

March 2005

Implementation of Medicare CAHPS[®] Fee-for-Service Survey

Final Report for the 2003 Survey Executive Summary

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Prepared by

RTI International
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Under subcontract to
Center for Health Systems Research and Analysis
University of Wisconsin-Madison

Contract No. 500-95-0061
RTI Project Number 07903.500



EXECUTIVE SUMMARY

This report summarizes the methodology and findings of the 2003 Medicare Consumer Assessment of Health Plans Study (CAHPS[®]) Fee-for-Service (FFS) Survey conducted for the Centers for Medicare & Medicaid Services (CMS) by RTI, with the assistance of RAND, NCS Pearson, and Discovery Research Group (DRG). The work was performed under subcontract to the Center for Health Systems Research and Analysis at the University of Wisconsin-Madison (UW), as part of UW's contract with CMS. More detailed information on many of the topics presented in this report is available in the individual project reports prepared for the 2003 CAHPS[®] FFS survey.

2003 Medicare CAHPS[®] Fee-for-Service Survey Questionnaire

The CAHPS[®] surveys were developed using comprehensive reviews of the existing literature, focus groups with consumers, cognitive testing of survey content and question wording, and field testing of preliminary versions of individual items. A set of core items was developed for all consumers, and certain items were targeted for special subpopulations, such as Medicare managed care enrollees. The CAHPS[®] items include evaluations (ratings) of care and reports of specific experiences with health plans. This combination of global assessments and reports about different aspects of health plan performance also allows users to link global evaluations with specific information to guide quality improvement efforts.

The FFS questionnaire is based on the CAHPS[®] core questionnaire for adult, privately insured populations developed as part of the CAHPS[®] research project sponsored by the Agency for Healthcare Research and Quality (AHRQ). In 1998, the FFS project team conducted a field test on a sample of fee-for-service Medicare beneficiaries in five states to test field procedures and evaluate the psychometric performance of standard CAHPS[®] questions within this population. As a result of this field test, the 12-month recall period for health-related experiences was shortened to 6 months. A 6-month recall period is also used for the Medicare CAHPS[®] Advantage (MA) Survey (previously known as the Medicare CAHPS[®] Managed Care [MMC] Survey). A report on the findings of the CAHPS[®] FFS field test survey is available electronically from CMS. The FFS survey has been implemented annually in all 50 states, the District of Columbia, and Puerto Rico since fall 2000, with the Virgin Islands added in 2003.

The FFS project team worked extensively with CMS and the MA project team during the first 7 months of 2003 to coordinate and discuss changes to the questionnaires that would be used in the 2003 Medicare CAHPS[®] surveys. As a result of those discussions, CMS and the project teams decided to make a number of changes to the 2003 surveys. The most significant changes were the deletion of three questions in the "Personal Doctor or Nurse" section (about health problems affecting day-to-day activities), the addition of some new questions to the series of questions about prescription drugs, and the addition of two new questions about health promotion advice. A more detailed discussion of the changes made to the 2003 FFS questionnaire is provided in Section 2 of this report. A copy of the 2003 FFS questionnaire is included in Appendix A.

Sample Selection, Weighting, and Data Presentation

For the 2003 MFSS survey, the MFSS project team selected a sample of 178,650 fee-for-service Medicare beneficiaries from a sampling frame constructed from the July 2003 version of CMS' Enrollment Database (EDB). The frame comprised approximately 32.0 million persons who were continuously enrolled in fee-for-service Medicare for at least 6 months, did not have a representative payee, were over the age of 18, and resided in any of the 50 states, the District of Columbia, Puerto Rico, or the Virgin Islands.

Prior to sample selection, we constructed local geographic areas (geounits), with each local area consisting of one or more counties. Factors considered for grouping counties included geographic contiguity, Medicare Advantage contract areas, and metropolitan statistical area (MSA) and state boundaries. County samples were then aggregated into geographic areas approximating fee-for-service market areas. In the 2000 MFSS survey, the selection allocation was defined to be 600 beneficiaries from each of the 275 geounits in the United States, and 3,000 beneficiaries from Puerto Rico, for a total sample size of 168,000 beneficiaries in 276 geounits. For the 2001 MFSS survey, no change was made to the number of geounits, but the total sample size was increased to 177,950 beneficiaries. For the 2002 survey, no change was made to the number of geounits or to the total (national) MFSS sample size from the 2001 survey. However, we reallocated the sample for the 2002 survey to provide better power for estimates in counties that experienced significant changes in Medicare managed care enrollment and/or counties with insufficient sample owing to higher than expected nonresponse in the prior MFSS survey. For the 2003 MFSS survey, we added one geunit for the Virgin Islands, bringing the total number of geounits in our study design to 277 and our total sample size to 178,650. In addition, our reallocation of sample between the 2002 and 2003 surveys involved selected counties in five "donor" states, which contributed a proportionate amount of their allocated sample in excess of 330 completes from the previous year, to recipient counties in eight states. The states selected as donors of sample were those with the most effective sample size when compared with MA.

We stratified the MFSS population by county and selected a simple random sample from within each county. We then assigned an initial sampling weight to each selected beneficiary as the inverse of the selection probability, reflecting the differential selection rates used to identify beneficiaries from each county. To reduce the potential biasing effects of differential nonresponse, we post-stratified the initial sampling weights of respondents to sum to 337 separate counts of fee-for-service beneficiaries obtained from the October 2003 version of the EDB, which is the approximate midpoint of data collection. The counts included 277 totals for each of the local geounits in the United States, Puerto Rico, and the Virgin Islands, as well as 60 totals formed by the intersection of the age, gender, race, and dual Medicare/Medicaid eligibility factors.

Using responses from the 2003 survey, we evaluated the effect of the MFSS analysis weights on the accuracy of the survey estimates by comparing the mean square errors (MSEs) of weighted estimates to the corresponding MSEs of unweighted estimates. The MSE, defined as the sum of the bias squared and the variance, is used to measure the combined effect of bias and variance on the survey estimates. We assumed that the weighted estimates represent unbiased estimates because of the bias reduction and improved coverage that the weights offer. We estimated the bias associated with the unweighted estimates as the deviation from the

corresponding weighted estimate. We used the CAHPS[®] macro with case-mix adjustment (CMA) to generate both the weighted and unweighted estimates for state estimates of two CAHPS[®] ratings (Rate Medicare and Rate Health Care) and three CAHPS[®] composites (Needed Care, Care Quickly, and Good Communication).

The results indicate that the weights are ignorable for many state estimates, especially those for the Good Communication composite. However, the weights are nonignorable for a number of state estimates of the overall ratings of Medicare and health care and the Needed Care and Care Quickly composites. Because all of the root MSEs (square root of the MSE) for the weighted estimates are either equal to or lower than those for the unweighted estimates, we conclude that the weighted analysis of the CAHPS[®] MFFS survey data can improve the accuracy of state-specific estimates of CAHPS[®] outcomes without adversely affecting the associated statistical power.

For the 2003 MFFS survey, some variables on the analysis data set were revised, and new variables were added. We revised the race variable to more accurately capture race information from the survey and from supplemental sources of information. Hispanics were added as a racial category in the NEWRACE7 variable. The NEWRACE6 variable combines Asians and Native Hawaiian/Pacific Islanders. The NEWRACE3 variable collapses the NEWRACE7 variable into three categories only: White, African American, and Other.

As begun with the 2002 MFFS in the previous year, we continue to maintain the MFFS trend data file, which is a data file combining the survey results from all 4 years of the MFFS survey (2000 through 2003) thus far. Because there are some differences in the survey instruments used during this time period, we created a crosswalk of survey questions. Users of the trend file should be aware of the differences in the survey instruments across the 4 years. These differences might lead to statistically significant trends that may only be artifacts of the question differences. The trend file assumes that the samples from each of the survey years are independent of each other and, hence, can be combined as one sample.

New for 2003, we are using an extract of the November 1, 2003, Long-Term Care Minimum Data Set (MDS) to identify sample members who had a nursing home stay before, during, and after data collection, among sample members from the 2000 through 2002 CAHPS[®] MFFS surveys. We have begun to examine the characteristics of this group and are currently assessing the effects on response rate within the MFFS population.

We present details of the sample selection, weighting, and data presentation activities for the 2003 MFFS survey in Section 3.

Data Collection

The MFFS survey is a self-administered mail survey with telephone follow-up of nonrespondents that also offers sample members the option of calling a toll-free number to complete the survey over the telephone. We made four modifications to the 2003 MFFS survey. First, we added 700 beneficiaries from the Virgin Islands to the sample. Second, we sent the third-wave mailing via a special delivery carrier for 2-day delivery, instead of overnight delivery. This change was a cost-saving measure that we implemented as a result of the finding that sample members were more affected by the mode of delivery than the speed of delivery

(Dimitropoulos, Campbell, and Iannacchione, 2003). Third, we mailed an additional thank you/reminder postcard to all survey nonrespondents following the third-wave questionnaire mailing. Finally, to allow the extra postcard enough time to have an effect, we extended the data collection period by 2 weeks.

The data collection period for the 2003 MFFS started with the mailout of the prenotification letter on September 10, 2003, and ended with the close of the telephone follow-up on February 21, 2004. The response rate achieved for the 2003 MFFS was slightly lower than that for the 2002 MFFS. The response rate among eligible sample members was 69.3 percent for the 2003 MFFS, which is 1.3 percent lower than the 2002 MFFS response rate of 70.6 percent. We also noted a decrease in the number of beneficiaries who responded from Puerto Rico, 55.8 percent, which was down from the previous year's rate of 59 percent. Of the 700 Virgin Island beneficiaries who were added to the sample in 2003, only 48.1 percent responded.

We present details of the data collection activities for the 2003 MFFS survey in Section 4.

Costs and Benefits of Improving Response Rates in the MFFS Survey

During this survey year, we conducted research to explore the costs and benefits of increasing the level of effort during the telephone follow-up phase of the MFFS survey. We addressed the following research questions using the 2003 CAHPS[®] MFFS data:

- Are we penetrating an underrepresented population segment by increasing the level of effort with additional calls?
- At what point do we experience diminishing returns with the number of call attempts sufficient to cap the level of effort?
- What are the cost implications of increasing the level of effort?
- Are the CAHPS[®] measures affected by the additional responses?

We conducted the analysis on 67,413 valid cases. For each case, a maximum of 12 attempts were made in order to contact a beneficiary and obtain a completed survey. A combination of survival analysis and logistic regression was used to investigate the research questions. Covariates investigated were demographic variables, including race, age, gender, dual eligibility, and disability status.

We found little evidence indicating that segments of the population are being sampled at different rates for the later call attempts versus the earlier attempts. There was no evidence to indicate that late responders differ from early responders. In other words, the demographics of the samples being obtained are not, in general, statistically different when comparing earlier attempts to later attempts. As expected, the total number of responses tends to decline in later call attempts. The mean response probability for the first six attempts is 4.41 percent, whereas the mean for the last six attempts is 3.31 percent ($p=0.0013$). Although this drop is statistically significant, the overall magnitude (1.1 percent) is not large and helps to justify additional attempts.

Some increase in marginal cost per complete is observed; however, it is only a moderate increase. The mean cost for the first six attempts is \$37, whereas the mean for the last six attempts is \$45. This finding implies that, if there is sufficient budget to support additional attempts, there will not be a significant degradation in the cost efficiency of obtaining completed surveys.

Our modeling of the CAHPS[®] measures, taking into account the same demographic variables of age, race, gender, dual eligibility, and disability status, indicated that the number of attempts had no statistically significant effect on the CAHPS[®] outcomes.

When choosing the number of attempts to make in the telephone follow-up of the CAHPS[®] MFFS annual survey, whether response bias is at issue or a concern for diminishing returns and cost, we recommend setting the maximum number of attempts at 12. As long as the budget is sufficient, the maximum number of attempts on this survey should be set no lower than 12, satisfying both scientific and cost concerns.

We present details of this response rate analysis for the 2003 MFFS survey in Section 5.

Case-Mix Adjustment

Case-mix adjustment (CMA) attempts to remove from CAHPS[®] ratings and composites of care response patterns that do not correspond to actual differences in quality of care and are systematically associated with such patient-level characteristics as demographics, socioeconomic status, and health status. The goal of CMA is to estimate the ratings and composites that a plan or collection of MFFS providers would have received if all providers and plans treated the same standardized population of patients (Medicare beneficiaries). This adjustment should make attributions of ratings and composites to MFFS providers and MA plans more appropriate, supporting better decision-making by beneficiaries and CMS.

The present study found that the case-mix adjusters employed in 2001 and 2002 MFFS-vs.-MA CMA (age, education, self-rated health status, self-rated mental health status, and proxy respondent status¹) continue to constitute an effective case-mix model for both comparison purposes. Self-rated health, self-rated mental health, and education were the three most important CMA variables. These findings are consistent with CMA results for 2000, 2001, and 2002.

The average magnitude of the impact of CMA on a *typical* state has remained moderate. The adjustments for a few states are substantial, however. For national estimates, case-mix adjustment has gone from moderate adjustments in favor of MA in 2001 to small adjustments in favor of MA in 2002 to moderate adjustments in favor of MFFS in 2003. A similar pattern exists for case-mix adjustment of state-level comparisons of MA and MFFS (adjustments favor MA in 2001 but favor MFFS by 2003).

Adjustments favoring MA probably correspond to MA having a higher proportion of certain types of negative responders (e.g., the young and the better educated). Adjustments

¹ Although proxy respondent status has only a small empirical effect on CMA, it has been included because many stakeholders feel it is important for the face validity of CMA.

favoring MFFS probably correspond to MFFS having a higher proportion of a different segment of negative responders (e.g., the unhealthy). The shift from adjustments favoring MA to adjustments favoring MFFS could mean that selection into MA on the basis of age and education is becoming less pronounced, but that health-based selection is becoming stronger. Future research should investigate trends in MFFS-vs.-MA case-mix demographics.

In comparing MFFS and MA, there was concern that geographic variation in ratings and reports beyond what is captured in a case-mix model might inappropriately influence the comparisons. Thus, to further improve state-level comparisons, we created weights that match MFFS to MA by county in the 43 states (including the District of Columbia) where MA exists. Comparison weights have gone from making moderate adjustments in favor of MA in 2001 to very small adjustments in 2002 and 2003, probably as a result of improved matching in the sampling design.

We present details of our case-mix adjustment activities for the 2003 MFFS survey in Section 6.

Estimating the Effects of Proxy Respondents in Medicare CAHPS[®]

Many health surveys, such as the MFFS survey, allow the use of proxy respondents or assistance to ensure that the experiences of the most vulnerable seniors are not omitted. The question that naturally arises is whether proxies give responses comparable to what would have been self-reported. To answer this question, we conducted an analysis of the effects of proxy respondents in Medicare CAHPS[®]. Of MFFS CAHPS[®] respondents, 5 percent had someone respond for them (proxy respondent), 14 percent received help from a proxy (proxy assistance), and 81 percent received no help (no proxy). Proxy assistance includes someone reading the survey to the respondent, writing responses, or translating. Proxy assistance might still allow for proxy influence, in that the proxy is discussing the items with the respondent. Spouses and life partners comprised 43 percent of all proxies, other family members comprised 46 percent (two-thirds of these being children), and the remaining 11 percent were not family members.

Proxy respondent effects are generally very small for objective report items but can be somewhat larger for global ratings, especially when proxies are not spouses. Proxy assistance effects are very small. Standard CMA can overestimate proxy effects by failing to compare beneficiaries who have comparable health status. Spouses are very accurate proxy respondents.

Proxy effects are likely to have substantial CMA effects only on surveys in which proxy respondents account for a large proportion of response. These effects are likely to be small on the Medicare CAHPS[®] surveys but might be larger for subreports on the disabled or those in fair to poor health, or for surveys of nursing home residents. The more objective report composites are preferable to the more subjective global ratings when using proxy respondents, because the former are subject to smaller proxy effects than the latter. When available, spouses should serve as proxies. Adjustment should be made for nonspouse proxy respondents if these are a substantial proportion of all responses. Such an adjustment will not be possible in the 2004 Medicare CAHPS[®] surveys, which lack information on the relationship of the proxy to the beneficiary. Propensity score weighting or matching can improve the estimation of these adjustments somewhat.

We present details of our analyses of the effects of proxy respondents using the 2001 MFSS survey in Section 7.

Subgroup Analyses

One of the key objectives of the Medicare CAHPS[®] implementation project is to provide information to help beneficiaries decide among health plan options. Data collected through the Medicare CAHPS[®] MFSS and MA surveys allow beneficiaries who reside in areas in which there is a choice of plans (managed care or fee-for-service) to access data comparing CAHPS[®] measures for these two populations. In Section 8, we compare and provide results of analyses of data from the 2003 CAHPS[®] MFSS survey. (The complete survey instrument is provided in Appendix A.)

We performed analyses of Medicare subgroups to gain a better understanding of the differences in health services experience and satisfaction among Medicare beneficiaries by geographic levels (national, regional, and state level), sociodemographic characteristics, health plan options, and health status. The MFSS population is quite heterogeneous in terms of demographic characteristics, region of residence, presence of supplemental insurance (whether with or without prescription drug coverage or Medicaid), and health-related characteristics. These subgroups of the MFSS beneficiaries have vastly different experiences with and expectations of the health care system and, thus, may perceive the quality of and access to services differently.

The analyses presented examine differences across selected subgroups for the most-positive CAHPS[®] ratings and reports (i.e., “10,” “Always,” “Not a Problem,” or “Yes”). Nine performance indicators (five composite indicators based on reports and four rating indicators) were used from the 2003 CAHPS[®] MFSS survey:

- Needed Care Composite
- Good Communication Composite
- Care Quickly Composite
- Respectful Treatment Composite
- Medicare Customer Service Composite
- Rate Personal Doctor
- Rate Specialist
- Rate Health Care
- Rate Medicare

Key Findings

Trends From 2000 Through 2003—During the 4-year period (2000 through 2003), between 84 percent and 89 percent of MFFS beneficiaries reported that they always received needed care. The percentage of most-positive responses was slightly lower in 2003 (85 percent) and 2002 (84 percent) than in 2001 (89 percent) and 2000 (87 percent), but remains quite high.

More than half of beneficiaries (58 percent) reported no problems getting care quickly in 2003. The small differences in results of the Care Quickly composite between the 2003, 2002, and 2001 surveys may be the result of changes in the wording of questions that make up this composite indicator.

Most-positive responses for both the Respectful Treatment composite and the Good Communication composite increased slightly in 2003 to 80 percent and 69 percent, after being consistent at 79 percent and 67 percent, respectively, during the first 3 years of the CAHPS[®] MFFS survey.

Approximately half of beneficiaries rated health care, their specialist, and their personal doctor a “10” during the 4-year survey period. Ratings of the Medicare health plan were slightly lower overall and decreased over the 4-year period. The most noteworthy change in the ratings for 2003 was a 6 percentage point decrease in beneficiaries’ rating the Medicare health plan a “10.” Specifically, only 38 percent of beneficiaries rated Medicare a “10” in 2003, a large deviation from the gradual downward trend in the previous 3 years—47 percent in 2000, 46 percent in 2001, and 44 percent in 2002.

MFFS vs. MA Comparison—Patient experiences with getting care quickly and good communication were very similar for the MFFS and MA beneficiary populations. In contrast, a higher percentage of MFFS beneficiaries provided most-positive responses to the Needed Care composite during the 4 years compared with their peers enrolled in MA. MFFS beneficiaries were also slightly more likely than MA beneficiaries to provide the best ratings for their health care and the Medicare health plan.

Sociodemographic Characteristics

2003 Highlights—For all CAHPS[®] composites and the rating of the Medicare plan, beneficiaries between 18 and 45 years of age (i.e., disabled beneficiaries) were less likely to provide most-positive responses than all other age groups. For the Needed Care and Respectful Treatment composites and ratings of Medicare and overall health care in 2003, there was at least a 14 percentage point difference between the proportion of most-positive responses reported by beneficiaries 80 years of age or older and those in the youngest age group, 18 to 45 years. There is a general trend with age and these age differences may reflect response tendencies, rather than better care for older beneficiaries.

Black beneficiaries were generally more likely than White beneficiaries or beneficiaries of other races to provide most-positive responses to CAHPS[®] indicators in 2003. The only exception to this finding was for the Needed Care composite, where 84 percent of White beneficiaries provided the most-positive response compared with 81 percent of Black beneficiaries. Hispanic beneficiaries were more likely than non-Hispanic beneficiaries to provide

most-positive responses to the CAHPS[®] ratings during 2003. We found considerable differences in CAHPS[®] ratings between Hispanic and non-Hispanic beneficiaries, with 6 to 17 percentage points separating the CAHPS[®] scores reported by Hispanic compared with non-Hispanic beneficiaries. These race/ethnic patterns are consistent with CAHPS[®] findings in commercial and Medicaid populations and are thought to reflect differing expectations.

With the exception of the Needed Care composite, there was a consistent tendency for lower ratings and composites to be associated with increasing beneficiary education. There was a greater than 10 percentage point difference in most-positive responses between the most and least educated beneficiaries. For example, 33 percent of beneficiaries with more than a college degree rated their health care a “10” in 2003, whereas almost twice as many beneficiaries (60 percent) with an eighth grade education or less rated their health care a “10.”

Findings From 2000 Through 2003—Similar proportions of male and female MFFS beneficiaries provided most-positive responses to the CAHPS[®] composite indicators, whereas 3 percent to 5 percent more women provided best possible responses to the four CAHPS[®] ratings during the 4-year period. There was a consistent age effect, with younger beneficiaries less likely to report most-positive experiences than older beneficiaries during all 4 years. CAHPS[®] indicator scores similarly varied by education during the 4-year period; less educated beneficiaries were consistently more likely to report most-positive experiences than more educated beneficiaries. Blacks were generally more likely to report most-positive ratings of satisfaction with care than were Whites and beneficiaries of other races. For example, slightly over half of Blacks rated their overall health care a “10” across all 4 years compared with only 46 percent to 47 percent of Whites. Hispanics rated Medicare and their overall health care slightly higher than non-Hispanics, but there was generally little to no difference in their composite scores during the 4-year period.

Health Status

2003 Highlights—For most indicators, beneficiaries reporting excellent health were more likely to give most-positive responses than those reporting poor health. In 2003, there was a 15 percentage point difference between the proportion of the healthiest beneficiaries and sickest beneficiaries providing most-positive responses for the Needed Care composite (80 percent vs. 65 percent for general health perception; 76 percent vs. 61 percent for mental health perception).

The self-reported presence of a chronic illness had no impact on several composites but had a minor impact on the Needed Care and Medicare Customer Service composites, both of which had fewer most-positive responses from beneficiaries with a chronic illness than from beneficiaries with no chronic illness. This finding suggests that issues related to access to care and dealing with Medicare may be more problematic for those who are likely to use more health care services. A smaller proportion of beneficiaries with a chronic illness provided most-positive ratings of “10” for all four indicators reflecting ratings of beneficiary satisfaction, compared with beneficiaries who did not report having a chronic illness. In 2003, only 36 percent of chronically ill beneficiaries rated Medicare a “10” compared with 43 percent of beneficiaries with no chronic illness. These findings are adjusted for self-rated health. Beneficiaries who had been hospitalized overnight at least once during the past year were more likely to rate their specialists a “10”;

however, hospitalization during the past year had little effect on other CAHPS[®] scores during the 4 years. In 2003, disability seemed to have no effect on the five CAHPS[®] composites; however, disabled beneficiaries gave a slightly higher percentage of “10” ratings for their personal doctor, specialist, health care, and the Medicare plan.

Findings From 2000 Through 2003—Across all indicators, we found a strong association between self-reported health status and CAHPS[®] scores; beneficiaries reporting better general and mental health status were more likely to provide most-positive responses for each CAHPS[®] indicator during the 4 years.

Access to Care

2003 Highlights—Beneficiaries who were dually eligible for Medicare and Medicaid reported greater satisfaction and better experiences than those who reported having additional insurance and prescription drug coverage; this was the case for the Good Communication and Medicare Customer Service composites and all ratings in 2003. In particular, over half of dually eligible beneficiaries rated Medicare a “10” compared with 35 percent of beneficiaries who had additional insurance and prescription drug coverage. The additional insurance and prescription drug coverage is self-reported. Dual eligibility status is obtained from the CMS database.

Beneficiaries who reported having a personal doctor were more likely to provide most-positive responses, generally by at least 10 percentage points, for the five CAHPS[®] composites and their ratings of health care and specialists in 2003. Ratings of Medicare were not affected by whether beneficiaries reported having a personal doctor or not.

Findings From 2000 Through 2003—Beneficiaries who reported having additional insurance but no prescription drug benefits were less satisfied and reported worse experiences than those with additional insurance and prescription drug benefits during each of the 4 years.

Additional Analyses

Supplemental Analysis Using Claims Data: Relationship Between CAHPS[®] Scores and Hospital Encounters for Ambulatory Care Sensitive Conditions—The objective of this analysis was to examine whether the incidence of hospital encounters for ambulatory care sensitive conditions (ACSCs) is associated with self-reports of poor access to care or dissatisfaction with health care services among MFFS beneficiaries. Our results showed that 6.1 percent of MFFS beneficiaries experience at least one inpatient admission, observation stay, or emergency room visit for an ACSC during the 12 months prior to the MFFS survey. Although beneficiaries with an ACSC were modestly more likely to report problems getting needed care, and this difference was statistically significant, the mean difference in this CAHPS[®] composite was very small. Overall, there were virtually no differences in mean CAHPS[®] scores between beneficiaries who did or did not experience an ACSC encounter. Because this analysis used a composite measure of different ACSCs, we cannot know if a relationship exists between CAHPS[®] scores and the incidence of hospitalizations for specific conditions. Therefore, we recommend that additional analyses be conducted to examine whether there is a relationship between CAHPS[®] measures and ACSCs for specific conditions.

Supplemental Analysis Using Claims Data: Relationship Between CAHPS® Scores and Claims-Based Quality Measure for Beneficiaries With Diabetes—In this study, using the individual as the unit of analysis, we examined the relationship between measures of patient satisfaction and claims-based clinical measures of (a) the quality of preventive care delivered to MFFS beneficiaries with diabetes and (b) complications from diabetes. We hypothesized that CAHPS® measures of patient experience (i.e., composite measures of getting needed care, getting care quickly, and good communication with providers) were more likely to be associated with clinical measures of quality than attitudes represented by CAHPS® ratings and patient experiences with Medicare and provider customer service.

Overall, we found that patient satisfaction measures were positively associated with a subset of the clinical measures of health care quality under study. Specifically, beneficiaries with diabetes who received recommended eye exams and at least one of the recommended physiological measures were more satisfied with their health care than their peers who did not receive these preventive care services. In contrast, the clinical measures of self-care and disease progression were not associated with the CAHPS® indicators.

However, the significant differences found among persons who received recommended eye exams and physiological tests represent very small differences in average CAHPS® scores. Therefore, these statistically significant differences do not necessarily reflect *meaningful* differences in patient satisfaction.

Depression Among 2000 and 2001 MFFS Beneficiaries—A third analysis begun this year uses the linked MFFS survey and beneficiary claims data to identify beneficiaries diagnosed with depression. To date, we have constructed definitions of depression using ICD-9 codes. Future research will examine the relationship between depression diagnosis and the mental health component scores derived from the SF-12 questions included on the CAHPS® MFFS survey.

We present details of the subgroup analyses for the 2003 MFFS survey in Section 8.