

**The Texas STAR+PLUS Program
Adult Enrollee CAHPS Health Plan Survey Report
Fiscal Year 2006**

**Measurement Period:
July 2006 – September 2006**

Prepared by

**Texas External Quality Review Organization
Institute for Child Health Policy
University of Florida
Gainesville, Florida**

**Submitted:
February 12, 2007**

**Final Submitted:
March 5, 2007**

Table of Contents

Overview	1
Introduction	4
Methods	4
Sample Selection Procedures	4
Data Sources	5
Measures	6
Survey Data Collection Techniques	7
Data Analysis	7
Results	7
Demographics	7
Health Status	10
Usual Source of Care	11
Enrollee Satisfaction with Their Health Care – Descriptive Results	15
Enrollee Satisfaction with Their Health Care – Multivariate Results	16
Specialty Services	17
Care Coordination	20
Access to Needed Care	24
Health Behaviors and Health Promotion Practices	25
Summary and Recommendations	27
Appendix A. Logistic Regression Results for the CAHPS Health Plan Survey Cluster Scores ..	30
Notes	32

Table of Tables

Table 1. MCO Stratification Strategy	5
Table 2. Demographic Characteristics of Enrollees Participating in the STAR+PLUS Program CAHPS Health Plan Survey	9
Table 3. RAND SF-36 Health Survey Results: STAR+PLUS Program Enrollees Compared to National Norms	11
Table 4. STAR+PLUS Program Adult Enrollees’ Usual Source of Care-Person	13
Table 5. STAR+PLUS Program Adult Enrollees’ Usual Source of Care-Person or Place	14
Table 6. Descriptive Results - Average CAHPS Health Plan Survey Cluster Scores: Enrollee Satisfaction with Their Health Care	16
Table 7. Logistic Regression Results – CAHPS Health Plan Survey Cluster Scores: Differences Between STAR+PLUS MCOs in Adult Enrollee Satisfaction Controlling for Race/Ethnicity, Health Status, and Education (Unweighted)	17
Table 8. STAR+PLUS Program Adult Enrollees’ Experiences with Specialty Care	18
Table 9. STAR+PLUS Program Adult Enrollees’ Experiences with and Need for Specialized Services	19
Table 10. STAR+PLUS Program Adult Enrollees’ Perceptions of Care Coordination Services ..	21
Table 11. STAR+PLUS Program Adult Enrollees’ Access to Needed Care	25
Table 12. Health Behaviors of STAR+PLUS Program and Adult Enrollees	26

Table of Figures

Figure 1. RAND SF-36 Health Survey Results: STAR+PLUS Program Compared to National Norms	11
Figure 2. Percentage of STAR+PLUS Adult Enrollees with a Personal Doctor or Nurse by MCO (Using the CAHPS Health Plan Survey)	12

Overview

Report Title:	The Texas STAR+PLUS Program Adult Enrollee CAHPS Health Plan Survey Report for Fiscal Year 2006
Measurement Period:	July 2006 – September 2006
Date Submitted by EQRO:	February 12, 2007
Final Submitted by EQRO:	March 5, 2007

Purpose

The purpose of this report is to present the results of telephone surveys with adults enrolled in the STAR+PLUS Program in Texas. The telephone survey includes the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey 3.0, which is designed to gather information from Medicaid beneficiaries about their satisfaction with their health care. This report provides results from surveys fielded from July 2006 through September 2006 and focuses on adults enrolled during fiscal year 2006. Specifically, the intent of this report is to:

- describe the socio-demographic characteristics and health status of adults enrolled in the STAR+PLUS Program for nine months or longer,
- document the presence of a usual source of care,
- describe enrollees' satisfaction with their health care,
- describe the need for and availability of specialty care for enrollees,
- describe enrollees' experiences with care coordination, and
- describe smoking behaviors of adult enrollees and smoking cessation strategies offered by physicians.

Summary of Major Findings

- STAR+PLUS Program enrollees are racially and ethnically diverse. Fifty-one percent of STAR+PLUS Program enrollees who responded to the survey were Black, non-Hispanic. The next largest racial/ethnic groups for the STAR+PLUS Program were White, non-Hispanic (20 percent) and Hispanic (20 percent) followed by the Other, non-Hispanic (5 percent) group.
- The SF-36 scores for the STAR+PLUS Program adult participants are significantly lower than national norms for all eight physical and mental health domains. National norms for the eight domains range between 61 and 84; whereas, STAR+PLUS Program enrollees' average scores range between 29 and 52. This is an expected finding since the STAR+PLUS Program serves the disabled and chronically ill populations in Harris county.
- Overall, 81 percent of STAR+PLUS respondents reported they had a specific person—a personal doctor or nurse—who provided health care for them. Eighty-two percent of respondents reported they had a particular place to go if they are sick and need health care.
- Overall, 62 percent of respondents enrolled in the STAR+PLUS Program reported they needed to see a specialist in the past six months. Just over one-fifth (22 percent) of STAR+PLUS Program enrollees who stated they needed specialty care reported experiencing a “big” problem when trying to obtain specialty care.
- A significant percentage of respondents who required specialized services reported problems obtaining needed care. Between 38 percent and 58 percent of enrollees needing home health care, special medical equipment, or specialized therapies reported problems accessing such care.

- For the most part, the majority of respondents who reported having a care coordinator reported satisfaction with the care coordinator's performance over the past six months. Overall, STAR+PLUS respondents reported satisfaction with the care coordinator at solving problems with services like housing, meals, and transportation over the past six months.
- Overall, 45 percent of respondents enrolled in the STAR+PLUS Program needed approval from their plan for selected services. A significant number of respondents indicated there were problems obtaining approval for care. Twenty-three percent of STAR+PLUS Program enrollees who needed approval reported obtaining approval was a "big" problem.
- The overall CAHPS Health Plan Survey composite scores for the STAR+PLUS Program enrollees were significantly lower than the Medicaid national mean for the getting needed care, getting care quickly, communication with doctors, and courtesy of office staff clusters. Scores for the health plan customer service cluster were higher among the STAR+PLUS Program enrollees when compared to Medicaid health plans reporting to the National Committee for Quality Assurance (NCQA). However, a comparison to the Medicaid national mean should be viewed cautiously. The population included in the Medicaid national mean is for Medicaid managed care organization beneficiaries overall, and as a group, they are a healthier population.
- There were no significant differences between the two STAR+PLUS health plans in their performance on the CAHPS Health Plan Survey composite scores after controlling for enrollee health status, race/ethnicity, and education.
- The majority of survey respondents reported that they were not current smokers. Forty-five percent had never been smokers and 18 percent had quit smoking. The majority of STAR+PLUS enrollees who did smoke and had a visit to their physician reported they were advised during at least one visit with their doctor to quit smoking (67 percent); however, fewer than half reported their doctor provided them with specific strategies to stop smoking. Thirty-nine percent of STAR+PLUS Program smokers reported that their doctor discussed smoking cessation programs, and 31 percent reported that their doctor recommended a medication to assist in smoking cessation.

EQRO Recommendations

The Texas Health and Human Services Commission (HHSC) may wish to consider the following strategies when developing future Medicaid policy:

- **Strategies to increase performance related to getting needed care, getting care quickly, communication with doctors, and courtesy of office staff should be explored.** Strategies should be developed to address deficits in the areas of getting needed care and getting care quickly to include: (1) reviewing MCO provider panels to ensure adequate numbers of primary care and specialty providers, (2) reviewing prior authorization procedures to ensure that care can be rendered quickly, and (3) reviewing assessment policies and procedures to ensure enrollees are appropriately evaluated for their care coordination needs. One strategy to improve doctor communication and courtesy of office staff is to provide feedback on the results of this survey to the MCOs and encourage them to share this information with their providers.
- **Monitor access to specialized services.** STAR+PLUS Program enrollees who needed specialized therapies, equipment, or assistance reported problems with getting these services. These findings suggest that access to specialized therapies, equipment, or assistance should be carefully monitored.

- **Strategies to increase physician adherence to smoking cessation guidelines should be considered.** While the majority of smoking respondents indicated that their physician advised them to quit smoking during at least one office visit, less than half indicated that a specific strategy or medication was recommended as prescribed by the Agency for Health Care Policy and Research Guidelines. An educational campaign should be considered to encourage physicians to provide specific, evidence-based smoking cessation instructions to enrollees who smoke.

Introduction

Assessing enrollees' self-reported health care experiences is an important measure of the quality of health care that managed care organizations (MCOs) provide. Positive health care experiences are associated with positive health care outcomes and positive health care behaviors, such as adhering to treatment plans and appropriate use of preventive health care services.^{1, 2}

The purpose of this report is to present the results of telephone surveys with adults enrolled in the STAR+PLUS Program. This report provides results from surveys fielded from July 2006 through September 2006 and focuses on adults enrolled during fiscal year 2006. Specifically, the intent of this report is to:

- describe the socio-demographic characteristics and health status of adults enrolled in the STAR+PLUS Program for nine months or longer,
- document the presence of a usual source of care,
- describe enrollees' satisfaction with their health care,
- describe the need for and availability of specialty care for enrollees,
- describe enrollees' experiences with care coordination, and
- describe smoking behaviors of adult enrollees and smoking cessation strategies offered by physicians.

Methods

Sample Selection Procedures

A stratified random sample of enrollees was selected to participate in this survey. To be eligible for inclusion in the sample, the enrollee had to be over the age of 18 and enrolled in the STAR+PLUS Program for nine continuous months in the past year. The continuous enrollment criterion was chosen to ensure that enrollees had sufficient experience to respond to the questions about the STAR+PLUS Program. Also, dual eligibles, enrollees who are eligible for both Medicaid and Medicare, were excluded. The sample was stratified to include representation from the two STAR+PLUS MCOs—Amerigroup and Evercare (See **Table 1**).

A target was set to complete 600 telephone surveys. There were 590 completed surveys.³ This sample size was selected to (1) provide a reasonable confidence interval for the survey responses and (2) ensure that there was a sufficient sample size to allow for comparisons between the two MCOs. The confidence interval information provided for the STAR+PLUS enrollee satisfaction survey is based on a hypothetical item with a uniformly distributed response. The information presented is provided as a “worst case” guideline only. Using a 95 percent confidence interval, the responses provided in the tables and figures are within ± 3.96 percentage points of the “true” responses for the enrollees of the STAR+PLUS MCO Program.⁴ The “true” response is the response that would be obtained if there were no measurement error. The stratification strategy along with the number of complete interviews is shown in **Table 1**.

Table 1. MCO Stratification Strategy

MCOs	N	Percent
Amerigroup	289	49%
Evercare	301	51%
Total	590	100%

For the STAR+PLUS Program, an average of 4.86 attempts were made per phone number to contact the enrollees. The response rate was 47 percent and the cooperation rate was 71 percent.⁵ These response and cooperation rates are comparable to those obtained with other low-income families in Medicaid.^{6, 7, 8}

Survey responders were compared to those who could not be located and to those who were located but refused to participate on the following characteristics: enrollee race/ethnicity, gender, and age. There were significant differences between survey responders, those not located, and those refusing to participate. In the Evercare sample, (1) females (compared to males) and those above 51 years of age (compared to those 18 through 35 years of age) were more likely to be located and to respond to the survey; and (2) Black, non-Hispanic and Other, non-Hispanic racial/ethnic groups (compared to the White, non-Hispanic racial/ethnic group) were less likely to be located and to respond to the survey. In the Amerigroup sample, (1) females (compared to males) and those above 51 years of age (compared to those 18 through 35 years of age) were more likely to be located and to respond to the survey; and (2) the Other, non-Hispanic racial/ethnic group (compared to the White, non-Hispanic racial/ethnic group) was less likely to be located and to respond to the survey. Due to these significant differences between survey responders, those not located, and those refusing to participate, weights were developed and weighted analysis was included in this report together with unweighted analysis.

The weights developed consisted of three components.⁹ First, a base sampling weight for each respondent with a completed survey was calculated. This base sampling weight relied on the probability of selection in a stratified random sampling where representation from the two STAR+PLUS MCOs—Amerigroup and Evercare—were included. Second, base sampling weights were adjusted to compensate for those who could not be located and those who were located but refused to participate. The adjustment factors were derived by modeling the probability of a sampled adult STAR+PLUS enrollee responding to the survey as a function of the following characteristics: enrollee race/ethnicity, gender, and age.¹⁰ Third, post-stratification techniques were used to adjust for any remaining discrepancies between the estimated number of adult beneficiaries and the total number of adult beneficiaries enrolled in two STAR+PLUS MCOs. Post-stratification adjustments were conducted at the MCO level and relied on the following characteristics: enrollee race/ethnicity and gender. Distributions of these enrollee characteristics were obtained from the information found in the Fiscal Year 2005 enrollment files for the STAR+PLUS Program.

Data Sources

Two primary data sources were used to conduct this evaluation. First, a third party administrator provided enrollment files for the STAR+PLUS Program to the Institute for Child Health Policy (IHP). These files were used to (1) identify the adult enrollees who met the sample selection criteria, (2) obtain contact information for the enrollees, and (3) compare the socio-demographic characteristics of survey participants compared to those not located or those refusing to participate. Second, telephone survey data from persons over the age of 18 who were enrolled in the STAR+PLUS Program for nine months or longer in the past year were used. These surveys were conducted in July 2006 through September 2006.

Measures

The STAR+PLUS Program Adult Enrollee CAHPS Health Plan Survey is comprised of the following sections: (1) a household listing table containing questions about the number of people in the household, their relationship to the STAR+PLUS Program enrollee, and their insurance and health status, (2) questions about the presence of a usual source of care for the enrollee, (3) the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey 3.0¹¹ (described below), (4) questions about care coordination services provided through the STAR+PLUS Program, (5) the RAND 36-Item Health Survey, Version 1.0 (described below), (6) a series of questions about family members' employment status and access to employer-based health insurance, and (7) demographic questions.

The household listing table was developed originally for use in the Florida KidCare evaluation and adopted for use for the adult STAR+PLUS Program population. It was developed in consultation with survey-design experts from Mathematica and the Urban Institute. The question series has been used in approximately 25,000 surveys conducted with adult Medicaid recipients and families of child Medicaid recipients in Texas, Florida, and New Hampshire.

The CAHPS Health Plan Survey 3.0 was used to assess enrollees' satisfaction with their health care.¹² Specifically, the Medicaid module with supplemental questions addressing behavioral health care, need for personal assistance care, smoking behaviors, and smoking cessation was used. The CAHPS Health Plan Survey contains composites, which are scores that combine results for closely related survey items to provide comprehensive yet concise results for multiple survey questions.¹³ Psychometric analyses indicate that the composite scores are a reliable and valid measure of member experiences.^{14, 15} CAHPS Health Plan Survey composite scores address the following domains: (1) getting needed care, (2) getting care quickly, (3) doctor's communication, (4) interactions with the doctor's office staff, and (5) health plan customer service. Using this composite scoring method, a mean score was calculated for each of the five areas that could range from 0 to 100 points with higher scores indicating greater satisfaction.

The RAND 36-Item Health Survey (SF-36) was created to survey health status in the Medical Outcomes Study.¹⁶ The SF-36 was designed for use in health policy evaluations and general population surveys. The SF-36 assesses eight separate health concepts: (1) limitations in physical activities because of health problems; (2) limitations in social activities because of physical or emotional problems; (3) limitations in usual role activities because of physical health problems; (4) bodily pain; (5) general mental health; (6) limitations in usual role activities because of emotional problems; (7) vitality (energy and fatigue); and (8) general health perceptions. The survey was designed for administration by a trained interviewer in person or by telephone.

ICHP developed the question series about employment, access to employer-based coverage, and socio-demographic characteristics. These items have been used in more than 25,000 surveys with Medicaid and CHIP enrollees in Texas and in Florida. The items were adapted from questions used in the National Health Interview Survey,¹⁷ the Current Population Survey,¹⁸ and the National Survey of America's Families.¹⁹ The entire telephone survey takes approximately 45 minutes to complete.

Individuals could refuse to respond to particular items or indicate that they did not know the answer to particular questions. These responses are indicated by the categories "refused" and "don't know." These responses most frequently occurred at rates that ranged between 0-2 percent of responses.

Survey Data Collection Techniques

Letters written in English and Spanish were sent to all potential participants in the sample explaining the purpose of the study and requesting their participation. The Bureau of Economic and Business Research (BEBR) at the University of Florida conducted the telephone surveys using computer-assisted-telephone-interviewing (CATI). Calls were made in English and in Spanish from 10 a.m. Central Time to 9 p.m. Central Time, 7 days a week. Calls were rotated throughout the morning, afternoon, and evening using the Sawtooth Software System in order to maximize the likelihood of reaching the enrollees.

A maximum of 30 attempts were made to reach an enrollee, and if the enrollee was not reached after that time, the software system selected the next individual on the list. Bad phone numbers were sent to a company that specializes in locating individuals, and any updated information was loaded back into the software system, and attempts were made to reach the adult enrollee using the updated contact information. No financial incentives were offered to participate in the surveys. The respondent was selected by asking to speak to the person in the household who was enrolled in the STAR+PLUS Program.

Historically, there has been concern that telephone surveys are biased because they do not include responses from populations that do not have phones. This is a particularly important issue with Medicaid recipients who, due to low incomes, may not have telephone service. However, research has shown that “transient” telephone households—those who have lost or gained telephone service in the recent past—are similar demographically to households without telephone service.²⁰ In an attempt to understand potential sources of bias in this survey, respondents were asked questions about their telephone service in the past six months. Fourteen percent of respondents who were enrolled in the STAR+PLUS Program cited an interruption in telephone service. For enrollees who reported breaks in service, 60 percent cited cost as the main reason for the interruption. Those with transient telephone service were compared with individuals who reported no break in telephone service across several demographic factors including race/ethnicity, gender, education, and marital status. There was no statistically significant difference between those with transient telephone service and individuals who reported no break in telephone service on these demographic factors.

Data Analysis

Descriptive statistics were calculated using SPSS Version 12.0. Chi-square tests and logistic regression models, calculated using STATA Version 8, were used in this report. Descriptive results for each item for each MCO are provided to HHSC.

Results

Demographics

The demographic characteristics of enrollees of the STAR+PLUS Program are important to assess. Research has shown that disparities exist among racial and ethnic groups in regard to health status, health outcomes, and access to health care.²¹ Due to the rich diversity evident among the population in the State of Texas and the importance of ensuring accessible health care for low-income individuals, assessing demographic characteristics of the enrollees in the STAR+PLUS Program is crucial.

Table 2 displays the demographic characteristics of respondents who participated in the 2006 STAR+PLUS Program Adult Enrollee CAHPS Health Plan Survey. Fifty-one percent of

STAR+PLUS Program enrollees who responded to the survey were Black, non-Hispanic. The next largest racial/ethnic groups for the STAR+PLUS Program were White, non-Hispanic (20 percent) and Hispanic (20 percent) followed by the Other, non-Hispanic (5 percent) group. As **Table 2** displays, weighted results show a similar distribution of race/ethnicity in the STAR+PLUS Program.

The most frequently reported marital status category for respondents in the STAR+PLUS Program was “single” (40 percent). The next two highest categories for marital status of respondents were divorced (20 percent) and married (16 percent). Weighted results reveal slightly higher proportions for those who are single (three percentage points) and married (two percentage points) and a lower proportion (one percentage point) for those who are divorced. Forty-one percent of the respondents stated that they reside in a single parent household. Forty percent of the respondents were not parents. Fourteen percent of the respondents indicated that they reside in a two parent household.

Almost one-half of the respondents had not obtained a high school diploma or GED while 29 percent of respondents indicated they had a high school diploma or GED. Survey results indicated some variability in respondent educational status. Few respondents indicated they had post-secondary training. Fourteen percent reported some vocational training or college and eight percent reported completing an associate’s degree or other higher educational degree.

The average age of STAR+PLUS Program enrollees who responded to the survey was 50.37 years (sd=10.50 years). Based on unweighted results, the majority of the survey respondents were female (73 percent). As **Table 2** displays, weighted analysis estimates that 48 percent of the STAR+PLUS population are females and 52 percent are males.

Table 2. Demographic Characteristics of Enrollees Participating in the STAR+PLUS Program CAHPS Health Plan Survey¹

Respondent Demographics ²		Unweighted		Weighted	
		N	Percent	N	Percent
Race/ Ethnicity	Refused	15	2.5%	558	2.4%
	Do not know	12	2.0%	330	1.4%
	White, non-Hispanic	119	20.2%	5175	22.0%
	Black, non-Hispanic	300	50.9%	11426	48.7%
	Hispanic	116	19.7%	4450	19.0%
	Other, non-Hispanic	28	4.8%	1533	6.5%
	Total	590	100.0%	23471	100.0%
Marital Status	Refused	3	0.5%	70	0.3%
	Do not know	4	0.7%	130	0.6%
	Married	92	15.6%	4,251	18.1%
	Common Law	17	2.9%	761	3.2%
	Divorced	117	19.8%	4,458	19.0%
	Separated	81	13.7%	2,545	10.8%
	Single	236	40.0%	10,026	42.7%
	Widowed	40	6.8%	1,230	5.2%
Total	590	100.0%	23,471	100.0%	
Household Type	Refused	18	3.1%	798	3.4%
	Do not know	10	1.7%	197	0.8%
	Single parent household	243	41.2%	7,459	31.8%
	Two parent household	81	13.7%	4,010	17.1%
	Not a parent	238	40.3%	11,007	46.9%
	Total	590	100.0%	23,471	100.0%
Education	Refused	0	0.0%	0	0.0%
	Do not know	4	0.7%	71	0.3%
	Less than high school	284	48.1%	11,267	48.0%
	High school diploma or GED	173	29.3%	6,696	28.5%
	Some vocational/college	85	14.4%	3,608	15.4%
	AA degree or higher	44	7.5%	1,830	7.8%
	Total	590	100.0%	23,471	100.0%
Age (N=576)³	Mean	50.37		50.34	
	Standard deviation	10.50		65.21	

¹ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

² As discussed in the Sample Selection Procedures section above, the weights that form the foundation for the weighted results in this table reflect variation between the health plans in the relationships between responders and non-responders and also the combined effects of race/ethnicity, age, and gender.

³ Some respondents refused to answer the age question. As a result, mean age calculations relied on 576 responses with complete information on the age question.

Table 2. Demographic Characteristics of Enrollees Participating in the STAR+PLUS Program CAHPS Health Plan Survey (Continued)⁴

Respondent Demographics		Unweighted		Weighted	
		N	Percent	N	Percent
Gender	Refused	2	0.3%	49	0.2%
	Do not know	0	0.0%	0	0.0%
	Male	159	27.0%	12233	52.1%
	Female	429	72.7%	11189	47.7%
	Total	590	100.0%	23471	100.0%

Health Status

Survey respondents were asked a series of questions about their health status. Rating health status is important for two major reasons. First, this information forms a baseline from which to track changes in health status over time, particularly if longitudinal studies were conducted. Second, such information can assist in program planning and financing. Assessing the percentage of enrollees served who are in poor health or who have chronic conditions is important to ensure adequate provider access, the appropriate range of services, and financing for health services.

As previously described, the health status of STAR+PLUS Program enrollees was assessed using the RAND 36-Item Health Survey, Version 1.0 (SF-36). Overall, the SF-36 scores for the STAR+PLUS MCO Program adult participants are significantly lower than national norms for all eight physical and mental health domains²² (See **Table 3 and Figure 1**). The smallest discrepancy between general United States (U.S.) population scores and STAR+PLUS scores was on the emotional well-being scale (U.S. norm=74.7 and STAR+PLUS mean=51.6). The largest discrepancy between general United States (U.S.) population scores and STAR+PLUS scores was in the area of role limitations due to physical disabilities (U.S. norm=81.0 and STAR+PLUS mean=29.1). The findings are similar when weighted scores for physical and mental health domains are compared to U.S. population scores.

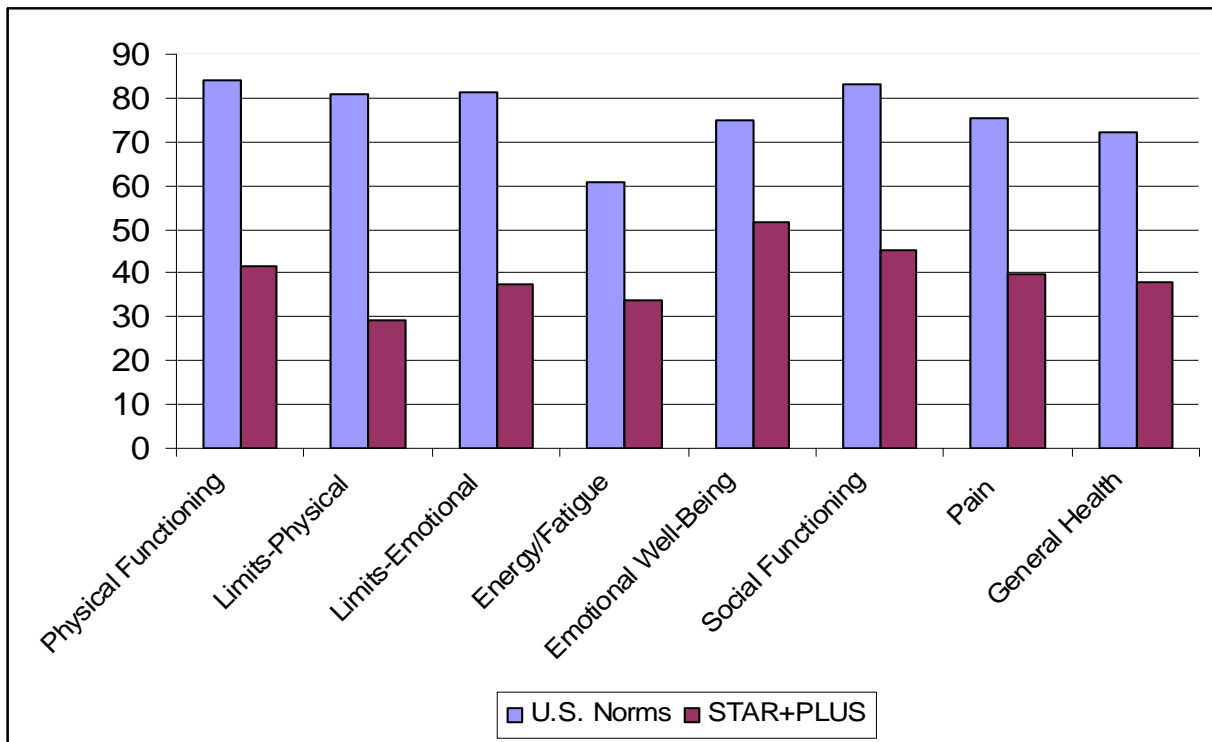
The differences in these scores reflect the fact that the adult population of the STAR+PLUS Program is a unique population compared to the society at large. The primary reason for these differences in scores is due to the fact that the STAR+PLUS Program serves disabled and chronically ill Medicaid members. Also, poverty and, possibly, lack of insurance coverage and access to health services prior to their enrollment in Medicaid are likely to contribute to the significantly higher rates of poor physical and mental health compared to the U.S. general population. Enrollees with poor health status present unique challenges to the health care delivery system because their needs for health care services, including specialty services, are higher than those who are healthy. One of the ways that the STAR+PLUS Program copes with these challenges is to provide a continuum of care for disabled and chronically ill Medicaid patients by integrating acute and long term care services in a managed care environment.

⁴ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 3. RAND SF-36 Health Survey Results: STAR+PLUS Program Enrollees Compared to National Norms

SF-36 Health Domains	National Norms for the U.S.		STAR+PLUS Program Enrollees Unweighted		STAR+PLUS Program Enrollees Weighted	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean Estimate	Std. Error
Physical Functioning	84.2	23.3	41.5	31.1	42.3	1.5
Role Limitations Due to Physical Health	81.0	34.0	29.1	36.6	29.1	2.0
Role Limitations Due to Emotional Problems	81.3	33.0	37.5	40.0	38.8	2.1
Energy/Fatigue	60.9	21.0	33.9	23.3	34.9	1.3
Emotional Well-Being	74.7	18.1	51.6	26.4	53.1	1.4
Social Functioning	83.3	22.7	45.3	31.6	46.1	1.6
Pain	75.2	23.7	39.7	30.4	41.7	1.5
General Health	72.0	20.3	38.1	18.5	39.6	0.8

Figure 1. RAND SF-36 Health Survey Results: STAR+PLUS Program Compared to National Norms



Usual Source of Care

Having a usual source of care—a particular person or place where one goes for sick and preventive care—contributes to improved health outcomes.^{23, 24} Health care consumers perceive primary care as an integral aspect of the health care system and appreciate the role of primary care providers in coordinating quality care.²⁵ In addition to care coordination, patients highly value

continuity with the same health care provider. Continuity of care contributes to receipt of preventive care and prompt detection and treatment of health care problems.²⁶

Information is presented in this section using questions from (1) the CAHPS Health Plan Survey about the presence of a *personal doctor or nurse* as a usual source of care and (2) the Primary Care Assessment Tool²⁷ about the presence of a *person or place* as the usual source of care. Among adults, there is some evidence to suggest that having a usual person as opposed to a usual place as the source of care promotes the use of some preventive services, such as blood pressure and cholesterol level checkups.²⁸ Therefore, enrollees were asked questions about the availability of a personal doctor or nurse (a usual person as the source of care) and about the availability of a usual person or place.

Overall, 81 percent of respondents reported that they had a personal doctor or nurse (See **Table 4**). Results from the weighted analysis at 79 percent provide a slightly lower estimate for enrollees who have a personal doctor or nurse.

There is not much variation in the percent of adult enrollees with a personal doctor or nurse by MCO (See **Figure 2**). Eighty-three percent of respondents from Amerigroup and 79 percent of respondents from Evercare reported that they had a personal doctor or nurse.

Figure 2. Percentage of STAR+PLUS Adult Enrollees with a Personal Doctor or Nurse by MCO (Using the CAHPS Health Plan Survey)

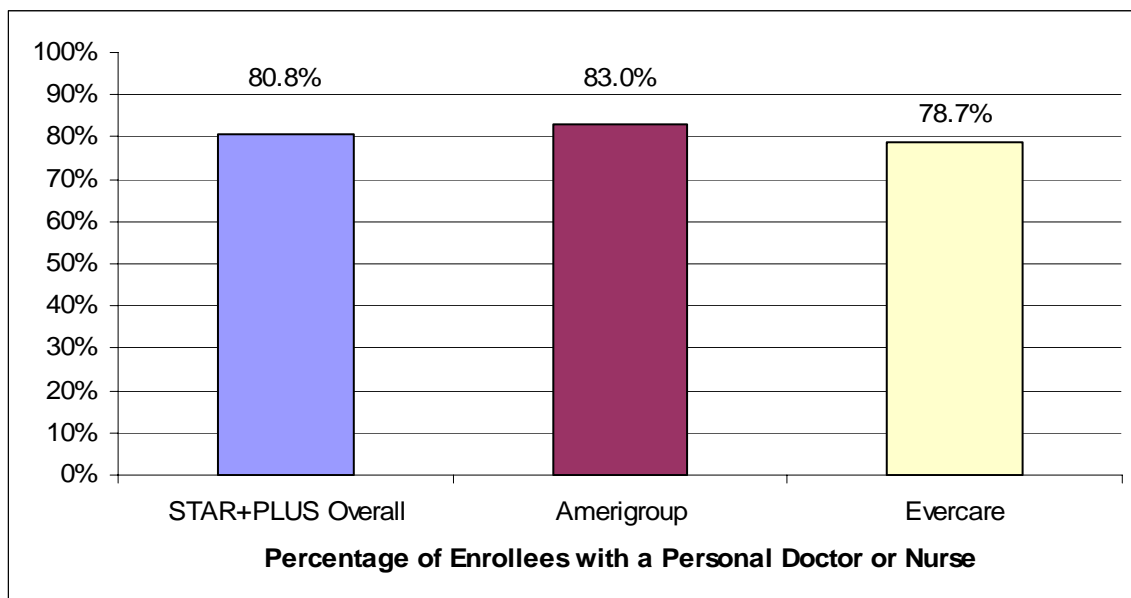


Table 4 also provides a breakdown of the type of health care provider named as a personal doctor or nurse. Sixty-five percent of STAR+PLUS Program respondents who reported that they had a personal doctor or nurse reported that the provider was a general doctor. Twenty-four percent of respondents reported that the personal doctor or nurse was a specialty physician. Six percent of STAR+PLUS respondents indicated the personal doctor or nurse was a physician's assistant or a nurse.

Respondents who reported they had a personal doctor or nurse also provided information on the length of time they had been seen by this person. Thirty-nine percent of respondents reported that they had been with their usual health care provider over five years. Fourteen percent of respondents reported they had been going to their personal doctor or nurse for less than one year.

The majority of respondents reported that they did not have a problem getting a personal doctor or nurse that they were happy with (61 percent).

Table 4. STAR+PLUS Program Adult Enrollees' Usual Source of Care-Person⁵

Usual Source of Care (Person)		Unweighted		Weighted	
		N	Percent	N	Percent
Do you have one person you think of as your personal doctor or nurse?	Refused	3	0.5%	64	0.3%
	Do not know	7	1.2%	388	1.7%
	Yes	477	80.8%	18,435	78.5%
	No	103	17.5%	4,584	19.5%
	Total	590	100.0%	23,471	100.0%
Is this person a general doctor, a specialist doctor, a physician's assistant, or a nurse?	Refused	9	1.9%	241	1.3%
	Do not know	17	3.6%	495	2.7%
	General doctor	308	64.6%	11,907	64.6%
	Specialist doctor	116	24.3%	4,609	25.0%
	Physician's assistant	10	2.1%	766	4.2%
	Nurse	17	3.6%	417	2.3%
	Total	477	100.0%	18,435	100.0%
How many months or years have you been going to your personal doctor or nurse?	Refused	7	1.5%	183	1.0%
	Do not know	8	1.7%	319	1.7%
	Less than 6 months	35	7.3%	1,310	7.1%
	At least 6 months but less than 1 year	31	6.5%	989	5.4%
	At least 1 year but less than 2 years	76	15.9%	2,958	16.0%
	At least 2 years but less than 5 years	133	27.9%	5,506	29.9%
	5 years or more	187	39.2%	7,170	38.9%
	Total	477	100.0%	18,435	100.0%
Since you joined, how much of a problem was it to get a doctor or nurse you are happy with?	Refused	12	2.6%	464	2.5%
	Do not know	7	1.5%	400	2.1%
	A big problem	89	19.1%	3,578	19.0%
	A small problem	74	15.9%	2,605	13.8%
	Not a problem	284	60.9%	11,788	62.6%
	Total	466	100.0%	18,836	100.0%

⁵ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 5 provides information about respondents who report a *person or place* as a usual source of care. Overall, 82 percent of STAR+PLUS respondents report that they have a particular doctor's office, clinic health center, or other place where they can go if they are sick and they need advice about their health. The majority of respondents reported using a physician's office located outside of a hospital (48 percent) followed by a walk-in clinic (11 percent) as their usual place of care. Four percent of enrollees report using the emergency room as their usual source of care. Results from weighted analysis were similar to these unweighted results.

Table 5. STAR+PLUS Program Adult Enrollees' Usual Source of Care-Person or Place⁶

Usual Source of Care (Person or Place)		Unweighted		Weighted	
		N	Percent	N	Percent
Is there currently a particular doctor's office, clinic, health center, or other place that you go to when you are sick or need advice about your health?	Refused	6	1.0%	270	1.2%
	Do not know	6	1.0%	286	1.2%
	Yes	481	81.5%	19,268	82.1%
	No	97	16.4%	3,647	15.5%
	Total	590	100.0%	23,471	100.0%
What kind of place is your usual source of care?	Refused	9	1.9%	309	1.6%
	Do not know	7	1.5%	371	1.9%
	Hospital emergency room	21	4.4%	858	4.5%
	Clinic at a hospital	45	9.4%	1,737	9.0%
	Doctor's office outside a hospital	229	47.6%	9,114	47.3%
	Doctor's office inside a hospital	34	7.1%	1,438	7.5%
	HMO-run clinic	14	2.9%	507	2.6%
	A community health center	24	5.0%	989	5.1%
	Local health department	2	0.4%	87	0.5%
	Walk in clinic or urgent care center	55	11.4%	2,364	12.3%
	Other	41	8.5%	1,494	7.8%
	Total	481	100.0%	19,268	100.0%

⁶ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Enrollee Satisfaction with Their Health Care – Descriptive Results

The importance of enrollees' satisfaction with their health care was described in the introductory section of this report. **Table 6** lists the mean composite scores for the five CAHPS Health Plan Survey domains for the STAR+PLUS Program overall and by MCO. These are descriptive results only. The five domains include:

- 1) Getting needed care,
- 2) Getting care quickly,
- 3) Doctor's communication,
- 4) Doctor's office staff, and
- 5) Health plan customer service.

As previously described, each of the domains had a possible score ranging from 0 to 100 with higher scores indicating greater satisfaction.

The overall scores for the STAR+PLUS Program enrollees were lower than the Medicaid national mean for all clusters except for customer service. The Medicaid national mean scores are the scores from Medicaid managed care plans that choose to report their CAHPS Health Plan Survey results to the National Committee for Quality Assurance (NCQA).²⁹ The last reporting period available for national comparison is calendar year 2002. These health plans are providing CAHPS Health Plan Survey results based on their general Medicaid population, which is a healthier group than STAR+PLUS enrollees.

The scores indicate the percentage of respondents who "usually" or "always" have positive experiences with the care depicted in the composite (i.e., getting care quickly, doctor communication, etc.). STAR+PLUS Program enrollees rated health plan customer service at 71.9—almost 5 points higher than the national average. According to weighted analysis, this difference is more pronounced: STAR+PLUS Program enrollees rated health plan customer service at 73.8—almost 7 points higher than the national average.

The STAR+PLUS Program enrollees' ratings for three of the remaining domains—getting needed care, doctor's communication, and doctor's office staff—were slightly lower than those of Medicaid plans reporting to the NCQA. The greatest variance among the domains was in getting care quickly. The NCQA average for getting care quickly was 77.30 points while the STAR+PLUS Program enrollees rated this domain at 60.8, almost 17 points lower. When weighted analysis is considered, the STAR+PLUS Program enrollees' ratings for getting care quickly is almost 15 points lower than the national average.

Overall, there were only small levels of variation in satisfaction ratings between Amerigroup and Evercare enrollees. For four out of five domains, the difference in scores was less than three points. However, Amerigroup enrollees rated getting care quickly almost six points higher than Evercare enrollees rated this domain. When weighted analysis is considered, differences in satisfaction ratings between Amerigroup and Evercare enrollees, in general, widen. The only exception to this is getting needed care where the gap is reduced from 1.4 points to 0.4 points.

Table 6. Descriptive Results - Average CAHPS Health Plan Survey Cluster Scores: Enrollee Satisfaction with Their Health Care

CAHPS Cluster Scores	Getting Needed Care	Getting Care Quickly	Doctor's Communication	Office Staff	Customer Service
National Medicaid CAHPS Health Plan Survey Mean	75.6	77.3	85.8	88.2	67.2
STAR+PLUS Overall (Unweighted)	71.7	60.8	82.1	84.3	71.9
Amerigroup	71.0	63.9	82.7	85.6	71.5
Evercare	72.4	58.0	81.5	83.0	71.4
STAR+PLUS Overall (Weighted)	71.6	62.4	81.1	84.7	73.8
Amerigroup	71.8	67.9	81.9	88.6	76.1
Evercare	72.2	57.8	80.3	81.5	71.7

Enrollee Satisfaction with Their Health Care – Multivariate Results

Satisfaction with health care can be influenced by several factors, including enrollee health status³⁰ and enrollee socio-demographic characteristics.³¹ Therefore, to compare enrollee satisfaction with care for each of the previously described CAHPS Health Plan Survey clusters for each MCO, we controlled for enrollee health status, race, and education.

The health and socio-demographic variables used in the logistic regression models were constructed as follows:

- (1) Enrollee health status was measured by the RAND SF-36 category general health. This is a composite score rated from a possible 0 to 100. A higher score indicates better general health.
- (2) Enrollee race/ethnicity was categorized as White, non-Hispanic; Black, non-Hispanic; Hispanic; or Other, non-Hispanic. White, non-Hispanic is the reference group.
- (3) Educational status was grouped as less than a high school education, a high school diploma or GED, some college or vocational school, and a college, associate, or higher education degree. Those who had less than a high school education were the reference group.

To select a reference group for the MCOs, the MCO with the highest score for each CAHPS Health Plan Survey cluster was selected. The purpose of the reference group is to provide a point of comparison. Therefore, the results of the second STAR+PLUS MCO are compared to the results of the highest scoring MCO for each cluster after controlling for race/ethnicity, health status, and educational status. The second STAR+PLUS MCO can have scores that are significantly lower than or not significantly different from the MCO serving as the reference.

The outcome variable was the odds that the enrollee would usually or always have positive experiences for each cluster. A score of 75 points or higher was used to indicate that the experience was usually or always positive.

Table 7 contains a summary of the logistic regression or odds ratio results for each CAHPS Health Plan Survey cluster.⁷ The reference MCO is indicated using the abbreviation “Ref.” For the second STAR+PLUS MCO with scores that are not significantly different from the reference MCO, the abbreviation “NS” is used. For the second STAR+PLUS MCO scoring significantly lower than the reference MCO after considering the covariates in the model, a “-” is used. The logistic regression results showing the odds ratios and confidence intervals are contained in Appendix A.

Evercare’s score for the *Getting Needed Care* cluster was higher than Amerigroup’s score. After controlling for enrollee health status, race/ethnicity, and education, the scores for this cluster were not significantly different across the two STAR+PLUS MCOs.

For the *Getting Care Quickly*, *Doctor’s Communication*, *Doctor’s Office Staff*, and *Health Plan Customer Service* clusters, Amerigroup had a higher score than Evercare. However, after controlling for enrollee health status, race/ethnicity, and education, none of these differences were statistically significant.

Table 7. Logistic Regression Results – CAHPS Health Plan Survey Cluster Scores: Differences Between STAR+PLUS MCOs in Adult Enrollee Satisfaction Controlling for Race/Ethnicity, Health Status, and Education (Unweighted)

MCO	Getting Needed Care	Getting Care Quickly	Doctor’s Communication	Office Staff	Customer Service
Amerigroup	NS	Ref	Ref	Ref	Ref
Evercare	Ref	NS	NS	NS	NS

Key: “Ref” = reference MCO; “NS” = not significant; “-” = score significantly lower than reference.

Specialty Services

The implementation of managed care, particularly for those with special health care needs, sometimes raises questions about potential barriers to health care services.³² The impact of managed care is of particular concern for individuals with complex physical or emotional disorders who may require many specialty services. Relatively healthy individuals may also require specialty services for acute conditions at various times.

Table 8 depicts the percentage of respondents reporting that they needed to see a physician specialist. Overall, 62 percent of respondents enrolled in the STAR+PLUS Program reported they needed to see a specialist in the past six months. The percentage of respondents reporting that they needed to see a physician specialist diminishes when weighted analysis is considered.

Of those who needed to see a specialist, 62 percent of respondents reported that obtaining specialty care was not a problem. Fifteen percent of enrollees reported they had a “small” problem obtaining specialty care. Twenty-two percent of enrollees who stated they needed specialty care reported experiencing a “big” problem when trying to secure a needed specialist. Weighted results are similar to the unweighted results.

⁷ Results from logistic regressions for CAHPS Health Plan Survey cluster scores using weighted data are not reported here as none of these regressions were statistically significant.

Table 8. STAR+PLUS Program Adult Enrollees' Experiences with Specialty Care ⁸

Specialty Care		Unweighted		Weighted	
		N	Percent	N	Percent
In the last 6 months, did you or a doctor think you needed to see a specialist?	Refused	4	0.7%	208	0.9%
	Do not know	6	1.0%	221	0.9%
	Yes	364	61.7%	13,707	58.4%
	No	216	36.6%	9,335	39.8%
	Total	590	100.0%	23,471	100.0%
In the last 6 months, how much of a problem was it to get a referral to a specialist?	Refused	3	0.8%	142	1.0%
	Do not know	3	0.8%	255	1.9%
	A big problem	79	21.7%	2,763	20.2%
	A small problem	53	14.6%	2,140	15.6%
	Not a problem	226	62.1%	8,407	61.3%
	Total	364	100.0%	13,707	100.0%
In the last 6 months, did you see a specialist?	Refused	0	0.0%	0	0.0%
	Do not know	3	0.5%	75	0.3%
	Yes	320	54.2%	12,358	52.7%
	No	267	45.3%	11,038	47.0%
	Total	590	100.0%	23,471	100.0%
Was the specialist you saw most often the same doctor as your personal doctor?	Refused	1	0.3%	13	0.1%
	Do not know	1	0.3%	19	0.2%
	Yes	113	35.3%	4,301	34.8%
	No	205	64.1%	8,025	64.9%
	Total	320	100.0%	12,358	100.0%

Information on the percentage of respondents reporting a need for specialized treatments or therapies such as specialized medical equipment or devices; special therapy such as physical, occupational, or speech therapy; or home health care is provided in **Table 9**. Forty-four percent of respondents reported a need for special equipment. Twenty-two percent of STAR+PLUS Program respondents required special therapy. Twenty-eight percent of enrollees reported a need for home health care. The high level of need for specialized services corresponds to limitations in physical functioning. A high percentage of respondents enrolled in the STAR+PLUS Program stated that they had impairment or health problems that interfered with daily living skills (See **Table 9**). Sixty-seven percent of enrollees reported having a physical or mental condition that seriously interferes with their independence or quality of life. These findings are similar to findings from weighted analysis.

Table 9 also provides information regarding respondents' experiences obtaining needed specialized therapies, equipment, or assistance. A significant percentage of respondents who required specialized services reported problems obtaining needed care. Between 38 percent and 58 percent of enrollees needing home health care, special medical equipment, or specialized therapies reported problems accessing care.

⁸ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 9. STAR+PLUS Program Adult Enrollees' Experiences with and Need for Specialized Services⁹

Specialized Services		Unweighted		Weighted	
		N	Percent	N	Percent
In the last 6 months, did you have a problem for which you needed special medical equipment?	Refused	2	0.4%	123	0.6%
	Do not know	1	0.2%	96	0.5%
	Yes	212	43.7%	8,247	43.1%
	No	270	55.7%	10,651	55.7%
	Total	485	100.0%	19,118	100.0%
In the last 6 months, how much of a problem was it to get special medical equipment through your plan?	Refused	8	3.8%	304	3.7%
	Do not know	1	0.5%	145	1.8%
	A big problem	46	21.7%	1,741	21.1%
	A small problem	34	16.0%	1,219	14.8%
	Not a problem	123	58.0%	4,838	58.7%
	Total	212	100.0%	8,247	100.0%
In the last 6 months, did you have any problems that needed special therapy?	Refused	0	0.0%	0	0.0%
	Do not know	1	0.2%	19	0.1%
	Yes	107	22.1%	4,997	26.1%
	No	377	77.7%	14,101	73.8%
	Total	485	100.0%	19,118	100.0%
In the last 6 months, how much of a problem was it to get special therapy through your plan?	Refused	2	1.9%	123	2.5%
	Do not know	2	1.9%	51	1.0%
	A big problem	35	32.7%	1,635	32.7%
	A small problem	27	25.2%	1,379	27.6%
	Not a problem	41	38.3%	1,809	36.2%
	Total	107	100.0%	4,997	100.0%
In the last 6 months, did you need someone to come into your home to give you home health care/assistance?	Refused	4	0.8%	228	1.2%
	Do not know	1	0.2%	96	0.5%
	Yes	134	27.6%	4,694	24.6%
	No	346	71.3%	14,099	73.8%
	Total	485	100.0%	19,118	100.0%
In the last 6 months, how much of a problem was it to get the home care/assistance through your plan?	Refused	3	2.2%	95	2.0%
	Do not know	5	3.7%	120	2.6%
	A big problem	37	27.6%	1,178	25.1%
	A small problem	17	12.7%	605	12.9%
	Not a problem	72	53.7%	2,696	57.4%
	Total	134	100.0%	4,694	100.0%
Because of any impairment or problem, do you need help with personal care such as eating, dressing, or getting around the house?	Refused	4	0.7%	197	0.8%
	Do not know	1	0.2%	18	0.1%
	Yes	191	32.4%	6,956	29.6%
	No	394	66.8%	16,300	69.4%
	Total	590	100.0%	23,471	100.0%

⁹ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 9. STAR+PLUS Program Adult Enrollees' Experiences with and Need for Specialized Services (Continued)¹⁰

Specialized Services		Unweighted		Weighted	
		N	Percent	N	Percent
Because of any impairment or problem, do you need help with routine needs, such as everyday household chores, doing necessary business, shopping, or other purposes?	Refused	11	1.9%	349	1.5%
	Do not know	5	0.8%	167	0.7%
	Yes	312	52.9%	11,583	49.4%
	No	262	44.4%	11,372	48.5%
	Total	590	100.0%	23,471	100.0%
Do you have a physical/ mental condition that seriously interferes with your independence or quality of life?	Refused	4	0.7%	132	0.6%
	Do not know	12	2.0%	460	2.0%
	Yes	395	66.9%	16,295	69.4%
	No	179	30.3%	6,583	28.0%
	Total	590	100.0%	23,471	100.0%

Overall, a substantial percentage of respondents reported needing a specialty physician or access to specialized medical treatment, therapy, or equipment. A significant number of those that require these specialized services report experiencing problems obtaining needed care. Potential barriers to specialty care and services need to be identified and strategies developed with the health plans to address those barriers. Potential barriers could include inadequate provider panels, inadequate care coordination, or restrictive prior authorization procedures.

Care Coordination

In the STAR+PLUS Program, all enrollees who receive long-term care services receive care coordination services from their MCO. Long-term care services may include day activity and health services, personal attendant services, and short-term (up to 120 days) nursing facility care. Additional services provided to CBA waiver clients are adaptive aids, adult foster home services, assisted living, emergency response services, medical supplies, minor home modifications, nursing services, respite care, and therapies (occupational, physical, and speech-language). Enrollees who require long-term care services must request care coordination services.³³ Care coordination services, which are intended to coordinate acute and long-term care services, include development of an individual plan of care with the client, family members, and provider and authorization of long-term care services for the client.

Table 10 provides information regarding survey respondents who receive care coordination services. Sixty-three percent of respondents indicated that they did not have a “care coordinator” from their health plan. Respondent survey data was matched with claims data to determine if they utilized long-term care services in the past year. Of the 63 percent of respondents who stated they did not have a care coordinator, 56 percent did not have a claim for long-term care services in the past year. Therefore, 56 percent of those who reported not having a care coordinator would not be expected to have one unless they specifically made a request because they had not received long-term care services (at least in the 12 months preceding the survey). Of those who reported not having a health plan based care coordinator, 43 percent reported that they would like to have one. Twenty-one percent of those who did not indicate they had a care coordinator associated with their

¹⁰ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

health plan reported that they had someone else who coordinated their care. This person was most often a family member or friend (63 percent).

Thirty-two percent of respondents indicated that they had a care coordinator from their health plan. Of those who reported a designated care coordinator, half reported some contact initiated by the coordinator within the past six months (50 percent). For the most part, the majority of respondents who reported having a care coordinator reported satisfaction with the care coordinator’s performance over the past six months. Of the 146 respondents who tried to get help from their care coordinator, approximately 68 percent reported that it was “somewhat easy” (12 percent), “easy” (27 percent), or “very easy” (13 percent) to get help from their care coordinator. Overall, STAR+PLUS respondents reported satisfaction with the care coordinator at solving problems with services like housing, meals, and transportation over the past six months. Seventy-two percent reported they were either “satisfied” or “very satisfied” with the care coordinator solving problems with their services. Sixty-three percent reported that the care coordinator either “usually” or “always” explained things in a way that was understandable.

The item in which a majority of respondents did not respond favorably regarding care coordinator performance was involvement in making decisions regarding services. Forty-four percent of respondents indicated that they were “usually” or “always” involved in decisions regarding services while 14 percent indicated they were involved “sometimes” and 40 percent indicated they were “never” involved in making decisions about their services.

As displayed in **Table 10**, weighted results on care coordination services were similar to unweighted results.

Table 10. STAR+PLUS Program Adult Enrollees’ Perceptions of Care Coordination Services¹¹

Care Coordination		Unweighted		Weighted	
		N	Percent	N	Percent
Do you have a care coordinator or a person who helps you get services from your health plan?	Refused	5	0.8%	234	1.0%
	Do not know	24	4.1%	914	3.9%
	Yes	191	32.4%	7,677	32.7%
	No	370	62.7%	14,646	62.4%
	Total	590	100.0%	23,471	100.0%
Does anyone help coordinate your care for you?	Refused	12	3.0%	516	3.3%
	Do not know	14	3.5%	583	3.7%
	Yes	82	20.6%	2,977	18.9%
	No	291	72.9%	11,718	74.2%
	Total	399	100.0%	15,794	100.0%

¹¹ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 10. STAR+PLUS Program Adult Enrollees' Perceptions of Care Coordination Services¹² (Continued)

Care Coordination		Unweighted		Weighted	
		N	Percent	N	Percent
Is this person a...	Refused	1	1.2%	61	2.0%
	Do not know	2	2.4%	57	1.9%
	A family member or friend	52	63.4%	1,940	65.2%
	Your primary care doctor	10	12.2%	412	13.8%
	A nurse or other health professional in your doctor's office	6	7.3%	168	5.6%
	Home health nurse	4	4.9%	101	3.4%
	Other	7	8.5%	238	8.0%
	Total	82	100.0%	2,977	100.0%
Would you like someone from your health plan to be your care coordinator?	Refused	8	2.0%	287	1.8%
	Do not know	17	4.3%	614	3.9%
	Yes	170	42.6%	6,873	43.5%
	No	204	51.1%	8,020	50.8%
	Total	399	100.0%	15,794	100.0%
In the last 6 months, has a care coordinator from your STAR+PLUS health plan contacted you?	Refused	1	0.5%	26	0.3%
	Do not know	3	1.6%	57	0.7%
	Yes	96	50.3%	3,764	49.0%
	No	91	47.6%	3,830	49.9%
	Total	191	100.0%	7,677	100.0%
In the last 6 months, how easy or difficult was it to get help from the care coordinator from your health plan?	Refused	7	3.7%	299	3.9%
	Do not know	3	1.6%	116	1.5%
	I have not tried to get help from a care coordinator at my health plan	35	18.3%	1,346	17.5%
	It was very easy	25	13.1%	1,051	13.7%
	It was easy	51	26.7%	1,907	24.8%
	It was somewhat easy	23	12.0%	1,094	14.2%
	It was somewhat difficult	15	7.9%	666	8.7%
	It was difficult	11	5.8%	397	5.2%
	It was very difficult	21	11.0%	801	10.4%
Total	191	100.0%	7,677	100.0%	

¹² Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 10. STAR+PLUS Program Adult Enrollees' Perceptions of Care Coordination Services¹³ (Continued)

Care Coordination		Unweighted		Weighted	
		N	Percent	N	Percent
In the last 6 months, has a care coordinator from your plan helped you get services like housing/meals/transportation?	Refused	1	0.5%	19	0.2%
	Do not know	0	0.0%	0	0.0%
	Yes	48	25.1%	1,812	23.6%
	No	142	74.3%	5,845	76.1%
	Total	191	100.0%	7,677	100.0%
In the last 6 months, how satisfied were you with the care coordinator at solving problems with services?	Refused	7	3.7%	215	2.8%
	Do not know	9	4.7%	318	4.1%
	Very satisfied	52	27.2%	2,086	27.2%
	Satisfied	86	45.0%	3,525	45.9%
	Dissatisfied	23	12.0%	925	12.1%
	Very dissatisfied	14	7.3%	608	7.9%
	Total	191	100.0%	7,677	100.0%
In the last 6 months, how often did your care coordinator explain things in a way you could understand?	Refused	0	0.0%	0	0.0%
	Do not know	6	3.1%	168	2.2%
	Never	43	22.5%	1,709	22.3%
	Sometimes	22	11.5%	861	11.2%
	Usually	26	13.6%	1,019	13.3%
	Always	94	49.2%	3,920	51.1%
	Total	191	100.0%	7,677	100.0%
In the last 6 months, how often did your care coordinator involve you in making decisions about your services?	Refused	1	0.5%	29	0.4%
	Do not know	3	1.6%	108	1.4%
	Never	77	40.3%	3,243	42.2%
	Sometimes	26	13.6%	1,055	13.7%
	Usually	13	6.8%	402	5.2%
	Always	71	37.2%	2,840	37.0%
	Total	191	100.0%	7,677	100.0%
Overall, how would you rate the care coordination services at your STAR+PLUS health plan?	Refused	0	0.0%	0	0.0%
	Do not know	4	2.1%	78	1.0%
	Excellent	48	25.1%	1,982	25.8%
	Very good	37	19.4%	1,352	17.6%
	Good	53	27.7%	2,071	27.0%
	Fair	24	12.6%	1,111	14.5%
	Poor	25	13.1%	1,082	14.1%
	Total	191	100.0%	7,677	100.0%

¹³ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Access to Needed Care

Managed care plans use a range of strategies to coordinate health care and control costs, such as requirement for prior approval for specific types of care, disease management programs, and pharmacy formularies. While these strategies ensure efficiency, they should be monitored to ensure they do not impede access to care for disabled or chronically ill individuals.

Table 11 shows information regarding the percentage of respondents who needed care, tests, or treatment and their experiences obtaining care. Overall, 77 percent of STAR+PLUS Program enrollees needed care, tests, or treatment. Of those who needed these services, the majority of respondents (64 percent) reported that obtaining needed care was not a problem.

Information about the percentage of enrollees needing approval from their MCO for care, tests, or treatment as well as experiences obtaining approval is also included in **Table 11**. Overall, 45 percent of respondents enrolled in the STAR+PLUS Program needed approval from their MCO. A significant number of respondents indicated that there were problems obtaining approval for care. Of enrollees who needed approval, 46 percent reported that delays while waiting for approval for needed care were not a problem, 31 percent reported that delays during the approval process were a “small” problem, and 23 percent reported that delays were a “big” problem.

As displayed in **Table 11**, weighted results on access to needed care were similar to unweighted results.

Table 11. STAR+PLUS Program Adult Enrollees' Access to Needed Care¹⁴

Access to Needed Care		Unweighted		Weighted	
		N	Percent	N	Percent
In the last 6 months, did you need any care, tests, or treatment?	Refused	2	0.4%	51	0.3%
	Do not know	2	0.4%	38	0.2%
	Yes	372	76.7%	14,409	75.4%
	No	109	22.5%	4,620	24.2%
	Total	485	100.0%	19,118	100.0%
In the last 6 months, how much of a problem was it to get the care, tests, or treatment?	Refused	0	0.0%	0	0.0%
	Do not know	1	0.3%	19	0.1%
	A big problem	69	18.5%	2,936	20.4%
	A small problem	64	17.2%	2,443	17.0%
	Not a problem	238	64.0%	9,011	62.5%
	Total	372	100.0%	14,409	100.0%
In the last 6 months, did you need approval from your health plan for care/tests/treatment?	Refused	2	0.4%	38	0.2%
	Do not know	11	2.3%	458	2.4%
	Yes	220	45.4%	8,728	45.7%
	No	252	52.0%	9,893	51.7%
	Total	485	100.0%	19,118	100.0%
In the last 6 months, how much of a problem were delays in care while you waited for approval?	Refused	0	0.0%	0	0.0%
	Do not know	1	0.5%	20	0.2%
	A big problem	50	22.7%	2,168	24.8%
	A small problem	67	30.5%	2,547	29.2%
	Not a problem	102	46.4%	3,993	45.8%
	Total	220	100.0%	8,728	100.0%

Health Behaviors and Health Promotion Practices

A number of health behaviors and health promotion practices can reduce illness and health care costs. Two such practices include flu shots and smoking cessation. The Centers for Disease Control recommends that individuals at high risk for influenza such as those 50 years old or older, residents of long-term care facilities, and people who have chronic medical problems should receive an annual flu shot to prevent adverse health outcomes such as hospitalization or death. The Agency for Health Care Policy and Research Smoking Cessation Clinical Practice Guidelines recommend that primary care physicians identify smokers, treat every smoker with a cessation or motivational intervention, offer nicotine replacement except in special circumstances, and schedule follow-up contact to occur after cessation.³⁴

Table 12 provides information regarding flu shots, smoking behaviors, and smoking cessation for respondents enrolled in the STAR+PLUS Program. The percentage of enrollees receiving flu shots since the fall of 2004 is provided for informational purposes only. Possibly due to nationwide flu

¹⁴ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

shot shortages during the past two years, the number of respondents reporting receipt of a flu shot is fairly low. Thirty-four percent of respondents reported receiving a flu shot since the fall of 2004.

The majority of survey respondents reported that they were or had been smokers (54 percent) while 45 percent reported that they were life-long non-smokers. “Smoker” is defined as having smoked at least 100 cigarettes in a lifetime. Of those respondents who have smoked, a large percentage of respondents enrolled in the STAR+PLUS Program reported smoking daily (40 percent). Twenty-five percent of respondents who smoked reported they smoked some days. Approximately one-third of enrollees who had ever smoked reported they had quit smoking. The majority of enrollees who currently smoke and had a visit to their physician were advised during at least one visit with their doctors to quit smoking (67 percent); however, fewer enrollees reported that their doctors provided them with strategies to cease smoking. Thirty-nine percent of smokers reported that their doctors or health providers discussed methods to assist them with quitting smoking. Even fewer respondents reported their doctors advised them to use a nicotine replacement medication. Thirty-one percent of smokers reported that their doctors or health providers recommended a medication such as nicotine gum or a nicotine patch to assist them in smoking cessation.

Table 12. Health Behaviors of STAR+PLUS Program and Adult Enrollees¹⁵

Health Behaviors		Unweighted		Weighted	
		N	Percent	N	Percent
Have you had a flu shot since September 1, 2004?	Refused	0	0.0%	0	0.0%
	Do not know	10	1.7%	419	1.8%
	Yes	199	33.7%	7,758	33.1%
	No	381	64.6%	15,294	65.2%
	Total	590	100.0%	23,471	100.0%
Have you ever smoked at least 100 cigarettes in your entire life?	Refused	3	0.5%	101	0.4%
	Do not know	5	0.8%	144	0.6%
	Yes	317	53.7%	13,795	58.8%
	No	265	44.9%	9,431	40.2%
	Total	590	100.0%	23,471	100.0%
Do you now smoke every day, some days, or not at all?	Refused	2	0.6%	90	0.7%
	Do not know	0	0.0%	0	0.0%
	Every day	126	39.7%	5,414	39.2%
	Some days	80	25.2%	3,862	28.0%
	Not at all	109	34.4%	4,429	32.1%
	Total	317	100.0%	13,795	100.0%
How long has it been since you quit smoking cigarettes?	Refused	0	0.0%	0	0.0%
	Do not know	0	0.0%	0	0.0%
	6 months or less	9	8.3%	368	8.3%
	More than 6 months	100	91.7%	4,061	91.7%
	Total	109	100.0%	4,429	100.0%

¹⁵ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

Table 12. Health Behaviors of STAR+PLUS Program and Adult Enrollees¹⁶ (Continued)

Health Behaviors		Unweighted		Weighted	
		N	Percent	N	Percent
In the last 6 months, on how many visits were you advised to quit smoking by your doctor in the plan?	Refused	7	3.3%	352	3.7%
	Do not know	4	1.9%	220	2.3%
	None	65	30.2%	3,171	32.9%
	1 visit	27	12.6%	1,144	11.9%
	2-4 visits	50	23.3%	1,906	19.8%
	5-9 visits	26	12.1%	1,290	13.4%
	10 or more visits	29	13.5%	1,225	12.7%
	I had no visits in the last 6 months	7	3.3%	335	3.5%
	Total	215	100.0%	9,644	100.0%
On how many visits was medication recommended to help you quit smoking?	Refused	3	1.4%	175	1.8%
	Do not know	8	3.7%	286	3.0%
	None	138	64.2%	6,140	63.7%
	1 visit	11	5.1%	500	5.2%
	2-4 visits	33	15.3%	1,455	15.1%
	5-9 visits	10	4.7%	500	5.2%
	10 or more visits	7	3.3%	336	3.5%
	I had no visits in the last 6 months	5	2.3%	251	2.6%
	Total	215	100.0%	9,644	100.0%
In the last 6 months, on how many visits did your doctor discuss methods and strategies to help you quit smoking?	Refused	3	1.4%	142	1.5%
	Do not know	6	2.8%	306	3.2%
	None	122	56.7%	5,366	55.6%
	1 visit	17	7.9%	763	7.9%
	2-4 visits	35	16.3%	1,559	16.2%
	5-9 visits	13	6.0%	661	6.9%
	10 or more visits	13	6.0%	553	5.7%
	I had no visits in the last 6 months	6	2.8%	295	3.1%
	Total	215	100.0%	9,644	100.0%

Summary and Recommendations

The major findings of this survey are as follows:

- STAR+PLUS Program enrollees are racially and ethnically diverse. Fifty-one percent of STAR+PLUS Program enrollees who responded to the survey were Black, non-Hispanic. The next largest racial/ethnic groups for the STAR+PLUS Program were White, non-Hispanic (20 percent) and Hispanic (20 percent) followed by the Other, non-Hispanic (5 percent) group.

¹⁶ Due to the weighting and due to carrying percentages out to only one decimal place, there may be very small differences in total numbers and percentages resulting from rounding.

- The SF-36 scores for the STAR+PLUS Program adult participants are significantly lower than national norms for all eight physical and mental health domains. National norms for the eight domains range between 61 and 84; STAR+PLUS Program enrollees' average scores range between 29 and 52. This is an expected finding since the STAR+PLUS Program serves the disabled and chronically ill populations in Harris county.
- Overall, 81 percent of STAR+PLUS respondents reported they had a specific person—a personal doctor or nurse—who provided health care for them. Eighty-two percent of respondents reported they had a particular place to go if they are sick and need health care.
- Overall, 62 percent of respondents enrolled in the STAR+PLUS Program reported they needed to see a specialist in the past six months. Just over one-fifth (22 percent) of STAR+PLUS Program enrollees who stated they needed specialty care reported experiencing a “big” problem when trying to obtain specialty care.
- A significant percentage of respondents who required specialized services reported problems obtaining needed care. Between 38 percent and 58 percent of enrollees needing home health care, special medical equipment, or specialized therapies reported problems accessing such care.
- For the most part, the majority of respondents who reported having a care coordinator reported satisfaction with the care coordinator’s performance over the past six months. Overall, STAR+PLUS respondents reported satisfaction with the care coordinator at solving problems with services like housing, meals, and transportation over the past six months.
- Overall, 45 percent of respondents enrolled in the STAR+PLUS Program needed approval from their plan for selected services. A significant number of respondents indicated there were problems obtaining approval for care. Twenty-three percent of STAR+PLUS Program enrollees who needed approval reported obtaining approval was a “big” problem.
- The overall CAHPS Health Plan Survey composite scores for the STAR+PLUS Program enrollees were significantly lower than the Medicaid national mean for the getting needed care, getting care quickly, communication with doctors, and courtesy of office staff clusters. Scores for the health plan customer service cluster were higher among the STAR+PLUS Program enrollees when compared to Medicaid health plans reporting to the National Committee for Quality Assurance (NCQA). However, a comparison to the Medicaid national mean should be viewed cautiously. The population included in the Medicaid national mean is for Medicaid managed care organization beneficiaries overall, and as a group, they are a healthier population.
- There were no significant differences between the two STAR+PLUS health plans in their performance on the CAHPS Health Plan Survey composite scores after controlling for enrollee health status, race/ethnicity, and education.
- The majority of survey respondents reported that they were not current smokers. Forty-five percent had never been smokers, and 18 percent had quit smoking. The majority of STAR+PLUS enrollees who did smoke and had a visit to their physician reported they were advised during at least one visit with their doctor to quit smoking (67 percent); however, fewer than half reported their doctor provided them with specific strategies to stop smoking. Thirty-nine percent of STAR+PLUS Program smokers reported that their doctor discussed smoking cessation programs, and 31 percent reported that their doctor recommended a medication to assist in smoking cessation.

The Texas HHSC may wish to consider the following strategies when working with the STAR+PLUS health plans to improve enrollee satisfaction with care:

- **Strategies to increase performance related to getting needed care, getting care quickly, communication with doctors, and courtesy of office staff should be**

explored. Strategies should be developed to address deficits in the areas of getting needed care and getting care quickly to include: (1) reviewing MCO provider panels to ensure adequate numbers of primary care and specialty providers, (2) reviewing prior authorization procedures to ensure that care can be rendered quickly, and (3) reviewing assessment policies and procedures to ensure enrollees are appropriately evaluated for their care coordination needs. One strategy to improve doctor communication and courtesy of office staff is to provide feedback on the results of this survey to the MCOs and encourage them to share this information with their providers.

- **Monitor access to specialized services.** STAR+PLUS Program enrollees who needed specialized therapies, equipment, or assistance reported problems with getting these services. These findings suggest that access to specialized therapies, equipment, or assistance should be carefully monitored.

- **Strategies to increase physician adherence to smoking cessation guidelines should be considered.** While the majority of smoking respondents indicated that their physician advised them to quit smoking during at least one office visit, less than half indicated that a specific strategy or medication was recommended as prescribed by the Agency for Health Care Policy and Research Guidelines. An educational campaign should be considered to encourage physicians to provide specific, evidence-based smoking cessation instructions to enrollees who smoke.

Appendix A. Logistic Regression Results for the CAHPS Health Plan Survey Cluster Scores

(Yellow highlights indicate significant differences between the second STAR+PLUS MCO scores and the reference group MCO.)

Odds of Usually or Always Getting Needed Care (MCO Reference = Evercare)

need1	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
general	1.015757	.0049785	3.19	0.001	1.006046	1.025562
hispanic	1.369664	.3752575	1.15	0.251	.800578	2.343281
black	1.100638	.2518674	0.42	0.675	.7028416	1.72358
other	.5981375	.270134	-1.14	0.255	.246818	1.449523
hsgrad1	1.264348	.2679372	1.11	0.268	.8346073	1.915362
somecoll1	.8777657	.2353482	-0.49	0.627	.5189827	1.484583
collgrad1	1.135397	.3847535	0.37	0.708	.5843862	2.205949
Amerigroup	.8522887	.1523624	-0.89	0.371	.6003695	1.209915

Odds of Usually or Always Getting Care Quickly (MCO Reference = Amerigroup)

quick1	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
general	.9871274	.0051078	-2.50	0.012	.9771669	.9971895
hispanic	1.171035	.3415631	0.54	0.588	.6611418	2.074174
black	1.02506	.2520453	0.10	0.920	.6330714	1.659761
other	1.328762	.6150195	0.61	0.539	.5363732	3.291752
hsgrad1	1.063022	.2341581	0.28	0.781	.6903081	1.636972
somecoll1	.8943889	.2501296	-0.40	0.690	.5169813	1.547312
collgrad1	.6195835	.2478954	-1.20	0.232	.2828356	1.357268
Evercare	.7506978	.1419584	-1.52	0.129	.5182047	1.087499

Odds of Usually or Always Having Positive Experience With Doctor's Communication (MCO Reference = Amerigroup)

doctor1	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
general	.9974548	.0056697	-0.45	0.654	.9864041	1.008629
hispanic	1.374415	.4443232	0.98	0.325	.7293568	2.589976
black	1.009752	.2681578	0.04	0.971	.6000161	1.699286
other	1.832978	1.026394	1.08	0.279	.6116722	5.492826
hsgrad1	1.695351	.416479	2.15	0.032	1.047499	2.743881
somecoll1	1.626422	.4977228	1.59	0.112	.8927832	2.962925
collgrad1	1.84773	.7723234	1.47	0.142	.8144215	4.192065
Evercare	.8273238	.1706745	-0.92	0.358	.552173	1.239584

Odds of Usually or Always Having Positive Experience With Doctor's Office Staff
(MCO Reference = Amerigroup)

officel	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
general	.9945195	.0057743	-0.95	0.344	.9832662	1.005902
hispanic	1.148587	.3734848	0.43	0.670	.6072668	2.172442
black	.9443754	.2529601	-0.21	0.831	.558653	1.59642
other	1.64907	.9063384	0.91	0.363	.561583	4.842441
hsgrad1	1.214765	.3021834	0.78	0.434	.7460166	1.978045
somecoll1	1.067098	.326181	0.21	0.832	.586161	1.942639
collgrad1	.9742995	.3922355	-0.06	0.948	.4426027	2.144722
Evercare	.7392086	.1559689	-1.43	0.152	.4888417	1.117804

Odds of Usually or Always Having Positive Experience With Health Plan Customer Service
(MCO Reference = Amerigroup)

custserv1	Odds Ratio	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
general	1.005538	.0070047	0.79	0.428	.9919027	1.019361
hispanic	1.844075	.7901413	1.43	0.153	.7962681	4.270687
black	1.86745	.5853546	1.99	0.046	1.010273	3.451908
other	.4967663	.2853421	-1.22	0.223	.1611473	1.531375
hsgrad1	.8508172	.2542887	-0.54	0.589	.4736229	1.52841
somecoll1	1.336576	.461019	0.84	0.400	.6798179	2.627814
collgrad1	.8814037	.3781973	-0.29	0.769	.3801342	2.04368
Evercare	.887688	.219891	-0.48	0.631	.5462702	1.442491

Notes

- ¹ Wickizer, T.M., G. Franklin, D. Fulton-Kehoe, J. A. Turner, R. Mootz, and T. Smith-Weller. 2004. "Patient Satisfaction, Treatment Experience, and Disability Outcomes in a Population-Based Cohort of Injured Workers in Washington State: Implications for Quality Improvement." *Health Services Research* 39 (4 Pt 1): 727-748.
- ² Pascoe, G.C. 1983. "Patient Satisfaction in Primary Health Care: A Literature Review and Analysis." *Evaluation and Program Planning* 6 (3-4): 185-210.
- ³ The main reason there were fewer than the targeted 600 completed surveys was that the enrollment data contained a high percentage of incorrect or outdated address and telephone information, making it difficult to contact adult STAR+PLUS Program enrollees.
- ⁴ All statistical analyses, including analysis of survey data, are measured with error. This can be offset by gathering more data (repeatedly or from more people in the population of interest). The "true" response can also be thought of as the actual response or the response we would get from the survey if there was no error or if no mistakes were made. Another way of looking at this is to take a question such as "Do you have one person you think of as your personal doctor or nurse?" In this survey, 80.85 percent of respondents replied "yes" to this question. Due to our confidence interval, we can say that we are 95 percent certain that "true" response lies between 76.89 percent and 84.81 percent.
- ⁵ American Association of Public Opinion Research. *Standards and Best Practices*. [Accessed on February 8, 2007]. Available at <http://www.aapor.org/standards.asp>.
- ⁶ Anarella, J., P. Roohan, E. Balistreri, and F. Gesten. 2004. "A Survey of Medicaid Recipients with Asthma - Perceptions of Self-Management, Access, and Care." *Chest* 125 (4): 1359-1367.
- ⁷ Dick, A. W., C. Brach, R. A. Allison, E. Shenkman, L. P. Shone, P. G. Szilagyi, J. D. Klein, and E. M. Lewit. 2004. "SCHIP's Impact in Three States: How Do the Most Vulnerable Children Fare?" *Health Affairs* 23 (5): 63-75.
- ⁸ Coughlin, T. A., S. K. Long, and S. Kendell. 2002. "Health Care Access, Use, and Satisfaction Among Disabled Medicaid Beneficiaries." *Health Care Financing Review* 24 (2): 115-136.
- ⁹ Blumberg, S. J., L. Olson, M. R. Frankel, L. Osborn, K. P. Srinath, and P. Giambo. 2005. *Design and Operation of the National Survey of Children's Health, 2003*. National Center for Health Statistics. Vital and Health Statistics 1(43).
- ¹⁰ Levy, P. S., and S. Lemeshow. 1999. *Sampling of Populations: Methods and Applications*. New York NY: John Wiley & Sons.
- ¹¹ U.S. Agency for Healthcare Research and Quality (AHRQ) has changed the name "CAHPS" to encompass the overall program. As a result, changes have been made in this report to reflect changes made by AHRQ, and "CAHPS Version 3.0" has been renamed as "CAHPS Health Plan Survey 3.0". Please see "What 'CAHPS' means." for these changes. [Accessed February 8, 2007]. Available at https://www.cahps.ahrq.gov/CAHPS_UsageGuide.asp.
- ¹² National Committee for Quality Assurance. 2002. *HEDIS 2003: Specifications for Survey Measures*. Washington, D.C.
- ¹³ U.S. Agency for Healthcare Research and Quality. 2002. *Article 8: CAHPS Reporting Composites and Global Ratings, CAHPS Survey and Reporting Kit*.

-
- ¹⁴ McGee, J., D. E. Kanouse, S. Sofaer, J. L. Hargraves, E. Hoy, and S. Kleimann. 1999. "Making Survey Results Easy to Report to Consumers: How Reporting Needs Guided Survey Design in CAHPS. Consumer Assessment of Health Plans Study." *Medical Care* 37 (3 suppl.): MS32-MS40.
- ¹⁵ Hargraves, J.L., R. D. Hays, and P. D. Cleary. 2003. "Psychometric Properties of the Consumer Assessment of Health Plans Study (CAHPS) 2.0 Adult Core Survey." *Health Services Research* 38 (6 Pt 1): 1509-1528.
- ¹⁶ Ware, J. J., and C.D. Sherbourne. 1992. "The MOS 36-Item Short-Form Health Survey (SF-36). I. Conceptual Framework and Item Selection." *Medical Care* 30 (6): 473-483.
- ¹⁷ Centers for Disease Control and Prevention, National Center for Health Statistics. *National Health Interview Survey*. [Accessed February 8, 2007]. Available at <http://www.cdc.gov/nchs/nhis.htm>.
- ¹⁸ U.S. Census Bureau. 2002. *Current Population Survey: Design and Methodology*. Available at <http://www.census.gov/prod/2002pubs/tp63rv.pdf>.
- ¹⁹ Urban Institute, *National Survey of America's Families*. [Accessed February 8, 2007]. Available at <http://www.urban.org/center/anf/nsaf.cfm>.
- ²⁰ Keeter, S. 1995. "Estimating Telephone Noncoverage Bias with a Telephone Survey." *The Public Opinion Quarterly* 59 (2):196-217.
- ²¹ United States Department of Health and Human Services. 2002. *Protecting the Health of Minority Communities*. United States Department of Health and Human Services. Washington, DC.
- ²² Ware, J. E., M Kosinski and B. Gandek. 2005. *SF-36 Health Survey: Manual and Interpretation*. Lincoln, RI.
- ²³ Safran, D.G., D. A. Taira, W. H. Rogers, M. Kosinski, J. E. Ware, and A. R. Tarlov. 1998. "Linking Primary Care Performance to Outcomes of Care." *Journal of Family Practice* 47 (3): 213-220.
- ²⁴ Donaldson, M.S., K. D. Yordy, K. N. Lohr, and N. A. Vanselow, (eds.) 1996. *Primary Care: America's Health in a New Era*. Washington DC: National Academy Press.
- ²⁵ Grumbach, K., J. V. Selby, C. Damberg, A. B. Bindman, C. Quesenberry, A. Truman, and C. Uratsu. 1999. "Resolving the Gate-Keeper Conundrum: What Patients Value in Primary Care and Referrals to Specialists." *Journal of the American Medical Association* 282 (3): 261-266.
- ²⁶ Mainous, A.G., R. Baker, M. M. Love, D. P. Gray, and J. M. Gill. 2001. "Continuity of Care and Trust in One's Physician: Evidence from Primary Care in the United States and the United Kingdom." *Family Medicine* 33 (1): 22-27.
- ²⁷ Cassady, C. E., B. Starfield, M. P. Hurtado, R. A. Berk, J. P. Nanda, and L. A. Friedenber. 2000. "Measuring Consumer Experiences with Primary Care." *Pediatrics* 105 (4 Pt 2): 998-1003.
- ²⁸ Xu, K.T. 2002. "Usual Source of Care in Preventive Service Use: A Regular Doctor versus a Regular Site." *Health Services Research* 37 (6): 1509-1529.
- ²⁹ National Committee for Quality Assurance, Available at <http://www.ncqa.org/Programs/HEDIS/02cahpsresults.htm>.
- ³⁰ Fan, V. S., M. Burman, M. B. McDonell, and S. D. Fihn. 2005. "Continuity of Care and Other Determinants of Patient Satisfaction with Primary Care." *Journal of General Internal Medicine* 20 (3): 226-233.
- ³¹ Hunt, K. A., A. Gaba, and R. Lavizzo-Mourey. 2005. "Racial and Ethnic Disparities and Perceptions of Health Care: Does Health Plan Type Matter?" *Health Services Research* 40 (2): 551-576.

³² Szilagyi, P.G. 1998. "Managed Care for Children: Effect on Access to Care and Utilization of Health Services." *The Future of Children* 8 (2): 39-59.

³³ Texas Health and Human Services Commission. "STAR+PLUS '101'." [Accessed February 8, 2007]. Available at http://www.hhsc.state.tx.us/starplus/star_plus_101/Starplus101.htm.

³⁴ The Smoking Cessation Clinical Practice Panel Staff. 1996. "The Agency for Health Care Policy and Research Smoking Cessation Clinical Practice Guideline." *Journal of the American Medical Association* 275 (16):1270–1280.