prior to the start of the demonstration
Ethnicity	A non-white indicator using data from the Medicare EDB master file
Median family income	Census data for the zip code in which the beneficiary resides
Beneficiary age	Five-year age category indicators (age 65–69 as reference), using date of birth from the Medicare EDB master file
Beneficiary gender	Indicator with male = 1; data from the Medicare EDB master file
Distance to the nearest MTF	Measured from the center of zip code of residence to the center of the MTF location zip code
DoD beneficiary category	Indicators for family member, survivor, or retiree (omitted category)
Demonstration sites	Indicator for each site, with San Diego as the omitted category

The results of our two logit models are presented in Table 4.11. For each model, we report the odds ratios, t-statistics, and 95 percent confidence intervals (CIs) around the odds ratio estimates. Results for the sample enrolled in M+C plans in the decision month are presented in the left three columns and results for fee-for-service beneficiaries are presented in the right three columns.

[3] The logit framework is not appropriate for modeling enrollment in supply constrained markets.

We find favorable selection into Senior Prime from the fee-for-service sector, after controlling for all other factors. With a significant odds ratio of 0.888 (at $p < 0.01$ level) for the fee-for-service health risk score, higher risk scores were associated with a reduction in the odds of enrolling in Senior Prime from fee-for-service Medicare. This result is consistent with our hypothesis of positive selection from fee-for-service Medicare. The coefficient on risk selection in the Medicare+Choice model was close to 1 and statistically insignificant and, therefore, does not support our hypothesis of adverse selection from managed care.

Table 4.11.
Estimates of Factors Associated with Senior Prime Enrollment Decisions

	M+C Plan in Decision Month			Fee for Service in Decision Month		
Variable Name	Odds Ratio	t-statistic	95% CI	Odds Ratio	t-statistic	95% CI
Health status, prior use						
Health risk	0.941	–1.310	0.859, 1.031	0.888**	–4.577	0.844, 0.934
DoD inpatient stay (0,1)	3.219**	17.659	2.827, 3.665	4.269**	33.708	3.923, 4.645
Medicare inpatient stay	0.297**	–7.559	0.216, 0.406	0.293**	–22.308	0.263, 0.327
Ever in hospice	0.504**	–4.810	0.381, 0.666	0.516**	–6.603	0.424, 0.628
Months in M+C	0.998	–0.335	0.986, 1.010	1.105**	9.245	1.082, 1.128
DoD beneficiary category						
Family member (0,1)	1.277	1.407	0.908, 1.795	1.577**	4.599	1.299, 1.914
Survivor (0,1)	0.742	–1.692	0.525, 1.048	1.054	0.521	0.865, 1.285
Characteristics						
Non-white	1.085	1.921	0.998, 1.179	0.994	–0.180	0.927, 1.065
Median family income	1.000	0.352	1.000, 1.000	1.000**	–13.280	1.000, 1.000
Age 70–74 (0,1)	0.803**	–5.907	0.747, 0.864	0.809**	–7.804	0.766, 0.853
Age 75–79 (0,1)	0.717**	–7.754	0.659, 0.780	0.738**	–10.187	0.696, 0.782
Age 80 and older (0,1)	0.666**	–7.495	0.599, 0.741	0.676**	–11.023	0.631, 0.725
Gender	1.437*	2.094	1.023, 2.018	1.676**	5.245	1.382, 2.032
Site indicators						
San Antonio	10.033**	49.950	9.165, 10.98	2.258**	23.090	2.107, 2.420
Keesler	0.807	–0.297	0.195, 3.340	4.097**	31.786	3.756, 4.470
Texoma	3.727**	3.064	1.607, 8.648	2.367**	18.690	2.162, 2.591
Madigan	3.439**	23.052	3.096, 3.819	2.460**	22.470	2.274, 2.661
Colorado Springs	5.346**	32.179	4.827, 5.921	1.457**	8.044	1.329, 1.596
Dover	11.629**	16.531	8.694, 15.56	1.456**	5.517	1.274, 1.664
Distance to nearest MTF	0.952**	–19.061	0.947, 0.957	0.976**	–18.717	0.974, 0.978
Log likelihood	–15,034			–28,960		
Number of observations	37,687			65,915		

* Significant at 0.05 level. ** Significant at 0.01 level.

Having an inpatient stay in a DoD facility during the last year before the start of the demonstration increased the odds of enrolling in Senior Prime from either the fee-for-service or M+C sector. This result is consistent with the findings from the GAO survey that enrollment in Senior Prime was driven by experience in the military health care system (GAO, 2000). Conversely, having a Medicare inpatient stay decreased the odds of Senior Prime enrollment

substantially. These two results suggest that existing preferences by dually eligible beneficiaries for one or the other sector of care influenced their Senior Prime enrollment choices.

Prior use of Medicare hospice services at any time reduced the odds of enrolling in Senior Prime in both sectors. The odds were reduced by almost half in both the Medicare fee-for-service and M+C sectors.

Gender and age had significant effects on the odds of enrolling in Senior Prime from either fee-for-service Medicare or M+C plans. Males had greater odds of enrolling in Senior Prime from both sectors. Compared with the age 65–69 group, which was the omitted reference group, beneficiaries in older groups had lower odds of enrolling in Senior Prime from both sectors, and the odds decreased with age. Although the coefficients on median family income and distance to the nearest MTF were statistically significant, the effect sizes were not very different from odds = 1 (even odds).

We used indicator variables to measure site-specific differences in the odds of enrolling in Senior Prime. These measures controlled for the effect of differences across sites in management and marketing of Senior Prime as well as the reputations of the site MTFs. They also captured differences in the local Medicare managed care markets. For both models, the coefficients on the site indicators measure the differences in the odds of Senior Prime enrollment in a specific site relative to San Diego, which was the reference group.

Quite different site effects are observed for odds of enrolling in Senior Prime from fee-for-service or M+C plans. For the M+C sector, the magnitude of the odds of enrollment varied considerably across the sites. The very high odds of 11.6 for the Dover site probably captured the fact that three M+C plans left its market at the same time that Senior Prime was entering it. The non-significant and low odds ratio for Keesler reflects the virtual absence of managed care in its market.

San Diego competed with mature health plans that offered rich supplemental benefits (the market has had high capitation rates historically). The DoD supplemental benefits were less competitive in this market than in the other sites, which should depress San Diego enrollments from managed care. This factor may be a partial explanation for why all sites (except Keesler) had higher odds than San Diego of enrolling beneficiaries from the M+C plans.

On the fee-for-service side, beneficiaries in all of the sites had significantly higher odds of enrollment than those in the San Diego site. The odds ratios were more moderate in size, however, and varied less than those obtained in the M+C model, ranging from 1.4 to 4.1 across the sites. This result may reflect the relatively more homogeneous nature of Medicare fee-for-service markets across the country.

The contrasting results between M+C and fee-for-service sectors suggest that market characteristics were more important contributors to Senior Prime enrollment rates than the characteristics of the MTFs or their marketing and enrollment processes. This interpretation is consistent with our process evaluation findings for the demonstration start-up in Section 3. There was little variation across sites in their characteristics or activities because all the sites were using similar marketing and enrollment methods and materials, as well as similar processes for initial visits and health screenings for new Senior Prime enrollees. By contrast, the characteristics of the M+C markets where the demonstration sites were located varied substantially, which would lead to greater observed variation in odds ratios for the M+C model.

Disenrollment

We estimated two models related to disenrollment. The first model considered the decision to stay in Senior Prime once enrolled. The second considered the Medicare sector (fee for service or M+C) where enrollees returned for those who exited Senior Prime alive during the first 12 months of the demonstration. Both models used the same covariates used in our enrollment models. However, none of the coefficient estimates were significant in either disenrollment model. This finding suggests that different processes governed enrollment and disenrollment, and it highlights the importance of understanding enrollee experiences in their selected health plan for understanding disenrollment decisions. For example, enrollees might disenroll if they were not satisfied with waiting times for care, responsiveness of providers, or other aspects of the care they received. However, we did not have data on these factors to include in the disenrollment models.

RESPONSES OF BENEFICIARIES TO SENIOR PRIME

Early Reactions to the Demonstration

Virtually everyone we interviewed during the initial site visits reported that enrollees were expressing their satisfaction with Senior Prime services and were very pleased to be back in military health care. The sites' extensive orientation activities and personal approach to supporting beneficiaries appeared to have prepared enrollees well for service delivery. These subjective results were supported during the first year of the demonstration by records of few complaints, grievances, or appeals, either filed within the Senior Prime plans or reported directly to CMS regional offices.

We also heard, however, that Senior Prime enrollees were often confused about how Senior Prime worked, what providers they could use, and how to make appointments. Many enrollees had trouble using the electronic appointment systems, and some enrollees who were referred to network providers were unhappy when the providers were not located close to where they live. The frontline MTF staff reported they spent a lot of time with enrollees to help them through these concerns and teach them how to use the system.

GAO Findings Regarding Beneficiaries' Perceptions

The General Accounting Office fielded a survey of Medicare-eligible DoD beneficiaries who were eligible for enrollment in the Senior Prime plans, for the purpose of assessing effects of the demonstration on these beneficiaries. The survey questions covered the domains of access to care, access to military care, quality of care, quality of military care, and health status and other characteristics of the respondents. The GAO survey consisted of surveys fielded at the beginning and the end of the demonstration. The survey sample consisted of 13,243 beneficiaries, both Senior Prime enrollees and non-enrollees, for the first survey and 23,833 beneficiaries for the second survey. The second sample included all those surveyed in the first survey plus an augmented sample that represented 36 percent of the total sample. High response rates of 91 percent and 88 percent, respectively, were achieved for the two surveys.

Survey results drawn from the GAO report, which are summarized in Tables 4.12 and 4.13 (GAO, 2001a), were generally consistent with site visit observations. Beneficiaries who enrolled in Senior Prime reported improved access to MTF care and satisfaction with the care

they received (Table 4.12). Other survey responses, however, indicate that 10 to 30 percent of enrollees had waits for primary care visits that were longer than called for in the TRICARE access standards. This finding differed from reports by the sites that they met the TRICARE standards consistently, with only occasional delays in getting timely appointments with primary care providers for Senior Prime enrollees. Enrollees also reported decreased out-of-pocket costs, thus reducing financial barriers. In the second survey, nearly two-thirds of enrollees reported having no out-of-pocket costs for their care.

Most of those who did not enroll in Senior Prime reported they were not affected by the demonstration, largely because only 10 percent reported they had received most or all their care at MTFs. The minority who had been heavy users of MTF care before the demonstration were affected by declining availability of space-available care, however, with only 36 percent of them reporting they were heavy users during the demonstration. An estimated 6 percent of all non-enrollees were crowded out. Satisfaction with military health care declined on average for this group, for both access to care and responsiveness of care, as shown in Table 4.13.

Table 4.12.
Changes in Perceptions of Senior Prime Enrollees Regarding Access and Quality of Care, Before and After Enrollment

	Improved	Unchanged	Declined
Access to care:			
Primary care doctor's hours convenient	32%	48%	20%
Did not have to wait too long for appointment with primary care doctor	35	39	26
Primary care doctor saw me promptly	34	49	17
Primary care provider:			
Quality—			
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
Communication—			
Explained things clearly	33	47	20
Really listened	31	51	18
Specialty care provider:			
Quality—skillful and competent	25	57	18
Communication—			
Told me about my treatment	29	50	21
Answered all my questions	27	53	20
Doctors communicated with each other	32	47	22

SOURCE: Published data from a survey of Medicare-eligible DoD beneficiaries by the General Accounting Office (GAO, 2001a).

Table 4.13.
Changes in Perceptions Regarding Access and Quality of Care for Non-Enrollees Who Were Crowded Out of Military Health Services After Senior Prime Began

	Improved	Declined	Net Change
Satisfaction with access to military care:			
Able to get care at MTFs when I needed it	10%	53%	–43%
Difficult to schedule appointments at MTFs	14	61	–47
I prefer to get my care at MTFs	10	37	–27
Satisfaction with military care:			
Satisfied with care at MTFs	12	42	–30
Doctors and staff did not treat me with respect at MTFs	14	40	–26
I would not recommend military care	17	37	–20

SOURCE: Published data from a survey of Medicare-eligible DoD beneficiaries by the General Accounting Office (GAO, 2001a).

NOTE: Non-enrollees were identified as "crowded out" if they reported in the first survey they obtained most or all of their care at MTFs, but in the second survey they reported they obtained only some or none of their care at MTFs.

DISCUSSION

The enrollment analysis in this section documents the rapid pace of enrollment that occurred during the first few months of Senior Prime operation. We found that beneficiaries were enrolling at similar rates from fee-for-service Medicare and M+C plans. We also found some evidence for positive selection in enrollment from fee-for-service Medicare but not for those who came from other M+C plans. Disenrollment rates were quite low during the first year of the demonstration. Factors contributing to decisions to enroll in Senior Prime were quite different for beneficiaries who came from fee-for-service Medicare versus M+C plans. The odds of enrollment for those entering from M+C plans varied widely across sites, apparently reflecting the differing characteristics of the local Medicare managed care markets.

Findings from the GAO evaluation, which we include in this report, document that enrollees were highly satisfied with Senior Prime, including both the clinical care and administrative support provided. These findings are consistent with the high enrollments and low rates of disenrollment in the first year of Senior Prime.

Section 5.
Early Effects of Senior Prime on Costs and Service Use

The introduction of TSP in the demonstration sites stimulated a migration of Medicare-eligible DoD beneficiaries. Many chose to enroll in the new program, while others remained with their existing coverage arrangements. In the previous section we described enrollment trends and estimated models to examine which factors contributed to demand for Senior Prime. In this section we examine changes in aggregate costs, per-capita costs, and service utilization by dually eligible beneficiaries resulting from the introduction of Senior Prime.

We describe the effects of Senior Prime in the Medicare fee-for-service sector and the DoD sector. For the DoD sector, this includes MTF direct-care services and Senior Prime network providers. Both the fee-for-service and managed care sectors of Medicare were affected by the introduction of Senior Prime in the six demonstration sites. For beneficiaries in fee-for-service Medicare, the effects were changes in service utilization and Medicare payments as documented by Medicare claims records. On the managed care side, we observed reductions in M+C plan enrollments as some enrollees switched to Senior Prime, with associated declines in M+C capitation payments for these individuals. However, we could not track cost and service use shifts directly for M+C enrollees because of lack of encounter data for plan enrollees.

REVIEW OF METHODS

As discussed in Section 2, we worked with the FY1998 cohort of beneficiaries, consisting of all beneficiaries residing in the demonstration or control sites who were dually eligible for Medicare and DoD benefits as of the end of September 1998. This approach allowed us to assess effects of Senior Prime on both those who chose to enroll in Senior Prime and those who had the option but remained in other Medicare sectors (either fee-for-service or M+C plans). Furthermore, by using the same group of beneficiaries in the "before and after" comparisons, we could control for case mix effects. We did not have the data to allow us to quantitatively analyze corollary effects (externalities) on other DoD beneficiaries or other Medicare beneficiaries in the demonstration sites, but we consider some possible effects qualitatively in our discussion of the implications of our findings in Section 6.

To assess effects of Senior Prime, we compared baseline costs and utilization (FY1998) for this population to their costs and utilization during the first year of Senior Prime (FY1999).[1] These comparisons were made for the demonstration sites and the control sites, using trends in the control sites as a reference point for shifts observed in the demonstration sites. We also focused within the demonstration sites to compare FY1998 and FY1999 costs and utilization rates for two groups of beneficiaries: those who chose to enroll in Senior Prime at any time during FY1999 and those who never enrolled during that period.

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[1] The statistical significance of comparisons should be considered when interpreting observed differences for the study sample, which is drawn from the full population of dually eligible beneficiaries. As discussed above in Section 2, we do not report the significance of differences because the sample is so large that almost any observable difference in values is statistically significant.

We use beneficiary months of eligibility to measure the denominator for all per-capita cost estimates and utilization rates. This measure accommodates the movement of beneficiaries between Medicare sectors, as well as the entry and exit of beneficiaries from Medicare and DoD eligibility due to aging-in or death. For each beneficiary, we summed the number of months of Medicare eligibility and DoD eligibility in each year, and we also summed the number of months spent in fee-for-service Medicare, managed care, or Senior Prime enrollment. We used total Medicare beneficiary months to calculate monthly per-capita costs and utilization rates. Use rates were normalized to annualized rates per 100 beneficiaries. When the denominator is total beneficiary months, movement out of Medicare fee-for-service or managed care sectors into Senior Prime can be observed as a decline in utilization rates for that sector of origin.

THE STUDY POPULATION

FY1998 and FY1999 summary profiles for our sample of dually eligible populations in the demonstration and control sites are provided in Tables 5.1 and 5.2. An estimated 242,000 dually eligible beneficiaries resided in the combined demonstration and control sites, of which approximately half (120,000 beneficiaries) were in the demonstration sites. For FY1998, the individual demonstration and control sites varied considerably in the percentage of dually eligible beneficiaries in each of the Medicare sectors (fee for service or M+C), reflecting variations in the market penetration of Medicare+Choice plans across the sites (Table 5.1).

Table 5.1.
Dually Eligible Beneficiaries in the Population by Medicare Sector, FY1998 and FY1999

		Percentage of Beneficiary Months by Sector			
		Fiscal Year 1998		Fiscal Year 1999	
	Number of Beneficiaries	Fee for Service	Senior Prime	Fee for Service	Senior Prime
All sites	241,665	75.3	0.1	68.8	8.3
Demonstration sites	119,757	66.7	0.2	55.2	16.6
Dover AFB	3,976	91.3	0.0	84.8	11.0
Keesler MC	7,271	98.8	0.0	72.5	26.2
Region 6–San Antonio	33,662	68.5	0.0	53.6	26.3
Region 6–Texoma	6,991	99.5	0.0	79.9	19.2
Colorado Springs	13,866	61.0	0.0	53.5	12.6
NMC San Diego	34,661	54.5	0.0	49.5	6.6
Madigan AMC	19,330	60.7	1.3	47.9	17.4
Control sites	121,908	83.6	—	82.2	—
McGuire AFB	19,706	75.8	—	73.7	—
Wright-Patterson AFB	6,695	89.9	—	86.9	—
Walter Reed/ National NMC Bethesda	39,482	92.4	—	92.4	—
Holloman/Kirtland AFB	9,474	58.0	—	56.4	—
NH Jacksonville	15,203	74.0	—	72.2	—
NH Portsmouth	21,429	93.1	—	90.3	—
Tripler AMC	9,919	79.1	—	77.8	—

The introduction of Senior Prime in the demonstration sites in FY1999 changed the distribution of dually eligible beneficiaries across Medicare sectors. Between FY1998 and FY1999, Medicare managed care enrollments in the control sites increased slightly, as shown in the reduction in fee-for-service share from 83.6 percent in FY1998 to 82.2 percent in FY1999.

Table 5.2 gives a profile of the FY1998 cohort of dually eligible beneficiaries in the demonstration sites by Senior Prime enrollment status. An estimated 20.4 percent of the beneficiaries enrolled in Senior Prime. The distribution of total beneficiary months between enrollees and non-enrollees remained stable during FY1998 and FY1999. These percentages are not the same as the distributions of beneficiary months reported in Table 5.1. For example, Senior Prime enrollees represented 21.0 percent of total beneficiary months in 1999 for the demonstration sites (Table 5.2), whereas 16.6 percent of total beneficiary months for beneficiaries in the demonstration sites were actually spent enrolled in Senior Prime (Table 5.1).

Months of Medicare eligibility were similar for beneficiaries who were Senior Prime enrollees for at least one month and for those who did not enroll. Enrollees were Medicare eligible for an average of 11.4 months in FY1998 and for 11.9 months in FY1999. Non-enrollees were Medicare eligible for an average of 11.5 months in both fiscal years. These eligibility periods are similar to the average for the overall Medicare population.

Table 5.2.
Dually Eligible Beneficiaries and Beneficiary Months in the Demonstration Sites

	Number of Beneficiaries	Number of Beneficiary Months	
		Fiscal Year 1998	Fiscal Year 1999
Counts	119,757	1,377,056	1,386,643
Percentage of total			
Senior Prime enrollees	20.4%	20.3%	21.0%
Non-enrollees	79.6%	79.7%	79.0%
Months of Medicare eligibility			
Senior Prime enrollees	na *	11.4	11.9
Non-enrollees	na *	11.5	11.5

* Not available.

EFFECTS ON DoD AND MEDICARE COSTS

We designed our analysis of cost impacts to estimate the extent to which the introduction of Senior Prime shifted Medicare and DoD spending for dually eligible beneficiaries in the demonstration sites. These costs are dominated by spending on health care services, but administrative costs also are a substantial share of total Senior Prime costs that should be considered. We first report evaluation results for the aggregate effects of the demonstration on both DoD and Medicare costs, followed by a comparison of costs for enrollees and non-enrollees. Then we examine the administrative costs of Senior Prime, presenting a summary of estimated administrative costs that were provided by TMA and the demonstration sites. Finally, we address effects on MTF use by dually eligible beneficiaries who did not enroll, and early trends in outpatient use rates as the program gained experience in managing care.

Aggregate Effects on DoD and Medicare Costs

For the analysis of aggregate costs, the total government cost of care is defined as the sum of the amounts spent by Medicare and by DoD for health care services for the dually eligible beneficiaries in the evaluation population. We recognize that a fraction of these beneficiaries may also obtain some of their health care at health facilities operated by the Department of Veterans Affairs, but because data for this service utilization were not available for this study, we could not include VA costs in the analysis. (Refer to Section 3 for a qualitative discussion of relationships between VA and DoD facilities, and how the demonstration may be influencing the VA facilities.)

As described in the evaluation methods in Section 2, this analysis is a straightforward summation of (1) actual Medicare payments to fee-for-service providers and M+C plans, (2) service delivery costs estimated for DoD MTF direct-care services, and (3) actual payments by the DoD to Senior Prime network providers. For the Medicare sector, the total costs are the sum of Medicare Part A and Part B services for fee-for-service beneficiaries and the costs for capitation payments for enrollees in M+C health plans. For the DoD sector, the total costs are the sum of estimated costs for MTF inpatient and outpatient services and DoD payments to network providers for inpatient and outpatient services. In addition to aggregate payment amounts, we report costs per beneficiary month where the denominator is total months of Medicare eligibility for all beneficiaries in the groups being compared, regardless of the sector (Medicare or DoD) in which they obtained their health care. Thus, the sum of the costs per beneficiary month across the categories of services is equal to the total estimated amount spent for an average beneficiary. The use of both aggregate and per beneficiary month measures allows us to identify how much of the change in costs is attributable to changes in the number of beneficiaries versus changes in use rates by those beneficiaries.

Comparison of Demonstration and Control Site Costs

We report in Table 5.3 the overall total costs estimated for the FY1998 evaluation population residing in the demonstration and control sites for the fiscal year preceding the demonstration (FY1998) and the first fiscal year of the demonstration (FY1999). Two comparisons are presented. The first is estimated costs in actual dollars for FY1998 and FY1999; the second discounts the Medicare costs to FY1998 dollars to control for effects of inflation. We used an inflation rate of 1.4 percent for this adjustment, which is based on the annual increase in overall Medicare costs (refer to the discussion in Section 2 for details). The FY1999 DoD direct-care costs were not discounted because the costs for both fiscal years were estimated using FY1998 MEPRS cost data, but DoD costs for network provider services were discounted.

Several shifts in costs are seen in Table 5.3. The control site costs provide a useful reference point to assess the observed changes for the demonstration sites.

Medicare Costs. In constant dollars, Medicare aggregate spending for the demonstration sites declined an estimated 3.4 percent in FY1999, and spending per beneficiary month declined 4.1 percent. Medicare spending in the control sites increased, with aggregate spending rising by 8.5 percent and spending per beneficiary month rising by 8.2 percent. The differences in these differences are (1) an 11.9 percent reduction in aggregate Medicare costs (equals –3.4 minus 8.5) and (2) a 12.3 percent reduction in costs per beneficiary month. These savings exceeded the goal of budget neutrality for Medicare costs.

DoD Costs. Aggregate DoD spending, in constant dollars, increased an estimated 29.8 percent in the demonstration sites and decreased 5.8 percent in the control sites. Similar changes were found for spending per beneficiary month. Differences between control sites and demonstration sites in the FY1998–FY1999 changes for aggregate spending were estimated to be 35.6 percent (equals 29.8 minus –5.8) and 35.0 percent for spending per beneficiary month. With this spending increase, the goal of budget neutrality for DoD costs was not achieved.

Combined Costs. Combined aggregate costs for Medicare and DoD increased an estimated 5.1 percent with the introduction of Senior Prime. With this result, the budget neutrality goal to not increase overall government costs was not achieved. However, when referenced to the control site spending, there was an estimated 0.8 percent cost increase for the government (equals 5.1 minus 4.3), with a similar cost increase per beneficiary month, which are close to budget neutrality. Results might differ if a different set of MTFs had been selected as control sites. However, the observed changes in Medicare and DoD costs for the control sites between FY1998 and FY1999 are consistent with known service use trends, where access to MTF care was declining for Medicare-eligible DoD beneficiaries.

Table 5.3.
Total Medicare and DoD Costs for the FY1998 Index Population, Before (FY1998) and During (FY1999) the Demonstration, by Demonstration and Control Sites

	Demonstration Sites		Control Sites	
	Payments ($1,000)	Payment per Beneficiary Month	Payments ($1,000)	Payment per Beneficiary Month
Nominal dollars				
FY1998 spending				
Total Medicare	$466,080	$338	$441,385	$314
Total DoD	161,058	117	179,895	128
Combined total	627,138	455	621,280	442
FY1999 spending				
Total Medicare	456,479	329	485,549	344
Total DoD	209,345	151	169,448	120
Combined total	665,824	480	654,998	464
Percentage change — FY1998 to FY1999				
Total Medicare	–2.1%	–2.7%	10.0%	9.7%
Total DoD	30.0	29.1	–5.8	–6.1
Combined total	6.2	5.4	5.4	5.1
1998 Dollars for 1999				
Total Medicare	$450,177	$325	$478,846	$339
Total DoD	209,049	151	169,436	120
Combined total	659,225	475	648,281	459
Percentage change — in constant dollars				
Total Medicare	–3.4%	–4.1%	8.5%	8.2%
Total DoD	29.8	28.9	–5.8	–6.1
Combined total	5.1	4.4	4.3	4.0

Table 5.4 shows distinct cost effects for individual components of Medicare or DoD services. The only substantial change in Medicare spending was in the M+C health plan payments, which declined by $9 per beneficiary month ($11 in FY1998 dollars) as dually eligible beneficiaries in M+C plans switched to Senior Prime. Part A and Part B spending per beneficiary month (in nominal dollars) remained the same for both FY1998 and FY1999 in the demonstration sites, but these costs increased slightly in the control sites between those two years. DoD costs increased for both inpatient and outpatient MTF care, and network provider costs were measurable for the first time in FY1999 when Senior Prime enrollees gained access to these providers.

Table 5.4.
Medicare and DoD Costs for the FY1998 Index Population in Demonstration and Control Sites, by Service Category, FY1998 and FY1999

	Demonstration Sites		Control Sites	
Service Category	Payments ($1,000)	Payment Per Beneficiary Month	Payments ($1,000)	Payment Per Beneficiary Month
FY1998 spending				
Medicare costs				
Part A	$153,690	$112	$206,917	$147
Part B	97,914	71	145,855	104
Medicare+Choice	214,476	156	88,613	63
Senior Prime	0	0	0	0
DoD costs				
MTF inpatient care	80,590	59	77,824	55
MTF outpatient care	80,073	58	101,679	72
Network inpatient	219	0	168	0
Network outpatient	176	0	224	0
(Less Senior Prime)	(0)	(0)	(0)	(0)
FY1999 spending				
Medicare costs				
Part A	154,682	112	225,898	160
Part B	98,032	71	155,884	110
Medicare+Choice	203,766	147	103,768	74
Senior Prime	0	0	0	0
DoD costs				
MTF inpatient care	94,183	68	80,905	57
MTF outpatient care	93,693	68	87,631	62
Network inpatient	10,817	8	260	0
Network outpatient	10,653	8	652	0
(Less Senior Prime)	(0)	(0)	(0)	(0)

Comparison of Senior Prime Enrollees and Non-Enrollees

Table 5.5 compares total Medicare and DoD spending in the demonstration sites for beneficiaries who had at least one month of enrollment in Senior Prime and those who did not enroll. Beneficiaries who enrolled in Senior Prime used DoD services in FY1998 (the baseline year) at much higher rates than dually eligible beneficiaries who did not enroll (refer to

utilization analysis later in this section). This difference in use rates had an important influence on the aggregate cost effects of the demonstration reported in Table 5.3.

Medicare Costs. An FY1998 Medicare payment of $196 per beneficiary month was estimated for those who later enrolled in Senior Prime—slightly more than half of that for non-enrollees. This amount declined in FY1999 to $55 per beneficiary month (a 72 percent reduction) as these beneficiaries switched to Senior Prime. At the same time, Medicare payments for non-enrollees rose an estimated 7.3 percent in FY1999.

DoD Costs. DoD costs in FY1998 for those who would enroll in Senior Prime the following year were $282 per beneficiary month, and their costs rose 77 percent to $498 per beneficiary month in FY1999. By comparison, DoD costs for non-enrollees were $75 per beneficiary month in FY1998, declining to $59 in FY1999.

The combined Medicare and DoD cost effects reveal that, as Senior Prime enrollees moved yet further into MTF direct care, there was a countermovement of non-enrollees away from MTF care to services in the private sector paid by Medicare. The net effect of these two shifts was relatively stable overall costs for Medicare.

The estimated monthly $498 cost for Senior Prime enrollees in FY1999 compares closely to the GAO estimate of $483 (GAO, 2001b). The GAO also estimated monthly per-capita costs for enrollees for prescription drugs and administrative costs. When added to the estimated costs for care, the GAO estimated a total monthly cost of $586 per beneficiary enrolled in Senior Prime.

Table 5.5.
Total FY1998 and FY1999 Medicare and DoD Costs for the Demonstration Site Population, by Senior Prime Enrollment Status

	Senior Prime Enrollees (enrolled at least one month)		Non-Enrollees (never enrolled)	
	Payments ($1,000)	Payment Per Beneficiary Month	Payments ($1,000)	Payment Per Beneficiary Month
FY1998 spending				
Total Medicare	$54,534	$196	$411,545	$375
Total DoD *	78,517	282	82,542	75
Combined total	133,051	478	494,087	450
FY1999 spending				
Total Medicare	15,892	55	440,587	402
Total DoD *	144,903	498	64,442	59
Combined total	160,795	553	505,029	461
Percentage change — FY1998 to FY1999				
Total Medicare	–70.9%	–72.0%	7.1%	7.3%
Total DoD	84.6	77.0	–21.9	–21.8
Combined total	20.9	15.9	2.2	2.4

NOTE: The sample was divided into the groups of Senior Prime enrollees (enrolled for at least one month) and non-enrollees (never enrolled) to compare their utilization and costs for the two years.

* Estimated DoD costs include payments for network providers for the Senior Prime enrollees.

Table 5.6 presents the underlying cost detail for Senior Prime enrollees and non-enrollees for Medicare services and DoD direct-care services. These estimates exclude DoD network provider costs because, by policy, no dually eligible beneficiaries had access to network provider services in FY1998 and only Senior Prime enrollees had access to them in FY1999. We see the higher FY1998 costs for MTF care for enrollees, especially for outpatient services. These DoD costs rose further as Senior Prime enrollments occurred in FY1999.

The estimates in Table 5.6 also highlight the important Medicare cost effect for beneficiaries who moved out of M+C plans to enroll in Senior Prime. In FY1998, the dually eligible beneficiaries who later would enroll in Senior Prime had an average M+C capitation payment of $133 per beneficiary month. This amount decreased 78 percent in FY1999 to $27 per beneficiary month. Part A and Part B costs for Senior Prime enrollees were already quite low in FY1998 ($38 for Part A and $25 for Part B). They declined yet further, resulting in a 47 percent overall decrease in fee-for-service Medicare costs for Senior Prime enrollees. At the same time, Medicare costs for non-enrollees remained stable from FY1998 to FY1999. M+C capitation payments for non-enrollees rose 10.5 percent from an average $162 to $179, reflecting movement of these beneficiaries into M+C plan enrollment.

Table 5.6.
Cost Components for Medicare and DoD Direct Care for the Demonstration Site FY1998 Index Population, by Senior Prime Enrollment Status, FY1998 and FY1999

	Senior Prime Enrollees (enrolled at least one month)		Non-Enrollees (never enrolled)	
	Payments ($1,000)	Payment Per Beneficiary Month	Payments ($1,000)	Payments Per Beneficiary Month
FY1998				
Medicare costs				
Part A	$10,604	$38	$143,086	$130
Part B	6,879	25	91,035	83
Medicare+Choice	37,052	133	177,425	162
Senior Prime	0	0	0	0
DoD costs *				
MTF inpatient care	34,436	123	46,154	42
MTF outpatient care	43,685	157	36,388	33
FY1999				
Medicare costs				
Part A	5,409	19	149,272	136
Part B	2,670	9	95,362	87
Medicare+Choice	7,813	27	195,953	179
Senior Prime	0	0	0	0
DoD costs *				
MTF inpatient care	55,971	193	38,212	35
MTF outpatient care	67,463	232	26,230	24

* Payments for network providers are excluded because these services were available only to Senior Prime enrollees. Therefore, these costs were negligible in FY1998, and all network provider payments that occurred were assigned to the Senior Prime enrollee group.

Limitations of the Cost Estimates

One uncertainty involved in estimating the magnitude of costs was the resource cost estimates for MTF direct-care inpatient and outpatient services, which we estimated using MEPRS cost data. To test the reasonableness of the estimated costs, we compared the estimated average per-diem costs for MTF inpatient care for dually eligible beneficiaries to (1) the overall average MEPRS per-diem costs for all DoD beneficiaries in the demonstration and control sites and (2) the average Medicare inpatient per-diem costs for the study population of dually eligible beneficiaries. The per-diem costs estimated for the study population were $1,883 per patient day in FY1998 and $1,850 per day in FY1999. These amounts are somewhat higher than the average FY1998 MEPRS per-diem costs of $1,406 for MTFs in the demonstration sites and $1,651 for MTFs in the control sites (refer to Table 5.8 below). Older beneficiaries are expected to use more costly care, which would be reflected in our higher estimates of per-diem costs because our methodology captures their use of more costly inpatient wards (e.g., cardiology). In addition, we added the direct costs for surgical events to the average daily costs to obtain total costs for surgical stays (refer to Section 2 for details on the MTF cost-estimation methodology).

For the comparison with Medicare per-diem costs, the average Medicare inpatient per-diem cost for this population was $1,205 for FY1998 and $1,234 for FY1999, which are also lower than our estimated costs for the study population. Part of the difference between the MTF and Medicare per-diem costs can be explained by inclusion of expenses for provider services in the MTF costs. These expenses are not part of the Medicare inpatient costs but are billed separately by the providers. It would be possible to estimate the Medicare provider costs related to inpatient stays by linking physician/supplier claims for inpatient services to inpatient claims by date, but this analysis was beyond the scope of this evaluation.

Differences in alternative unit cost estimates do not affect our findings because our comparative methodology uses the same unit costs to calculate DoD direct-care costs for all comparison groups. However, they raise a question regarding how best to: (1) obtain accurate cost estimates for MTF services for comparisons with other alternatives, (2) examine the efficiency of MTF care, and (3) assess whether MTF direct care is more or less expensive than alternative providers.

Another cost estimate limitation stems from our use of the cohort of beneficiaries as of the end of FY1998 as the population for this cost comparison. Ideally, we should have complete annual cost estimates for all beneficiaries who used Medicare or DoD benefits at some time during each year, but for this population, beneficiaries who died during FY1998 or who became Medicare eligible during FY1999 are not in the study population. The resulting cost estimates may be biased to the extent that relatively more (or fewer) costs than beneficiary months are omitted from each year of data. However, normalizing the estimates to costs per beneficiary month of eligibility partially compensates for this limitation.

To test this issue, we used Medicare claims for fee-for-service beneficiaries and payments for M+C enrollees to calculate average costs per beneficiary month for FY1997 and FY1998. We had full cohorts of beneficiaries and Medicare data for these years. We could not use DoD data because ADS outpatient data were not collected routinely before FY1998. These estimates for FY1998 Medicare payments per beneficiary month were 6 percent higher than the costs estimated for the FY1998 index population of beneficiaries. Thus, our estimated levels of costs may be biased downward (i.e., are too low), but they can be used effectively for comparative assessments.

Changes in DoD Costs

Substantial administrative costs were incurred for operating the subvention demonstration through its first year. The demonstration sites prepared estimates of staff time and other direct costs for both the start-up period and the first year of operation, which are summarized in Table 5.7. TMA estimates of costs for MCS contractor services are also presented by site. The last line item in the table is the estimated cost incurred by Iowa Foundation for processing Senior Prime applications at the Medicare Processing Center. The demonstration sites have cautioned us that their cost estimates were vulnerable to substantial error because they had to do the calculations manually. The accounting systems at the MTFs and lead agent offices do not allow for routine recording of this level of detail. Similarly, the TMA estimates for MCS contractor costs are preliminary estimates, pending finalization of discussions with the contractors regarding payments for services.

Despite large margins of error, the estimate of $41 million in total costs highlights that the administrative costs of Senior Prime should not be overlooked in evaluating the program resource requirements. If only half of the estimated amount in Table 5.7 were added to the total costs presented in Table 5.3, net government costs would exceed budget neutrality. The MCS contractor costs represent 80 percent of total administrative costs (excluding Iowa Foundation costs). The start-up costs for the sites were estimated for a six-month period centered on the first month of Senior Prime operation at each site. If these estimates were annualized, they would approximate the costs for the first year of Senior Prime operation. The administrative costs for TMA, which are not included in this table, increase this financial investment even further.

Table 5.7.
Administrative Costs for Start-Up and First Year of Senior Prime Operation, Estimated by the Demonstration Sites and the TRICARE Management Activity Office

	Start-Up Costs		First Year Operation		MCS	
	Staff Time	Other Costs	Staff Time	Other Costs	Contractor	Total Costs
Total	$2,955,900	$175,600	$4,428,400	$369,600	$33,297,600	$41,227,100
Dover AFB	241,600	12,500	355,500	23,300	2,965,900	3,598,800
Keesler MC	241,300	4,400	844,500	24,500	2,754,700	3,869,400
Region 6	1,005,000	40,500	940,100	25,000	9,240,000	11,250,600
Colorado Springs	449,200	44,000	840,100	67,100	7,167,000	8,567,400
NMC San Diego	483,000	17,000	747,000	28,700	5,580,000	6,855,700
Madigan AMC *	535,800	57,200	701,200	201,000	2,600,000	4,095,200
Iowa Foundation MPC					2,990,000	2,990,000

* Other direct costs for the Madigan site include $168,800 for administrative costs of a DME contract and exclude loss of other health insurance revenue for Senior Prime enrollees, which the site estimated to be $450,000 in the start-up period and $1.8 million in the first year of operation. Other sites did not report such large losses of health insurance revenues.

Direct-Care Costs for MTFs. In this subsection, we look more closely at the mix of MTF direct-care costs by Medicare sector for beneficiaries who are utilizing MTFs for at least part of their health care services. Service and cost profiles of the MTFs in the demonstration and control sites are presented in Tables 5.8 and 5.9, based on MEPRS data for utilization of the

facilities by all types of DoD beneficiaries. The profiles show that these two groups of MTFs are similar in size for both inpatient and outpatient service activity, and they tend to be among the largest facilities in the DoD system. Their average costs per unit of service differ, however, with the control sites tending to have higher per-diem inpatient costs and higher average costs per visit. These differences indicate that cost comparisons are best made by comparing changes in costs rather than absolute values.

Table 5.8.
Average Inpatient Activity and Costs for Demonstration and Control Sites, Compared with Other MTFs

	Demonstration Sites		Control Sites		Other MTFs	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Number of wards						
1996	28	9	27	13	38	216
1997	27	11	27	13	37	203
1998	29	9	26	13	36	193
Average daily census						
1996	186	157	226	223	112	745
1997	173	174	193	170	98	643
1998	176	152	184	190	95	607
Cost per bed day						
1996	$1,108	$99	$1,195	$146	$1,103	$422
1997	1,256	192	1,461	247	1,305	340
1998	1,406	162	1,651	317	1,458	391

SOURCE: Analysis of MEPRS data for inpatient ward expenses and utilization by MTF and ward.

Table 5.9.
Average Outpatient Activity and Costs for Demonstration and Control Sites, Compared with Other MTFs

	Demonstration Sites		Control Sites		Other MTFs	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Number of clinics						
1996	71	33	79	45	81	534
1997	83	39	87	43	91	600
1998	80	35	90	50	92	602
Daily visits						
1996	1,640	1,127	1,720	1,437	1,265	8,779
1997	1,614	1,170	1,636	1,361	1,213	8,386
1998	1,575	1,156	1,448	1,120	1,154	7,892
Cost per visit						
1996	$108	$15	$123	$35	$109	$21
1997	120	17	143	45	122	41
1998	136	23	165	44	135	23

SOURCE: Analysis of MEPRS data for outpatient clinic expenses and visits by MTF and clinic.

The mix of MTF direct-care costs by beneficiary group for demonstration and control sites is shown in Table 5.10, including percentage distributions within each year and changes in costs over time. (These costs *do not include* the costs for network provider services.) Enrollees in M+C plans represented 27.3 percent of the FY1998 MTF costs for dually eligible beneficiaries in the demonstration sites; this compares with only 6.2 percent for the control sites. With the introduction of Senior Prime, the M+C plan enrollees' share of costs at the demonstration sites dropped to 10.7 percent. A similar effect was found for fee-for-service Medicare beneficiaries, for whom the share of DoD costs decreased from 71.6 percent in FY1998 to 31.6 percent in FY1999. Senior Prime accounted for 57.6 percent of the FY1999 MTF costs. At the same time, the mix of costs remained stable for the control sites, with only a slight increase in the M+C plan enrollees' share to 7.7 percent of total costs.

Overall, MTF direct-care costs for the demonstration sites increased 16.9 percent with the introduction of Senior Prime. This is less than the 29.8 percent increase in total DoD costs reported in Table 5.3. The additional portion of the DoD cost increase is costs for use of network providers by Senior Prime enrollees, which are incurred by TMA rather than by the MTFs. Direct-care costs for the control site MTFs declined by 6.2 percent during this time.

Table 5.10.
Amounts and Changes in MTF Costs for Direct Care Services for Dually Eligible Beneficiaries, by Demonstration and Control Sites, FY1998 to FY1999

	Demonstration Sites		Control Sites	
	MTF Costs ($1,000)	Percentage of Total	MTF Costs ($1,000)	Percentage of Total
FY1998				
Total	$160,663	100.0	$179,503	100.0
Senior Prime	805	0.5	0	0.0
Fee for service	115,071	71.6	167,568	93.4
M+C plan	43,927	27.3	11,092	6.2
Other DoD	861	0.5	843	0.5
FY1999				
Total	187,870	100.0	168,421	100.0
Senior Prime	108,270	57.6	28	0.0
Fee for service	59,309	31.6	155,174	92.1
M+C plan	20,074	10.7	12,928	7.7
Other DoD	217	0.1	292	0.2
Percentage change— FY1998 to FY1999				
Total	16.9%		–6.2%	
Senior Prime	na *		na *	
Fee for service	–48.5		–7.4	
M+C plan	–54.3		16.6	
Other DoD	–74.8		–65.4	

* Not applicable.

Appropriate Utilization and Costs of Care. The importance of cost-effective service delivery has been a recurring theme during the subvention demonstration, and its importance has been reinforced yet again in these evaluation results. Given the large increases in service activity and costs experienced by the MTFs, their success in avoiding unnecessary utilization will determine the extent to which Senior Prime can maintain budget neutrality for the government budget. We heard from the process evaluation results that MTF outpatient visit rates for new Senior Prime enrollees were higher than normal early in the demonstration as the sites evaluated their health status and prepared treatment plans. We heard mixed results regarding subsequent progress by the sites in reducing utilization rates.

To assess early service use patterns, we prepared monthly trend information on the number of primary care and specialty clinic outpatient visits provided by MTFs for beneficiaries who were enrolled in Senior Prime in each month. To control for the time differences in demonstration site start-ups between September 1998 and January 1999, we standardized the start months so that "month one" was the first month of operation for each site. We summed the number of visits and beneficiaries for all sites for months one through nine, which was the minimum number of months of operation during FY1999 (for the sites that started in January 1999). The results of this analysis are presented in Figure 5.1.[2]

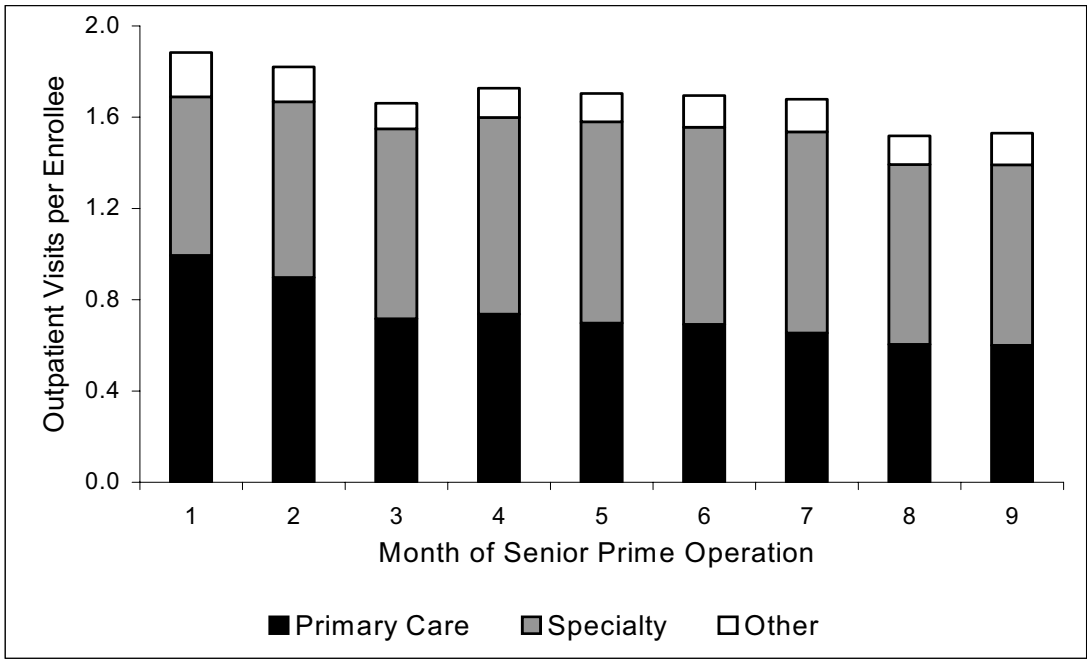

Figure 5.1—MTF Monthly Outpatient Use Rates for Senior Prime Enrollees, by Month of Operation for the Demonstration Sites

[2] We did not control for seasonal effects on utilization rates because we did not have the data needed to do so. Some seasonal effects might exist because the sites began operation at different times from September 1998 through January 1999, but the time differences involve only a five-month period. In addition, the start-up effects on utilization are strong enough to be observable even with possible seasonal effects involved.

The start-up concentration of MTF primary care visits, followed by a gradual downward trend in primary care use rates through month nine, are clearly visible in Figure 5.1. The peak in specialty care visits appeared in months four through seven, with slight reductions in rates for months eight and nine. According to reports by the demonstration sites, the rise in specialty care visits occurred as patients began using specialists for problems identified during their early primary care visits. Overall, the downward trend in total visits suggests progress by the sites in managing care. An alternative explanation, however, could be shifts in outpatient care from MTF services to network providers. If so, this trend in MTF services would represent only one portion of trends in total DoD service activity for Senior Prime enrollees. We were not able to examine utilization trends for network providers because of issues regarding data completeness and comparability of units of service.

EFFECTS ON UTILIZATION OF MEDICARE AND DoD SERVICES

Changes in Medicare Service Utilization

Utilization rates for Medicare Part A and Part B services by beneficiaries in the demonstration and control sites are shown in Table 5.11. As discussed at the start of this section, the rates for each type of service are expressed as the number of units of service per 100 beneficiaries, and the denominator is all dually eligible beneficiaries residing in the demonstration or control sites. This choice of denominator reflects the analytic goal of describing how total Medicare fee-for-service utilization for the dually eligible beneficiaries changed as some of these beneficiaries enrolled in Senior Prime when it became available (and stopped using fee-for-service Medicare).

The use rates in Table 5.11 are calculated using two different denominators. Normally, utilization rates for Medicare fee-for-service benefits are calculated using only fee-for-service beneficiaries because they are the only ones eligible to use these services (M+C plan enrollees use services provided by their health plans). We used the fee-for-service beneficiaries as the denominator for the control sites and for FY1998 for the demonstration sites, but these counts changed when some fee-for-service beneficiaries enrolled in Senior Prime in FY1999. If we used the new counts for a fee-for-service denominator, we would obtain use rates for beneficiaries who remained in that sector, which would not address the question of how Medicare fee-for-service utilization changed overall with the introduction of Senior Prime. The first two columns of use rates for the demonstration sites were calculated using eligibility months for all dually eligible beneficiaries, to show the shift in Medicare utilization across the entire population from FY1998 to FY1999. The remaining three columns were calculated using beneficiary months in fee-for-service Medicare for the three conditions where these measures are valid: the demonstration sites in FY1998 and the control sites in both years. These additional rates serve as a reference point for comparison to the rates based on the full populations.

Table 5.11.
Annualized Utilization Rates for Fee-for-Service Medicare for Dually Eligible Beneficiaries, by Type of Service, FY1998 and FY1999

	Unit of Service	Rate per 100 Total Beneficiaries in Demonstration Sites		Rate per 100 Fee-for-Service Beneficiaries		
				Demo Site	Control Sites	
		FY1998	FY1999	FY1998	FY1998	FY1999
Part A services						
Hospital inpatient services	Inpatient stay	13.0	12.7	18.0	21.5	24.1
Long-stay hospital services	Inpatient stay	0.5	0.4	0.8	0.6	0.5
Skilled nursing facility	Inpatient stay	2.4	2.1	3.7	3.4	3.9
Home health agency	Visit	311.7	231.8	480.6	260.7	335.3
Hospice services	Visit	40.3	54.6	47.4	32.2	43.8
Part B services						
Hospital outpatient clinic	Visit	5.7	5.9	8.7	20.6	21.9
Hospital emergency room	Visit	8.9	8.7	13.5	15.0	16.2
Dialysis treatment	Month	65.6	61.7	99.5	93.8	103.3
Hospital outpatient surgery	Surgical event	1.8	1.7	2.7	3.9	4.4
Ambulatory surgery centers	Surgical event	7.1	6.9	10.7	14.7	15.2
Outpatient rehab services	Visit	40.5	59.1	61.1	107.4	95.9
Physician medical services	Visit	565.3	542.1	860.0	1,058.0	1,112.1
Diagnostic procedures	Procedure	552.6	547.9	833.0	1,060.5	1,137.4
Oxygen equipment	Oxygen units	95.5	61.0	143.3	139.9	108.7

For Medicare Part A services, Table 5.11 shows higher FY1998 use rates for both home health services and hospice services in the demonstration sites compared to the control sites. Use of home health services declined between FY1998 and FY1999 in the demonstration sites, while it increased in the control sites. This is the Medicare Part A service that had the sharpest decline in use rates with movement of beneficiaries into Senior Prime from fee-for-service Medicare.

We see a unique use pattern for hospice care, which increased in FY1999 from the previous year in both the demonstration and control sites. At least part of this increase probably reflects the nature of our sample as a cohort defined as of the end of the fiscal year. Some of the people who used hospice care during FY1998 died before the year ended. Thus they were excluded from our cohort, and their contribution to hospice utilization was not included in that year's numbers. Similarly, some people became terminally ill during FY1999 and turned to hospice for their end-of-life care. Their hospice use, which may be billed to Medicare even for M+C enrollees, was captured in our numbers.

For many of the Medicare Part B service categories, FY1998 rates were lower in the demonstration sites than in the control sites. This difference may be explained by several factors, including higher managed care enrollment rates in the demonstration sites (i.e., fewer people in fee-for-service Medicare), greater use of MTF direct-care services, or differences in local practice patterns. In the demonstration sites, use rates declined for physician/supplier services, dialysis treatment, and oxygen supplies; increased for rehabilitation services; and remained stable for other services. Use rates in the control sites remained stable or increased between the two years for all Part B services except rehabilitation services and oxygen supplies.

Such small shifts in use rates in the demonstration sites reflect the differences in use of fee-for-service Medicare services between beneficiaries who were in Senior Prime for at least a month (enrollees) and those who did not enroll (non-enrollees). Table 5.12 compares the percentages of Senior Prime enrollees and non-enrollees in the demonstration sites who ever used each category of Medicare service during FY1998 and FY1999. Beneficiaries who ultimately enrolled in Senior Prime were less likely than non-enrollees to have used Medicare fee-for-service benefits in FY1998 (before Senior Prime was available). We note that use of fee-for-service Medicare by Senior Prime enrollees in FY1999 represents utilization that took place either before joining Senior Prime or after disenrollment.

For every Medicare service category listed in Table 5.12, beneficiaries who became Senior Prime enrollees were less likely than non-enrollees to ever have used the service in the baseline year of FY1998. With the presence of Senior Prime enrollments in FY1999, percentages of use were yet smaller as enrollees shifted to using MTF services. This was expected because Senior Prime enrollees are locked out of fee-for-service Medicare. By contrast, the percentages of non-enrollees using each Medicare service category remained steady from FY1998 to FY1999.

Table 5.12.
Percentage of Dually Eligible Beneficiaries in Demonstration Sites Who Ever Used Fee-for-Service Medicare, by Senior Prime Enrollees and Non-Enrollees, FY1998 and FY1999

	Percentage of Beneficiaries			
	Enrolled in Senior Prime		Did Not Enroll	
	FY1998	FY1999	FY1998	FY1999
Part A services				
Hospital inpatient services	2.6	1.5	10.2	10.3
Skilled nursing facility	0.7	0.4	2.2	2.0
Home health agency	2.8	1.1	4.5	4.2
Any Part A services	4.8	2.9	11.0	12.3
Part B services				
Institutional outpatient services	13.0	6.0	29.9	30.6
Physician/supplier services	29.5	17.1	45.7	45.3
Durable medical equipment	5.3	2.6	8.4	8.8
Any Part B services	31.6	18.5	46.4	45.8

We also compared the rates of use of Medicare Part A and Part B services by Senior Prime enrollees and non-enrollees, with use rates calculated as the number of units per 100 beneficiaries (again comparing rates for the two denominators of all beneficiaries and fee-for-service beneficiaries). The results were similar to those for probability of use, as shown in Table 5.13. FY1998 use rates by beneficiaries who chose Senior Prime were lower for every service category, and their use rates declined from FY1998 to FY1999 because they were obtaining their care at the MTFs instead of from Medicare. At the same time, non-enrollee use rates increased in FY1999 for some Part B services, most notably for rehabilitation services, physician services, and diagnostic tests. The strong contrast between Senior Prime enrollees and non-enrollees in use of dialysis treatments was expected. Because beneficiaries with end-stage

renal disease (ESRD) are not eligible for Senior Prime, dialysis rates would be very low in both years for those who enrolled in the program. (Some dialysis use by Senior Prime enrollees is expected for patients who need it on an acute basis but who do not have permanent kidney failure.) The increase observed in the second year probably reflects a fraction of Senior Prime enrollees who developed ESRD after joining the plan.

Changes in DoD Service Utilization

In characterizing service use for MTF direct-care services, we examined utilization patterns for dually eligible beneficiaries in all Medicare sectors, all of whom have access to MTF care. During the baseline year of FY1998, access to MTF services was only on a space-available basis (the lowest priority of all DoD beneficiaries). Beginning in FY1999, Senior Prime enrollees were required to obtain their care through the MTFs and had priority access to MTF care. Non-enrollees continued to use space-available care, but access became more difficult as the amount of space-available care diminished because of MTF capacity limits.

Table 5.13.
Annualized Utilization Rates for Fee-for-Service Medicare for Dually Eligible Beneficiaries, by Senior Prime Enrollees and Non-Enrollees, FY1998 and FY1999

		Use Rate per 100 Total Enrolled		Use Rate per 100 Fee-for-Service Beneficiaries		
		in Senior Prime		Enrolled	Did Not Enroll	
	Unit of Service	FY1998	FY1999	FY1998	FY1998	FY1999
Part A services						
Hospital inpatient services	Inpatient stay	3.6	1.8	5.3	21.1	23.7
Long-stay hospital services	Inpatient stay	0.3	0.1	0.5	0.8	0.9
Skilled nursing facility	Inpatient stay	0.9	0.5	1.3	4.3	4.2
Home health agency	Visit	220.1	50.1	341.5	514.5	439.2
Hospice services	Visit	4.4	34.7	4.6	57.8	82.2
Part B services						
Hospital outpatient clinic	Visit	1.6	0.5	2.6	10.2	11.2
Hospital emergency room	Visit	3.7	1.3	5.8	15.4	16.4
Dialysis treatment	Month	1.4	2.6	2.2	123.1	121.8
Hospital outpatient surgery	Surgical event	0.8	0.3	1.3	3.1	3.3
Ambulatory surgery centers	Surgical event	2.9	1.1	4.6	12.2	13.0
Outpatient rehab services	Visit	20.3	14.2	31.1	68.4	110.4
Physician medical services	Visit	207.2	88.1	320.2	991.3	1,060.0
Diagnostic procedures	Procedure	166.5	70.8	255.8	973.4	1,033.6
Oxygen equipment	Oxygen units	74.6	23.5	110.3	151.3	111.7

Use Rates for MTF Inpatient Services. Table 5.14 presents overall annualized use rates of MTF inpatient services by Medicare-eligible beneficiaries in the demonstration and control sites.[3] The average MTF inpatient use rate for FY1998 was higher for the demonstration

[3] All inpatient stays provided by MTFs for beneficiaries in the study population are included in this analysis, including stays at MTFs outside of the demonstration sites in which beneficiaries reside.

sites than for the control sites. Demonstration site MTF inpatient use rates increased from 8.6 inpatient stays per 100 beneficiaries in FY1998 to 9.5 stays in FY1999. At the same time, control site MTF inpatient utilization remained near 6.2 inpatient stays per 100 beneficiaries.

Dually eligible beneficiaries in both the Medicare fee-for-service and M+C sectors can use MTF inpatient services. In FY1998, fee-for-service beneficiaries in both the demonstration and control sites had inpatient use rates higher than those of M+C plan enrollees. In the demonstration sites, fee-for-service beneficiaries used MTF inpatient care at a rate of 9.3 stays per 100 beneficiaries compared to 7.1 stays for M+C plan enrollees (denominators based on beneficiary months in each sector).

Table 5.14.
MTF Inpatient Utilization Rates for the FY1998 Cohort of Dually Eligible Beneficiaries, FY1998 and FY1999

	Annualized Use Rate per 100 Beneficiaries			
	Demonstration Sites		Control Sites	
	FY1998	FY1999	FY1998	FY1999
Total use per 100 beneficiaries				
Inpatient stays	8.6	9.5	6.2	6.1
Inpatient days	39.6	46.4	33.0	34.9
Inpatient stays by Medicare sector				
Senior Prime enrollees	22.5 *	29.4	na **	na **
M+C plan enrollees	7.1	4.1	2.5	2.6
Fee-for-service beneficiaries	9.3	6.3	6.9	6.8

* Utilization by Senior Prime enrollees in FY1998 represents inpatient use during the first month of Senior Prime operation at the Madigan/Region 11 site.

** Not applicable.

With the introduction of Senior Prime in FY1999, the average MTF inpatient use rate for Senior Prime enrollees reached 29.4 stays per 100 beneficiaries. As Senior Prime service use escalated, the use rates for fee-for-service beneficiaries declined by 32 percent and those for M+C plan enrollees declined by 42 percent. At the same time, use rates for these two groups in the control sites remained steady near 2.6 stays and 6.9 stays per 100 beneficiaries, respectively.

Table 5.15 compares use rates for MTF inpatient care for Senior Prime enrollees and non-enrollees at the demonstration sites. As expected, overall FY1998 use rates were higher for enrollees than for non-enrollees, and enrollees' use rates increased from FY1998 to FY1999 while non-enrollees' rates decreased. The individual demonstration sites differed considerably in the extent to which their catchment area beneficiaries used the MTFs for inpatient care before Senior Prime began. Yet within each site, those who ultimately chose Senior Prime consistently had much higher use rates than non-enrollees. The Dover site was an exception. With no inpatient services, patients needing such care had been referred to MTFs in the National Capital Area or to local community hospitals. The observed decrease in MTF utilization for enrollees may reflect the new affiliation of Dover physicians with a community hospital in FY1999.

The effect of Senior Prime on MTF inpatient use rates was lessened by the fact that beneficiaries who eventually chose Senior Prime already used MTF inpatient services more than

non-enrollees. If baseline FY1998 use rates had been similar for Senior Prime enrollees and non-enrollees, we would have observed much larger increases in use rates by enrollees and much larger decreases by non-enrollees. This would have created worse access problems for non-enrollees because many more would have had to switch to other providers as space-available care declined. An important outcome for the MTFs was the net increase in inpatient use resulting from opposing shifts in usage by Senior Prime enrollees and non-enrollees.

Table 5.15.
MTF Inpatient Utilization Rates at Demonstration Sites, by Senior Prime Enrollees and Non-Enrollees, FY1998 and FY1999

Inpatient Use Per 100 Beneficiaries	Annualized Use Rate Per 100 Beneficiaries			
	Enrolled in Senior Prime		Did Not Enroll	
	FY1998	FY1999	FY1998	FY1999
All demonstration sites				
Hospital stays	19.8	27.6	5.8	4.8
Inpatient days	81.2	129.4	29.0	24.3
Inpatient stays by MTF:				
Dover AFB *	8.4	6.7	1.1	1.4
Keesler MC	18.0	26.1	5.3	3.1
Region 6–San Antonio	24.8	33.9	12.1	10.3
Region 6–Texoma	10.1	18.1	2.5	1.3
Colorado Springs	3.8	10.2	1.4	0.6
NMC San Diego	27.1	33.9	3.7	2.8
Madigan AMC	20.2	27.5	6.1	5.7

* Dover AFB does not have inpatient beds. MTF inpatient use reported here is for use of other MTFs, primarily in the National Capital Area.

Outpatient Use Rates. MTF outpatient service utilization is examined in Tables 5.16 and 5.17. The outpatient use rates are estimates rather than actual counts; they reflect adjustments made for undercounts of outpatient activity in the SADRs. We adjusted the counts of SADR encounters by applying SADR/MEPRS completion ratios (refer to Section 2 for a description of the adjustment method used). Table 5.16 shows that total estimated outpatient visits for FY1998 were higher for the demonstration sites than for the control sites. In addition, overall use rates increased for the demonstration sites and declined for the control sites in FY1999.

M+C plan enrollees in the demonstration sites were heavier users of MTF outpatient care during FY1998, compared with those in the control sites, as shown in Table 5.16. In contrast, fee-for-service beneficiaries in the demonstration sites were lower users than those in the control sites. These rates reflect the greater presence of M+C plans in the demonstration sites. Introduction of Senior Prime in FY1999 resulted in the same shift in outpatient utilization for the demonstration sites that we found for inpatient use, with increases in utilization for Senior Prime enrollees (because they obtain all their care from the MTFs or network providers while enrolled), along with decreases in MTF utilization by both fee-for-service and M+C plan enrollees. At the same time, control site use rates and the distribution of outpatient activity by Medicare sector remained about the same in both years.

Table 5.16.
Annualized Rates of MTF Outpatient Service Utilization for the FY1998 Cohort of Dually Eligible Beneficiaries, FY1998 and FY1999

	Demonstration Sites		Control Sites	
	FY1998	FY1999	FY1998	FY1999
Total use per 100 beneficiaries	449	524	392	380
Estimated outpatient visits	515,162	605,186	459,745	447,130
Percentage by Medicare sector				
Senior Prime enrollees	1.1%	63.6%	na *	na *
M+C plan enrollees	28.8	10.3	7.8%	8.0%
Fee-for-service beneficiaries	69.5	26.1	91.8	92.0

NOTE: Outpatient service encounters reported in the ADS data are adjusted using completion ratios based on SADR counts/MEPRS counts.

* Not applicable.

Table 5.17 looks at outpatient utilization for the individual demonstration sites. The table shows the total estimated number of outpatient visits per 100 beneficiaries for each site in FY1998 and FY1999, as well as the percentage of the total visits made by beneficiaries in each Medicare sector. The baseline FY1998 use rates at the sites varied substantially, from a low of 137 visits per 100 beneficiaries in the Colorado Springs site to a high of 793 visits in the San Antonio portion of the Region 6 site. Estimated visit rates increased in FY1999 at all sites except at Dover AFB. Senior Prime enrollees became the dominant users of MTF outpatient care in FY1999, accompanied by reductions in percentage of visits for both the Medicare fee-for-service and M+C sectors. A substantial share of this shift probably was utilization by the same individuals, who changed status when they enrolled in Senior Prime.

The striking contrast in MTF outpatient service use rates between beneficiaries in the demonstration sites who ever enrolled in Senior Prime and those who did not is shown in Table 5.18. The Senior Prime enrollees were the dominant users of MTF outpatient care in all the sites before the demonstration. They used services at higher rates in FY1999, while rates decreased for non-enrollees. These increases in use rates indicate that access to MTF care improved for Senior Prime enrollees, which is consistent with what we have heard from the sites during the process evaluation.

Two sites—Region 6–Texoma and Colorado Springs—stand out with large increases in estimated outpatient use rates. Both sites had noticeably lower FY1998 use rates than the other sites, but rates for both sites increased substantially in FY1999. The Colorado Springs rates may be explained by the fact that the two MTFs at this site were serving only a few Medicare-eligible beneficiaries before the demonstration because of capacity constraints for space-available care. The same may be true for the Region 6–Texoma facilities, although the Silver Care program that Reynolds ACH offered for older beneficiaries should have generated outpatient visits by its members; this may explain the somewhat higher rate for Texoma.

Table 5.17.
Annualized Rates of MTF Outpatient Service Utilization for the FY1998 Cohort of Dually Eligible Beneficiaries, by Demonstration Site, FY1998 and FY1999

Demonstration Site	Estimated Visits Per 100 Beneficiaries	Estimated Visits	Percentage by Medicare Sector		
			Senior Prime	M+C Plan	Fee for Service
FY1998					
Dover AFB	284	10,750	0.0	5.4	94.2
Keesler MC	504	34,970	0.0	0.4	99.3
Region 6–San Antonio	793	256,371	0.0	33.7	66.0
Region 6–Texoma	284	18,906	0.0	0.1	99.3
Colorado Springs	137	18,145	0.0	33.3	66.1
NMC San Diego	285	94,807	0.0	32.2	66.4
Madigan AMC	439	81,212	7.0	30.6	61.8
FY1999					
Dover AFB	231	8,890	49.2	1.5	49.1
Keesler MC	623	43,448	74.4	0.1	25.4
Region 6–San Antonio	934	303,950	65.2	8.7	26.1
Region 6–Texoma	390	26,256	79.1	0.1	20.7
Colorado Springs	245	32,997	71.2	10.7	18.2
NMC San Diego	316	105,378	45.3	19.0	35.7
Madigan AMC	453	84,278	69.0	14.2	16.8

NOTE: Outpatient service encounters reported in the ADS data are adjusted using completion ratios based on SADR counts/MEPRS counts.

Table 5.18.
Annualized Rates of MTF Outpatient Utilization at Demonstration Sites, by Senior Prime Enrollees and Non-Enrollees, FY1998 and FY1999

Outpatient Visits Per 100 Beneficiaries	Enrolled in Senior Prime		Did Not Enroll	
	FY1998	FY1999	FY1998	FY1999
All demonstration sites	1,204	1,772	257	192
Outpatient visits by MTF:				
Dover AFB	838	883	171	92
Keesler MC	1,051	1,502	201	110
Region 6–San Antonio	1,489	2,168	501	391
Region 6–Texoma	780	1,319	114	54
Colorado Springs	291	956	99	61
NMC San Diego	1,405	1,947	176	151
Madigan AMC	1,328	1,735	245	164

NOTE: Outpatient service encounters reported in the ADS data are adjusted using completion ratios based on SADR counts/MEPRS counts.

Utilization of Senior Prime Network Providers. The other service delivery sector for Senior Prime enrollees is the network providers, which are civilian health care providers in the community under contract to TRICARE. These providers are used when the MTFs do not offer

specific services or when problems with access to MTF services arise due to deployments or annual rotations of military personnel. Claims for network provider services are processed and documented in HCSR data, including both inpatient services and outpatient services. We used these data to estimate aggregate costs for network provider services. However, because the number of claims was small and we did not have a good sense of data quality or completeness, we do not present more detailed information on use rates for types of network provider services.

Issues from the Utilization Analysis

The shifts in health care utilization we found in the Medicare and DoD sectors, and relationships among them, are often intricate and difficult to interpret. Furthermore, because services are measured differently in Medicare and DoD data, it is not possible to sum units of service across the two sectors. For example, an outpatient visit to an MTF clinic includes the visit itself as well as associated ancillary services that cannot be measured separately with the data we have. A Medicare claim for an institutional provider clinic visit also may include both the visit and ancillary services, but a Medicare physician visit represents only the office visit. Separate claims for any ancillary services are submitted by the physician or other providers. Because of these data differences, we examined shifts in service utilization separately for the various services covered by Medicare and DoD. Our goal was to provide as rich a picture as possible of the diversity of effects of Senior Prime on service use patterns. Some general patterns emerged from this information, which we summarize here.

The virtual absence of reductions in some Medicare Part A services is consistent with our finding of favorable selection into Senior Prime from the fee-for-service sector. Users of some Part A services tend to have chronic illnesses or health conditions that would discourage them from changing providers to enroll in a new program. These services include hospice care, inpatient and outpatient rehabilitation services, and SNF services. By contrast, we found larger reductions in Medicare Part B services, especially physician services, which are used by beneficiaries with a broader case mix than some of the specialty services.

The outpatient utilization data for the DoD treatment facilities and network providers supply evidence for increased access to care for Senior Prime enrollees and decreased access for dually eligible beneficiaries who did not participate in this program, as well as for other DoD beneficiaries. Access is an issue for MTF outpatient clinics with staffing constraints that limit their ability to take many new patients in addition to an existing caseload. The total number of MTF outpatient visits for dually eligible beneficiaries rose substantially from FY1998 to FY1999, while the share of those visits for non-enrollees declined. To the extent that clinics could not expand services, increases for dually eligible beneficiaries were associated with decreased access to clinic appointments for other DoD beneficiaries who are not Medicare eligible, which according to reports by TMA staff, may include active duty personnel.

Such clinic capacity constraints, along with financial incentives, may be encouraging demonstration MTFs to refer patients to network providers at higher rates than they might otherwise. Under Senior Prime rules, enrollees' primary care managers must be MTF providers, so the MTFs cannot refer enrollees to network providers for primary care. As a consequence, primary care referrals to network providers may have increased for TRICARE Prime enrollees or for TRICARE Extra or Standard beneficiaries. In addition, referrals of Senior Prime enrollees to specialty providers in the networks may be increasing, which could make it more difficult for DoD to manage its health care and costs.

DISCUSSION

Our estimates indicate that the net costs of the Senior Prime demonstration increased total government costs slightly in the first year of operation, and thus did not meet the goal of budget neutrality. These costs were the sums of amounts spent by Medicare and DoD on health care services for the dually eligible beneficiaries in the demonstration sites. Contributing to the net cost increase were a slight net decrease in Medicare costs for care and a substantial increase in DoD costs, as beneficiaries migrated out of fee-for-service Medicare or M+C plans into Senior Prime enrollment. Of interest, those who enrolled in Senior Prime had been much heavier users of MTF care in the baseline year, compared to non-enrollees. The cost effects of the demonstration reflect the underlying changes in service utilization, which we examined in the latter part of this section. These results raise policy issues with respect to the feasibility of managing utilization of MTF services to ensure appropriate care for an elderly population, while managing costs within the constraints of a capitation payment. We address these issues in the last section, and we consider their implications for future DoD and Medicare policy.

Section 6.
Implications for Broader Use of an MTF-Based Option

Senior Prime plans were discontinued on the December 2001 end date for the demonstration. DoD has been considering an alternative MTF-based model for former Senior Prime enrollees and perhaps for other enrollees. Because many findings from the Senior Prime evaluation are relevant for similar managed care models, we assess the implications of our findings with respect to Senior Prime specifically, as well as to other DoD-based models.

As we noted in Section 1, CMS and DoD share a commitment to the welfare of dually eligible beneficiaries and to the pursuit of ways to provide them cost-effective health benefits. Historically, DoD has taken the initiative in identifying and testing new health benefits options for this population. DoD is likely to continue this role in the future because the primary benefits that DoD beneficiaries have been seeking are access to military health care provided by MTFs and DoD coverage of services not covered by Medicare (supplemental insurance coverage).

As we assess the implications of our evaluation findings from the Senior Prime demonstration, we consider the perspectives of both CMS and DoD as collaborators in operating the program. The CMS perspective reflects its obligation to protect the well-being of Medicare beneficiaries and the financial integrity of the Medicare program. For Senior Prime or other DoD programs that would fit within the Medicare structure, the Medicare regulations represent essentially fixed provisions that apply to the larger program, which allow only limited exceptions to meet unique DoD requirements. For example, Senior Prime had to meet the M+C qualification and performance requirements, just like all other M+C health plans. The perspectives of DoD and its beneficiaries will be driving forces in decisions for such options.

In this section, we address three basic questions:

1. How well did Senior Prime meet its goals?
2. Should DoD continue to offer Senior Prime or a similar plan?
3. How should such a plan be designed, and where should it be implemented?

SENIOR PRIME MET ONE OF ITS GOALS

Senior Prime had three basic goals: (1) provide accessible quality care to dually eligible beneficiaries, (2) maintain budget neutrality, and (3) provide cost-effective care. Senior Prime appears to have met the first goal for accessible and quality care, but it did not meet the financial goals.

Provide Accessible Quality Care to Dually Eligible Beneficiaries

There is weak evidence from the evaluation that the demonstration met this goal. At our initial site visits, providers and clinic staff reported that beneficiaries enrolled in Senior Prime were enthusiastic about having improved access to MTF services. The sites also reported that they maintained compliance with the TRICARE access standards for clinic appointments throughout the first year of operation. Our evaluation was not able to address this goal in greater depth, however, because the impact analysis for the second year of the demonstration was not

funded. The analysis of effects on beneficiaries was scheduled for later in the demonstration to allow sufficient time for effects to occur and be captured in DoD survey data.

With respect to quality, the sites applied proactive quality management techniques for care to enrollees in compliance with the Medicare QISMC requirements, including a collaborative approach for disease management of diabetes. The sites reported low rates of grievances and appeals, suggesting that beneficiaries enrolled in Senior Prime were basically satisfied with their care. On the other hand, we found that dually eligible beneficiaries who did not enroll in Senior Prime experienced reduced access to MTF care as MTF capacity for space-available care declined. At the same time, they increased their use of Medicare providers in the community.

The GAO documented similar beneficiary responses from its site visits and beneficiary survey, including survey findings that retirees expressed preferences for military health care, and Senior Prime enrollees reported they could get the care they needed at no extra cost (GAO, 2002). Satisfaction with access and quality of care increased during the demonstration for Senior Prime enrollees but decreased for non-enrollees. However, the GAO survey results suggested that the TRICARE access standards were not met as consistently as reported by the sites.

Maintain Budget Neutrality

Senior Prime did not meet this goal of not increasing the federal government's net costs. Medicare service delivery costs declined by 3.4 percent in the first year of Senior Prime, but DoD net aggregate costs increased by 29.8 percent, with a resulting net increase in government costs. Furthermore, net Medicare savings in the first year were smaller than might be expected because of two opposing trends. Costs for capitation payments declined because payments were eliminated for M+C enrollees who switched to Senior Prime. At the same time costs for fee-for-service Medicare increased for beneficiaries who did not enroll in Senior Prime.

DoD administrative costs for start-up and operation of the Senior Prime sites as M+C plans were also higher than expected. We report these costs separately because they are "high-level" estimates provided by the demonstration sites and DoD that are less precise than the estimated service delivery costs (see Table 5.7). These costs totaled an estimated $41 million, of which $33 million were for MCS contractor services, $3 million were start-up costs for the demonstration sites, and $5 million were first-year costs for the demonstration sites. The size of these estimated costs was 6 percent of the total of $659 million in DoD service delivery costs for FY1999.

Cost-Effectiveness

The demonstration did not appear to meet this goal, based on observed changes in DoD service delivery patterns and costs. DoD costs increased substantially because greater numbers of beneficiaries used MTF care and those beneficiaries had higher per-capita utilization rates than those of dually eligible beneficiaries using space-available care in previous years. The high rates of use for clinic visits suggest that there was overutilization during the first year of the demonstration, although use rates began to decline slowly toward the end of the year. We did not have the data to track continuing trends in use rates, nor could we assess the extent to which the high utilization rates contributed to improved outcomes for enrollees or how declining access to MTF care for non-enrollees affected their outcomes.

The RAND evaluation could not assess this goal directly because it was not designed to perform a formal cost-effectiveness analysis. The evaluation focused on how Senior Prime affected DoD and CMS costs and utilization. Drawing conclusions about cost-effectiveness would require information about costs and outcomes of care for both Senior Prime enrollees and non-enrollees.[1]

SHOULD DoD CONTINUE TO OFFER A PLAN SIMILAR TO SENIOR PRIME?

The possibility of permanently offering Senior Prime or other supplemental insurance options for Medicare-eligible DoD beneficiaries raises basic policy questions for the Congress and DoD: *What is the health care mission of the military health system, and how does serving the older DoD beneficiaries fit into that mission?* There are tensions and trade-offs between the medical readiness mission of the military health system and DoD's obligations to Senior Prime enrollees. Furthermore, substantial clinical care and administrative resources were required to initiate and operate Senior Prime plans. Without increases in MTF budgets, these resources of necessity were taken from other budgeted medical readiness or peacetime health care activities.

It is clear from the evaluation results that it would be costly to DoD, and to a lesser extent to the overall U.S. government, to continue Senior Prime in its current form. Despite the slight savings obtained for Medicare, the first year of Senior Prime increased government costs. Barring substantial changes in service utilization by Senior Prime enrollees, we would expect these cost effects to continue in the second and third years of the demonstration.

At this time, the Congress and DoD appear to have determined that improving health benefits for Medicare-eligible DoD beneficiaries is an important part of the DoD health care mission. If so, the operational and financial lessons from this demonstration can help guide choices regarding which models to use, and they highlight the importance of assessing how each option affects both costs and medical readiness for the military health system.

Effects of Key Features of Senior Prime

In considering whether Senior Prime should be continued in some form, it is important to understand the features and limitations of this model and how they differ from those of other models for enhancing health benefits for Medicare-eligible DoD beneficiaries. As decisions are made on which options to offer, the relative importance of the features of each option should be assessed (along with other criteria).

We illustrate the effects of differences in plan features by comparing the Senior Prime and TRICARE for Life models, as summarized in Table 6.1. Senior Prime was a managed care model in which TMA and the MTFs incurred the full costs for MTF and network provider services provided to enrollees, and Medicare capitation payments were intended to generate new DoD revenues to offset these costs. In addition, the MTFs were to develop new managed care skills that could be transferred to providing care for TRICARE Prime enrollees.

TRICARE for Life provides new fee-for-service benefits for all beneficiaries, regardless of location. Even a fully implemented Senior Prime program could not provide this kind of

[1] Ideally, to assess effects on all potentially affected groups, the same information for other DoD beneficiaries using the MTFs and other Medicare beneficiaries in the service areas should be included in an analysis.

coverage because it is MTF based. TRICARE for Life also controls the extent of DoD financial liability by covering only beneficiary cost sharing and costs of supplemental services not covered by Medicare. However, it is not designed to improve access to MTF care, to generate new revenue to offset costs of additional services, or to strengthen managed care capability.

Table 6.1.
Applicability of Senior Prime and TRICARE for Life to DoD Goals

DoD Goal	Senior Prime	TRICARE for Life
Improve benefits for beneficiaries, supplemental to Medicare benefits	Only for beneficiaries residing in MTF areas	For all Medicare-eligible beneficiaries
Improve access to MTF care	Yes, where offered	Unknown
Generate revenue to cover costs of care	Yes, but not achieved	No
Control size of new DoD costs	Liable for costs of all covered care	Liable for costs not covered by Medicare
Strengthen managed care capability	Yes (managed care)	No (fee-for-service care)

The comparison in Table 6.1 lists the DoD goals and highlights how plan features affect the likelihood that each of these goals can be met. In the discussion below, we draw on our evaluation results to explore how Senior Prime or a similar DoD model might be designed to improve its feasibility. Specifically, we examine Senior Prime performance relative to the distinct sets of principles that guided CMS and DoD in negotiating its design and operation. We note any modifications that would improve the plan's effectiveness and financial viability.

Performance of Senior Prime Relative to CMS Principles

As discussed in Section 1, CMS is responsible for the integrity of the Medicare program, including effective service to beneficiaries for Medicare-covered benefits, timely and appropriate payments to Medicare providers, protection against fraud and abuse, and the financial viability of the program. From the perspective of CMS, the subvention demonstration needed to conform to three basic principles that are important factors for all Medicare policy formation: (1) protect the solvency of the Medicare trust funds, (2) provide for beneficiary choice and protections, and (3) ensure effective plan performance.

The Senior Prime demonstration performed well on all three of these principles because the demonstration was designed to be responsive to them. CMS protected the Medicare trust funds through the capitation payment formula and the baseline LOE provisions, which were structured to maintain budget neutrality for Medicare. This is likely to remain a baseline requirement for any program affecting Medicare spending, given the priority placed on Medicare solvency by the Congress and U.S. public. Freedom of beneficiary choice and beneficiary protections have long been Medicare priorities, as reflected in the rules of the M+C program in which Senior Prime plans were participants. Beneficiary protections are provided through the grievance and appeals processes and compliance monitoring for effective plan performance. As long as Senior Prime plans are certified M+C plans, CMS is likely to require them to meet the standards applicable for all M+C plans, with limited exceptions for issues that clearly are unique to military medicine (e.g., not requiring military physicians to be licensed in the state where they are practicing).

Performance of Senior Prime Relative to DoD Principles

The DoD encouraged authorization of the subvention demonstration to test how well Senior Prime (and Medicare Partners) could achieve three basic DoD goals: (1) contribute to fulfilling the moral obligation to provide military personnel health care for life, (2) maintain budget neutrality in the military health system, and (3) strengthen DoD's capability to provide cost-effective managed care in the TRICARE Prime program. The goal of improving health care coverage for beneficiaries has two components: *improving benefits for beneficiaries* for services not covered by Medicare and *improving access to MTF care*. The goal of budget neutrality was to be achieved by *generating revenue* from Medicare capitation payments for beneficiaries enrolled in Senior Prime that would offset health care cost increases and by *controlling the size of new DoD costs.*

Improve Benefits for Beneficiaries. This principle encompasses the scope of benefits provided by Senior Prime, the costs of these benefits to beneficiaries, and beneficiaries' response to the program. Benefits for Senior Prime enrollees were expanded by enhancing access to MTF care with no cost sharing and by offering additional benefits not covered by Medicare. As discussed above, Senior Prime enrollees appeared to be satisfied with what Senior Prime offered them. Those who did not enroll in Senior Prime did not have those expanded benefits, and they also experienced reduced access to space-available MTF care.

Improve Access to MTF Care. The Senior Prime model increased access to MTF care for enrollees by (1) establishing the participating MTFs as the primary sites of health care for enrollees and (2) giving enrollees priority for clinic appointments at the same level as TRICARE Prime enrollees. This effect is reflected in the large increase in aggregate and per-capita utilization and costs for MTF care. However, as discussed above, we also found that access to space-available care was reduced for other dually eligible beneficiaries.

Generate Revenue to Cover Costs of Care. One of the most informative outcomes of the demonstration was the failure of DoD to obtain capitation payments to offset costs for the incremental volume of care provided to Senior Prime enrollees. Three major factors contributed to this negative result: levels of the capitation rates, the baseline LOE, and the complex payment formula. For 1998, DoD did not retain any capitation payments because the sum of applicable capitation amounts and the costs of care for non-enrollees did not exceed the LOE. DoD did not retain payments for calendar year 1999 either, with payments being cut because of low costs for space-available care by non-enrollees and risk adjustment for positive selection in enrollment.

The Senior Prime capitation rates were set at levels lower than the local M+C rates. The rates were established at a level of 95 percent of the average M+C rates for counties in the MTF service areas, after removing components attributable to medical education and capital costs. In addition, the Senior Prime payments were adjusted for demographic factors and a retrospective adjustment was also applied for selection bias. Thus, only part of the standard M+C prospective risk adjustment method (the demographic factors) was applied to Senior Prime payments. Any changes in these provisions would have to be negotiated between CMS and DoD. It is not likely that CMS would agree to capitation rates higher than the local M+C rates, or to a risk adjustment method that treated DoD plans more favorably than the standard Medicare risk adjustment method.

The baseline LOE was the level of aggregate spending that DoD had to reach before capitation payments would begin to be credited for Senior Prime care. The LOE was determined

using cost estimates based on 1996 service activity. However, between 1996 and the start of Senior Prime, DoD made numerous changes in the amount and mix of services provided to dually eligible beneficiaries. Some MTFs reduced or eliminated inpatient capacity and reconfigured their outpatient services. For example, Dover AFB closed its inpatient service effective 1998, and Brooke AMC opened a completely new hospital building in 1997. Furthermore, the new TRICARE Prime program was being phased in by region during the years following 1996. The amount of space-available care the MTFs were able to provide declined as TRICARE Prime enrollments grew, while service capacity remained fixed. As a result, the baseline LOE was holding DoD accountable for a higher level of space-available care for dually eligible beneficiaries than what probably was being provided by 1998, the year immediately preceding the start of Senior Prime.

If Senior Prime were continued as a certified M+C plan, it is almost certain that DoD would be expected to continue to finance its historical level of health care for dually eligible beneficiaries, as measured by the LOE. To establish a more relevant LOE, the baseline year would need to be updated and the methodology for calculating DoD's LOE obligation should be adjusted for changes in MTF service mix over time.

Another factor that may have influenced revenue was the sheer complexity of the payment formula, provisions for interim payments, and rules for determining whether capitation payments will be made. In addition to being difficult for participants to understand, this multiplicity of rules offered opportunities for perverse payment outcomes. For example, the rules included thresholds that defined limits for the share of DoD costs attributable to Senior Prime enrollees and to non-enrollees receiving space-available care. Although the thresholds turned out not to be constraining factors in determining payment eligibility or amounts, their existence created some confusion and inappropriate financial incentives.

Control the Size of New DoD Costs. As discussed above, the substantial increase in DoD health care costs in the first year of Senior Prime was due to a combination of increased numbers of MTF users and increased use rates for those users. Much of the increased use stemmed from initial evaluation visits, which all M+C plans are required to provide for new enrollees. Furthermore, the sites reported that these patient evaluations identified health problems requiring follow-up care more frequently than expected, which further increased visit rates. The monthly rates of DoD outpatient visits shown in Figure 5.1 reflect these early events in the operation of each site; use was slightly reduced during the later part of the year.

The Senior Prime sites recognized the importance of effective UM, which they pursued to achieve more cost-effective levels of care. However, they were not uniformly successful in managing care during the first year of the demonstration. Barriers they identified included

- problems coordinating UM activities performed by the MTFs and the MCS contractors
- ineffective UM provisions in some MCS contracts that took a long time to change
- MTF staffing levels and mix that were fixed by annual budgets
- lack of financial incentives to encourage effective management of care
- confusion regarding how reducing utilization would affect payments under the complex threshold provisions of the payment formula.

The financial incentive and payment formula issues may have contributed to increased utilization because the site teams reported that they left these financial issues to others and focused on providing high-quality care for enrollees. At the same time, MTF commanders reported that they were very concerned about the escalation of service delivery costs, but they lacked the authority to overcome the barriers and adjust the resources required.

Strengthen Managed Care Capability. The demonstration sites appear to have achieved improved capability in managed care techniques as a result of Senior Prime. Two factors seem to have driven this effect. First, the presence of an external CMS oversight function through the M+C contracts gave sites an incentive to implement new procedures to comply with Medicare requirements. The sites speculated that, without this oversight, they might have made slower progress in such areas as quality assurance initiatives and care management. Second, all the sites reported they had begun to transfer several of the new procedures required by Medicare for use in TRICARE Prime. Most of these were techniques for managing care. Although many improvements were accomplished at participating MTFs, some were also made by the MCS contractors because the Senior Prime plans were operating partnerships that included those led by the lead agent offices, MTFs, and MCS contractors.[2]

Balancing Interactions Between the Readiness Mission and Senior Prime

The relationship between Senior Prime and the military readiness mission is a key consideration in determining options for serving dually eligible beneficiaries. This relationship is also quite complex to assess. The MTF roles in the readiness mission are at the heart of military medicine, but under contracts with Medicare to run the Senior Prime plans, the MTFs are equally obligated to their Senior Prime enrollees. Senior Prime shares finite resources with MTF functions geared to medical readiness and support of deployments. In assessing the interactions between Senior Prime and the readiness-related activities of the demonstration sites, we examined possible DoD gains or losses on readiness issues as well as possible effects of readiness activities and deployments on health care services to Senior Prime enrollees.

Issues to Address. Four issues need to be considered when examining the relationship between Senior Prime and military readiness: (1) recruitment and retention of military clinical personnel, (2) training and sustaining wartime medical skills, (3) readiness for and management of deployments by both line and medical military personnel, and (4) the annual rotations that contribute to readiness by forging a unified military resource.

Recruitment and Retention. Historically, the three military services have viewed serving the senior population as enhancing recruitment and retention of military physicians. Military physicians like treating this population because their complex health care needs allow physicians to use their clinical skills fully. The readiness contribution of the senior population may be especially useful for Air Force MTFs, the majority of which are small clinics in relatively remote areas. Many of the Air Force physicians assigned to these clinics are fresh from their medical training. They want to reinforce their new skills by practicing in an environment in which they encounter a wide range of medical conditions. Therefore, having access to the Senior Prime population at an outpatient clinic such as at Dover Air Force Base may contribute substantially to

[2] As described in Section 1, each TRICARE region is commanded by a lead agent, and each military service has designated responsibility for managing some of the regions. The Senior Prime plans are operated out of the lead agent offices.

retention of physicians. It may be less important to have Senior Prime at Army and Navy facilities with only outpatient services, because both services have a mix of large medical centers, smaller community hospitals, and outpatient clinics through which physicians rotate.

Training and Sustaining Wartime Clinical Skills. All three military services cite the elderly population as vital to their training programs and continuing GME programs. In our site visits, both primary care and specialty physicians asserted the importance of the elderly, more complex patients such as Senior Prime enrollees in contributing to their ability to maintain clinical skills. This patient base had been eroding, however, with declining space-available care at the MTFs. This point is underscored by the fact that, before Senior Prime began, many of the demonstration sites already had impaneled a group of seniors or were providing care to military retirees on a space-available basis. Sites also reported that primary care residents treating Senior Prime enrollees learned to manage the continuity of primary and specialty care for an older population, rather than the more episodic care that is typical of the traditional medical education model. Some subspecialty programs at the sites viewed a large patient population of elderly beneficiaries as being essential for sustaining their training programs. In a few facilities, however, some of the specialty clinics had difficulty finding patients with health problems among the Senior Prime enrollees because they had less flexibility to select patients based on health status, which they could do with space-available patients.

Readiness for and Management of Deployments. On the negative side, establishing a contractual obligation to serve the Senior Prime population, including compliance with access standards and other requirements, may compete with the MTFs' responsibilities for readiness and deployments. When the supply of providers was reduced by deployments or otherwise occupied preparing troops for deployment, the MTFs had to find other ways to continue responsive service to Senior Prime enrollees. We also observed some discordance between how medical units are organized for contingency operations and the peacetime medical mission of the facility. For example, when medical units are deployed to support units that are not part of the MTFs' base population, medical personnel may be lost to the MTFs without accompanying reduction in the size of the base population. The sites used a variety of techniques to compensate for those losses, including planned backfill personnel, resource sharing providers, call-up of reserve providers, and network providers—all of which involve new costs.

At the same time, the demonstration sites reported that growth in Senior Prime service use may have strained the capacity of participating MTFs to serve their military personnel. The sites had to absorb the increased use of MTF services by Senior Prime enrollees within fixed budgets, so growth in Senior Prime activity reportedly led to a shortage of services for other beneficiaries, including some active duty personnel. This difficult situation could become worse if large deployments arose that placed the needs of active duty personnel and Senior Prime enrollees in more direct opposition.

Annual Rotations of Military Personnel. Rotations inevitably had negative effects on access to care for Senior Prime enrollees each summer when some primary care providers left their enrollees, provider supply was temporarily reduced, and newly arrived providers became oriented to the MTF and acquainted with their new patients. The sites reportedly managed the rotations for the summer of 1999 effectively by applying the same backup resources used to cover for deployments losses (listed above). They reported that the access standards for Senior Prime enrollees were generally met, but the costs for temporary personnel increased.

Policy Options. Military retirees using MTFs have demonstrated a strong loyalty to the military services, and many enrolled in the Senior Prime program recognized that the job of military physicians involves periodic rotations and may require them to deploy occasionally. The demonstration sites explored several policy options to help manage the potential conflict between the readiness mission of the MTFs and their obligations to Senior Prime enrollees. Such strategies would be relevant for any program for dually eligible beneficiaries that involves direct-care services by MTFs.

Maintain Flexibility in the System. Recent declines in the size of the medical force reduced the amount of redundancy in the system that would allow for flexibility to respond to deployments or annual rotations, and the temporary nature of these events has made it difficult to find other effective mechanisms. The available options share problems of higher costs than MTF care and a limited ability to respond quickly to changing demands. They include

- referring Senior Prime enrollees to civilian networks
- using reservists to backfill MTFs that have lost deployed medical personnel
- resource sharing agreements to utilize civilian providers where savings are shared with the managed care support contractor[3]
- resource support where the MTF pays for requested services up front.

The last two options, by their very definition, share several problems. Many civilian physicians are unwilling to participate for such short periods of time and on such an unpredictable basis. It also takes time to identify candidate providers, negotiate agreements, and get physicians credentialed and familiar enough with the MTF and its policies and procedures to be useful. These issues are especially difficult in markets where physicians are in high demand, or where civilian providers may view managed care negatively.

Ensuring the Correct Mix of Skills. It has not yet been determined whether the mix of clinical skills needed to sustain readiness matches the set of skills required to provide care to Senior Prime patients. Some have argued that many of the skills necessary for the wartime mission cannot be gained in peacetime care for the elderly (e.g., major trauma). Conversely, some of the specialty skills needed to care for Senior Prime enrollees (e.g., geriatric pharmacist) are not relevant to military medicine so they should be outsourced and not be provided by MTFs. This policy issue needs serious and sustained attention.

SEEKING A FEASIBLE DoD MANAGED CARE OPTION

Design Issues

Senior Prime met all the CMS principles with respect to the Medicare program; it also met the DoD principles of improving benefits for some dually eligible beneficiaries and helping to strengthen the TRICARE managed care capability. However, despite these positive results, its

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[3] In *resource sharing*, the MCS contractor provides staffing, supplies, or other resources that allow work to be done in the MTF. The contractor gets credit for the workload, and savings are shared between the government and contractor during bid price adjustment. In *resource support,* the MCS contractor provides staff for cost plus a management fee, serving as a form of contracting officer with less federal contracting burdens. The MTF pays for requested services as they are provided.

failure to achieve budget neutrality for DoD suggests that Senior Prime, as designed for the demonstration, is a costly option for enhancing health care coverage for dually eligible beneficiaries. We summarize in Table 6.2 the factors that contributed to this poor outcome and suggest changes that might be made to improve performance. We consider possible changes for both a modified Senior Prime model (Medicare certified) and for a DoD managed care plan model that does not involve Medicare.

Table 6.2.
Comparison of Senior Prime Performance Issues for a Modified Senior Prime and Similar DoD Plans Not Certified as Medicare+Choice Plans

Senior Prime Performance Issues	Status in a Modified Senior Prime	Other Form of DoD Managed Care Plan	
		Does Issue Apply?	Comments
Limited DoD revenue			
Medicare capitation formula	Revise closer to M+C rate	No	No capitation to offset new costs for a DoD-only plan
Baseline level of effort	Update	No	Not relevant
Payment formula rules	Simplify	No	Not relevant
Escalation of DoD's net costs			
Increased MTF enrollments	Limit sites and # of enrollments	Yes	MTFs serve enrollees; can limit sites and enrollments
High utilization rates	Strengthen management of care	Yes	Can decide on use of initial evaluations; should strengthen management of care
MCS contractor services	Use fixed price contract	Depends on design	Depends on use of network providers; less administration
Administrative burden & costs			
M+C plan qualification and start-up	Rules remain; lower burden w/ experience	Yes	Start-up costs will occur but no costs for M+C application and certification process
Medicare compliance process	Same	No	Only internal compliance rules
Data system duplication	Same	Depends on design	No interface with Medicare enrollment data system; perhaps with MCS contractors

NOTE: MCP is managed care program.

We discuss each performance issue briefly below. Note that the issues are stated from the perspective of DoD implementation because DoD would probably take the lead in choosing between a modified Senior Prime and a DoD-only plan. CMS policies would need to be considered as well for a plan that was Medicare certified.

Limited DoD Revenue. Only a Medicare-certified managed care plan would give DoD the opportunity for revenues to offset health care costs. All the design elements affecting revenue could be revised to some extent to enhance DoD's potential to obtain revenue under such a plan, subject to CMS policies designed to protect the Medicare program. In our opinion,

the increase in revenue that could be achieved by such revisions would not be sufficient to offset the large incremental DoD costs of care that occurred for plan enrollees under Senior Prime.

Escalation of DoD's Costs of Care. We believe this is the single most important issue to be addressed in either a modified Senior Prime or a DoD-only managed care plan. If the MTFs' care management capabilities are not strengthened, DoD would have high costs for any MTF-based model. The costs of care are driven by both the number of beneficiaries and their use rates, and explicit actions would need to be taken to address both factors. Limiting either the number of sites or total enrollments could control the number of participating beneficiaries. Ways to monitor use and quality of care for enrollees could include the following actions:

- Integrating consistent performance standards into health care delivery processes for key health conditions across the MTFs and network providers.
- Proactive case management for enrollees with chronic health conditions, multiple morbidities, or episodes of severe or costly illness.
- Focused pre-authorization and review activities to improve service components that have been identified as problem areas for inappropriate utilization.
- Management of the structural issues the sites identified as barriers to their progress in strengthening care management processes.
- Updating MCS contract provisions to ensure that contractors are using the most effective care management techniques and are collaborating with the MTFs.
- Consistent quality and utilization monitoring across the Senior Prime sites (or programs in the future) with feedback reported regularly to providers, including attention to levels of costs relative to those required for payments under any LOE requirements.

Administrative Burden and Costs. Given the M+C regulations, most of the administrative costs experienced in the demonstration would continue in any modified Senior Prime that was Medicare certified. These costs include staff time to prepare applications, implement enrollment and start-up, and document performance compliance, all of which are an integral part of being a M+C plan. If the current Senior Prime structure were continued, the LA offices, MTFs, and MCS contractors would have to spend time coordinating activities. Based on estimates of the Senior Prime administrative costs prepared by the sites and TMA, we have concluded that these costs would be measurably lower for a DoD-only plan because none of the activities required for M+C plans would be applicable, and the plan administrative structures could be simplified. Existing MTF care delivery provisions, e.g., quality management, would support care for all patients, including dually eligible beneficiaries enrolled in the DoD managed care plan.

It is difficult to assess how MCS contractor costs might change under a modified Senior Prime plan or a DoD-only plan. Some of the contractor costs incurred during the demonstration reflected the newness of the program and would not occur in an ongoing program. Contractors participated with TMA in defining the detailed scope of work that is documented in Chapter 20 of the *TRICARE Operations Manual*, and they also worked closely with the LA offices and MTFs in developing the many enrollment and service delivery procedures involved in Senior Prime. Recognizing the many uncertainties involved, TMA paid the contractors on a cost-plus basis for the demonstration. To the extent that MCS contractors have a role in a future managed

care plan for dually eligible beneficiaries, fixed-price contracts should be established for those services, and DoD might consider provisions to share some of the risk with the MCS contractors.

Geographic Scope of a Managed Care Model

If DoD decides to continue to offer an MTF-based managed care option for dually eligible beneficiaries, choices will also need to be made regarding the geographic scale of the program. Two basic choices are available: (1) continue to offer a managed care model in the six sites that participated in the subvention demonstration or (2) expand the program to enhance access to this model by including additional MTFs. We have learned from the evaluation that either option would involve some challenges, which we discuss below.

Continue to Offer a Managed Care Plan at the Demonstration Sites. Several of the demonstration sites expressed caution regarding the extent to which the program could be expanded in the existing facilities. The sites believe that a permanent program would create additional enrollment demand by beneficiaries who had been reluctant to sign up for the demonstration because it was temporary. The Madigan and the Region 6–San Antonio MTFs, for example, already have people on their Senior Prime waiting lists. Three possible constraints to expanding the Senior Prime model need to be considered: (1) the capacity of primary care clinics to serve additional patients, (2) the capacity of current MTF budgets to provide the administrative staff support, and (3) the ability to expand the number of network providers. Several site teams suggested that the policy of limiting PCMs to military providers needs to be reconsidered. The capacity limits of MTF clinics could be accommodated at some sites if enrollees could use network providers as PCMs, similar to TRICARE Prime. An assessment of such an approach should consider potential effects on the ability to manage care effectively.

Expand the Program to Additional Sites. If DoD decided to expand the program, it would need to choose the most feasible locations. Factors that should be considered include the size of the local dually eligible population, characteristics of the Medicare managed care market, and features of the MTFs that are candidates for participation. Choices regarding governance structure would also need to be made.

Population. Geographic areas with large populations of dually eligible beneficiaries would be attractive candidates for an expanded managed care model because they would offer some economies of scale for enrollment and administrative costs. Table 6.3 shows the number and percentage of Medicare and dually eligible beneficiaries for the top 15 states in 1998, sorted by the size of the dually eligible populations. Overall, the dually eligible beneficiaries represented about 3 percent of the total Medicare population. The 15 states in Table 6.3 represented 54 percent of all Medicare beneficiaries (21,243,000 people) and 69 percent of all dually eligible beneficiaries (890,000 people). Large numbers of both Medicare and dually eligible beneficiaries resided in the states of California, Florida, and Texas. These three states alone included about 23 percent of all Medicare beneficiaries (8,870,000 people) and about 34 percent of all dually eligible beneficiaries (442,000 people).

Despite the concentrations of both Medicare and dually eligible beneficiaries in the top three states, the distribution of the dually eligible population across other states differs from the distribution of the overall Medicare population. For example, New York had a large percentage of Medicare beneficiaries and is ranked third nationally, but it ranks fifteenth based on the size of its dually eligible beneficiary population. Some of this observed distribution can be attributed to

the desire of dually eligible beneficiaries to locate near military facilities to maximize retirement benefits. In some of the states with a large dually eligible population, such as California, MTFs have been affected by base realignments and closures.

Table 6.3.
Top 15 States Sorted by Dually Eligible Population, 1998

	Number of Beneficiaries		Percentage Distribution of Beneficiaries	
State	All Medicare	Dually Eligible Population	Medicare Beneficiaries	Dually Eligible Population
California	3,816,000	179,000	9.7%	13.8%
Florida	2,802,000	147,000	7.1	11.3
Texas	2,252,000	116,000	5.7	9.0
Virginia	877,000	72,000	2.2	5.5
Georgia	911,000	47,000	2.3	3.6
Washington	737,000	42,000	1.9	3.3
North Carolina	1,123,000	41,000	2.9	3.2
Arizona	661,000	39,000	1.7	3.0
Alabama	688,000	34,000	1.7	2.6
South Carolina	562,000	34,000	1.4	2.6
Pennsylvania	2,131,000	33,000	5.4	2.5
Colorado	463,000	30,000	1.2	2.3
Maryland	643,000	26,000	1.6	2.0
Tennessee	830,000	26,000	2.1	2.0
New York	2,748,000	24,000	7.0	1.9
Other states	18,148,000	409,000	46.1	31.5
Total	39,390,000	1,299,000	100.0	100.0

SOURCE: Medicare Quarterly Enrollment Files, September 1998; enrollment data prepared for the evaluation.

NOTE: Numbers are rounded.

Facility Resource Capability and Efficiency. The characteristics of the MTFs and Medicare markets that should be considered in defining the program scope are summarized in Table 6.4. Our process evaluation findings indicated that medical centers or community hospitals with a balanced mix of primary care and specialty care were able to move into Senior Prime most easily and quickly. Larger medical centers with the depth of clinical specialty capability to serve most health care needs may save money by avoiding referrals to network providers (if their costs are lower than the prices paid to network providers), but unless they already have an experienced primary care management function under TRICARE Prime, they may have more trouble gearing up for Senior Prime than other facilities.

An MTF's ability to deliver services efficiently and cost-effectively would also influence its success in a managed care program. MTFs cannot be compared directly to civilian facilities because of their unique military mission and the federal budget structure. MTFs are required to maintain inpatient capability, even with low census, in order to support military missions. At the same time, MTF clinical and administrative staff also have military obligations that place demands on their time and often take them away from the MTF. Furthermore, the DoD

budgeting and resource allocation system constrains MTF flexibility to adjust clinical staffing upward or downward in response to changes in patient care activity. All of these factors compromise the ability of MTFs to manage costs that are considered variable in the private health care sector.

Table 6.4.
MTF and Market Characteristics to Consider in Selecting Plan Locations

Characteristics	Considerations
Military / medical treatment facility	
Mix of primary care, specialty, and inpatient care capability	MTF service mix influences its ability to manage care as well as the extent of use of network providers.
Production efficiency	Efficient MTFs (using per-unit costs of care) have potential to be the best financial performers.
Readiness and deployment	Readiness experience and retention for small outpatient MTFs; for MTFs with heavy deployments, Senior Prime services may suffer.
Medical education programs	Care for Senior Prime enrollees may strengthen medical education programs, contributing to readiness.
Local market	
Supply of community providers	It is easier to recruit network providers in communities with a rich provider supply.
Size of eligible population	Can get economies of scale for administrative costs where population size yields large enrollments per unit of cost.
Presence of managed care	In managed care markets, both enrollees and providers understand managed care and are more willing to participate in Senior Prime.
Medicare capitation rates	Capitation rates are the plan revenues, so it is desirable to locate where rates are high.

To assess an MTF's capabilities and efficiency, the DoD should examine both its average and incremental costs of health care. The average costs include both controllable (variable) costs and allocated fixed overhead costs. The incremental costs (which approximate marginal costs) include only the controllable costs that are directly associated with health care services. When making siting decisions, incremental cost is the preferred measure of an MTF's efficiency. However, MTFs that cannot "staff up" for additional workload would have to reduce services for other beneficiaries as they began to provide services for new Senior Prime enrollees. The average unit cost should also be examined as a measure of efficiency for these facilities, which cannot take advantage of increased service volume to spread overhead costs.

To gain insight into this factor, we examined measures from the MTF financial data (MEPRS data) on MTF workload and average costs for inpatient and outpatient services. The first measure is the facility's average cost per inpatient day of care. (We did not have data on incremental costs.) Table 6.5 displays these costs for several inpatient wards, categorized by facility size as measured by average daily inpatient census. MTFs with low daily census have high average operating costs for their inpatient units, and per-diem costs are especially high for the smallest inpatient facilities, reflecting the relatively high share of costs represented by fixed

overhead costs. For each type of inpatient unit, cost per occupied bed day declines with an increase in average daily census, as variable costs grow with service volume. For some services, average costs are lowest for MTFs with census of 30 to 60 patients, and the costs are somewhat higher for larger MTFs. More than 40 percent of all MTFs have a daily census of ten or fewer patients.

Table 6.5.
Estimated Average Per-Diem Cost for Selected Types of MTF Inpatient Wards, FY1998

		Average Cost Per Inpatient Day (excludes direct costs of surgical procedures)					
Category	Percentage of MTFs	All Wards	Family Practice	Internal Medicine	Medical Specialties	General Surgery	Surgery Specialties
All MTFs	N = 100	1,472	1,599	1,591	1,448	1,622	1,584
Daily census							
1–5	22	2,732	2,880	2,773	2,989	2,969	3,496
6–10	20	2,168	2,308	2,400	2,202	2,708	2,279
11–20	13	1,770	1,655	2,112	1,976	1,741	1,892
21–30	9	1,489	1,403	1,982	1,516	1,508	1,521
31–40	7	1,492	1,950	1,970	1,140	1,556	1,579
41–60	9	1,273	1,349	1,535	1,338	1,322	1,247
61–220	11	1,381	1,092	1,500	1,512	1,447	1,480
> 220	9	1,468	1,087	1,491	1,437	1,603	1,536

SOURCE: Analysis of MEPRS data for military treatment facilities.

The second MTF workload measure is the average cost per outpatient visit. Table 6.6 displays this cost categorized by volume of daily visits. The average cost per outpatient visit follows a pattern similar to that of inpatient cost, in that costs per visit are lower for clinics with higher levels of outpatient activity. Yet this relationship varies by clinic type. As shown in Table 6.6, a facility's mix of clinics will influence its overall cost of care provided, with the surgical clinics costing more per visit.

Market. Senior Prime plans and MTFs have competed for enrollments and service delivery with other M+C plans in their markets, and that competition would continue for a modified program even if the plans were not Medicare certified. The extent of Medicare managed care penetration in the local market is an indicator not only of the nature of potential competition but also of the familiarity of the local population with managed care. A market with a high managed care presence (>15%) equates to more competition for the MTF in the market, but it also means that enrollees and providers are aware of and understand managed care. Across the markets served by 68 MTFs, the percentage of Medicare beneficiaries enrolled in a M+C plan as of January 2000 varied from 0 percent to close to 50 percent, and the number of competing plans ranged from 0 to 20 plans (Farley et al., 2000).

Table 6.6.
Estimated Average Cost Per Visit for Selected Types of MTF Outpatient Clinics, FY1998

Category	Percentage of MTFs	Average Cost Per Outpatient Visit: All Clinics	Family Practice	Internal Medicine	Medical Specialties	General Surgery	Surgery Specialties
All MTFs	N = 152	137	117	171	154	371	237
Visits per day							
1–100	7.9	207	189	196	71	448	429
101–200	15.1	152	148	226	138	299	372
201–300	21.1	159	137	195	150	438	354
301–400	12.5	135	140	137	102	370	254
401–500	13.2	139	116	194	120	346	234
601–700	10.5	121	111	172	101	304	231
> 700	19.7	135	98	166	164	385	234

SOURCE: Analysis of MEPRS data for military treatment facilities.

The local Medicare capitation rates, which are the basis for Senior Prime payment rates, will strongly affect the financial viability of Senior Prime in each market. MTFs in areas with low capitation rates would have trouble achieving budget neutrality regardless of how efficiently they delivered health care services.

Table 6.7 displays the national range of Medicare capitation rates for calendar year 2000. Rates ranged from a low of $402, which was the payment floor, to a high of $814 in Richmond County, New York. The majority of the county rates are in the $401–$450 category.

Table 6.7.
Distribution of U.S. Counties by the Level of Medicare Capitation Rates for Calendar Year 2000

Payment Category ($)	Counties by 2000 Capitation Rate: Frequency	Percentage
401–450	1,885	59.9
451–500	736	23.4
501–550	308	9.8
551–600	134	4.3
601–650	48	1.5
651–700	23	0.7
More than 700	13	0.4

SOURCE: Medicare book of M+C payment rates, January 2000.

By comparison, data for MTF service areas indicate an average capitation rate of $485, with a range from $402 to $640. The distribution of MTF service areas by level of capitation rate is shown in Figure 6.1. Most of the MTF areas have average Medicare capitation rates in the range between $401 and $500. Three MTFs located in areas with the minimum capitation rate of

$402 are Holloman AFB, New Mexico; Mountain Home AFB, Idaho; and Grand Forks AFB, North Dakota. The highest capitation rate of $640 is at Edwards AFB, California.

Readiness. As discussed above, several factors affected how Senior Prime interacted with the readiness mission at any given MTF. One positive contribution to readiness that the demonstration sites reported was the good case mix that enhanced training and skills maintenance for providers and clinical support personnel. We were able to identify MTFs with family practice and physician assistant training programs that could benefit from working with this population. For a comprehensive assessment, other training programs (e.g., internal medicine or nurse practitioner programs) should be identified that could give clinicians a richer educational experience by working with an elderly population.

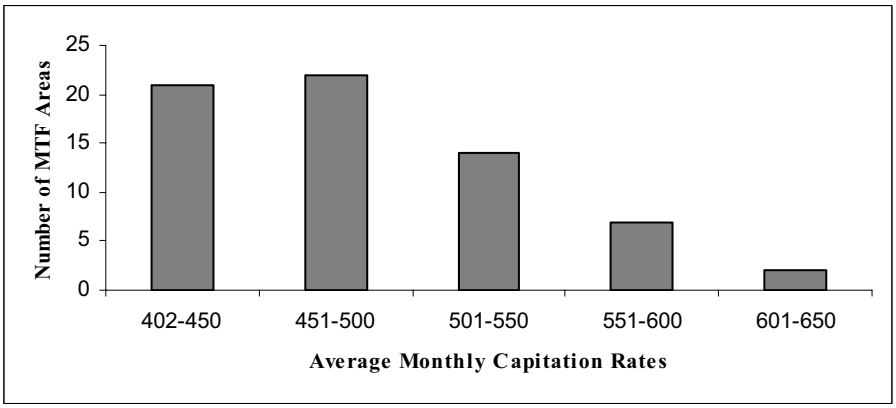

Figure 6.1—Average Capitation Rates for Catchment Areas of Military Treatment Facilities in the Continental United States

Governance and Management Structure

The subvention demonstration was structured as part of the TRICARE regional structure, which was a reasonable organizational choice for Senior Prime plans. The regional LA offices in the demonstration sites generally performed well in leadership roles that expanded upon their traditional TRICARE roles of coordination and facilitation among the three participating organizations: LA office, MTF, and MCS contractor. However, initiating and operating a Senior Prime plan with more than one MTF, while maintaining responsiveness to CMS's external oversight function, could be burdensome. For example, the Region 6 demonstration site managed well in the absence of LA office line authority over the MTFs, but the LA staff reported that this success required a great deal of their time to stimulate and coordinate activities among the participants. This issue may make it much more difficult to manage a Senior Prime plan with many MTFs.

Two (opposing) alternatives for a permanent program would be to (1) integrate regional managed care plans into the TRICARE regional governance and management organization or (2) establish a separate plan for every local market area. A regional approach would extend the structure established for the Senior Prime governing boards within the TRICARE structure. If the program were expanded, organizing the plans by region would offer more efficient management than other options by spreading overhead across larger enrollments. If DoD

decided to continue Medicare participation, this approach would also avoid duplication of Medicare certification and compliance processes across multiple individual plans.

The heavy reliance on contractors to perform many of the administrative and financial functions of Senior Prime plans stimulated some concern by the CMS regional offices because contracts are vulnerable to non-performance and are more difficult to oversee than an organization's own staff. Although the military has a long history of working with contractors, it would be appropriate to reexamine and test in some detail the functions specified for contractors to ensure that contracts can be managed effectively and at reasonable costs.

CONCLUSION

The Medicare-DoD Subvention Demonstration tested Senior Prime as a managed care approach for enhancing access to affordable health care for Medicare-eligible DoD beneficiaries. While Senior Prime achieved solid beneficiary participation and satisfaction, it also raised a difficult set of challenges involved in applying managed care to the DoD health care system. These challenges included financial issues such as establishing equitable capitation rates and an appropriate level-of-effort baseline, as well as management issues such as effective care management and administrative processes for health plan sites. The basic structures of TRICARE and the DoD health system, including separate management jurisdictions and hierarchical budgeting methods, contribute to the challenges by creating incentives that discourage delivery of cost-effective care. MTFs need to be motivated not only to provide excellent care but also to manage appropriateness of care and related costs. Although DoD has decided to discontinue the Senior Prime model, many of the lessons learned from this demonstration are applicable to any managed care program that DoD may contemplate in the future.

Appendix A.
RAND Process Evaluation Questions for Initial Site Visits

Date: January–May 1999

QUESTIONS ABOUT SENIOR PRIME

Overall Strategy for Implementation

What are the goals and overall strategies of this site for Senior Prime? Have they changed since the early phases of planning?

What types of decisions is the site making individually in designing its Senior Prime program?

What Senior Prime design decisions have the sites made collectively?

If the sites are making collective design decisions, for what types of decisions have they found this approach to be useful?

Which individuals at the site actually did the planning for Senior Prime? What were their respective roles?

In your view, what major decisions by DoD or CMS have driven the implementation process?

Which decisions have been made by DoD or CMS and which have been made locally by the sites?

When designing the Senior Prime program, what views were sought or received from

- retiree organizations or beneficiaries
- MTF physicians and other staff?

How are the sites communicating and working with each other in addition to the regular meetings of the sites' representatives?

How have the experiences of the sites that implemented Senior Prime enrollment earliest been influencing the implementation strategies of other sites?

How is the site's early experience confirming or modifying implementation strategies?

What features do the sites see as unique to their catchment area and mission that need to be taken into account if Senior Prime were implemented systemwide?

Initial Views of the Sites

What factors were initially thought to most strongly influence decisions by dually eligible beneficiaries regarding Senior Prime enrollment and service utilization? What are your views now?

How was Senior Prime expected to affect patient satisfaction for dually eligible beneficiaries and non–dually eligible beneficiaries? What are your views now?

What benefits was Senior Prime expected to provide the MTF? What are your views now?

What concerns were there about the potential impact of Senior Prime on the ability of MTFs to serve non–dually eligible beneficiaries, and the potential impact on access to care and patient satisfaction? What are your views now?

What effect was Senior Prime expected to have on the MTF's service delivery or overhead costs? What are your views now?

What were views initially about the effect of Senior Prime on the MTF's overall readiness mission? What are your views now?

Compliance with CMS Contractual Requirements

How did the lead agent, MTF, and TRICARE contractor coordinate their respective roles in development of mechanisms to achieve compliance with CMS requirements?

What actions were undertaken to meet the conditions for participation required for Medicare health plans?

What effects did the actions taken for Medicare compliance have on other aspects of the sites' operations or health care delivery processes?

Which issues or challenges involved in qualifying as a Medicare health plan were shared by all the sites, and which were unique to individual sites?

What other issues arose during the Medicare health plan application process and how were they resolved?

Management Structure and Roles

What factors were considered in deciding the management structure for the Senior Prime program?

How are the lead agent, MTF, and TRICARE contractor coordinating their respective roles in Senior Prime management?

How have management roles changed since preparing the Senior Prime application? Why were changes made, if any?

How do the organizations work together to resolve problems that arise?

How has the MTF approached building a managed care team? How is Senior Prime integrated into other TRICARE managed care activity?

For early experiences, what aspects of Senior Prime management are

- working especially well
- presenting challenges to resolve?

Start-Up Training and Preparation

How are the lead agent, MTF, and TRICARE contractor coordinating their respective roles for training personnel for Senior Prime?

What new programs were established specifically to serve the Senior Prime enrollees? How are they working?

What training is being provided to MTF staff for delivering care to Senior Prime enrollees?

What clinical management challenges did providers find in preparing for service delivery?

What changes needed to be made to standard operating procedures for the lead agent, MTF, or contractor? How have the new procedures been working?

Enrollment Marketing and Process

How are the lead agent, MTF, and TRICARE contractor coordinating their respective roles in Senior Prime enrollment?

How was the decision made on the site's Senior Prime enrollment targets? What factors were considered?

Do you expect to meet those enrollment targets? What does this mean for meeting LOE and financial liability?

What is the overall strategy for marketing Senior Prime to dually eligible beneficiaries?

How did the site's enrollment targets influence the approach taken to market Senior Prime to beneficiaries?

What pre-enrollment information is provided for dually eligible beneficiaries in addition to the materials prepared by DoD?

What procedures are established to keep the dually eligible beneficiaries informed about Senior Prime and to address questions or concerns?

To what extent are efforts being made to educate non–dually eligible beneficiaries regarding effects of Senior Prime on their access to care? And to respond to concerns?

What new mechanisms did the TRICARE contractor establish to manage Senior Prime enrollment activity?

Are TRICARE contractor staff and processes adequate to handle enrollment effectively?

Are enrollments being depressed because beneficiaries view the short two-year life of the demonstration as too risky?

What unexpected delays or problems occurred in starting the enrollment process? How were they managed?

Provider Networks and Services

How are the lead agent, MTF, and TRICARE contractor coordinating their respective roles in developing mechanisms to achieve compliance with CMS requirements?

To ensure the site could provide Medicare-covered services, what adjustments were made in

- mix of MTF clinical staff
- MTF physical facilities
- MTF equipment
- TRICARE network providers?

What options were evaluated for achieving the required provider mix?

What factors were considered regarding use of network providers?

For what services are network providers delivering care for the dually eligible beneficiaries?

What modifications to existing provider contracts were needed to comply with Medicare requirements?

Does the site anticipate that changes in MTF clinical staffing may lead to inconsistencies with the provider mix required for the MTF's readiness and training mission?

How important was it to maintain staffing flexibility for Senior Prime because of potential deployments of clinical personnel?

If deployable personnel are an issue, how did the site consider the issue in staffing decisions?

What other effects, if any, did provider changes have on the MTF's ability to provide services to non–dually eligible beneficiaries?

What unexpected delays or problems occurred in the start of service delivery to beneficiaries? How were they managed?

How are service coverage decisions made for Senior Prime enrollees as services are being provided? Who is involved in decisions?

What are early experiences in delivering services? Any highlights of areas of success or problems; implications for expansion of Senior Prime systemwide?

Quality Assurance

How are the lead agent, MTF, and TRICARE contractor coordinating their respective roles in quality assurance planning and monitoring?

What approach has the site taken to respond to CMS quality assurance requirements?

How was the quality assurance plan for the Senior Prime program developed? Who was involved?

How much was the MTF's existing quality assurance (QA) plan modified to encompass Senior Prime?

How is the Senior Prime QA plan integrated with other QA activities, e.g., ORYX?

How have the QA plan goals or measures been modified since they were was first developed?

What quality indicators have been identified as most important to monitor? Why?

What new quality indicators were added specifically for Senior Prime and why?

Are all the sites monitoring a set of common indicators? If so, how was the set chosen?

What data collection and reporting procedures are being used to monitor the quality indicators? How are service modification decisions made in response to QA findings?

What are the site's early experiences with beneficiaries in the grievance and appeal process? What issues are surfacing?

How is information on grievances and appeals being reported to site management? What actions have been taken by the site?

What are the site's early experiences with beneficiaries in the patient relations/customer affairs function? What complaints are being received?

How is information on complaints being reported to Senior Prime management? What actions have been taken by the site?

Is the site performing any customer surveys other than the DoD surveys? If so, what questions are asked, how frequently, and when are results reported?

Effects on GME/Clinical Training

What value, if any, does Senior Prime offer for the hospital's training mission (if teaching)? What potential negative effects?

How is Senior Prime expected to affect specialty physician caseloads? What are the implications for medical education?

Do the various specialties have differing views regarding the value of Senior Prime for training?

Market Positioning for Senior Prime

How would you characterize the Medicare managed care market dynamics in the service area?

How are local market dynamics influencing the site's implementation decisions?

Are many dually eligible beneficiaries in the service area enrolled in other Medicare health plans?

Do the other Medicare plans view the Senior Prime plan as serious competition?

What actions have you seen the other plans taking in response to entry of Senior Prime?

Financial Considerations

Is Senior Prime expected to be a financial benefit or liability for the site MTFs?

Does each MTF, and the site as a whole, expect to meet the LOE requirement?

What are the most important new costs being incurred for Senior Prime:

- Staff and other resource overhead costs?
- Direct costs of delivering care?

Which of the organizational and start-up activities, and related costs, that were committed to initiating Senior Prime will continue during ongoing plan operation?

If Senior Prime were extended broadly in the military health system, how would start-up costs compare to those for the demonstration?

Is Senior Prime helping to achieve more efficient use of the existing MTF physical plant that had not been fully used before?

Effects on Senior Prime Organizations

How has Senior Prime changed operating circumstances most significantly for each of the following parties, and how have they responded:

- the lead agent's office
- the TRICARE contractor
- MTF management
- MTF physicians
- MTF clinical and support staff?

How easy has it been for MTF staff to adjust to a managed care environment?

How has the workload of MTF staff changed with Senior Prime? How have they managed additional time demands, if any?

How has Senior Prime affected civilian provider organizations (e.g., home health)?

Effects on Beneficiaries

How are dually eligible beneficiaries adjusting to a managed care environment?

What benefits or problems do beneficiaries expect to see from Senior Prime?

What are the key reasons why beneficiaries are enrolling in Senior Prime?

What specific concerns have the dually eligible beneficiaries raised about Senior Prime? How has the site handled those concerns?

Are other DoD beneficiaries in the service area concerned about having less ready access to MTF services because of Senior Prime?

What other concerns have other DoD beneficiaries expressed? How are those concerns being handled?

QUESTIONS ABOUT MEDICARE PARTNERS

Initial Views of the Sites Regarding Medicare Partners

How likely is it that one or more Medicare health plans will approach the MTF for a Medicare Partners contract?

What benefits might the MTF gain by participating in Medicare Partners?

How might Medicare Partners affect the ability of the MTF to provide services for non–dually eligible beneficiaries? How will that affect access to care and patient satisfaction?

What effect might Medicare Partners have on the MTF's direct and indirect costs?

How might Medicare Partners affect the MTF's overall readiness and training mission?

Appendix B.
Template for Site Visit Agenda

DAY 1:

1. Individual courtesy meeting with the MTF/lead agent commander (15–30 min).
2. Introductory meeting with the command team and other key management staff (1 hr). RAND team provides an overview of the evaluation design and how the site visits fit into the evaluation. Then seek high-level policy perspective from the command team regarding the subvention demonstration.
3. Tour of the medical treatment facility(ies) (1 hr).
4. Group meeting with the Senior Prime management team (2 hrs)—focus on policy, organizational, and implementation topics from the management perspective.
5. Meeting with the Senior Prime medical leadership (1 hr)—medical directors of the MTF and lead agent office.
6. QM/UM team meeting with counterparts from lead agent, MTF, and TRICARE contractor (Foundation Health) (1 hr).
7. Focus group with representatives of retiree associations (1 hr).

DAY 2:

8. Meeting with CEIS staff from lead agent's office (1 hr)—discuss data availability, quality, and plans for reporting Senior Prime activity.
9. Meeting with the TRICARE managed care support contractor management team (1 ½ hrs). (Often held at the contractor's office, but sometimes at the lead agent office.)
10. Focus groups with MTF health care delivery personnel (each 1 ½ hrs)
    - PCM physicians
    - specialty physicians
    - frontline clinical and support staff
    - ancillary services staff.

DAY 3:

11. Marketing team meeting—typically lead agent staff (1 hr).
12. Meeting with financial management staff—MTF and lead agent (1 hr).
13. Meetings with MTF and lead agent staff who deal directly with enrollees (each 1 hr)
    - patient relations
    - Senior Prime appeals and grievances.
14. Outbriefing by RAND with the site's executive management team (1 hr)—RAND provides a preliminary overview of what was learned and highlights of items the site may wish to monitor or address.

Appendix C.
RAND Process Evaluation Questions for Mid-Demonstration Review

Date: March 2000

The questions below are being addressed in RAND's review of the status of the sites as of midpoint in the DoD-Medicare Subvention Demonstration. TRICARE Senior Prime plans have been in operation for more than a year, and some activities may have begun for Medicare Partners. The questions have been selected to monitor issues that surfaced during RAND's initial site visits soon after the Senior Prime plans began operation, as well as to gather information on other items that are expected to be important to the subvention demonstration.

TRICARE SENIOR PRIME

GENERAL: What new issues have arisen since RAND's initial site visits in early–mid 1999?

Management of Health Care Services for Senior Prime Enrollees

1.1 What new or modified activities have been undertaken to actively manage care for Senior Prime enrollees using utilization management, disease management, or other techniques?

1.2 How have service patterns changed *subsequent to* the initial high volume of clinic visits for new enrollees and resulting follow-up visits?

1.3 What effects on specialty clinic service volumes are now being felt as Senior Prime has moved toward greater equilibrium in service delivery?

1.4 Are the MTFs providing more cost-effective care for the Senior Prime enrollees than they were during the start-up period of heavy activity? Is such a trend expected in the remainder of this year?

1.5 Please provide documentation of the number of Senior Prime grievances and appeals recorded since service delivery began, and their dispositions.

Other Effects on MTF Services

2.1 To what extent is Senior Prime contributing to squeezing out space-available care? Can you quantify this estimate?

2.2 How is Senior Prime bringing benefit or value to the MTF?

2.3 Is Senior Prime proving to make a positive contribution to medical education over time?

2.4 Is Senior Prime proving to contribute to retention of providers?

2.5 What managed care practices introduced with Senior Prime have been transferred to TRICARE Prime or other MTF practices?

Effects on Lead Agent and MTF Costs

3.1 What effects is Senior Prime having on service delivery costs (none, increase, or decrease):

a. Pharmacy

b. Laboratory

c. Radiology

d. Therapies

e. Other services (identify)_____

f. Contribution to MTF financial performance (e.g., share of loss; reduction in margin)?

3.2 Please estimate the administrative costs involved with the start-up of Senior Prime as well as ongoing costs, for the lead agent office and each MTF in the demonstration.

First, list the types of costs incurred by the lead agent and MTF(s) in the box below.

For the lead agent office:	For the MTF(s):

Then provide your best estimate of the size of staff costs and other direct costs, using the chart below to record these amounts.

Type of Cost	Lead Agent	MTF
Start-up—the time period of 3 months before to 3 months after the start of service delivery 1. Total staff time in FTEs 2. Dollar cost of the staff time 3. Other direct costs in dollars ***Ongoing operation***—since month 4 of service delivery (best estimate of typical workload) 1. Total staff time in FTEs 2. Dollar cost of the staff time 3. Other direct costs in dollars		

NOTE: FTEs is full-time equivalents.

3.3 How do you expect costs to change during the remainder of the demonstration?

a. Service delivery costs per Senior Prime enrollee

b. Administrative costs.

Use of Network Providers

4.1 To what extent are Senior Prime enrollees obtaining care from network providers rather than from the MTF?

4.2 What are the reasons for their use of the network providers?

4.3 How has the amount of use of network providers changed over time, if at all?

4.4 How adequate has been the supply of network providers in the site?

Experience with CMS Compliance Monitoring

5.1 Has CMS conducted a compliance visit to this site yet?

5.2 If so, what issues were identified in preparation for the site visit or as a result of CMS's review?

5.3 What has been the site's experience with the compliance requirements, and how do you feel they could be changed to improve the process?

5.4 Which compliance requirements have been the most difficult to achieve?

Interactions Between Senior Prime and Military Obligations

6.1 How did the annual rotation of military personnel affect the MTF's ability to provide services to Senior Prime enrollees? What actions, if any, were taken to manage this process?

6.2 Have deployments occurred since Senior Prime began service delivery? How have the deployments affected service delivery to enrollees?

6.3 What reactions by enrollees did you observe in response to rotations or deployments of providers?

6.4 Has there been a change in philosophy or approach toward Senior Prime as a result of change in lead agent or MTF leadership or other military personnel?

6.5 In balance, to what extent has Senior Prime been supporting or conflicting with fulfilling the military mission in this site?

Medicare Partners

7.1 Has there been any activity for the site MTF(s) regarding Medicare Partners agreements with local Medicare managed care plans?

7.2 Have any of the Medicare plans expressed interest (or lack of interest) in Medicare Partners?

7.3 What type of Medicare Partners activity do you expect will occur during the remainder of this calendar year?

7.4 What is the opinion of the MTF leadership regarding Medicare Partners?

Appendix D.
FY96–FY98 RAND Data Documentation

Prepared by SRA International

The SAS transport file "RAND9698.XPT" contains MHS-wide FY96 through FY98 inpatient and ambulatory expense and workload data for use in patient-level costing applications. The following SAS datasets are contained in this deliverable: IP96.SD2, SUR96.SD2, OP96.SD2, IP97.SD2, SUR97.SD2, OP97.SD2, IP98.SD2, SUR98.SD2, and OP98.SD2. Also included is an Excel workbook ("DRG SURGICAL INDICATOR.XLS") with flags identifying specific FY96–FY98 surgical DRGs.

All MEPRS expense and workload data used in these analyses were extracted from the MEPRS Executive Query System (MEQS) between 16 March and 29 March 2000. Patient-level data—Standard Inpatient Data Records (SIDRs)—were obtained from the following biometrics SAS datasets available on the Ft. Detrick IBM mainframe:

HAF.CON.VRI.USER.INPBIO.Q4xx.SDS, where xx = 96, 97, 98

FY96–FY98 expense and workload data were processed using identical logic and algorithms. FY98 MEQS inpatient and ambulatory expense data from NH San Diego were replaced with "correct" expense data obtained from NH San Diego during the FY98 TRICARE Senior Prime MEPRS data certification process. Further, where applicable, resource sharing expenses were added to MEPRS expenses.

The following variables are included in IP96.SD2, IP97.SD2, and IP98.SD2:

1. DMIS (Defense Medical Information System)—Parent military medical treatment facility (MTF) DMIS ID
2. MEPR3—3rd-level MEPRS code to which unit costs should be applied
3. ROLLMEPR—Rolling 3rd-level MEPRS code serving as the basis of cost and workload data
4. NOSURTOT—Total expenses less surgery stepdown after cost pools purification
5. MDISP—MEPRS dispositions
6. MOBD—MEPRS occupied bed days
7. PERDAY—NOSURTOT divided by MOBD.

The following variables are included in OP96.SD2, OP97.SD2, and OP98.SD2:

1. DMIS—Parent military medical treatment facility (MTF) DMIS ID
2. MEPR4 —4th-level MEPRS code
3. TOTVIS—Total visits from MEQS (sum on inpatient and outpatient visits)
4. TOTEXP—Total expenses after purification of cost pools—including all stepdown expenses
5. RX—Pharmacy stepdown expenses
6. LAB—Lab stepdown expenses (sum of clinical pathology, anatomical pathology, and blood bank)
7. RAD—Radiology stepdown expenses (sum of diagnostic and therapeutic radiology)
8. TOTNOANC—Total expenses less all ancillary stepdown after purification of cost pools

9. ANCNOABC—All other ancillary stepdown expenses after purification of cost pools (ancillary stepdown expenses less pharmacy, lab and radiology).

The following variables are included in SUR96.SD2, SUR97.SD2, and SUR98.SD2:

1. DMIS—Parent military medical treatment facility (MTF) DMIS ID
2. SUR—Total surgery expenses stepped down to inpatient work centers
3. MDISP—Total MEPRS dispositions
4. SURGRWP—Sum of DRG weights (base RWP) associated with patients with surgery-flagged DRGs
5. BDISP—Total biometrics dispositions
6. SUR_CST—Surgery unit costs adjusted for MEPRS/biometrics volume differences. Calculated as (SUR/MDISP*BDISP/SURGRWP).

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