PROJECT REPORT

Health Care Survey of DoD Beneficiaries 2007 Annual Report

August 2007

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MATHEMATICA
Policy Research, Inc.

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TRICARE

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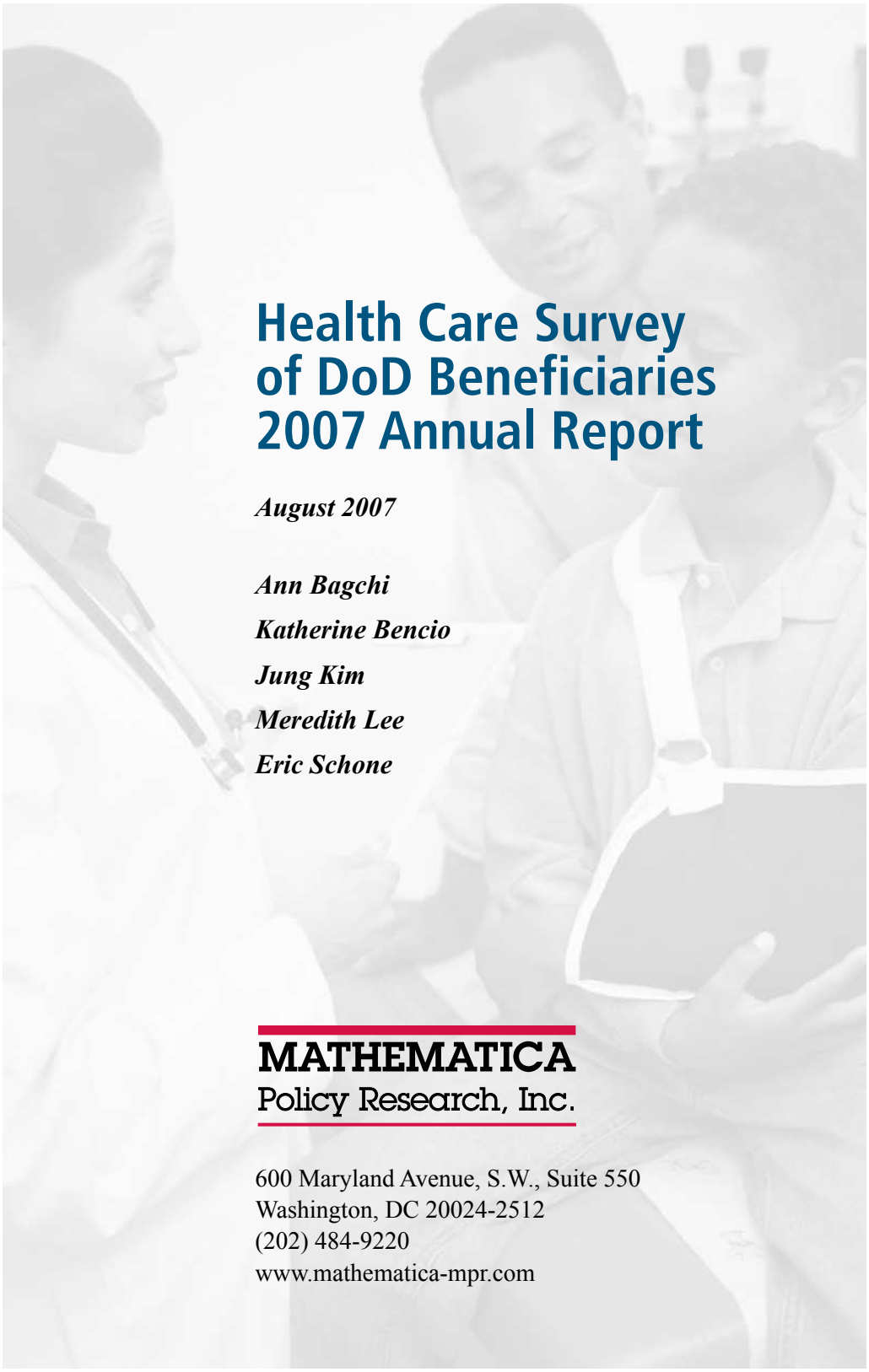

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Contents

Executive Summary

The Health Care Survey of DoD Beneficiaries (HCSDB) Annual Report describes results from a worldwide survey of beneficiaries eligible for health care coverage through the military health system (MHS). The survey contains questions about beneficiaries' ratings of their health care and health plan, access to care, choice of health plan, and other subjects relevant to the leaders and users of the MHS. Results are compared to benchmarks from civilian health plans reporting survey results to the National CAHPS Benchmarking Database (NCBD). According to the 2007 HCSDB Annual Report:

- Among military retirees, use of TRICARE purchased care increased between 2004 and 2006, while use of other civilian insurance has fallen.
- Beneficiaries enrolled to direct care rate their health care, personal doctors, and specialists substantially lower than civilian benchmarks and substantially lower than do users of purchased care.
- Beneficiaries enrolled to direct care are more likely than users of purchased care to report barriers to finding a personal doctor and to seeing specialists. They are less likely to report delays in obtaining approval for care.
- Beneficiaries who use their civilian benefits instead of TRICARE rate care, access to specialists, and customer service above civilian benchmarks.
- Among military retirees, use of civilian doctors remained approximately the same between 2004 and 2006, but a higher proportion is financed by TRICARE than by other civilian insurance.
- Beneficiaries who report that a military treatment facility (MTF) is their usual source of care are substantially less likely than beneficiaries who rely on civilian facilities or the Veterans' Administration (VA) to report that they can usually or always get routine care when they want.
- Beneficiaries who use MTFs are less likely to report that they are treated with courtesy and respect, or that their doctor spends enough time with them than are beneficiaries who use civilian or VA providers.
- Ratings by purchased care users of waiting times and interactions with doctors and their offices are similar to civilian benchmarks.
- Beneficiaries who use civilian providers with Medicare or other civilian coverage give ratings that exceed civilian benchmarks.
- Non-Latino black beneficiaries rate their health plan and health care higher than do other ethnic and racial groups.
- Overall, American Indian/Alaska Natives rate their health care lowest and fare the worst on most measures of preventive care use.
- On average, 13 percent of TRICARE beneficiaries reported seeking care from a non-network provider in 2006.
- The majority of beneficiaries under age 65 who sought care from a non-network provider reported difficulties in finding a personal doctor or nurse.
- The TRICARE fee schedule is the most commonly cited barrier to care from non-network doctors among beneficiaries who report access problems.
- Active duty personnel rate their health plan and their health care lower than other Prime enrollees.
- Active duty beneficiaries are below *HP2010* benchmarks for blood pressure screening, smoking cessation counseling, and receipt of prenatal care within the first trimester.
- As measured by body mass index, the number of at-risk and overweight children did not change significantly between 2004 and 2006.
- Parents of children served by the military health care system reported significant increases in their children's healthful behaviors between 2004 and 2006; a higher percentage participate in rigorous physical activity, lower percentages of children watch television for three or more hours per day, and a higher percentage never eat fast food.

- Children from racial and ethnic minority groups are more likely to be at-risk or overweight than non–Latino white children. In 2006, 27 percent of white children were at-risk or overweight as compared with 38 percent among black and Latino children, and 31 percent among Asians and Pacific Islanders.
- Retired beneficiaries 65 years of age or older are most likely to report fair or poor mental health, but family members of active duty personnel are most likely to report a need for counseling within the past 12 months.
- Beneficiaries relying on TRICARE or VA benefits for coverage are more likely than those with civilian insurance or Medicare to report problems in obtaining behavioral health care.
- Active duty personnel did not report a greater unmet need for mental health care than other TRICARE users.
- The proportion of MHS beneficiaries who have received sigmoidoscopy or colonoscopy exceeds the Healthy People 2010 goal of 50 percent.
- MHS beneficiaries who rely on VA facilities were most likely to have been screened for colorectal cancer.
- The proportion of retirees reporting use of MTF pharmacies fell between 2005 and 2006 in favor of retail pharmacies and mail order.
- Thirty percent of retirees under the age of 65 who filled prescriptions reported they do not know how to use the TRICARE Mail Order Pharmacy.

Chapter 1. Introduction

About the HCSDB

The HCSDB is a worldwide survey of military health system (MHS) beneficiaries that has been conducted each year since 1995 by the Office of the Assistant Secretary of Defense/ TRICARE Management Activity (TMA). Congress mandated the survey under the National Defense Authorization Act for Fiscal Year 1993 (P.L. 102-484) to ensure regular monitoring of MHS beneficiaries' satisfaction with their health care options. The survey is administered each quarter to a stratified random sample of adult beneficiaries and once each year to the parents of a sample of child beneficiaries. Any beneficiary eligible to receive care from the MHS on the date the sample is drawn may be selected. Eligible beneficiaries include members of the Army, Air Force, Navy, Marines, Coast Guard, Public Health Service, National Oceanic and Atmospheric Administration, and activated members of the National Guard and Reserves. Although many of the beneficiaries use TRICARE Prime, TRICARE Standard, or TRICARE Extra, others rely on Medicare or civilian health insurance plans.

Samples are drawn from the Defense Enrollment Eligibility Reporting System (DEERS) and are stratified by the location of a beneficiary's home, health plan, and reason for eligibility. In 2006, 200,000 beneficiaries living inside or outside of the United States were sampled for the adult survey. A total of 35,000 beneficiaries worldwide were sampled for the child survey. The *2006 HCSDB Adult Sample Report* and *2006 Child Sample Report* describe the sampling methods. Synovate administers the survey, allowing beneficiaries to respond by mail or on a secure website.

Responses to the survey are coded, cleaned, edited, and assembled in a database. Duplicate and incomplete surveys are removed. A sampling weight is assigned to each observation, adjusted for nonresponse. The *2006 HCSDB Codebook and Users Guide* describes the contents of the database.

Questions in the 2006 HCSDB were developed by TMA or were taken from other public domain health care surveys. Many questions were taken from the Consumer Assessment of Health Programs and Systems (CAHPS) Health Plan Survey, Version 3.0. CAHPS contains core and supplemental survey questions used by commercial health plans, the Center for Medicare & Medicaid Services (CMS), and state Medicaid programs to assess consumers' satisfaction with their health plans.

Most survey questions change little from quarter to quarter so that responses can be followed over time. Supplementary questions are added each quarter so as to learn more about the latest health policy issues. In 2006, the survey added questions about care received from civilian physicians, such as TRICARE's civilian network, pharmacy benefits, beneficiaries' need for and use of behavioral health services, reservists' health coverage, colon cancer screening, and several other topics.

About this Report

This report presents results for all surveys administered in 2006 and sometimes compares the results to those from 2004 and 2005. The report includes responses from all beneficiaries eligible for MHS benefits, including children, who reside in the United States.

Beneficiaries are eligible for military health benefits if they are currently on active duty or are dependents of active duty personnel. National Guard and Reserves mobilized for more than 30 days and their dependents are eligible, as are retirees and those who are the dependents of a retiree. MHS beneficiaries may receive care from military treatment facilities (MTFs) financed and operated by the uniformed services or from civilian facilities reimbursed by the Department of Defense.

Eligible beneficiaries may choose from several health plan options. TRICARE Prime is a point-of-service HMO that centers on military facilities or civilian facilities that are members of TRICARE's civilian network. Active duty personnel and their family members are automatically eligible for free enrollment in Prime. Retirees under age 65 may enroll if they pay a premium. TRICARE Standard offers cost sharing for care received from civilian doctors on a fee-for-service basis. TRICARE Extra offers enhanced cost sharing for fee-for-service care provided by network doctors. Many retirees and some active duty dependents also have non-military coverage. For beneficiaries with civilian insurance, including Medicare, the civilian payer has primary responsibility. Since the inception of TRICARE for Life in October

2001, TRICARE Standard has been second payer to Medicare and has paid most costs remaining after Medicare.

The initial chapters of this report compare beneficiaries' coverage choices and providers. Chapter 2 describes the choices of eligible beneficiaries among different health plans and providers of care. Chapter 3 describes beneficiaries' experiences in seeking care from different types of health care providers, including military, civilian, and VA providers. The chapters present the results as percentages calculated with adjusted sampling weights. When results are compared between years or to an external benchmark, the difference is tested for statistical significance, accounting for the complex sample design. Results that differ significantly from an external benchmark ($p < .05$) are presented in boldface.

Chapters 4 through 8 present results from the survey on several topics, including racial and ethnic disparities, childhood obesity, use of non-network civilian doctors, and behavioral health. Rates in some figures are adjusted for the age or age and health status of beneficiaries.

Results from CAHPS questions are compared to results from the National CAHPS Benchmarking Database (NCBD) for 2003, 2004, and 2005. The NCBD assembles results from CAHPS surveys administered to hundreds of civilian health plans. Mean rates are calculated from the results and adjusted for age and health status to correspond to the characteristics of beneficiaries shown in the graph. For example, benchmarks in graphs presenting civilian health plan ratings are adjusted to the age and health status of beneficiaries using civilian health plans while the same benchmarks for Prime users are adjusted to the age and health status of beneficiaries who use Prime. For preventive care measures, such as the proportion of women screened for cervical cancer, results are compared with *HP2010* goals. *HP2010* goals are set by the government to promote good health through healthy behavior, such as immunization, screening for illness, and avoiding unhealthy habits. The *2006 HCSDB Technical Manual* describes the benchmarks in more detail.

The 2004 survey used questions from Version 3.0 of CAHPS for the first time. Before 2004, CAHPS surveys used Version 2.0 questions. With this change, the wording of several questions used in this report also changed.

Other reports prepared from the HCSDB are the *TRICARE Beneficiary Reports, HCSDB Issue Briefs,* and *TRICARE Consumer Watch.* The *Beneficiary Reports* is an interactive Web-based document that compares TRICARE Regions, Services, and MTFs by using scores calculated from survey results. *HCSDB Issue Briefs* are two-page reports that present HCSDB results from the survey administered in a particular quarter and address a topic of current interest. *Consumer Watch* contains a brief summary of results from the *Beneficiary Reports.* Both appear quarterly.

The *Issue Briefs* for 2006, which are included in this report, concerned (1) colon cancer screening, (2) use of TRICARE's civilian network, (3) and use of pharmacy benefits. These *Issue Briefs* make up the last three chapters of this report. *The Issue Brief* for first-quarter FY 2006 appeared in the *2005 Annual Report*.

Chapter 2. Beneficiaries' Choices of Health Plan

MHS beneficiaries are covered by a wide range of health plans, most of them provided or supplemented by the Department of Defense. Active duty personnel are largely restricted to TRICARE Prime, but their dependents may choose from Prime, Standard/Extra, or civilian policies. Retirees also may choose Prime, Standard/Extra, or civilian coverage, with a substantial minority eligible for Veterans Administration care. Medicare-eligible retirees are eligible for TRICARE for Life, which provides TRICARE benefits to pay deductibles and coinsurance left over from Medicare. Beneficiaries who rely on Prime may enroll to a primary care manager at a military facility (direct care) or to the managed care network (purchased care). The great majority are enrolled to direct care. As shown in Figure 1, 42 percent were active duty or MTF enrollees in 2006. Purchased care users are those who are enrolled to the TRICARE civilian network, or who report that they rely on Standard or Extra for most of their care. Seventeen percent of respondents are TRICARE purchased care users. As shown in Figure 2, purchased care use increased between 2004 and 2006, from 15 percent to 17 percent of respondents. The survey results indicate that beneficiaries switched during that time from civilian insurance to purchased care, as the decrease in the proportion reporting reliance on civilian insurance has matched the increase in the proportion using purchased care.

As shown in Figure 3, the majority of family members (60 percent) are direct care users, but 28 percent use purchased care. Only about one in ten family members of active duty personnel report relying on alternative civilian insurance. Health plan choices of active duty family members remained approximately the same between 2004 and 2006.

Figure 4 indicates that, by contrast with active duty family members, only about one-quarter of retirees and their family members choose direct care as their health plan, while a third rely on purchased care. Purchased care use rose from 29 percent to 34 percent between 2004 and 2006. The retirees have shifted away from other civilian insurance.

Figure 1. Health plan used for most care 2006

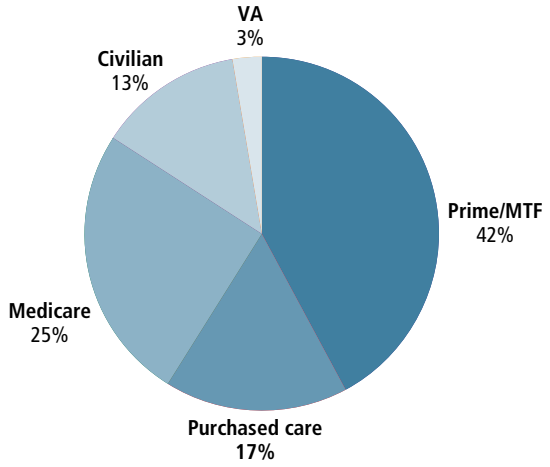


Figure 2. Health plan used for most care 2004

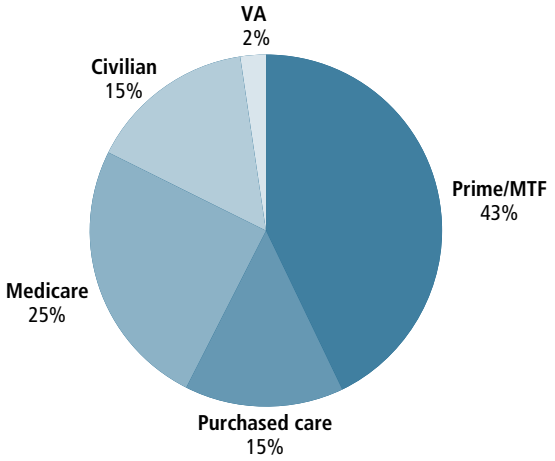


Figure 3. Active duty family members choice of health plan

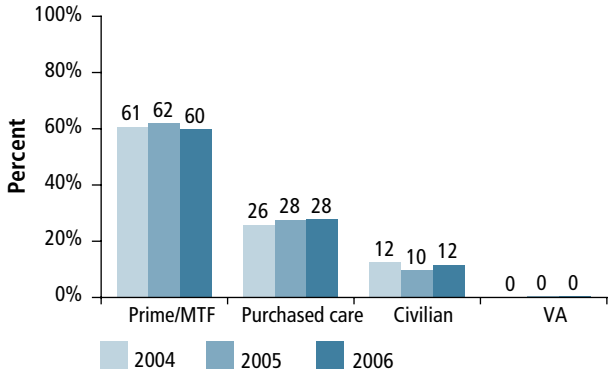
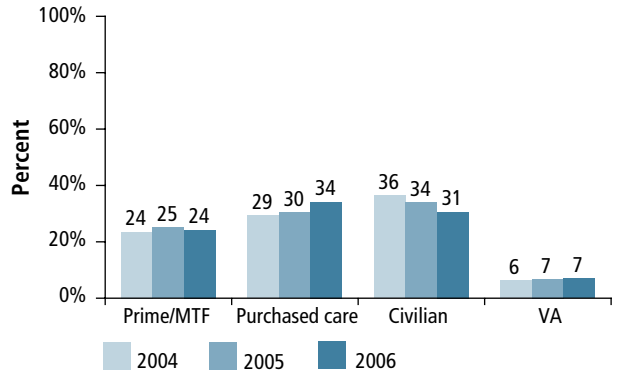


Figure 4. Retired, less than 65 choice of health plan



The proportion choosing other civilian insurance dropped from 36 percent in 2004 to 31 percent in 2006. The shift continued a decline noted in previous reports.

Graphs in this section compare ratings of different aspects of care given by users of three health plan types: TRICARE Prime through direct care, TRICARE through purchased care, and other civilian insurance. The ratings are shown in comparison with civilian benchmarks taken from the National CAHPS Benchmarking Database, and are adjusted for age and health status.

As shown in Figure 5, when asked to rate their health plan, direct care Prime enrollees give ratings slightly below their adjusted benchmarks. Fifty-five percent rate their plan 8 or above. Fifty-four percent of direct care enrollees give their health care a high rating, which is well below the civilian benchmark.

By contrast, purchased care users, as shown in Figure 6, also rate their health plan slightly below the adjusted benchmark.

Figure 5. Direct care enrollees' health care and health plan ratings

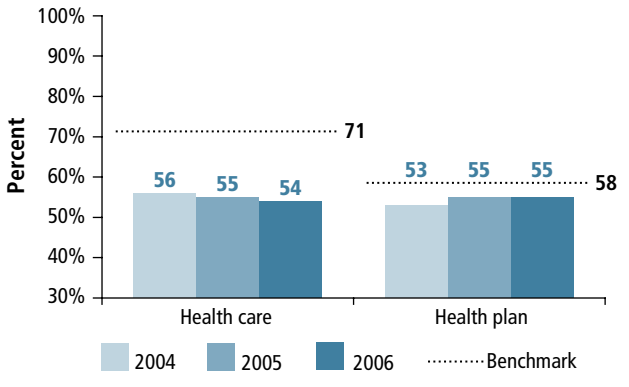
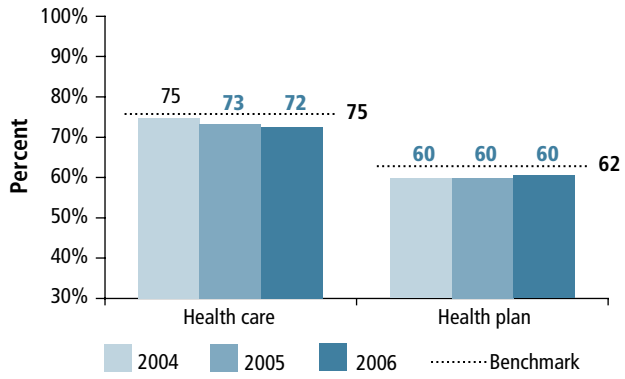


Figure 6. Purchased care users' health care and health plan ratings

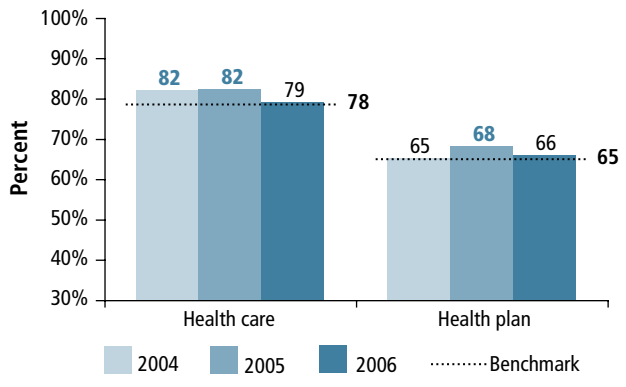


However, their health care ratings also are similar to their adjusted civilian benchmark. Seventy-two percent rate their health care 8 or above. As shown in Figure 7, beneficiaries who use civilian health insurance coverage give ratings to both their health plans and health care that do not differ significantly from adjusted civilian benchmarks.

Relative to civilian benchmarks, health care ratings of all groups show a slight decline. The apparent decline is due to an increase in the civilian benchmark (not shown) that is greater than the increase for any TRICARE group.

The figures that follow depict differences among these TRICARE options that may be responsible for the differences in the ratings just described. The graphs contrast the three enrollment groups with their adjusted benchmarks for the year 2006. Although health plan ratings for these three options are similar, beneficiaries' responses illustrate differences in the way their plans are organized.

Figure 7. Beneficiaries with civilian coverage health care and health plan ratings



As shown in Figure 8, direct care users are much less likely than are users of purchased care or other civilian insurance to have a personal doctor, while purchased care users are less likely to have a personal doctor than those who rely on their civilian plan. Forty-two percent of direct care users, 82 percent of purchased care users, and 88 percent of beneficiaries who rely on their civilian coverage report that they have a personal doctor.

Although direct care enrollees are much less likely than purchased care users to have personal doctors, direct care enrollees are not appreciably more likely to report they have problems in finding a personal doctor. As shown in Figure 9, 54 percent of direct care Prime enrollees and 57 percent of purchased care users report no problem in finding a personal doctor. Both groups are more likely to report problems than beneficiaries with civilian coverage.

As shown in Figure 10, differences in problems with finding a personal doctor do not translate into differences among enrollment groups in the proportion that give their personal doctor a high rating. The proportions of purchased care users and the proportion of civilian care users that rate their personal doctor 8 or above are not substantially different from their respective benchmarks. By contrast, the proportion of MTF enrollees that rate their personal doctor high is somewhat lower than the benchmark rate, 64 percent compared to a benchmark of 73 percent.

Compared to direct care enrollees, purchased care users are more likely to encounter delays while awaiting approval for their care as shown in Figure 11. Eighty-three percent of direct care users and 78 percent of purchased care users report no problem getting approval for care. Both groups are more likely to encounter problems than are beneficiaries who rely on civilian insurance, 91 percent of whom report no problems.

As shown in Figure 12, getting access to specialists is a greater problem for MTF enrollees than are other problems described in this report, while among purchased care users the problem is similar to the problem of finding a personal doctor or waiting

Figure 8. Has personal doctor by enrollment group

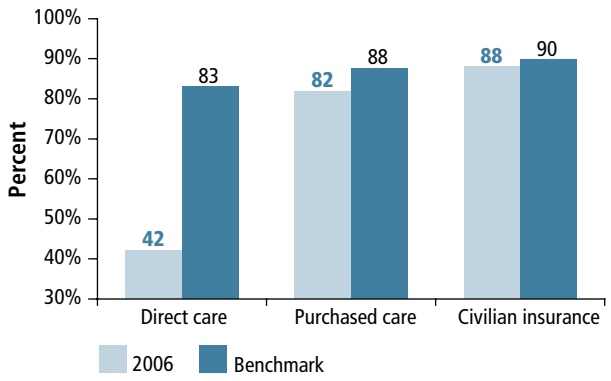


Figure 9. No problem finding personal doctor by enrollment group

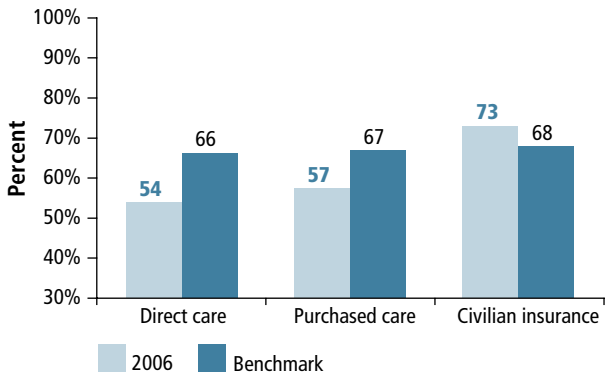


Figure 10. Personal doctor rating 8 or above by enrollment group

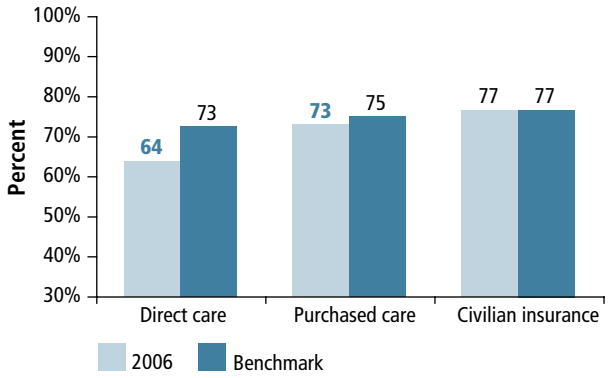


Figure 11. No delays awaiting approval by enrollment group

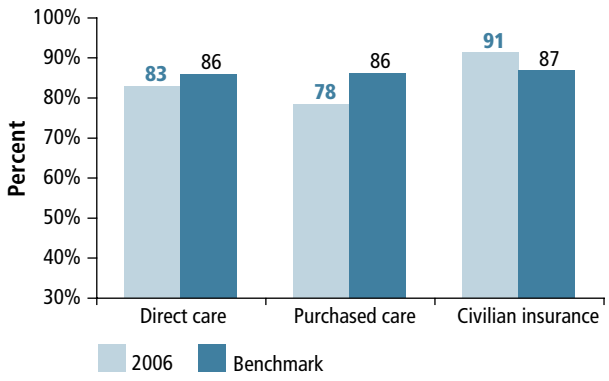
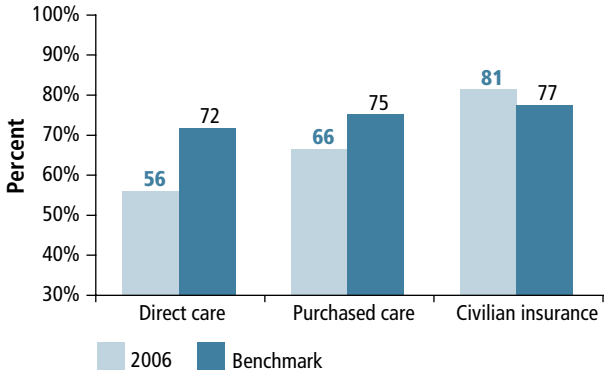


Figure 12. Getting to see a specialist by enrollment group



for approval. Only 56 percent of direct care enrollees report no problems in getting to see a specialist, compared to a benchmark of 72 percent. By contrast, 66 percent of purchased care users report problem-free access to specialists, compared to a benchmark of 75 percent. Among users of civilian care, 81 percent experience no problems in getting to see a specialist.

These differences in access to specialists correspond to smaller differences among the enrollment groups in specialist ratings. Beneficiaries relying on purchased care or on their civilian insurance both give high ratings to their specialists at a rate similar to the NCBD benchmark. Direct care enrollees are somewhat less likely to rate their specialists highly. (See Figure 13.)

In their interactions with their health plans' claims handling and customer service, beneficiaries enrolled to direct care rate their experiences lower than do users of purchased care, who in turn rate their experiences lower than those with civilian coverage. While the proportions of direct care users reporting that their claims are usually or always correct (Figure 14) and timely (Figure 15) are

Figure 13. Specialist rating 8 or above by enrollment group

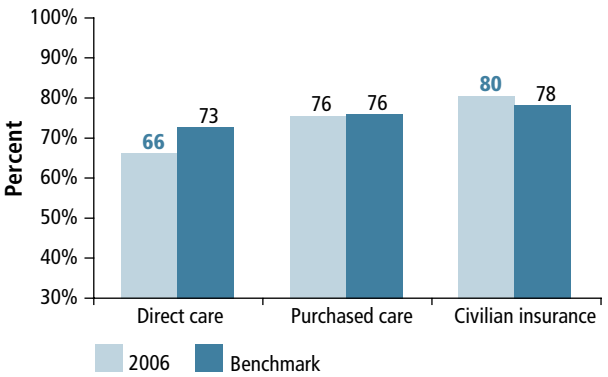


Figure 14. Claims handled correctly by enrollment group

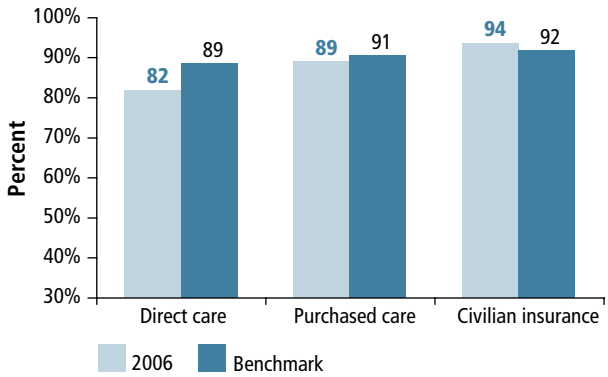
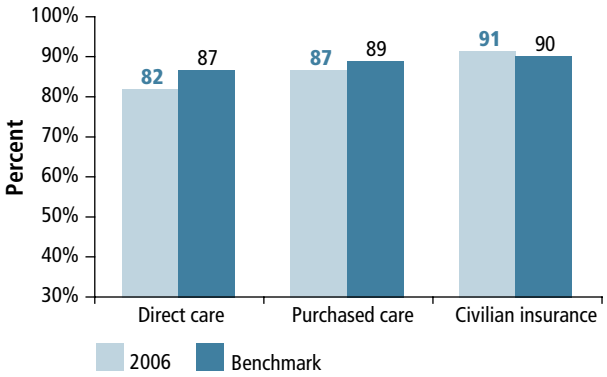


Figure 15. Claims handled on time by enrollment group



lower than the NCBD benchmarks, rates for purchased care users and users of civilian care are similar to their benchmarks. However, claims ratings by direct care enrollees may not be comparable to those of the other two groups because direct care enrollees file claims only when using purchased care, and would therefore have little experience with claims.

Direct care enrollees are least likely to report problem-free use of their health plans' customer service, although problems with customer service are common among all groups (Figure 16). Fifty-two percent of direct care users and 57 percent of purchased care users reported that, when using their health plan's customer service line, they got the help they needed with no problems, compared to a civilian benchmark of 63 percent. Among beneficiaries with civilian coverage, the proportion with no problems was 67 percent.

In contrast to the low ratings given to their health care and different features of their health plans, women enrolled to MTFs are equally or more likely than are other enrollment groups to report that they get appropriate preventive care. As shown in

Figure 16. No problem with customer service line by enrollment group

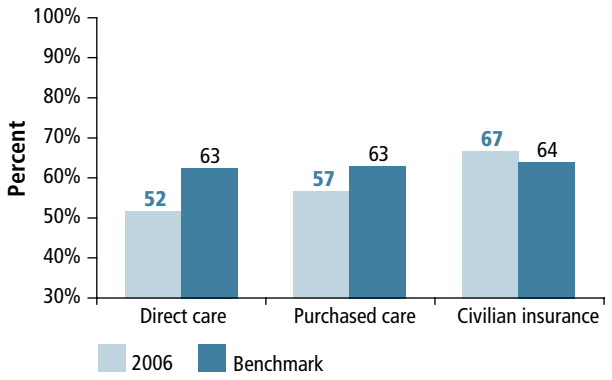


Figure 17. Mammography by enrollment group

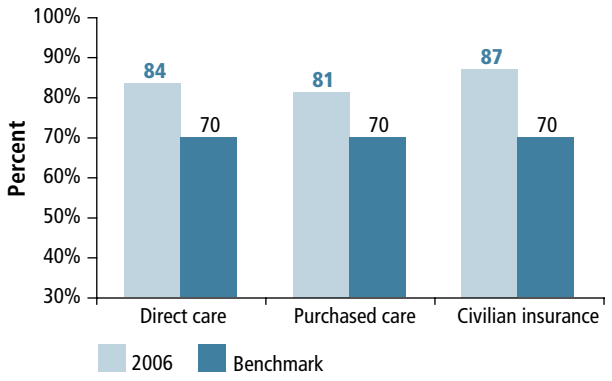


Figure 17, direct care users and users of purchased and civilian care all report mammography rates exceeding the *HP2010* goal of 70 percent. The rates range from 81 percent of purchased care users to 87 percent with civilian care. However, only women enrolled to MTFs have cervical cancer screening rates exceeding the Healthy People goal of 90 percent (Figure 18). Ninety-two percent have had a Pap smear in the past 3 years, compared to 87 percent of purchased care and civilian coverage users.

Figure 18. Pap smear by enrollment group

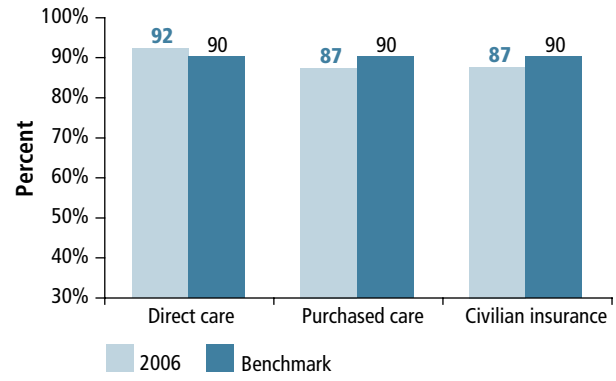
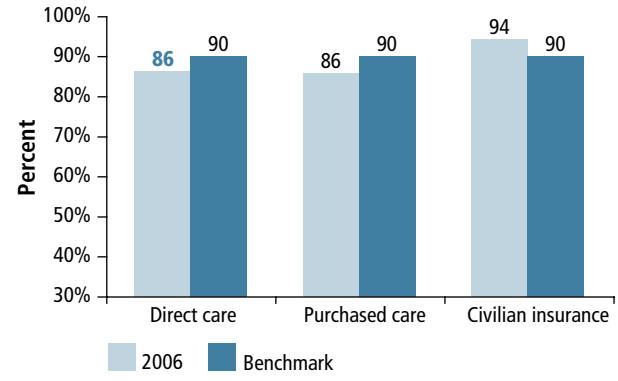


Figure 19. Prenatal care by enrollment group



As shown in Figure 19, prenatal care rates of direct care and purchased care enrollees are 86 percent, below the *HP2010* goal of 90 percent, although, because the purchased care sample is smaller, only the direct care rate is statistically significantly below the goal. The prenatal care rate for beneficiaries with civilian coverage is 94 percent.

Chapter 3. Beneficiaries' Sources of Health Care

Beneficiaries who use civilian insurance, TRICARE for Life, or TRICARE Standard/Extra receive care primarily from civilian providers. Prime enrollees, however, may get care either from civilian managed care support contractors or from military treatment facilities (MTFs) operated by the uniformed services. Thus, the proportion of beneficiaries that gets care primarily from MTFs is less than the proportion enrolled in Prime. Figure 20 divides civilian care users into beneficiaries whose civilian care is covered primarily by a TRICARE plan and those whose care is covered through Medicare or other civilian insurance. The majority of eligible beneficiaries (57 percent) get care primarily from civilian facilities (CTFs). Another 5 percent use VA facilities and 38 percent rely on MTFs. Approximately one-third of civilian care used by MHS eligible beneficiaries is received through TRICARE, primarily through its civilian network.

Figure 21, which shows the sources of care for beneficiaries in the 2004 HCSDB, indicates that MTF use has dropped since that time. Forty percent in 2004 described MTFs as their usual source of care. The drop in MTF use corresponds to a 2 percent increase in the use of civilian facilities financed through TRICARE, most of which comes from TRICARE's civilian network. The shift to civilian facilities may be due in part to the increase in the number of reservists and their family members covered by TRICARE. Reservists families are more likely than other active duty families to use civilian doctors.

Figure 20. Patient's usual source of care 2006

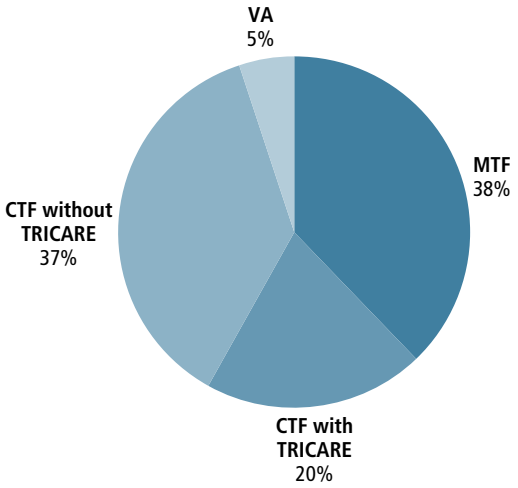
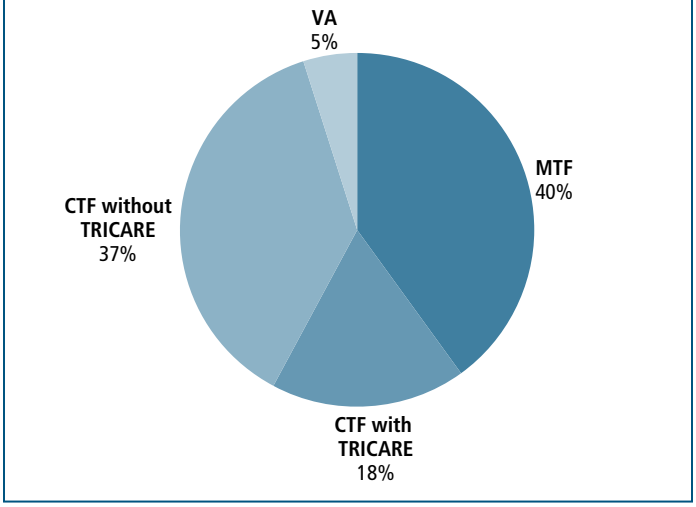


Figure 21. Patient's usual source of care 2004



Active duty personnel receive the great majority of their care through military providers. However, as shown by Figure 22, family members receive a substantial proportion of their care from civilian providers. Approximately 6 in 10 describe a military provider as their usual source of care, but 30 percent get most of their care from civilian providers, financed by TRICARE, and 11 percent from civilian providers and a civilian health plan. The provider choices of family members remained approximately the same between 2004 and 2006.

As shown in Figure 23, the proportion of retirees and their dependents under 65 using civilian care covered by TRICARE

Figure 22. Active duty family members usual source of care

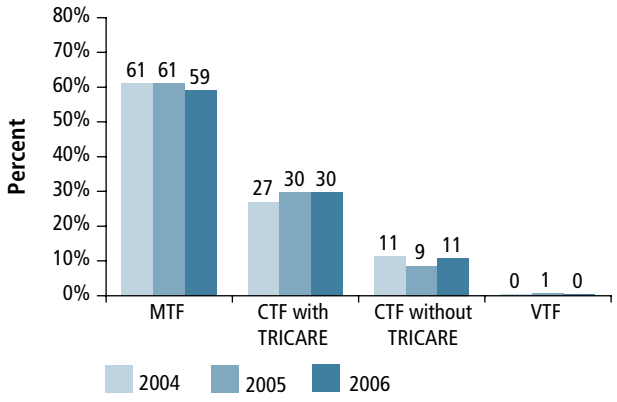
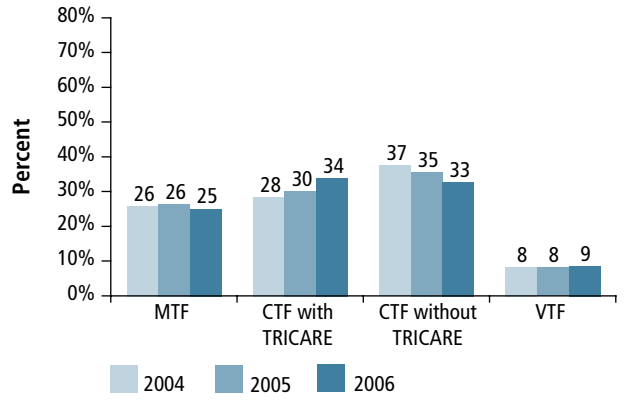


Figure 23. Retired, less than 65 usual source of care



increased between 2004 and 2006. About one in four retirees and their beneficiaries list military providers as their usual source of care, and about two in three designate a civilian provider as their usual source of care. However, civilian providers covered by TRICARE increased from 28 percent to 34 percent, while civilian providers reimbursed through private insurance fell from 37 percent to 33 percent during that time. Nine percent of retirees report that they get most of their care from VA providers.

Measures in this section concern the length of time beneficiaries must wait to receive care, either at the doctors office, or when trying to get an appointment.

As shown in Figure 24, the likelihood of a short wait in the doctor's office does not differ much from the benchmark wait at any of the provider types. However, the proportion with short waits is slightly below the benchmark for beneficiaries who use MTFs. Rates for users of civilian or VA facilities are similar to or greater than the civilian benchmark.

Figure 24. Short wait in doctor's office by usual source of care

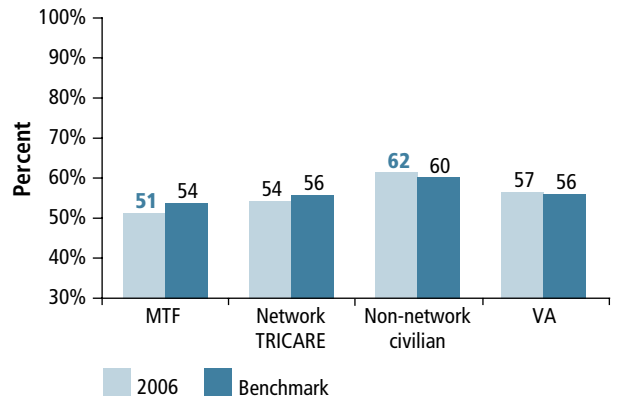


Figure 25 shows that users of MTFs are most likely to fall short of benchmarks in the category of "waits for routine care." Users of VA facilities also are less likely than users of civilian facilities to report that they usually or always get appointments for routine care when they want them. By contrast, at civilian facilities, whether through the civilian network or civilian insurance, the proportion of beneficiaries reporting timely access to routine care is similar to or above the NCBD benchmark.

Another important aspect of beneficiaries' experiences with their providers is their interaction with both the office staff they encounter in the doctor's office and with doctors themselves. Figure 26 describes beneficiaries' impressions of the helpfulness of office staffs. Most beneficiaries report that the office staff are usually or always helpful at all office types. At civilian facilities, whether coverage is received through TRICARE or through civilian insurance, the proportion that reports staff are usually or always helpful is similar to or above the civilian

Figure 25. Timely routine care by usual source of care

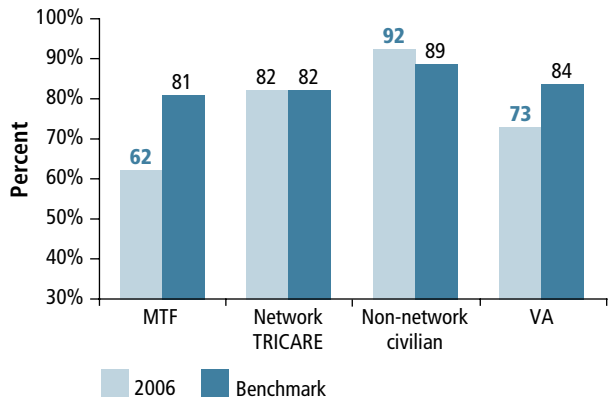
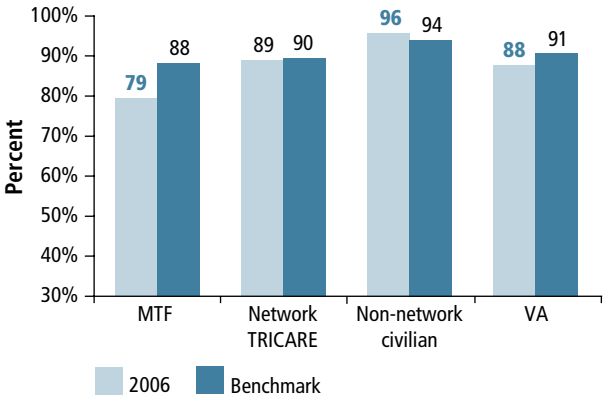


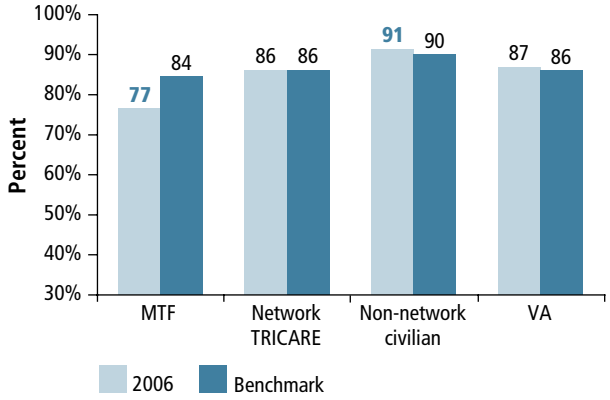
Figure 26. Staff are helpful by usual source of care



benchmark. At MTFs and VA facilities, the proportion reporting helpful staff is slightly below the benchmark.

As shown in Figure 27, beneficiaries using MTFs are less likely than those seeing VA or civilian doctors to report that doctors usually or always spend enough time with them. For those seeing civilian doctors, whether or not coverage is provided through TRICARE, the proportion reporting that time is sufficient is similar to the benchmark, as it is for those seeing a VA doctor. By contrast, among beneficiaries who use MTF doctors, the proportion getting enough time is significantly below the NCBD benchmark.

Figure 27. Patient gets enough time by usual source of care



Chapter 4. Variations in Health Care Access and Services by Race and Ethnicity

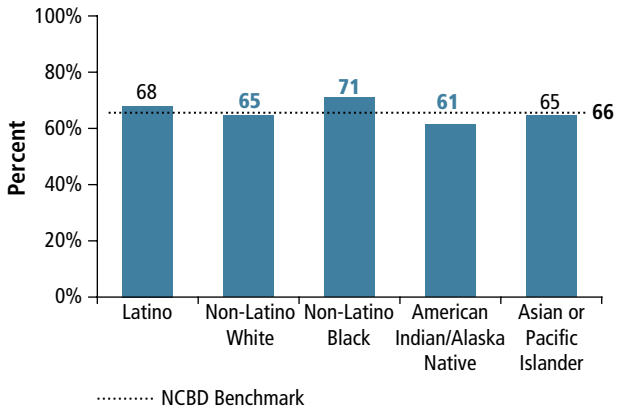
Responding to overwhelming evidence that racial and ethnic disparities in health care access contribute to the overall inferior health status of members of racial and ethnic minority groups in the U.S. (Institute of Medicine 2003), the federal government launched its Healthy People 2010 initiative with a primary goal of eliminating these disparities. Because it provides universal access to its enrollees, the military health care system has been cited as a leader in promoting equitable health care access and health outcomes. Researchers have found reduced disparities among MHS beneficiaries in survival from lung cancer, the use of invasive cardiac procedures after acute myocardial infarction, and treatment for dental caries (Mulligan et al. 2006; Taylor et al. 1997; Hyman et al. 2006). However, other research has documented widening disparities in breast cancer survival between white and African American patients served by the military health care system (Ismail 2003). The DoD has contributed to efforts to counter this trend by funding initiatives to study the causes of racial disparities in deaths from breast and prostate cancer.

This chapter of the HCSDB Annual Report includes findings from the HCSDB fielded in FY2006. Ratings of health care experiences by other racial and ethnic groups are compared with those of non-Latino whites and with external benchmarks. Comparisons are adjusted for age or age and health status. Highlighted values indicate significant differences from benchmark. Rates include beneficiaries using all of the TRICARE options, as well as civilian insurance and Medicare. The results indicate that the military health care system still faces challenges in ensuring equity in patient satisfaction and the use of preventive services across all racial and ethnic groups.

Ratings of Health Plan and Health Care

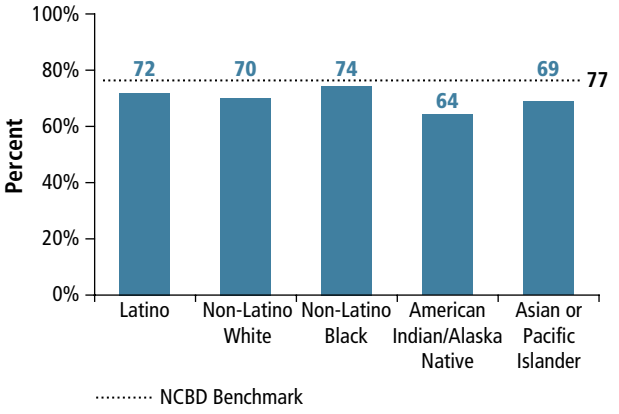
Figure 28 indicates that health plan ratings were the same for non-Latino whites (whites, hereafter) and Asian/Pacific Islanders; 65 percent of beneficiaries in these groups gave their health plan a rating of 8 or above. Compared to whites (unless stated otherwise, whites are the comparison group in all statistical analyses in this chapter), Latinos and non-Latino blacks (blacks hereafter) were significantly more likely to give their plan a high rating (68 percent and 71 percent, respectively). By comparison, American Indians/Alaska Natives (AIAN) were significantly less satisfied with their health plans, with only 61 percent of these respondents rating their health plan 8 or above.

Figure 28. Rating of health plan by race/ethnicity



The results for rating of health care are similar (Figure 29). Blacks were significantly more likely to give their overall health care a rating of 8 or higher (74 percent). As was the case with health plans, AIAN were the least likely to give their health care a high rating. Sixty-four percent of AIAN gave their health care a high rating, compared with 69 percent or more across all remaining groups.

Figure 29. Rating of health care by race/ethnicity



Satisfaction with Providers

Figure 30 shows that AIAN respondents also report the greatest difficulties in finding a personal health care provider, compared to members of other groups; only 57 percent AIAN said they had no problem finding a personal doctor or nurse they were happy with.

There was similar variation in the ability to visit a specialist when needed (Figure 31). AIAN respondents and Latinos were most likely to indicate problems in seeing a specialist (only 66 percent of both groups said they had no problems doing so) and blacks were least likely to report experiencing problems (76 percent reported that they had no problems seeing a specialist). Only among AIAN was the rate not significantly different from whites (due to the relatively small sample size of AIAN respondents).

Figure 30. No problem finding a personal doctor by race/ethnicity

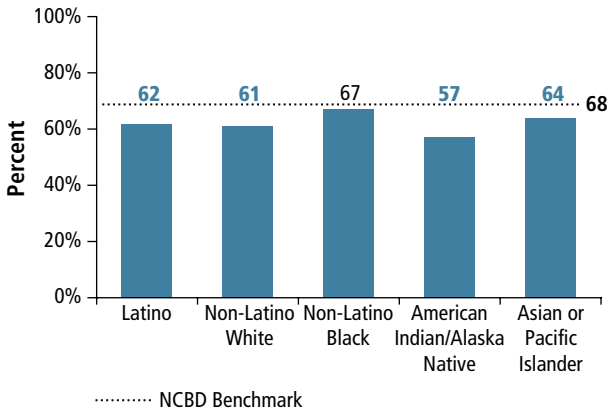
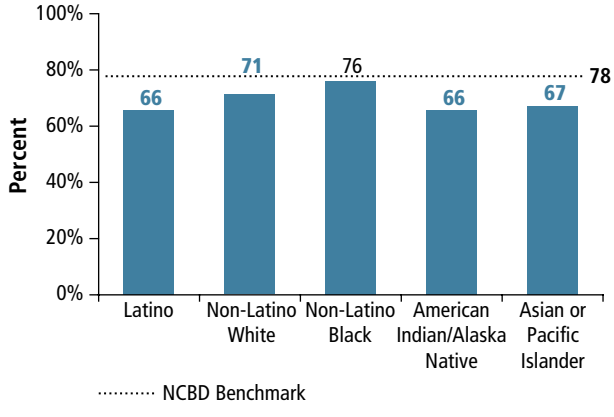


Figure 31. No problem seeing a specialist by race/ethnicity



Research has shown that poor patient-provider interactions can undermine patient satisfaction with care and contribute to racial disparities in health care outcomes (Saha, Arbelaez, and Cooper 2003; Morales et al. 1999). Figures 32 and 33 show ethnic and racial variation in patients' perceptions of their interactions with their physicians. A large majority of respondents in each group reported that their doctor or other provider usually or always listened to them carefully (Figure 32) and usually or always showed them respect in their health encounters (Figure 33). On average, 89 percent of respondents said their provider listened carefully (results were significantly different from whites for all groups except Latinos) and 90 percent said their provider treated them with respect. By both measures, AIAN respondents were least likely to report favorably on their interactions with doctors. Only 84 percent of AIAN patients agreed that their provider listened carefully to them, and only 87 percent said their provider treated them with respect.

Figure 32. Doctors listened carefully by race/ethnicity

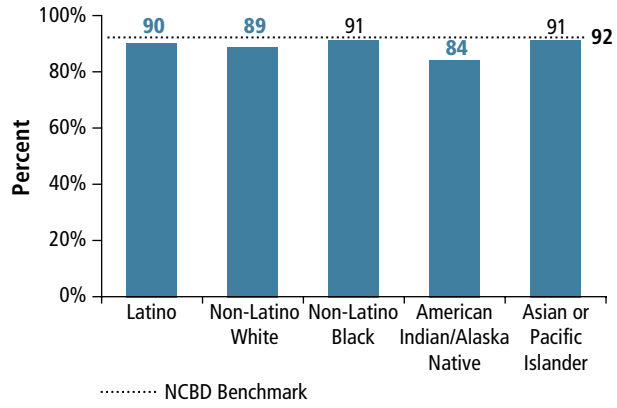
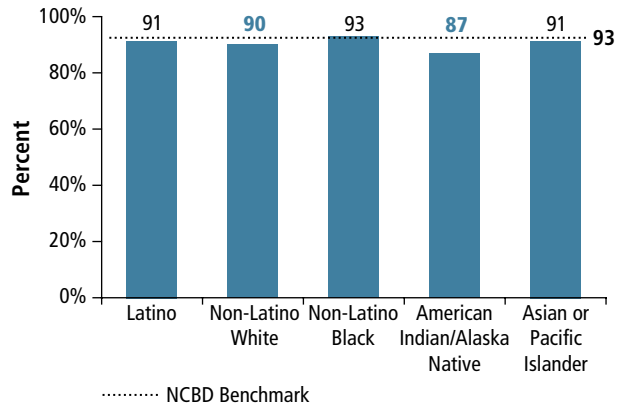
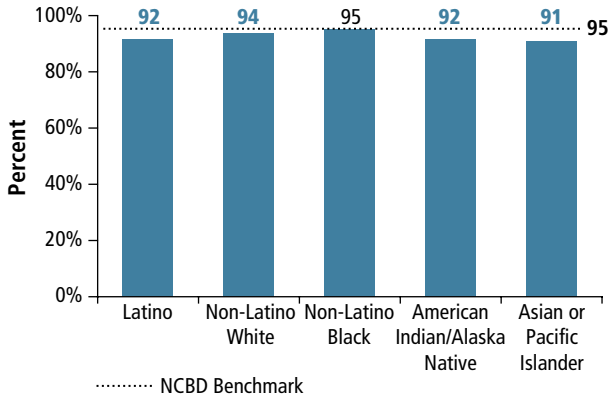


Figure 33. Doctors showed respect by race/ethnicity



Interactions with office staff also may contribute to disparities. Office staff are usually the first contacts patients have with their providers, and these interactions can affect the quality of subsequent communication between patients and doctors. As Figure 34 shows, although there was some variation in patients' perceptions of their treatment by office staff, the percentages reporting that they were usually or always treated with courtesy and respect were high across all groups (91 to 95 percent). Differences were significant for all groups except AIAN.

Figure 34. Courteous and respectful staff by race/ethnicity

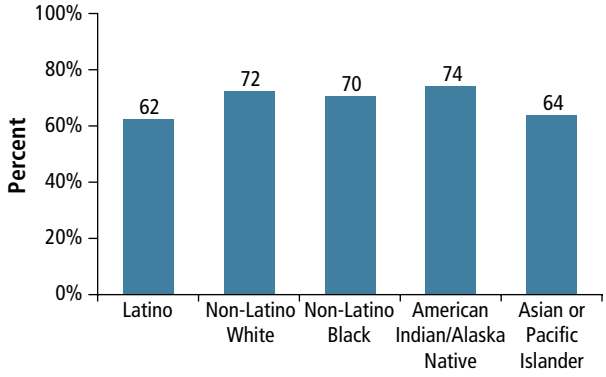


Smoking Cessation

Variation by ethnic and racial groups in the use of preventive services also can be measured using results from the HCSDB. The results suggest that ethnic and racial variations in preventive service use are greater than variations in beneficiaries' perceptions of their care.

Prior studies have documented higher rates of smoking cessation counseling among whites and lower rates among racial and ethnic minorities, particularly African Americans and Latinos (Rogers et al. 1997; Leischow, Ranger-Moore, and Lawrence 2000; Houston et al. 2005). Findings from the HCSDB indicate significantly lower counseling rates in the MHS among Latinos but not blacks. As shown in Figure 35, an average of about 68 percent of smokers reported receiving smoking cessation counseling in the past year. The counseling rate was highest among AIAN respondents (74 percent) and whites (72 percent), and lowest among Latinos (62 percent). Asian counseling rates also were also significantly lower than rates for whites. Similar proportions of blacks and whites were likely to have received smoking cessation counseling.

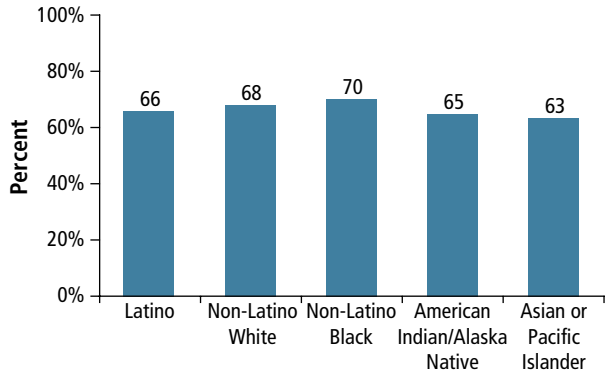
Figure 35. Received smoking cessation counseling by race/ethnicity



Cancer Screening

Rates of cancer screening varied by race and ethnicity. On average, about 65 percent of adults age 50 and older received a sigmoidoscopy or colonoscopy, varying from 63 percent among Asian and Pacific Islanders to 70 percent among blacks (Figure 36). These differences were not statistically significant. Overall, these results run counter to recent analyses that have documented persistent and worsening racial and ethnic disparities in receipt of late stage colorectal cancer screening (Richards and Reker 2004; Agency for Healthcare Research and Quality 2006).

Figure 36. Compliance with American Cancer Society guidelines for colon cancer screening



Figures 37 and 38 show cancer screening rates for MHS women. For both breast cancer and cervical cancer screening, the results indicate black women had significantly higher rates than whites. For example, 93 percent of black women under age 65 had received a Pap smear compared with 89 percent

of whites (Figure 37). Pap smear rates for Asian and Pacific Islanders (82 percent) were significantly lower than those of whites and the *HP2010* guideline of 90 percent or more for cervical cancer screening.

Black women also were the group most likely to have received mammography. Although most groups' mammography rates were well above the *HP2010* goal (70 percent), mammography rates varied from a low of 68 percent among AIAN respondents and 76 percent among Asians and Pacific Islanders to a high of 85 percent among blacks (Figure 38). On all measures of cancer screening, the rates for blacks and Latinos were similar to or higher than those of whites, and were near or above the *HP2010* guidelines; these results may reflect the DoD's emphasis on reducing disparities in cancer rates.

Figure 37. Pap smear within Healthy People 2010 guidelines

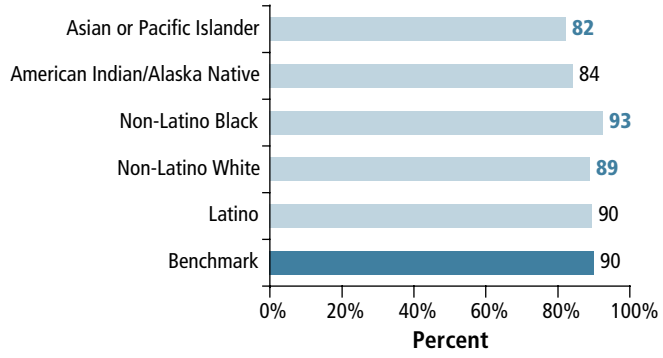
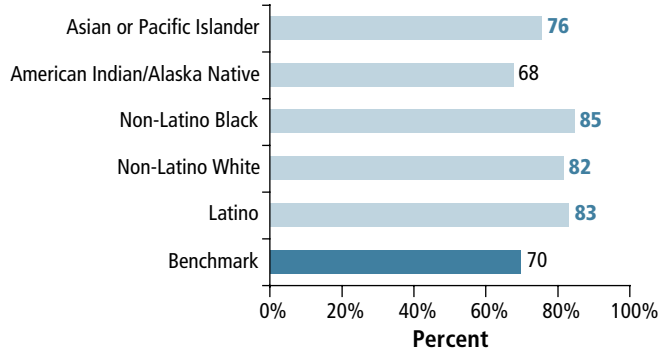


Figure 38. Mammography within Healthy People 2010 guidelines



Preventive Care

Racial and ethnic variation also appears on other measures for the use of preventive care. Receipt of blood pressure screening was below the *HP2010* goal (95 percent) across all race and ethnic groups, averaging around 90 percent (see Figure 39), but was lowest among Latinos (88 percent). Rates for both Latinos and Asian/Pacific Islanders (90 percent) were significantly lower than that of whites (93 percent).

As shown in Figure 40, flu shot rates of beneficiaries age 65 or older were significantly lower than the *HP2010* goal of 90 percent. Whites' flu shot rates were highest, at 73 percent. Blacks were significantly less likely than other groups to have received a flu shot in the past 12 months (54 percent), although Latinos' flu shot rates (60 percent) also were low. Percentages were significantly different from those of whites for all groups except AIAN. These findings are in keeping with results from the National Healthcare Disparities Report (Agency for Healthcare Research and Quality 2006), which documented widening

Figure 39. Blood pressure reading within Healthy People 2010 guidelines

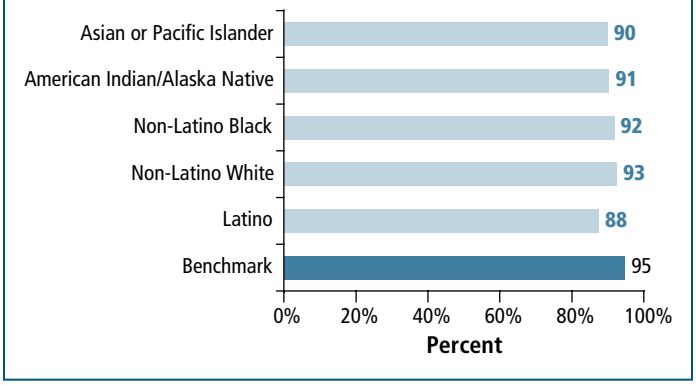
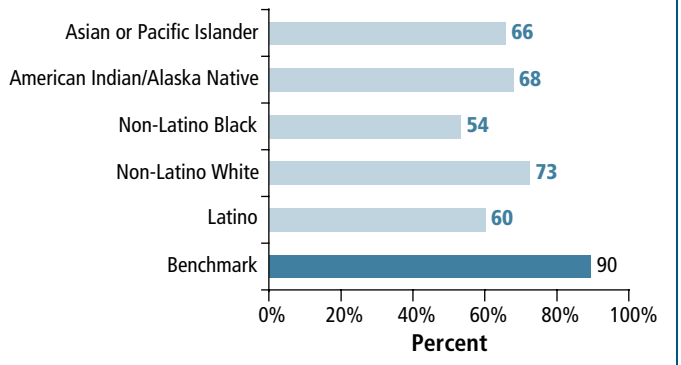


Figure 40. Flu shot within Healthy People 2010 guidelines

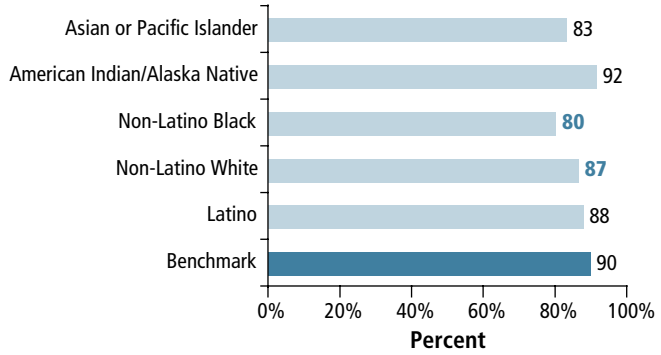


disparities in the receipt of flu shots between whites and blacks, Asians and Pacific Islanders, and Latinos.

HCSDB results indicate particularly low flu shot rates (47 percent) among Puerto Rican respondents (not shown).

Figure 41 shows that black women were less likely than women in other racial and ethnic groups to receive first trimester prenatal care. Their rates were the lowest of all groups, at only 80 percent, compared to a Healthy People 2010 guideline of 90 percent, though differences between racial and ethnic groups are not statistically significant due to small sample sizes. This finding is consistent with previous research that has shown poorer prenatal care among black women (Alexander, Kogan, and Nabukera 2002). However, AIAN respondents had slightly higher rates of prenatal care than whites (92 percent versus 87 percent), suggesting that the MHS has overcome deficiencies in AIAN prenatal care found by previous researchers (Frisbie, Echevarria, and Hummer 2004).

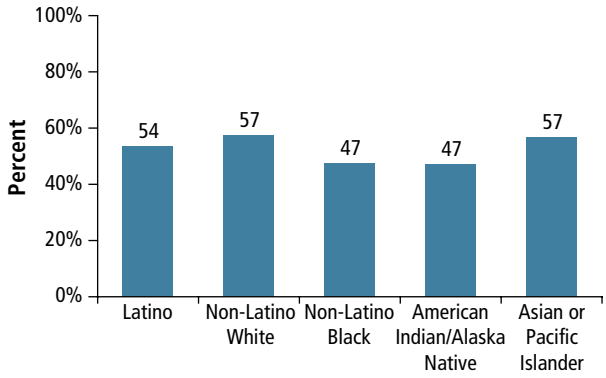
Figure 41. Prenatal care within healthy people 2010 guidelines



Self-rated Health

Respondents were asked to rate their own health on a five-point scale from "poor" to "excellent." Previous studies have documented clear disparities on this measure, with whites and Asian and Pacific Islanders giving higher ratings than members of other racial and ethnic groups (Ren and Amick 1996; McGee et al. 1999). As Figure 42 shows, the results from the HCSDB survey clearly support these findings. Fifty-seven percent of whites and Asians and Pacific Islanders rated their health as either very good or excellent, versus 54 percent among Latinos, and only 47 percent among blacks and AIAN respondents (all of which were statistically significant).

Figure 42. Self-rated health very good or excellent by race/ethnicity



Conclusions

Overall, the results from the HCSDB do not indicate consistent variations by race or ethnicity in access, satisfaction, or use of preventive services. Contrasting with results of many studies of the U.S. civilian population, blacks in the MHS expressed the highest satisfaction with their health plans and health care and fared as well as or better than whites and other racial and ethnic minority groups on a number of preventive care measures, such as Pap smears and mammography. However, for some other preventive services, such as flu shots and prenatal care, black rates lag. Similarly, while AIAN respondents lagged behind members of other groups on many measures of access and satisfaction, they were most likely to have received smoking cessation counseling and prenatal care. The findings, therefore, do not reflect the pattern of disparities found in the civilian population, but indicate a need to continue to monitor variations in health care access and use by different ethnic groups to continue measuring progress toward the goal of promoting health throughout the MHS population.

Chapter 5. Access to Care for Beneficiaries Using Non-Network Providers

Despite policies that encourage the use of military treatment facilities (MTFs), an increasing percentage of TRICARE enrollees receive their care from civilian providers. Between 2000 and 2005, the number of TRICARE beneficiaries receiving inpatient care in civilian facilities increased from 50 percent to 75 percent, while over the same period of time, the use of civilian providers for outpatient care increased from 39 percent to 65 percent (U.S. Government Accountability Office 2006). Beneficiaries enrolled to Prime receive care either from military providers or the network of providers maintained by TRICARE's managed care support contractor. They also may select a civilian provider from outside the network but must bear much of the expense unless their choice is dictated by the unavailability of network providers.

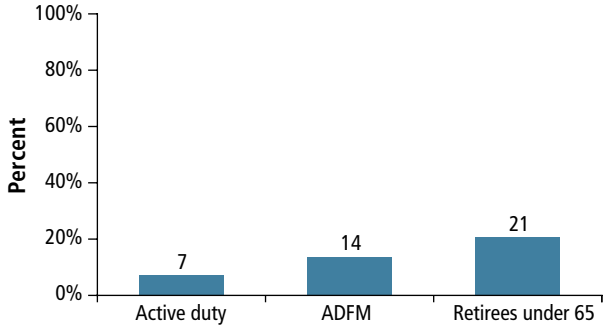
Standard and Extra do not require enrollment so beneficiaries' classification into one or the other depends on the type of provider they use at the point of service. The Extra benefit covers visits to civilian providers who participate in the TRICARE network with enhanced coinsurance. Under the Standard benefit, patients may choose to seek care from a civilian provider who does not participate in the TRICARE network but has agreed to accept TRICARE patients. Patients may also obtain care from non-network providers who do not accept the TRICARE fee schedule, but in these cases the beneficiary must pay for the service in full and submit a claim to TRICARE for reimbursement.

This chapter presents results from the HCSDB fielded in January and April 2006 describing experiences of beneficiaries using non-network physicians under TRICARE Standard.

Variation in the Use of Non-Network Providers

As Figure 43 shows, the percentage of beneficiaries seeking an appointment with a non-network provider ranged from a low of 7 percent among active duty personnel to a high of 21 percent among retirees under age 65 and their survivors or family members. These figures reflect the primary health plans of TRICARE beneficiaries, as described in Chapter 2. Active duty personnel generally use non-network providers only if they live far away from military providers. The higher use of non-network providers among younger retirees and their family members reflects their greater use of Standard/Extra and lower enrollment in Prime.

Figure 43. Percent trying to make an appointment with a non-network provider by beneficiary category

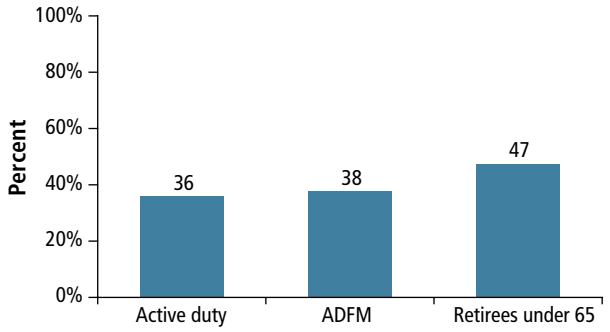


Finding a Personal Physician or Nurse

TMA works with contractors to develop and manage the network of civilian providers. However, some unenrolled TRICARE beneficiaries have charged that the TMA has not invested sufficient resources in developing these networks for non-Prime beneficiaries (U.S. Government Accountability Office 2006). In response, the 2004 National Defense Authorization Act directed the DoD to undertake a survey of civilian providers to monitor access to these services for nonenrolled TRICARE beneficiaries. The survey collects information on the number of TRICARE patients served and the reasons why physicians may not be accepting TRICARE patients. The first of three rounds of the physician survey was completed in 2005 and results suggest that most civilian providers are willing to accept TRICARE beneficiaries as new patients (U.S. Government Accountability Office 2006).

Despite these findings, among HCSDB respondents seeking care outside the TRICARE network, less than half reported no problems locating non-network civilian providers who accept TRICARE. As shown in Figure 44, 36 percent of active duty personnel and 38 percent of their family members reported no problems in finding a personal doctor or nurse who would accept TRICARE as did 47 percent of retirees under age 65 and their family members.

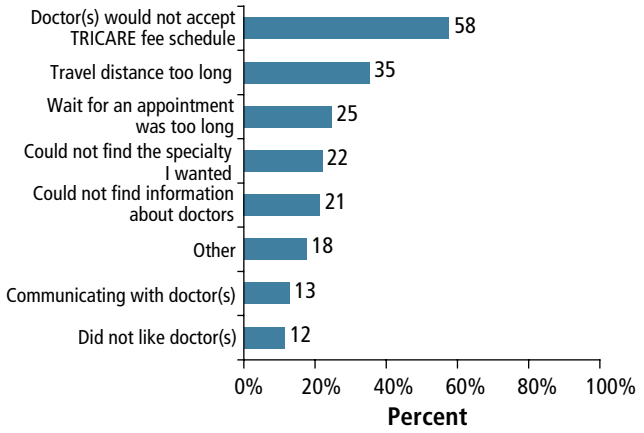
Figure 44. No problem finding a personal doctor who accepts TRICARE by beneficiary category



Policymakers have been concerned for some time that TRICARE payments to providers may not be sufficient to prevent them from refusing to participate in TRICARE. A recent Government Accountability Office (GAO) study (2006) confirmed that reimbursement rates were an important impediment to providers' willingness to accept nonenrolled TRICARE beneficiaries, but that study also found that administrative burdens and lack of practice capacity were additional major barriers.

As shown in Figure 45, payment rates were by far the most frequently cited obstacle to finding a non-network personal doctor. In the HSCDB survey, 58 percent of respondents who reported problems receiving care cited providers' unwillingness to accept the TRICARE physician fee as a problem in finding a personal doctor or nurse. Other frequently mentioned barriers were the distances beneficiaries must travel to see a participating provider (35 percent) and waiting times for appointments (25 percent).

Figure 45. Problems encountered in finding a non-network personal doctor who accepts TRICARE



Seeing a Specialist

Patients seek care from both non-network primary care doctors and specialists. As Figure 46 indicates, more than half of patients of all beneficiary types who sought care from non-TRICARE providers tried to make an appointment with a specialist. The most frequently consulted non-network specialists, shown in Figure 47, were dermatologists (15 percent) followed by surgeons and cardiologists (10 percent and 9 percent, respectively).

Figure 46. Percent who tried to make an appointment with a non-network specialist by beneficiary category

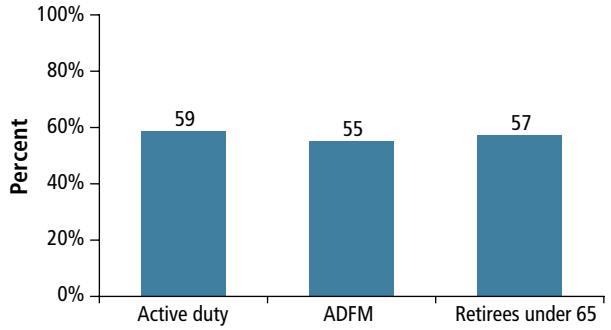
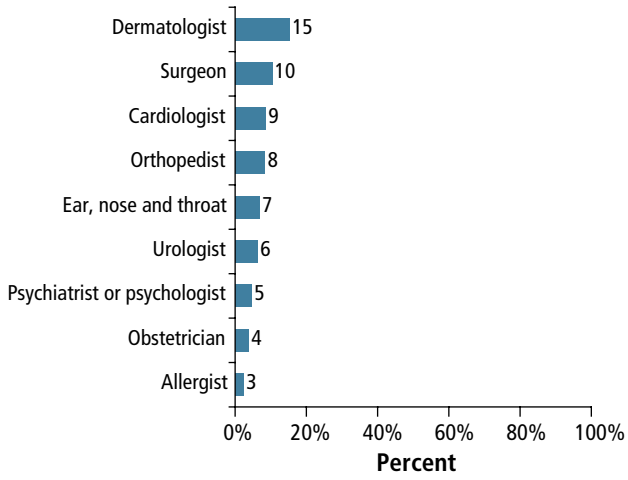


Figure 47. Specialty of last non-network specialist seen



As was the case for personal doctors, a minority of beneficiaries reported no problems in finding a non-network specialist who would accept TRICARE (Figure 48). The proportion reporting no problems ranged from 35 percent among active duty personnel to 57 percent among retirees under age 65.

Among patients reporting problems, the types of problems in encountering a specialist who would accept TRICARE were similar to those cited for finding a personal doctor or nurse. As seen in Figure 49, 61 percent of respondents said that the TRICARE physician fee schedule was a barrier to finding a participating specialist, compared to 32 percent who mentioned the waiting time for an appointment and 25 percent who cited travel distance.

Conclusions

Non-network providers are used by a significant number of TRICARE beneficiaries. To overcome barriers to access among beneficiaries seeking non-network care, changes to reimbursement may be needed in some regions. Reimbursement is the barrier to physician access most frequently cited by beneficiaries seeking care outside of the TRICARE system and physicians responding to TRICARE's physician survey.

Figure 48. No problem seeing a non-network specialist by beneficiary type

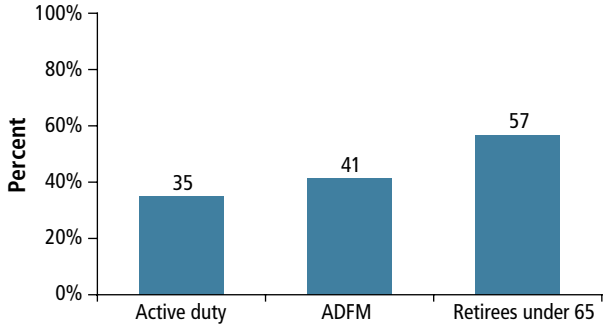
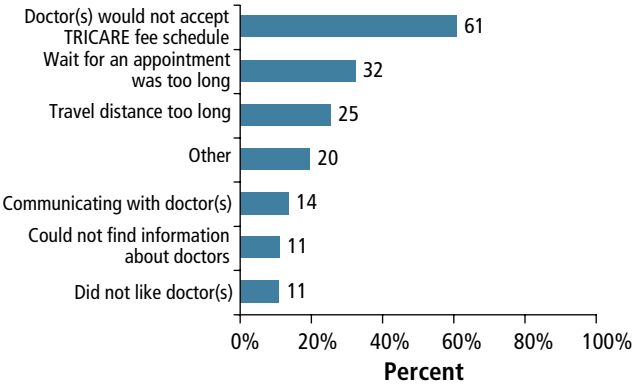


Figure 49. Problems encountered in finding a non-network specialist



Chapter 6. Health Care Access and Use Among Active Duty Personnel

Prime is the managed care program within the TRICARE system. As noted in Chapter 2, 42 percent of TRICARE beneficiaries are enrolled in Prime through an MTF. Another 9 percent are enrolled in Prime through the civilian network (not shown). All active duty personnel are enrolled in Prime automatically. Other MHS beneficiaries also may elect to enroll in Prime. Active–duty personnel are more likely than other groups to get care from MTFs and less likely to have a choice of provider. For that reason, their experience with their health plans and health care providers differs from the experience of other Prime enrollees. This chapter presents results from the HCSDB fielded in FY2006, comparing experiences of active duty beneficiaries with those of other Prime enrollees.

Ratings of Health Plan and Health Care

Compared with other Prime enrollees, active duty personnel report greater dissatisfaction with their health plans. As shown in Figure 50, slightly more than half (52 percent) of active duty personnel give a high rating to the Prime network, compared with 60 percent of other Prime enrollees. The disparity is smaller with respect to overall health care; 51 percent of active duty personnel give their care high ratings, compared with 56 percent of other Prime members.

Finding a Personal Doctor or Nurse

Active duty personnel are somewhat less likely than other Prime enrollees to have a personal doctor or nurse but report greater difficulty finding one with whom they feel satisfied. However, among those who do have a personal doctor or nurse, active duty personnel give lower ratings. These findings are summarized in Figure 51.

For both groups of Prime enrollees, the percentage who have a personal doctor or nurse are well below civilian norms; only 34 percent of active duty members have a personal doctor, versus 63 percent of other Prime enrollees. Active duty personnel are, however, less likely to report difficulty in finding a personal doctor or nurse they are happy with (56 percent versus 47 percent). Although they perceive less difficulty in finding a personal doctor, active duty personnel are less likely to be happy with the personal doctor they have. Sixty-three percent of other Prime beneficiaries rated their provider at 8 or above, as opposed to 59 percent of active duty personnel.

Seeing a Specialist

Slightly more than half of Prime enrollees report having no problems seeing a specialist when needed. As seen in Figure 52, 52 percent of active duty personnel and 55 percent of other Prime enrollees reported seeing specialists without problems. Similarly, among those who saw a specialist, a larger majority of non-active duty enrollees than other Prime enrollees gave their specialist a high rating (8 or higher on a 10 point scale).

Figure 50. Ratings of health care and health plan by active duty status

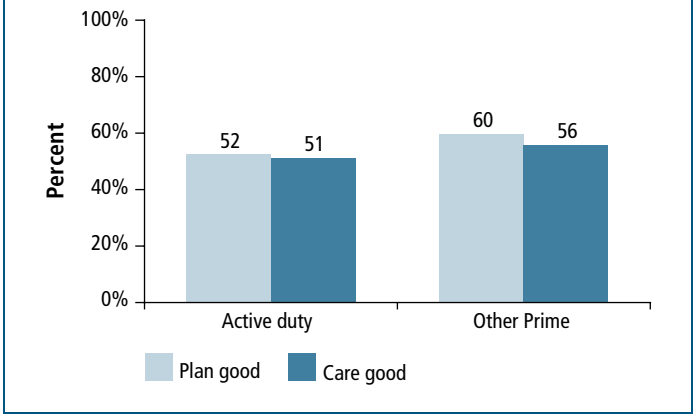


Figure 51. Relation to personal doctor by active duty status

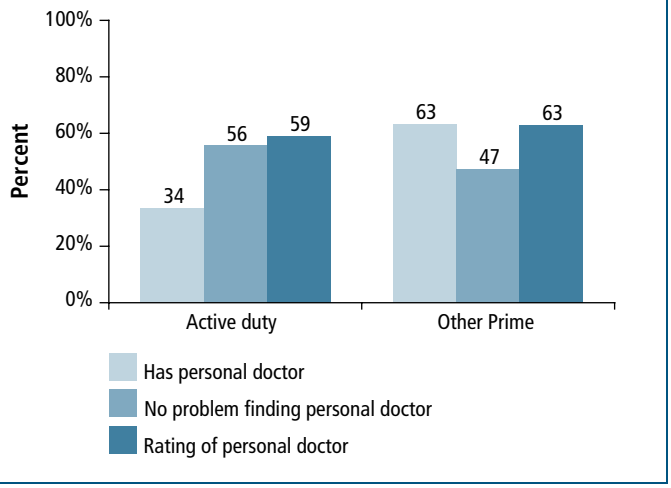


Figure 52. Relation to specialist by active duty status

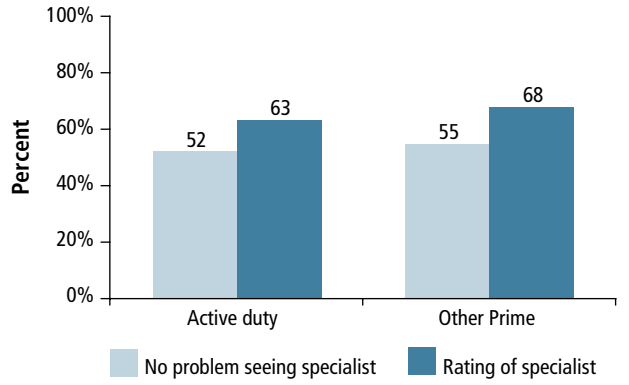
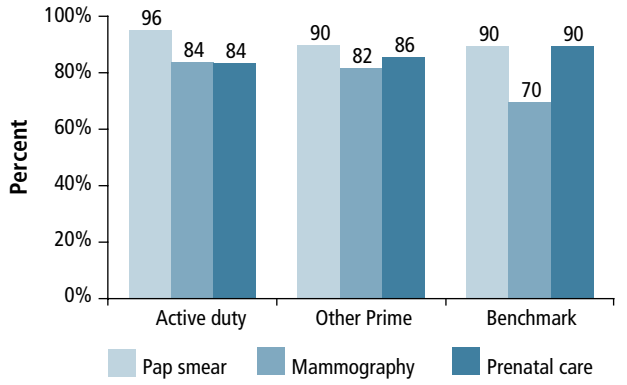


Figure 54. Women's preventive care by active duty status



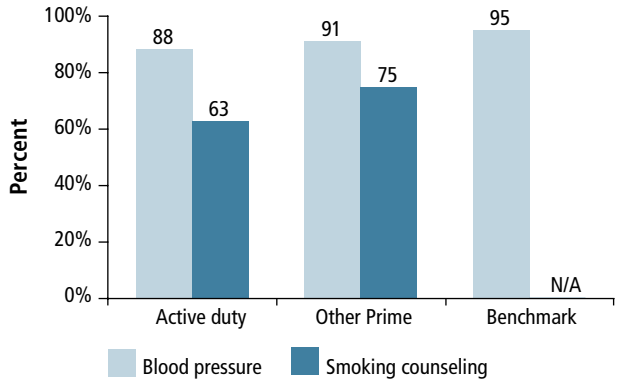
Preventive Care

Preventive care rates for Prime enrollees are below *HP2010* goals for some measures. As Figure 53 shows, both active duty and other Prime enrollees had blood pressure screening rates lower than the benchmark of 95 percent, but the rate for active duty personnel was 3 percent lower than their Prime enrollee counterparts (88 and 91 percent, respectively). Similarly, the proportion of active duty personnel that was counseled to quit smoking during at least one office visit (63 percent) was well below the proportion of other Prime enrollees that received counseling (75 percent).

Women's Preventive Care

Receipt of women's preventive care is similar for both active duty and other Prime enrollees, although both groups fall below the *HP2010* standards on receipt of prenatal care (Figure 54). Ninety-six percent of active duty women received a Pap smear within the previous 3 years, compared to 90 percent among other female Prime enrollees.

Figure 53. Preventive care: blood pressure, smoking counseling



More than 80 percent of enrolled women over 40 received a mammography in the last year, well above the *HP2010* goal of 70 percent. Eighty-four percent of pregnant active duty women and 86 percent of other pregnant women enrolled in Prime received prenatal care in their first trimester, below the *HP2010* target of 90 percent.

Conclusions

Active duty personnel rate both their health plans and health care lower than other Prime enrollees. Active duty members' health care ratings have remained level since 2002, at around 51 percent (Bencio et al. 2005). Health plan ratings, however, have improved over the years; between 2002 and 2004 only 44 percent of active duty personnel gave their health plan high ratings (with a high of 46 percent in 2004), versus 52 percent in 2006. Although problems with access and physician interactions are slightly more common among active duty than other Prime enrollees, the differences do not explain the substantially lower ratings given to their health care and health plans by active duty beneficiaries.

Preventive care received by active duty does differ significantly from care received by other Prime enrollees in some categories. Pap smear rates for active duty women are substantially higher than rates for other women enrolled in Prime. However, active duty rates of smoking cessation counseling are lower than those of other Prime enrollees. Given the efforts of TRICARE leadership to reduce smoking rates, further investigation to understand the reason for this low rate is warranted.

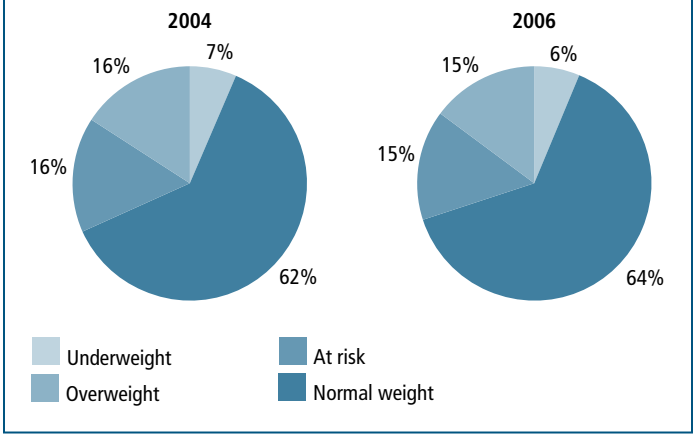
Chapter 7. Childhood Overweight in the MHS

The prevalence of obesity among American children has reached epidemic proportions in recent years. In 2002, approximately 16 percent of children between the ages 6 and 19 were overweight (Hedley et al. 2004). The Centers for Disease Control and Prevention (CDC) recommends using the body mass index (BMI), calculated from a child's height and weight, to identify children who are overweight or at-risk for becoming overweight. Children whose BMI is at or above the 95th percentile for children of their age and gender, based on the 2000 CDC Growth Charts for the United States (Kuczmarski et al. 2002), are considered overweight, and those whose BMI is above the 85th percentile but below the 95th percentile are considered at-risk.

Prevalence

In the HCSDB child questionnaire, parents are asked to report the height and weight for a child selected from their household, which provides the information used to calculate the child's BMI. Because errors are likely to be large relative to the range of normal BMIs for children under age 6, the results here include only children aged 6 to 17. As Figure 55 shows, in 2004, 16 percent of children were overweight and another 16 percent were at-risk of being overweight. In 2006, these numbers were not significantly different. HCSDB results do not indicate an increase in overweight among MHS children over the last few years.

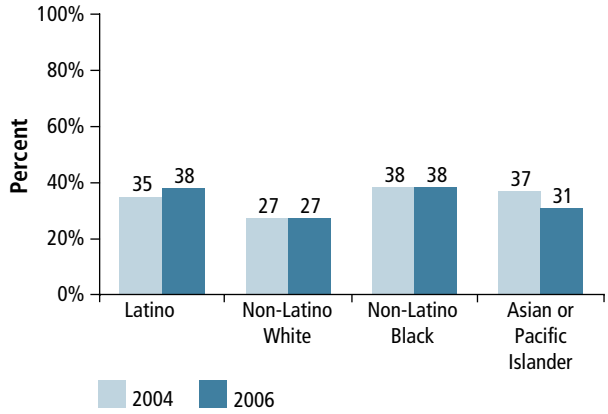
Figure 55. Children's BMI



Race and Ethnic Variations

Figure 56 shows that non-Latino white children are significantly less likely than children from other racial and ethnic groups to be at-risk or overweight in both 2004 and 2006. In these years, the proportion of white children in those two weight groups was 27 percent. In both 2004 and 2006, black children were the most likely to fall within one of the two high weight groups. Thirty-eight percent of black children in both 2004 and 2006 could be found in one of these groups. Latino children were also more likely than white children to be in a high weight group, with 35 percent in 2004 and 38 percent in 2006 at-risk or overweight. The drop from 37 percent to 31 percent among AI/P children is not statistically significant.

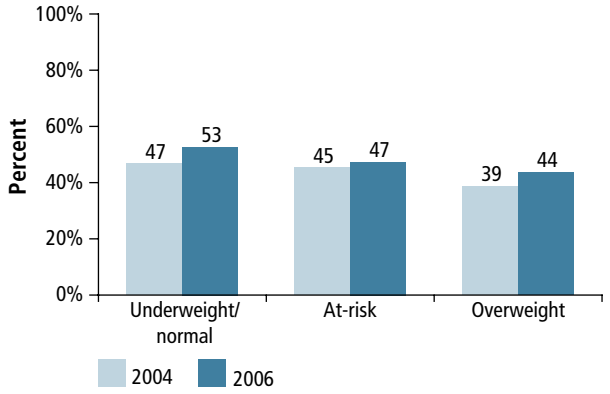
Figure 56. Percentage at-risk and obese by race and ethnicity



Physical Activity

Federal guidelines recommend that children and adolescents participate in at least one hour of "physical activity most, preferably all, days of the week" (U.S. Department of HHS and U.S. Department of Agriculture 2005) to maintain physical fitness and ward off weight gain. According to parents in the HCSDB survey, approximately half of MHS children participate in vigorous physical activity at least 5 days a week, regardless of BMI. The reported rates of physical activity in all groups have increased since 2004. As Figure 57 shows, the association between weight

Figure 57. Participation in rigorous physical activity at least 5 days per week



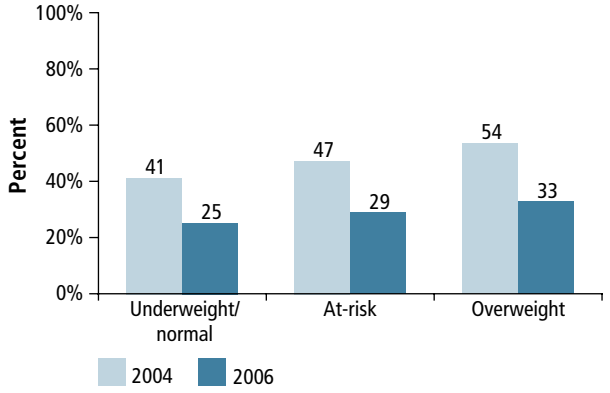
class and physical activity was similar in 2004 and 2006. In both years, normal and underweight children were significantly more likely to participate in vigorous activities 5 or more days per week; overweight children were least likely to do so.

In 2006, 53 percent of normal and underweight children were physically active versus 47 percent of at-risk children, and 44 percent of overweight children.

Television Watching

Sedentary activities also can contribute to weight gain and the risk for obesity. Specifically, increased time spent watching television has been cited as a factor contributing to increases in childhood obesity (Gortmaker et al. 1996; Crespo et al. 2001; Ebbeling, Pawlak, and Ludwig 2002; Coon and Tucker 2002). According to a study by the Annenberg Public Policy Center at the University of Pennsylvania, the average child spends four and a half hours per day watching television, playing video games, and/or using a computer (Woodard and Gridina 2000). When these activities substitute for physical activity, children may face a higher risk of weight gain. As shown in Figure 58, the percentage of children who watched 3 or more hours of television per day decreased substantially between 2004 and 2006 across each BMI group, but overweight children were most likely to fall within the group watching a large amount of television. Thirty-three percent of overweight children watched 3 or more hours in 2006, compared to 29 percent of at-risk children and 25 percent of normal or underweight children. Differences between at-risk or overweight children and normal or underweight children were significantly different in both years.

Figure 58. Spending 3 or more hours watching television per day



Fast Food Consumption

Unhealthy eating is believed to be another cause of childhood obesity. Many schools have cut unhealthy foods from their meals and replaced them with healthier options (for example, replacing potato chips with carrot sticks) and there has been a concerted campaign to remove soft drink machines from school cafeterias. Fast food chains also have sought to improve the health content of their menus but the frequent consumption of fast food has also been blamed for weight gain among children (Ebbeling, Pawlak, and Ludwig 2002; Bowman et al. 2004). As

Figure 59. Never eating fast food

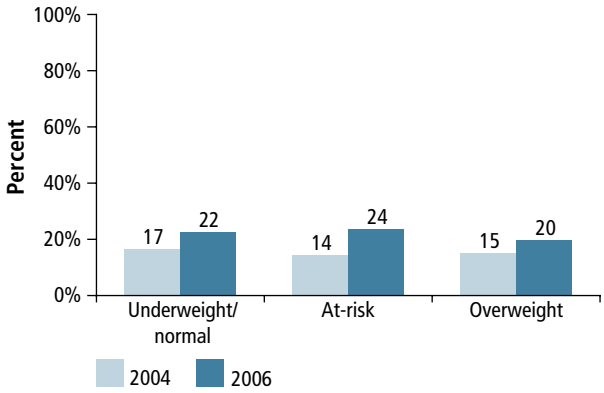


Figure 59 shows, the percentage of children who never eat fast food in an average week has increased considerably between 2004 and 2006 in all weight groups. However, the results do not indicate a significant relation between fast food consumption and overweight.

Conclusions

The significant increases in healthy behaviors among TRICARE children and the absence of an increase in obesity are encouraging, particularly in light of recent studies that document continuing increases in the number of obese children. These reported improvements within the military community may reflect the fact that military personnel must maintain high levels of physical fitness and that these standards may be passed from military parents to their children. At least one study of this question did not find such a relationship; third grade children of military personnel who attended school with civilian students in two San Diego public schools were not any more physically fit than their civilian counterparts (Stephens et al. 2003).

The findings may reflect increasing attention paid to this issue by parents and MHS leadership in recent years. Objective confirmation of these self-reported findings may be needed to establish that they reflect a real change.

Chapter 8. Behavioral Health Care

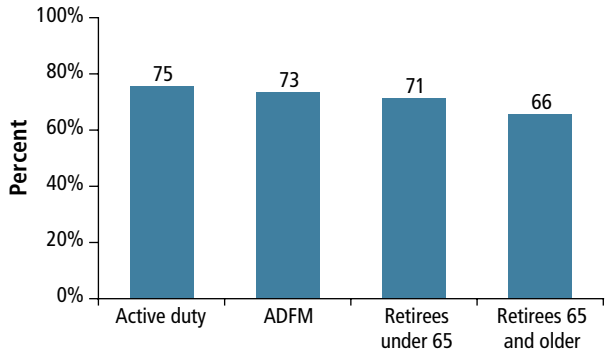
The 2005 HCSDB Annual Report documented the mental health needs and access to care among military health system enrollees. Since that time, news reports have highlighted cases where active duty personnel have not received the mental health treatments they need (Zwerdling 2006). In response to these reports, the DoD has reaffirmed its commitment to meeting the mental health needs of all beneficiaries in the MHS. This chapter presents results from the HCSDB fielded in April, 2006 concerning behavioral health care in the MHS.

As with other TRICARE benefits, TRICARE beneficiaries are encouraged to get mental health care from MTFs, but patients get much of their care from civilian providers. Non-active duty beneficiaries can get outpatient mental health care for eight visits without referral during a fiscal year, but must seek authorization and a referral from their regional contractor if they wish to continue their care beyond eight visits. Inpatient care is capped for adults at 30 days in a fiscal year, and for children under aged 19, at 45 days.

Self-rated Mental Health

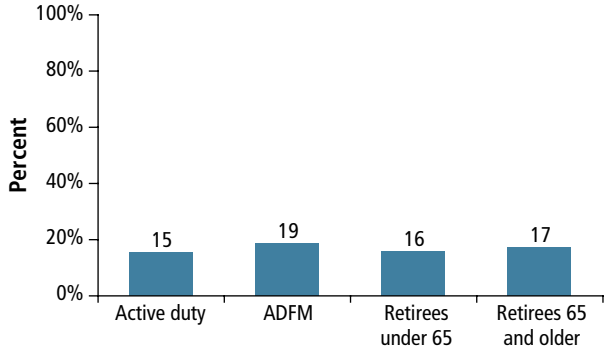
Overall, TRICARE beneficiaries report good mental health status. As Figure 60 shows, 75 percent of active duty respondents report that their mental health is very good or excellent, higher than the rate for other beneficiary groups. Sixty-six percent of retirees 65 or older report very good or excellent mental health, which is the lowest of the beneficiary groups.

Figure 60. Overall mental health very good or excellent by beneficiary category



The expressed need for mental health counseling is considered a more reliable indicator than mental health ratings of mental health status. The proportion reporting a need for counseling in the last 12 months ranged from 15 percent of active–duty personnel to 19 percent of active duty family members, with insignificant variation across beneficiary groups (Figure 61). However, individuals suffering from depression or other mental health problems may be less likely than those with good mental health to respond to the survey, so these figures may underesti-

Figure 61. Needing counseling in last 12 months by beneficiary category

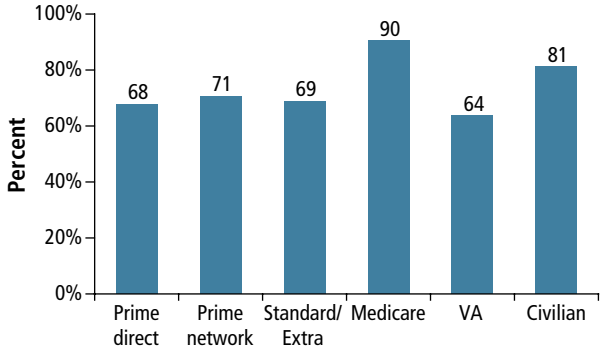


mate the number of TRICARE beneficiaries with mental health care needs (Schone, Williams and Huskamp 2006).

Access to Counseling Services

Among those who reported they needed counseling, the majority of respondents said they had no problem receiving mental health care. However, TRICARE users were more likely than those using civilian sources to report problems. As Figure 62 shows, 68 percent of direct care Prime enrollees and 71 percent enrolled to the network reported that it was not a problem to get counseling. Eighty-one percent of beneficiaries with civilian insurance and 90 percent with Medicare reported no problem getting access. However, among beneficiaries who rely on their

Figure 62. Not a problem to get the counseling needed by plan type



VA benefits for coverage, only 64 percent reported that it was not a problem to get needed care.

Ratings of Counseling Services

Ratings of behavioral health care received also varied considerably by health plan. TRICARE and VA users were least likely to give their mental health care a high rating. Only 54 percent of Prime direct care enrollees rated their treatment or counseling 8 or higher, as did 57 percent of network Prime enrollees and 61 percent of Prime Standard/Extra users (Figure 63). Similarly, only 59 percent of VA enrollees rated their behavioral health care highly. Among beneficiaries using civilian insurance, 70 percent gave high ratings, as did 79 percent of Medicare enrollees.

Active Duty Personnel

Contrary to recent reports, active duty personnel did not report greater problems accessing mental health care than did other TRICARE beneficiaries. Differences in access problems were not statistically significant among beneficiary groups under age 65. Sixty-six percent of active duty personnel said they did not have a problem getting needed health care, compared with 70 percent of their family members and 71 percent among retired individuals under age 65 and their family members (Figure 64). Ninety-one percent of retirees age 65 and over reported that they had no problem receiving mental health counseling.

As shown in Figure 65, active duty personnel rated their mental health treatment significantly worse than other groups. The proportion rating their treatment or counseling 8 or above (51 percent) is seven percentage points lower than that of their family members (58 percent). The discrepancy is even greater when comparing active duty personnel with retirees. Sixty-three

Figure 63. Rating of counseling by plan type

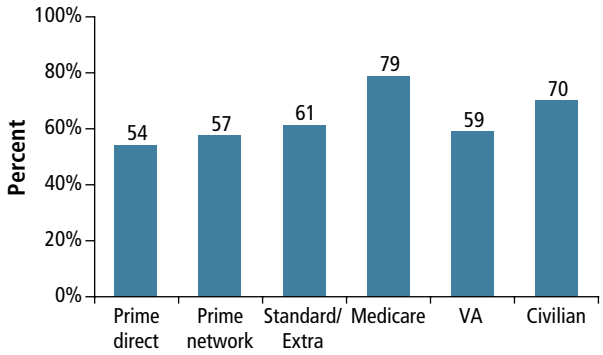


Figure 64. No problem to get the counseling needed by beneficiary type

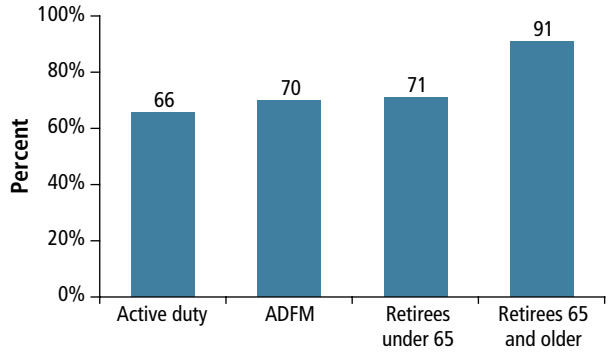
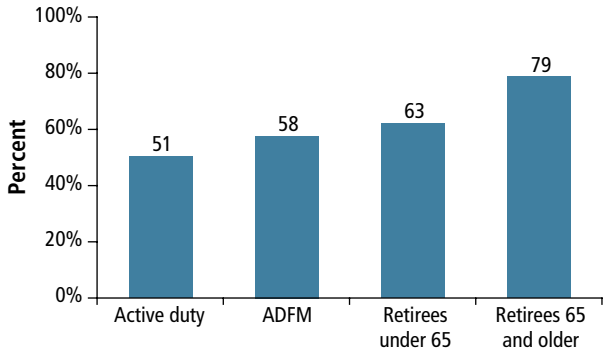


Figure 65. Rating of counseling by beneficiary type



percent of retirees under age 65 gave their treatment a rating of 8 or higher, as did 79 percent of retirees 65 or older.

Conclusions

Despite recent reports, active duty personnel do not report any greater unmet need for mental health care than the majority of TRICARE beneficiaries. However, the HCSDB may underestimate the need for care, particularly among active duty personnel, who may be less willing than other beneficiaries to admit a need or accept treatment. Social and environmental factors within the military may limit active duty members' ability to recognize their need for mental health treatment (Zwerdling 2006). Results from the HCSDB can be used to monitor trends in mental health needs and to identify access problems. The results suggest that TRICARE users perceive barriers to access to behavioral health care that are similar to barriers to access for other specialty care.

Issue Briefs

These issue briefs first are available on TRICARE's website:

- *Colon Cancer Screening*
- *Use of TRICARE's Civilian Network*
- *TRICARE Pharmacy Options*

Issue Brief: Colon Cancer Screening

Colon cancer is the second leading cancer-related cause of death in the United States, resulting in over 50,000 deaths in 2005.[1] It is estimated that 60 percent of colon cancer deaths could be prevented by routine screening of adults 50 and over.[2] Guidelines from the U.S. Preventive Services Task Force and the American Cancer Society (ACS), recommend one or more of the following for adults age 50 and older: (1) an annual fecal occult blood test (FOBT), (2) flexible sigmoidoscopy every 5 years, and (3) colonoscopy every 10 years.[2] Healthy People 2010 (*HP2010*) goals for adults over age 50 include 50 percent with FOBT within two years and 50 percent with colon imaging, whether colonoscopy or sigmoidoscopy, at any time in their lives.[3]

TRICARE offers coverage for colon cancer screening for men and women over age 50, including FOBT each year and sigmoidoscopy every 3 to 5 years. Effective March 15, 2006, colonoscopy at 10-year intervals is also covered.[4,5] The benefit is similar to benefits offered by Medicare and many civilian plans.

Table 1 shows that, according to their responses to the Health Care Survey of DoD Beneficiaries (HCSDB) fielded in January, 2006, 67 percent of MHS beneficiaries comply with ACS guidelines. As described above, the guidelines call for FOBT annually, sigmoidoscopy every 5 years or colonoscopy every 10 years. Among health plans, the proportion in compliance ranges from 62 percent with Standard/Extra to 79 percent of those covered by the Veterans Administration (VA).

Table 1. Compliance with Screening Guidelines by Health Plan

	ACS Guidelines	FOBT in 2 Years	Colonoscopy or Sigmoidoscopy Ever
	Percent		
All MHS (over age 50)	67	33	70
Prime	65*	29*	67*
Standard/Extra	62*	25*	64*
Medicare	71*	33	76*
Other Civilian	67	35	67*
VA	79*	63*	68

*Differs significantly from other plans, p<0.05

Though the proportion of MHS beneficiaries that has had colonoscopy or sigmoidoscopy exceeds the *HP2010* goal of 50 percent, the proportion with FOBT within 2 years (33 percent) is less than the corresponding goal. Sixty-three percent of those covered by the VA have had FOBT within the past 2 years, which exceeds the *HP2010* goal, while beneficiaries with all types of coverage exceed the goal for colon imaging. Standard/Extra users are least likely to have had FOBT within 2 years (25 percent) and least likely to have had sigmoidoscopy or colonoscopy (64 percent), but still exceed the *HP2010* goal for colon imaging.

According to the 2004 Behavioral Health Risk Factor Surveillance System (BRFSS) survey, 19 percent of U.S. adults age 50 and older had a blood stool test within the past year and 51 percent had either a sigmoidoscopy or colonoscopy within the past 10 years.[1] Table 2 shows that though the FOBT rate of military beneficiaries is similar to the BRFSS rate, military beneficiaries are substantially more likely than their civilian counterparts to undergo colon imaging. Only 18 percent have had FOBT within the past 12 months, but 62 percent have had sigmoidoscopy within 5 years or colonoscopy within 10. Also shown by Table 2, imaging by military beneficiaries is primarily in the form of colonoscopy. Fifty-seven percent of respondents report they have had a colonoscopy in the past 10 years.

Table 2. Types of Screening by Health Plan

	FOBT in 12 months	Sigmoidoscopy in 5 Years or Colonoscopy in 10 Years	Colonoscopy in 10 Years	Sigmoidoscopy in 5 Years
	Percent			
All MHS	18	62	57	28
Prime	15*	61	55*	27
Standard/Extra	13*	57*	52*	21*
Medicare	18	67*	63*	30
Other Civilian	19	61	55*	26
VA	46*	63	56	43*

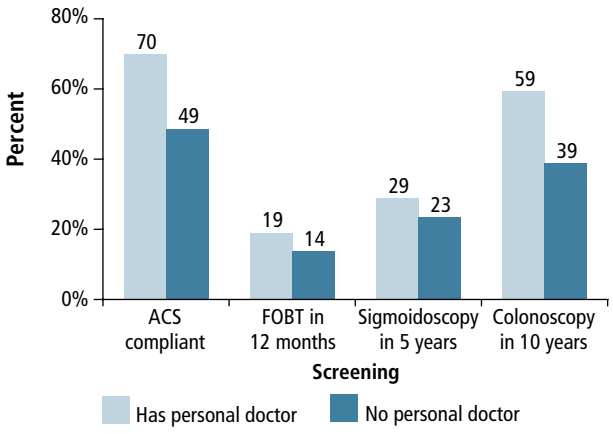
*Differs significantly from other plans, p<0.05

There is no significant difference in compliance with ACS guidelines between those who use TRICARE Prime (65 percent) and those who use civilian insurance (67 percent). Nor is there a significant difference in the likelihood of colonoscopy. Fifty-five percent of both Prime users and users of civilian insurance report a colonoscopy in the past 10 years. Prime enrollees underwent colonoscopy at the same rate in spite of the limited coverage of the procedure afforded by Prime at the time this survey was fielded.

Medicare beneficiaries are the oldest, and hence are most likely to have had colon imaging at any time in their life (76 percent). They are also most likely to have had sigmoidoscopy in the past 5 years or colonoscopy in the past 10 years (67 percent). Medicare beneficiaries are the group most likely to have had colonoscopy in the past 10 years (63 percent). However, respondents from the VA are most likely to have had a recent sigmoidoscopy (43 percent) or FOBT (46 percent).

Figure 1 shows that beneficiaries who report that they have a personal doctor are more likely to be in compliance with ACS guidelines. Seventy percent with a personal doctor and 49 percent without a personal doctor have had FOBT within the past year, sigmoidoscopy within 5 years or colonoscopy within 10 years. Those with a personal doctor are more likely than those without one to have had any type of screening, but the difference is greatest for colonoscopy. Fifty-nine percent with a personal doctor have had colonoscopy within the past 10 years compared to 39 percent without a personal doctor. Sigmoidoscopy rates differ less than other screening rates between the two groups. Twenty-nine percent with a personal doctor have undergone sigmoidoscopy in the previous 5 years compared to 23 percent without a personal doctor.

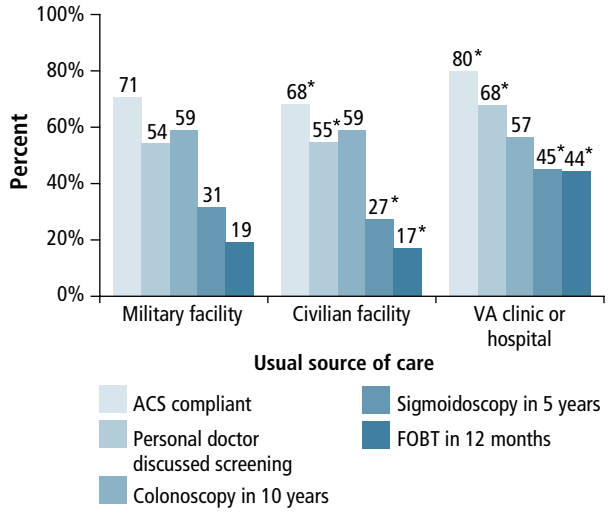
Figure 1. Colon cancer screening and personal doctors



All differences significant, p<0.05

Figure 2 shows how practices differ according to the beneficiary's usual source of care. Beneficiaries who usually get care from a VA facility are most likely to be in compliance with ACS guidelines (80 percent). Compliance rates for those who use MTFs (71 percent) and those who use civilian providers (68 percent) differ little. Patients with a personal doctor who get care from VA facilities are also more likely than those who use MTFs or civilian providers to have discussed colon cancer screening with that doctor in the past year. Sixty-eight percent who get care from the VA have discussed screening with their personal doctor in the past year, compared to 54 percent who get care from MTFs and 55 percent who see civilian providers. However, though VA users are most likely to have had FOBT within the past year, or sigmoidoscopy within the past 5 years, 10-year colonoscopy rates for the three provider types are approximately the same.

Figure 2. Colon cancer screening by usual source of care



*Differs significantly from other sources, p<0.05

Conclusion

Results from the HCSDB indicate that two-thirds of beneficiaries surveyed are in compliance with ACS guidelines for colon cancer screening. Those who rely on VA coverage are most likely to be screened, while those who use TRICARE Standard/Extra are least likely. Most compliant beneficiaries are compliant because they have undergone colonoscopy within the past 10 years, no matter what coverage they are using. Thus, it seems that TRICARE beneficiaries were receiving colonoscopy in spite of limited coverage for that procedure prior to March, 2006.

Users of VA facilities are more likely than users of MTFs or civilian facilities to comply with screening guidelines because of their greater use of sigmoidoscopy and FOBT. Though not as definitive as colonoscopy, the alternative screening tests have reduced mortality in clinical trials or case control studies.[6] By promoting these less invasive alternatives in addition to colonoscopy, TRICARE providers may increase screening rates and reduce mortality associated with colon cancer.

Sources

[1] Centers for Disease Control and Prevention. 2006. "Increased Use of Colorectal Cancer Tests-United States, 2002 and 2004." *MMWR*; 55:308-311.

[2] Centers for Disease Control and Prevention. 2005. Notice to Readers: National Colorectal Cancer Awareness Month-March 2005. *MMWR*; 54:254-255. Guidelines also include barium enema within 5 years.

[3] "Cancer Trends Progress Report-2005 Update." Available at [http://progressreport.cancer.gov/doc_detail.asp?pid=1&did=2005&chid=22&coid=218&mid=].

[4] TRICARE Policy Manual 6010.54-m, Medicine, Chapter 7, Section 2.1, "Clinical Preventive Services." Available at [http://manuals.tricare.osd.mil/index.cfm].

[5] Prior to that date, colonoscopy was covered only for beneficiaries with higher than average risk of colon cancer.

[6] U.S. Preventive Services Task Force. 2002. "Screening for Colorectal Cancer: Recommendation and Rationale." *Annals of Internal Medicine*; 137:129-131.

Health Care Survey of DoD Beneficiaries fielded January, 2006.

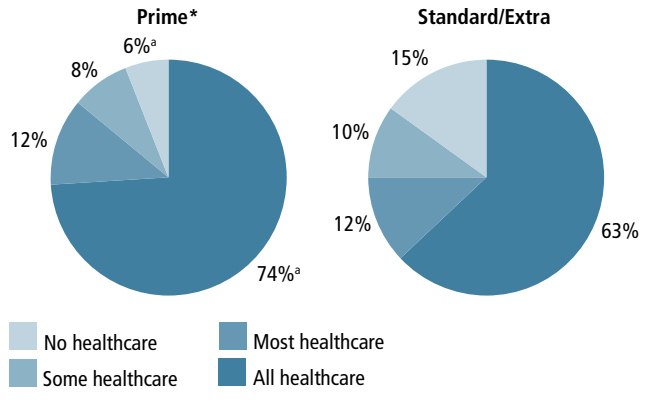
Issue Brief: Use of TRICARE's Civilian Network

In the military health system, care from civilian doctors is covered through TRICARE Prime or TRICARE Standard and Extra within the United States. To provide this coverage, TRICARE contracts with three regional health plans. These health plans, known as managed care support contractors (MCSCs), are directed to establish networks of doctors, which, in designated Prime service areas, complement the care provided in military facilities. A beneficiary who sees doctors not part of the resulting TRICARE network must pay more out-of-pocket, either a point-of-service charge, if a Prime enrollee, or higher coinsurance, if using TRICARE Standard. To ensure that the network meets beneficiaries' needs, MCSCs' contracts include performance standards for travel distance, appointment waiting times and out-of network referrals for Prime enrollees.[1,2]

Results from the health care survey of beneficiaries (HCSDB) fielded in April 2006 permit estimates of how many beneficiaries rely on the civilian network, and to what extent the TRICARE network gives them access to the doctors they need.

Beneficiaries who rely on the civilian network are primarily from two groups, those enrolled to Prime through the MCSC, and those who use TRICARE Extra and Standard. As shown in Figure 1, about 74 percent of Prime MCSC enrollees who got care during the previous year said they got all of their health care from the civilian network, while another 12 percent said they got most of their care through the civilian network. In all, 94 percent of Prime MCSC enrollees got at least some of their care through the network. Among Standard/Extra users, 75 percent reported they got all or most of their care from network doctors.

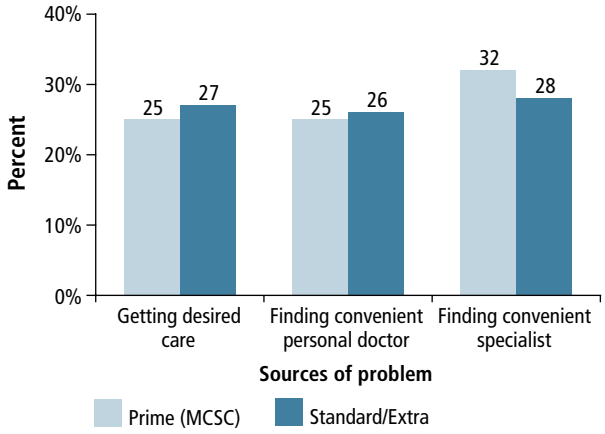
Figure 1. Use of the TRICARE civilian network



*Enrolled to MCSC
[a]Differs significantly from Standard/Extra, p<0.05

The results shown in Figure 2 suggest that Prime MCSC enrollees and Standard/Extra users encounter similar rates of problems getting access to care through the civilian network.

Figure 2. Percent with access problems



No differences are statistically significant

Twenty-five percent of Prime MCSC enrollees reported some kind of problem getting care from the civilian network, compared to 27 percent of Standard/Extra users. Beneficiaries of both types were slightly more likely to report problems finding specialists than finding personal doctors.

Twenty-five percent of Prime MCSC enrollees and 26 percent of Standard/Extra users reported problems finding a conveniently located personal doctor in the network, while 32 percent of Prime enrollees and 28 percent of Standard/Extra users said they had problems finding a specialist.

Prime MCSC enrollees and Standard/Extra users experienced similar problems when trying to make appointments with network doctors, as shown in Table 1. Among Prime MCSC enrollees and Standard/Extra users, travel distances were the problem most often mentioned both by those trying to see a specialist and those trying to find a personal doctor. The proportions citing travel distance range from 47 percent of Standard/Extra users

Table 1. Types of Access Problems*

	Personal Doctor		Specialist	
	Prime (MCSC)	Standard/ Extra	Prime (MCSC)	Standard/ Extra
	Percent			
Travel distance	62	51	49	47
Wait for appointment too long	31	39	42	39
Doctor not taking new patients	50[a]	42	28	32

[a]Differs significantly from specialist, p<0.05
*Not mutually exclusive

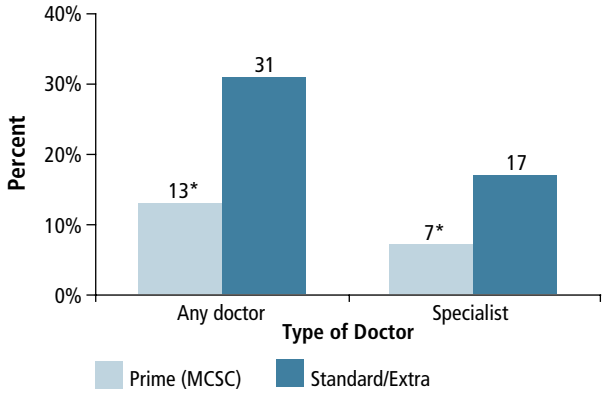
with problems getting a specialist appointment to 62 percent of Prime MCSC enrollees with problems finding a personal doctor.

Among network users seeking a personal doctor, access problems due to doctors not accepting new patients were more likely than were long waits for an appointment, while for users trying to make an appointment with a specialist long waits were the greater problem. For example, half of Prime MCSC enrollees with problems finding a personal doctor mentioned doctors not accepting new patients, while 31 percent reported long waits for appointments. By contrast, 42 percent of enrollees with problems finding a specialist reported long waits for appointments, compared to 28 percent who blamed doctors that do not accept new patients. Among Standard/Extra users results are similar, though differences by problem type are smaller.

Beneficiaries may respond to problems making an appointment within the network by using out-of-network doctors. As shown in Figure 3, 13 percent of Prime MCSC enrollees and 31 percent of Standard/Extra users said they had made appointments with a non-network physician in the previous 12 months. About half of each group that saw non-network doctors reported that they had made an appointment with a non-network specialist.

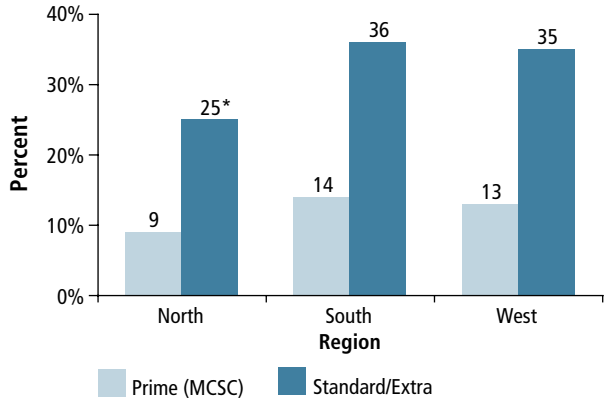
As shown in Figure 4, use of non-network doctors varies by region. Only 25 percent of Standard/Extra users in the North made out-of-network appointments compared to 36 percent in the South and 35 percent in the West. Differences in Prime enrollees' out-of-network use by region were not statistically significant.

Figure 3. Use of non-network doctors



*Differs significantly from Standard/Extra, p<0.05

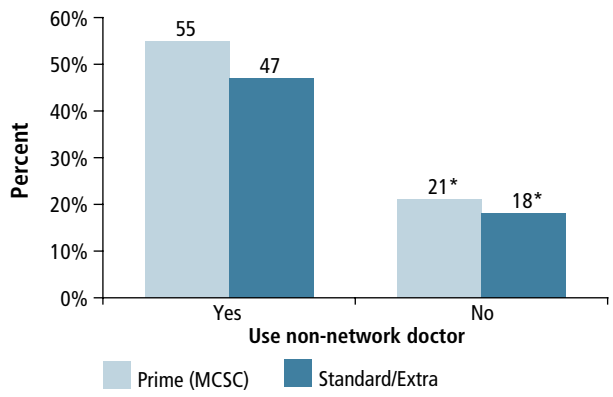
Figure 4. Use of non-network doctors by region



*Differs significantly from other regions, p<0.05

Beneficiaries' use of non-network doctors need not signal deficiencies in the network. Those who go out of network may simply prefer a doctor who has not contracted with a TRICARE plan, and be willing to pay more for this choice. Figure 5 shows

Figure 5. Percent with access problems by use of non-network doctors by region



*Differs significantly from users of non-network doctors, p<0.05

beneficiaries, both Prime MCSC enrollees and Standard/Extra users, who used non-network doctors and also reported problems getting the care they wanted from the network. Forty-seven percent of Standard/Extra users, and 55 percent of Prime MCSC enrollees who saw non-network doctors reported problems getting care from the network, compared to 18 percent of Standard/Extra users and 21 percent of MCSC enrollees who did not see non-network doctors. These results indicate that, though they had more access problems than beneficiaries who stayed in the network, only half of the group that saw non-network doctors did so because of problems getting the care they wanted.

Sources

[1] General Accounting Office. 2005. "Implementation Issues for New TRICARE Contracts and Regional Structure." Washington, DC: General Accounting Office. GAO-05-773.

[2] *TRICARE Operations Manual* 32 CFR 199.17, 2005. Available at [www.tricare.osd.mil/FR05/C17.PDF].

Health Care Survey of DoD Beneficiaries fielded April, 2006.

Issue Brief: TRICARE Pharmacy Options

In both the military health system (MHS) and U.S. health care system, spending on prescription drugs has increased rapidly in recent years. According to the U.S. National Health Expenditure Accounts (NHEA), which breaks down health care spending by source of payment and type of service, over $188 billion was spent on prescription drugs in 2004, an 8 percent increase over 2003 and 10 percent of the total spending on health care for 2004. According to the NHEA, pharmacy spending by the DoD has increased more rapidly than all other public expenditures in every year from 1998 to 2004. During that time MHS pharmacy spending went from under 2 percent to more than 6 percent of public funds spent on prescription drugs.[1]

Expanded coverage through the TRICARE Senior Pharmacy program has contributed to the annual increase in MHS prescription drug spending since 2001. This program enables military retirees and their family members 65 and over to use the same pharmacy options that other TRICARE beneficiaries can. As a result of the expanded benefits and the overall increase in prescription drug spending, the estimated cost of the DoD pharmacy benefit in FY 2006 was $6.18 billion.2

Policy Changes

To reduce costs, TRICARE policy attempts to direct beneficiaries to lower cost drugs and to lower cost pharmacies. To promote lower cost drugs, the Uniform Formulary designates drugs for full coverage, based on clinical and cost effectiveness. It created a higher cost-sharing tier for non-formulary drugs obtained by mail or retail, effective May 3, 2004.3 MTF pharmacies may fill prescriptions for non-formulary drugs only if medical necessity has been certified.

DoD estimates that prescriptions filled through retail pharmacies cost on average at least twice as much as MTF prescriptions or mail order prescriptions.[4] Therefore, TRICARE encourages beneficiaries to use MTF pharmacies and the TRICARE mail-order pharmacy. For the same copayment, beneficiaries can obtain a 90-day supply of their prescription through mail order, or a 30-day supply from a retail pharmacy. Nonetheless, most of the recent increase in TRICARE's prescription drug spending has paid for drugs from retail pharmacies.[4]

HCSDB Results

According to the HCSDB, the proportion of TRICARE pharmacy users that fill prescriptions at military pharmacies has fallen in the past year, from 52 percent in 2005, to 49 percent in 2006. The proportion using retail pharmacies and the mail order pharmacy have increased, though the changes are not statistically significant.

As shown in Table 1, the greatest drop in MTF pharmacy use has occurred among retirees under age 65. MTF pharmacy use in that beneficiary group dropped from 49 percent in 2005 to 42 percent in 2006. Over half of retirees filling prescriptions under TRICARE use retail pharmacies. Mail order pharmacy use increased in all beneficiary groups, though not statistically significantly.

Table 1. Pharmacy Choice by Beneficiary Category

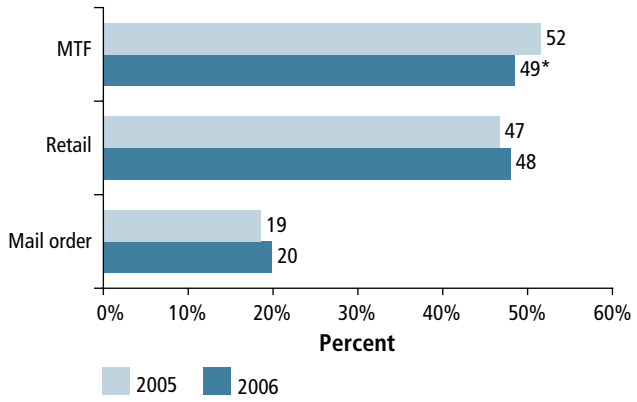
		MTF	Retail	Mail Order
		Percent		
Active Duty	2005	75	24	5
	2006	74	26	7
ADFM	2005	63	41	7
	2006	65	42	8
Retired <65	2005	49	53	17
	2006	42*	55	18
Retired >65	2005	35	57	34
	2006	34	56	36

*Significant change, $p<0.05$

Figure 2 shows that MTF use is found primarily among active duty and retirees or family members enrolled to MTFs. Beneficiaries enrolled to the Managed Care Support Contractors and those who rely on civilian insurance and their TRICARE pharmacy benefit primarily use retail pharmacies.

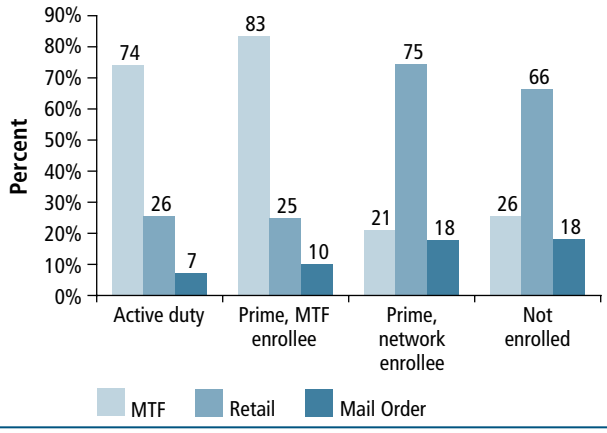
MTF pharmacies are used when other health care is obtained in MTFs. Fifty-two percent of MTF pharmacy users say they chose that pharmacy at least in part because they were seeing an MTF doctor (not shown).

Figure 1. Prescriptions filled by point of service



*Significant change, p<0.05

Figure 2. Pharmacy choice by enrollment group



If a beneficiary is not receiving care from MTF doctors, retail pharmacies are generally more accessible. Other options must compete on the basis of cost, but the perceived convenience of the retail wins out even over mail order. As shown in Table 2, the convenience of retail pharmacies is the leading reason for selecting that option instead of mail order. Among retirees age 65 and over, the convenience of civilian pharmacies is mentioned by half of those who do not use mail order.

Some beneficiaries do not use mail order because of its unfamiliarity. Twenty-nine percent of beneficiaries do not use mail order because they are unaware that they can use it. Thirty percent do not use mail order because they do not know how. Most who do not use mail order because they lack knowledge of it are active duty and their family members. This group primarily uses

Table 2. Reasons For Not Using Mail Order

	Active Duty	ADFM	Retired <65	Retired >65	Total
			Percent		
Civilian pharmacy is more convenient	12	19	36	49	31
Did not know how to use	32	40	30	21	30
Did not know I could use	47	46	23	11	29
Needed drugs immediately	21	29	29	30	27
MTF pharmacy is more convenient	29	24	22	26	25
Not comfortable with mail order	11	17	20	20	18

MTF pharmacies, so a change in their pharmacy choice would not reduce costs. However, thirty percent of retirees under age 65 indicate they do not know how to use mail order, and nearly a quarter report they are not aware of the option. These are beneficiaries who may be switched from retail to mail order by targeted education.

Conclusion

Results from the HCSDB indicate that use of retail pharmacies continues to increase compared to use of MTF pharmacies, particularly among retirees. Retail pharmacies are used because beneficiaries who do not use direct care see civilian pharmacies as convenient, whether they rely on TRICARE or other civilian insurance. As beneficiaries are referred to civilian health care providers, the shift away from MTF pharmacies is likely to continue.

Results from the survey also suggest that information about the mail-order option can switch some users from retail to mail order. Substantial numbers of respondents report they do not use mail order because they do not know of the option or do not know how to use it. Educational strategies targeted at such beneficiaries may reduce the cost of their pharmacy benefits to DoD. The survey appears to suggest that more savings would be reaped if beneficiaries can be convinced that mail order is easy and convenient. Otherwise, changing copayments to increase the patient's savings from using mail order compared to the retail network may cause more beneficiaries to adopt mail order.

Sources

[1] Centers for Medicare and Medicaid Services (CMS). National Health Expenditure Data, "National Health Expenditures by Type of Service and Source of Funds: Calendar Years 2004-1960." Available at [www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp#TopOfPage]. Accessed October 19, 2006.

[2] McGinnis, T. "Pharmacoeconomic Center Conference January 8, 2007." Available at [www.pec.ha.osd.mil/2007_PEC_Conference/Presentations/2]. Accessed February 12, 2007.

[3] U.S. Department of Defense. Military Health System. TRICARE Uniform Formulary Final Rule Published. Press Release No. 004-10, April 09, 2004. Available at [www.tricare.osd.mil/pressroom/news.aspx?fid=72].

[4] General Accounting Office. 2005. "Mail Order Pharmacies: DOD's Use of VA's Mail Pharmacy Could Produce Savings and Other Benefits." Washington, DC: General Accounting Office. GAO-05-555.

Health Care Survey of DoD Beneficiaries fielded July, 2006.

Sources

Agency for Healthcare Research and Quality. "National Healthcare Disparities Report," 2006. Rockville, MD: Department of Health and Human Services.

Alexander, Greg R., Michael D. Kogan, and Sara Nabukera. 2002. "Racial Differences in Prenatal Care Use in the United States: Are Disparities Decreasing?" *American Journal of Public Health* 92(12):1970-1975.

Bencio, Katherine, Megan McHugh, Rebecca Nyman, and Eric Schone. April 2005. "Health Care Survey of DoD Beneficiaries 2004 Annual Report. "Washington, DC: Mathematica Policy Research, Inc.

Borrell, Luisa N. 2006. "Self-Reported Hypertension and Race Among Hispanics in the National Health Interview Survey." *Ethnicity & Disease* 16(1):71-77.

Bowman, Shanty A., Steven L. Gortmaker, Cara B. Ebbeling, Mark A. Pereira, and David S. Ludwig. 2004. "Effects of Fast-Food Consumption on Energy Intake and Diet Quality Among Children in a National Household Survey." *Pediatrics* 113(1):112-118.

Coon, K.A., and K.L. Tucker. 2002. "Television and Children's Consumption Patterns: A Review of the Literature." *Minerva Pediatrica* 54(5):423-436.

Crespo, Carlos J., Ellen Smit, Richard P. Troiano, Susan J. Bartlett, Caroline A. Macera, and Ross E. Andersen. 2001. "Television Watching, Energy Intake, and Obesity in US Children: Results from the Third National Health and Nutrition Examination Survey, 1988-1994." *Archives of Pediatrics & Adolescent Medicine* 155(3):360-365.

Ebbeling, Cara B., Dorota B. Pawlak, and David S. Ludwig. 2002. "Childhood Obesity: Public-health Crisis, Common Sense Cure." *The Lancet* 360(9331):473-482.

Frisbie, W. Parker, Samuel Echevarria, and Robert A. Hummer. 2002. "Prenatal Care Utilization Among Non-Hispanic Whites, African Americans, and Mexican Americans." *Maternal and Child Health Journal* 5(1):21-33.

Gortmaker, S.L., A. Must, A. M. Sobol, K. Peterson, G. A. Colditz, and W. H. Dietz. 1996. "Television Viewing as a Cause of Increasing Obesity Among Children in the United States, 1986-1990." *Archives of Pediatrics & Adolescent Medicine* 150(4):356-362.

Hedley, Allison A., Cynthia L. Ogden, Clifford L. Johnson, Margaret D. Carroll, Lester R. Curtin, and Katherine M. Flegal. 2004. "Overweight and Obesity Among US Children, Adolescents, and Adults, 1999-2002." *Journal of the American Medical Association* 291(23):2847-2850.

Houston, Thomas K., Isabel C. Scarinci, Sharina D. Person, and Paul G. Greene. 2005. "Patient Smoking Cessation Advice by Health Care Providers: The Role of Ethnicity, Socioeconomic Status, and Health." *American Journal of Public Health* 95(6):1056-1061.

Hyman, Jeffrey J., Britt C. Reid, Susan W. Mongeau, and Andrew K. York. 2006. "The Military Oral Health Care System As a Model for Eliminating Disparities in Oral Health." *Journal of the American Dental Association* 137(3):372-378.

Institute of Medicine. 2003. "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care." Washington, DC: IOM.

Kuczmarski R.J., C.L. Ogden, S.S. Guo, L.M. Grummer-Strawn, K.M. Flegal, Z. Mei, et al. 2002. "2000 CDC Growth Charts for the United States: Methods and Development. National Center for Health Statistics." *Vital Health Statistics* 11(246):1-190.

Leischow, Scott J., James Ranger-Moore, and Deirdre Lawrence. 2000. "Addressing Social and Cultural Disparities in Tobacco Use." *Addictive Behaviors* 25(6):821-831.

Logan, John R. 2003. "How Race Counts for Hispanic Americans." Albany, NY: Lewis Mumford Center.

McGee, Daniel L., Youlian Liao, Guichan Cao, and Richard S. Cooper. 1999. "Self-Reported Health Status and Mortality in a Multiethnic U.S. Cohort." *American Journal of Epidemiology* 149(10):41-46.

Morales, Leo S., William E. Cunningham, Julie A. Brown, Honghu Liu, and Ron D. Hays. 1999. "Are Latinos Less Satisfied with Communication by Health Care Providers?" *Journal of General Internal Medicine* 14:409-417.

Mulligan, Charles R., Amir D. Meram, Courtney D. Proctor, Hongyu Wu, Kangmin Zhu, and Aizen J. Marrogi. 2006. "Unlimited Access to Care: Effect on Racial Disparity and Prognostic Factors in Lung Cancer." *Cancer Epidemiological Biomarkers and Prevention* 15(1):25-31.

Ren, Xinhua S., and Benjamin C. Amick. 1996. "Racial and Ethnic Disparities in Self-Assessed Health Status: Evidence from the National Survey of Families and Households." *Ethnicity & Health* 1(3):293-304.

Richards, Robert, and Dean M. Reker. 2004. "Racial Differences in Use of Colonoscopy, Sigmoidoscopy, and Barium Enema in Medicare Beneficiaries." *Digestive Diseases and Sciences* 47(12):2715-2719.

Rogers, Laura, Karen C. Johnson, Zin Mandy Young, and Marshall Graney. 1997. "Demographic Bias in Physician Smoking Cessation Counseling." *The American Journal of the Medical Sciences* 313(3):153-158.

Saenz, Rogelio. 2004. "Latinos and the Changing Face of America." Washington, DC: Population Reference Bureau.

Saha, Somnath, Jose J. Arbelaez, and Lisa A. Cooper. 2003. "Patient-Physician Relationships and Racial Disparities in the Quality of Health Care." *American Journal of Public Health* 93(10):1713-1719. 2003.

Stephens, Mark B., Jeffrey J. Harrison, Cindy Wilson, Robert L. Ringler, and Chris Robinson. 2003. "Are Children of Military Personnel More Physically Fit Than Children of Civilian Parents?" *Family Medicine* 35(5):404-407.

Taylor, Allen J., Gregg S. Meyer, Robert W. Morse, and Clarence E. Pearson. 1997. "Can Characteristics of a Health Care System Mitigate Ethnic Bias in Access to Cardiovascular Procedures? Experience from the Military Health Services System." *Journal of the American College of Cardiology* 30(4):901-907. 1997.

U.S. Department of Health and Human Services and U.S. Department of Agriculture. "Dietary Guidelines for Americans, 2005." Washington, DC: U.S. Government Printing Office. Available at [www.health.gov/dietaryguidelines/dga2005/document/pdf/dga2005.pdf]. Accessed January 8, 2007.

U.S. Government Accountability Office. December 2006. "Access to Care for Beneficiaries Who Have Not Enrolled in TRICARE's Managed Care Option." Washington, DC: GAO.

Woodard, Emory H., and Natalia Gridina. 2000. "Media in the Home 2000: The 5th Annual Survey of Parents and Children, 2000." Philadelphia, PA: Annenberg Public Policy Center of the University of Pennsylvania.

Zwerdling, Daniel. "Soldiers Face Obstacles to Mental Health Services." National Public Radio, December 4, 2006.

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