

Texas Medicaid Managed Care and Children's Health Insurance Program

EQRO Summary of Activities and Trends in Healthcare Quality

Contract Year 2011

Measurement Period:

September 1, 2007 through August 31, 2010

**The Institute for Child Health Policy
University of Florida**

**The External Quality Review Organization
for Texas Medicaid Managed Care and CHIP**

Submitted: November 28, 2011

Final Submitted: January 6, 2012

Table of Contents

Executive Summary	1
Introduction	6
External Quality Review in Texas Medicaid and CHIP	7
Managed Care Programs and Participating MCOs	8
EQRO Activities	10
Conceptual Framework	11
1 – The Texas Medicaid and CHIP Populations	12
1.1 – Demographic Characteristics	12
Program Profiles – Demographics, August 2010	16
1.2 – Health Status	18
Children with Special Health Care Needs (CSHCN)	18
STAR+PLUS Member Health Status - Physical/Social Functioning and ADLs	21
Overweight and Obesity	22
Program Profiles – Health Status, SFY 2010	23
1.3 – Utilization and Cost of Care	24
Well-Care Visits	24
HEDIS® Outpatient Drug Utilization	28
Use of Mental Health Services	30
Program Profiles – Service Utilization, SFY 2010	32
2. Managed Care Organization Structure and Process	33
2.1 – Health Plan Information	33
Encounter Data Validation	34
Electronic Data Submission	35
Data Certification in SFY 2010	36
2.2 – Disease Management Programs	37
2.3 – Health Plan Information and Customer Service	38
Program Profiles – MCO Structure and Process, SFY 2010/2011	40
3. Quality of Care	41
3.1 – Access and Timeliness of Care	41
Primary and Specialist Care	41
Potentially Preventable Events	47

Prenatal and Postpartum Care	53
Dental Care.....	55
Program Profiles – Access and Timeliness, SFY 2010	56
3.2 – Effectiveness of Care	58
Preventive Care – Cervical Cancer Screening	58
Primary Care – Treatment for Children with Pharyngitis	59
Management of Chronic Disease – Asthma	60
Management of Chronic Disease – Diabetes	62
Behavioral Health Care – Hospitalizations for Mental Illness	64
Program Profiles – Effectiveness of Care, SFY 2010.....	68
Appendix A. SFY 2010 Recommendations.....	70
Care Coordination	70
Access and Timeliness of Care	71
Effectiveness of Care	72
Appendix B. EQRO Methodologies.....	73
Calculation of Performance Measures – SFY 2010	73
Claims and Encounter Data Quality Certification – SFY 2010	75
Encounter Data Validation – SFY 2009.....	75
MCO Administrative Interviews – SFY 2011	78
Member Satisfaction Surveys – SFY 2009 and SFY 2010.....	79
Endnotes.....	82

List of Tables

Table 1. Texas Medicaid and CHIP MCOs and Service Areas in SFY 2010.....	9
Table 2. Obesity Rates by Medicaid Program, Texas and U.S. Populations, 2008 - 2010.....	1
Table 3. Utilization and Cost Measures	24
Table 4. Member Participation in Asthma and Diabetes DM Programs, SFY 2011.....	38
Table 5. HHSC Dashboard - Survey-based Primary/Specialist Care Access Indicators	42
Table 6. Access to Care in STAR+PLUS: HHSC Dashboard Survey Indicators, 2008 - 2009 ...	46
Table 7. Access to Care in CHIP: HHSC Dashboard Survey Indicators, 2008 - 2010.....	47

List of Figures

Figure 1. Number of Members in STAR, PCCM, and CHIP, 2008 - 2010	12
Figure 2. Number of Members in STAR+PLUS, STAR Health, and NorthSTAR, 2008 - 2010... 13	13
Figure 3. Distribution of STAR Members by Race/Ethnicity, 2008 - 2010	1
Figure 4. Distribution of PCCM Members by Race/Ethnicity, 2008 - 2010	1
Figure 5. Distribution of STAR+PLUS Members by Race/Ethnicity, 2008 - 2010.....	1
Figure 6. Distribution of STAR Health Members by Race/Ethnicity, 2008 - 2010.....	1
Figure 7. Distribution of NorthSTAR Members by Race/Ethnicity, 2008 - 2010	1
Figure 8. Distribution of CHIP Members by Race/Ethnicity, 2008 - 2010	1
Figure 9. Percent of CSHCN in STAR, PCCM, and CHIP, 2008 - 2010.....	1
Figure 10. Characteristics of CSHCN in STAR Health, SFY 2009 and 2010.....	20
Figure 11. Characteristics of CSHCN in CHIP, SFY 2008 and 2010.....	20
Figure 12. STAR+PLUS Member Physical Health RAND®-36 Scores, 2008 - 2009	1
Figure 13. STAR+PLUS Member Mental Health RAND®-36 Scores, 2008 - 2009.....	1
Figure 14. STAR+PLUS Member Activities of Daily Living (ADL), 2008 - 2009	1
Figure 15. Well-Child Visits in the First 15 Months of Life in STAR, 2008 - 2010.....	1
Figure 16. Well-Child Visits (3 – 6 Years) in STAR, 2008 - 2010	1
Figure 17. Adolescent Well-Care Visits in STAR, 2008 - 2010.....	1
Figure 18. Well-Child Visits in the First 15 Months of Life in PCCM, 2008 - 2010.....	1
Figure 19. Well-Child Visits (3 – 6 Years) in PCCM, 2008 - 2010	1
Figure 20. Adolescent Well-Care Visits in PCCM, 2008 - 2010.....	1
Figure 21. Well-Child Visits (3 – 6 Years) in STAR+PLUS, 2008 - 2010.....	1
Figure 22. Adolescent Well-Care Visits in STAR+PLUS, 2008 - 2010	1
Figure 23. Child and Adolescent Well-Care in STAR Health, 2009 - 2010.....	1
Figure 24. Well-Child Visits (3 – 6 Years) in CHIP, 2008 - 2010	1
Figure 25. Adolescent Well-Care in CHIP, 2008 - 2010	1
Figure 26. Average Cost of Prescriptions in STAR, PCCM, and CHIP, 2008-2009	1
Figure 27. Average Number of Prescriptions in STAR, PCCM, and CHIP, 2008-2009	1
Figure 28. Average Cost of Prescriptions in STAR+PLUS and STAR Health, 2008-2009	1

Figure 29. Average Number of Prescriptions in STAR+PLUS and STAR Health, 2008-2009.....	1
Figure 30. Utilization of MH Inpatient Services in STAR Health and NorthSTAR, 2008-2010.....	1
Figure 31. Utilization of MH Intensive Services in STAR Health and NorthSTAR, 2008-2010.....	1
Figure 32. Utilization of MH Outpatient Services in STAR Health and NorthSTAR, 2008-2010...	1
Figure 33. Encounter Data Validation – Match Rates in STAR, 2008 - 2009	1
Figure 34. Encounter Data Validation – Match Rates in STAR+PLUS, 2008 - 2009.....	1
Figure 35. Encounter Data Validation – Match Rates in STAR Health, 2008 - 2009.....	1
Figure 36. Encounter Data Validation – Match Rates in CHIP, 2008 - 2009	1
Figure 37. Percent of Hospital and Physician Claims Submitted Electronically, 2008 - 2010.....	1
Figure 38. Missing Data for Claims Data Elements in STAR, STAR+PLUS, and CHIP, 2010	1
Figure 39. CAHPS® <i>Customer Service</i> for STAR+PLUS, 2008 - 2009.....	1
Figure 40. CAHPS® <i>Customer Service</i> for CHIP, 2008 - 2010	1
Figure 41. Children and Adolescents' Access to PCPs in STAR, 2008 - 2010.....	1
Figure 42. Children and Adolescents' Access to PCPs in PCCM, 2008 - 2010.....	1
Figure 43. Children and Adolescents' Access to PCPs in CHIP, 2008 - 2010.....	1
Figure 44. CAHPS® <i>Getting Needed Care/Getting Care Quickly</i> in STAR+PLUS, 2008-2009....	1
Figure 45. CAHPS® <i>Getting Needed Care/Getting Care Quickly</i> in STAR Health, 2009-2010.....	1
Figure 46. CAHPS® <i>Getting Needed Care/Getting Care Quickly</i> in CHIP, 2008 - 2010	1
Figure 47. Percentage of ED Visits for an ACSC in Medicaid and CHIP, 2008 - 2009.....	48
Figure 48. AHRQ Asthma PDI Rates in Medicaid and CHIP, 2008 - 2010.....	1
Figure 49. AHRQ Diabetes ST Complications PDI Rates in Medicaid and CHIP, 2008-2010.....	1
Figure 50. AHRQ Gastroenteritis PDI Rates in Medicaid and CHIP, 2008 - 2010.....	1
Figure 51. AHRQ Urinary Tract Infection PDI Rates in Medicaid and CHIP, 2008 - 2010.....	1
Figure 52. AHRQ Adult Asthma PQI Rates in Texas Medicaid, 2008 - 2010	1
Figure 53. AHRQ Diabetes Short-Term Complications PQI Rates in Medicaid, 2008 - 2010.....	1
Figure 54. AHRQ Diabetes Long-Term Complications PQI Rates in Medicaid, 2008 - 2010	1
Figure 55. AHRQ Uncontrolled Diabetes PQI Rates in Medicaid, 2008 - 2010	1
Figure 56. AHRQ Hypertension PQI Rates in Medicaid, 2008 - 2010	1
Figure 57. Timeliness of Prenatal Care in Medicaid, 2008 - 2010	1
Figure 58. Postpartum Care in Medicaid, 2008 - 2010	1
Figure 59. HEDIS® Annual Dental Visit for Children in CHIP Dental, 2008 - 2010	1

Figure 60. HEDIS® Annual Dental Visit for Adolescents in CHIP Dental, 2008 - 2010	1
Figure 61. HEDIS® Cervical Cancer Screening, 2008- 2010	1
Figure 62. HEDIS® Appropriate Testing for Children With Pharyngitis, 2008 - 2010	1
Figure 63. HEDIS® Appropriate Medications for People With Asthma in STAR, 2008 - 2010	1
Figure 64. HEDIS® Appropriate Medications for People With Asthma in PCCM, 2008 - 2010	1
Figure 65. HEDIS® CDC (HbA1c Testing) in STAR, PCCM, and STAR+PLUS, 2008 - 2010	1
Figure 66. HEDIS® CDC (Eye Exam) in STAR, PCCM, and STAR+PLUS, 2008 - 2010	1
Figure 67. HEDIS® CDC (LDL-C Screening) in STAR, PCCM, and STAR+PLUS, 2008-2010	1
Figure 68. HEDIS® CDC (Nephropathy) in STAR, PCCM, and STAR+PLUS, 2008 - 2010	1
Figure 69. 7-day Follow-up in STAR, PCCM, STAR+PLUS, and CHIP, 2008 - 2010	1
Figure 70. 7-day Follow-up in STAR Health and NorthSTAR, 2008 - 2010	1
Figure 71. 30-day Follow-up in STAR, PCCM, STAR+PLUS, and CHIP, 2008 - 2010	1
Figure 72. 30-day Follow-up in STAR Health and NorthSTAR, 2008 - 2010	1
Figure 73. Readmission within 30 Days in STAR, PCCM, and CHIP, 2008 - 2010	1
Figure 74. Readmission within 30 Days in STAR Health and NorthSTAR, 2008 - 2010	1

Executive Summary

Introduction

This report summarizes the evaluation activities conducted by the Institute for Child Health Policy (IHP) at the University of Florida to meet federal requirements for external quality review of Texas Medicaid Managed Care and the Children's Health Insurance Program (CHIP). IHP has been the external quality review organization (EQRO) for the Texas Health and Human Services Commission (HHSC) since 2002. The findings discussed in this report are based on EQRO activities conducted in State Fiscal Year (SFY) 2010 – September 1, 2009 to August 31, 2010. This report also presents trends in healthcare quality in Texas Medicaid and CHIP between SFY 2008 and SFY 2010.

The review is structured to comply with the Centers for Medicare and Medicaid Services (CMS) federal guidelines and protocols, and addresses care and services provided by managed care organizations (MCOs), the exclusive provider organization (EPO), and the behavioral health organizations (BHOs) participating in STAR, STAR+PLUS, STAR Health, NorthSTAR, and CHIP. The EQRO also evaluates certain aspects of care and services provided in the Medicaid Primary Care Case Management (PCCM) and Fee-for-Service (FFS) programs.

The EQRO conducts ongoing evaluation of quality of care primarily using MCO administrative data, including claims and encounter data. The EQRO also reviews MCO documents and provider medical records, conducts interviews with MCO administrators, and conducts surveys of Texas Medicaid and CHIP members, caregivers of members, and providers.

The findings presented in this summary are based on previously approved EQRO reports to HHSC. The summary concludes with a listing of the most relevant recommendations made by the EQRO in SFY 2010 for improving quality of care in Texas Medicaid and CHIP, and a brief description of EQRO methodologies for each covered activity.

Summary of Findings

Demographic characteristics

- *Enrollment.* In 2010, the STAR program had the largest number of members (1,477,897), followed by PCCM (849,444), and CHIP (522,769). The membership in STAR, NorthSTAR, and PCCM increased by at least 20 percent over the three-year period. STAR+PLUS and CHIP had a 10 percent membership increase during this time period, and the membership in STAR Health remained constant.
- *Member race/ethnicity.* Hispanic members were the largest racial/ethnic group in every program, ranging from one-third of members in STAR+PLUS to nearly two-thirds of members in STAR.

- *Member age.* The average age of members in Texas Medicaid and CHIP ranged from 8 to 14 years old, with the exception of STAR+PLUS, in which the average age of members was 42 years old.

Health status

- *Children with special health care needs (CSHCN).* Using the caregiver-reported CSHCN Screener[®], the STAR Health program had the highest percentage of CSHCN, at 62 percent of members in 2010. The prevalence of CSHCN using Clinical Risk Groups (CRGs) in STAR and CHIP was between 13 percent and 16 percent, and has remained constant during the three-year period.
- *Health status of STAR+PLUS members.* The RAND Health Survey results indicate that the self-reported health status of STAR+PLUS members was poor. In addition, the functional status for half of the STAR+PLUS membership was low, with these members reporting that they needed help with routine or personal care needs.
- *Overweight/obesity.* Obesity rates for children and adults in Texas Medicaid and CHIP generally exceeded the average rates of the general Texas and national populations, with members in STAR+PLUS having the highest obesity rate across programs.

Utilization and cost of care

- *Well-care visits.* Rates of well-child and well-care visits increased slightly over the three-year period for all programs. STAR and CHIP met HHSC Dashboard standards for well-child/well-care visits in all age groups for all three years. The STAR+PLUS program met the HHSC Dashboard standard for well-child visits for children 3 to 6 years of age, but not for adolescent well-care visits in 2010.
- *Outpatient drug utilization.* In 2008 and 2009, the average cost and number of prescriptions remained fairly constant in STAR, PCCM, and CHIP. The STAR+PLUS program had the highest cost of prescriptions, at \$317 per member per month in 2009. In STAR Health, the average cost of prescriptions decreased considerably, to \$93 per member per month in 2009. CHIP had the lowest average cost of prescriptions, at \$57 per member per month in 2009.
- *Use of mental health services.* In 2010, use of outpatient/ED mental health services was considerably greater in STAR Health (78 percent) than in NorthSTAR (8 percent). Use of inpatient services was also greater in STAR Health (8 percent) than in NorthSTAR (0.4 percent). Trends show a slight increase for outpatient/ED mental health services, a greater increase for inpatient services, and a decrease for intensive mental health services in STAR Health during the three-year period.

Health plan information

- *Encounter data validation.* Match rates for date of service and diagnosis increased in STAR, STAR Health, and CHIP between 2008 and 2009. The highest match rates in SFY 2009 were observed in STAR Health and CHIP. In particular, the match rates in

STAR Health were 91 percent for date of service, 86 percent for diagnosis, and 88 percent for procedure data elements.

- *Electronic data submission.* The percentage of hospital claims submitted electronically to MCOs increased from 81 percent in 2008 to 88 percent in 2010. The percentage of physician claims submitted electronically to MCOs increased from 74 percent in 2008 to 85 percent in 2010.
- *Data certification.* The majority of essential data elements were found to be complete and valid in STAR, STAR+PLUS, and CHIP in 2010. Three data elements had higher rates of missing data: (1) Billing provider taxonomy code; (2) Rendering provider NPI; and (3) Rendering provider taxonomy code. In particular, the rates of missing rendering provider taxonomy data were 73 percent in STAR, 86 percent in STAR+PLUS, and 67 percent in CHIP.

Disease management (DM) programs

- *Asthma DM participation rates.* In 2011, rates of participation in MCO asthma DM programs were low in STAR (26 percent) and STAR Health (35 percent). Participation rates were higher in CHIP (57 percent) and STAR+PLUS (67 percent).
- *Diabetes DM participation rates.* In 2011, rates of participation in MCO diabetes DM programs were 44 percent in STAR, 69 percent in STAR+PLUS, and 54 percent in CHIP.

Health plan information and customer service

- *CAHPS® Customer Service scores in STAR+PLUS.* The percentage of STAR+PLUS members who “usually” or “always” had positive experiences with their MCO’s customer service increased from 66 percent in 2008 to 72 percent in 2009. These rates were lower than the CAHPS® national benchmark.
- *CAHPS® Customer Service scores in CHIP.* The percentage of CHIP caregivers who “usually” or “always” had positive experiences with customer service at their child’s MCO remained constant between 2008 and 2010, at 83 percent. This rate was higher than the CAHPS® national benchmark.

Access and timeliness of care

- *Primary and specialist care.* Across programs, child and adolescent members had good access to PCPs, with generally over 90 percent of members visiting a PCP during the measurement period. In STAR+PLUS, STAR Health, and CHIP, access to specialist care and other tests and treatment (*CAHPS® Getting Needed Care*) were below CAHPS national benchmarks. However, survey results indicate that members in STAR+PLUS and STAR Health generally received timely care, and were able to get urgent care and doctor’s appointments when needed (*CAHPS® Getting Care Quickly*).
- *Potentially preventable ED visits.* The highest rates of ED visits with a primary diagnosis of an ambulatory care sensitive condition (ACSC) were observed in PCCM, which

showed an increase from 47 percent in 2008 to 57 percent in 2009. Rates in STAR were also high, with approximately half of ED visits having a primary diagnosis of an ACSC for both years.

- *Potentially preventable hospital admissions.* Pediatric inpatient admissions rates for ACSCs generally remained constant or showed a slight decline across programs between 2008 and 2010. One exception was STAR Health, in which some rates fluctuated over the three-year period. Potentially avoidable diabetes-related inpatient admissions were notably high for adults with diabetes living in former PCCM areas, and particularly for those in STAR+PLUS.
- *Prenatal and postpartum care.* Rates of timely prenatal care were consistently above the HHSC Dashboard standard (72 percent) in STAR and PCCM, but below the standard in STAR+PLUS. Rates of postpartum care were consistently below the HHSC Dashboard standard (65 percent) in STAR, PCCM, and STAR+PLUS. The rate of postpartum care was considerably lower in STAR+PLUS than in the other programs, at 35 percent in 2010. Access to prenatal and postpartum care in STAR Health was lower than in STAR or PCCM.
- *Dental care.* Overall, the rate of annual dental visits in CHIP Dental increased from 53 percent in 2008 to 63 percent in 2010, with rates in all years exceeding the corresponding HEDIS® national means.

Effectiveness of care

- *Cervical cancer screening.* Although rates of cervical cancer screening increased considerably between 2008 and 2009 in STAR and PCCM, they are still low compared to the HEDIS® national mean (at 39 percent and 43 percent in 2010, respectively). Rates in STAR+PLUS showed an overall decline over the three-year period, from 51 percent in 2008 to 42 percent in 2010.
- *Treatment for Children with Pharyngitis.* Rates of appropriate treatment for children with pharyngitis in STAR, PCCM, and CHIP changed little over the three-year period. By 2010, these rates were approximately the same – between 52 percent and 54 percent. Texas Medicaid and CHIP rates were on average 10 percentage points below the HEDIS® national means for this measure.
- *Management of asthma.* Over the three-year period, rates of appropriate treatment for asthma were consistently high among children and adolescents in STAR, PCCM, and CHIP (above 90 percent). In addition, the rate of appropriate asthma treatment among adults in STAR+PLUS (91 percent) was considerably higher than the HHSC Dashboard standard.
- *Management of diabetes.* Rates of HbA1c testing, LDL-C screening, and medical attention for nephropathy were well above the corresponding HHSC Dashboard standards for all programs. In STAR and STAR+PLUS, eye exam rates were below

standards. National comparisons suggest that HbA1c testing and eye exam rates could be improved for all programs.

- *Follow-up after hospitalization for mental illness.* In all programs, rates of follow-up within 7 and 30 days of discharge from hospitalization for mental illness were consistently above HHSC Dashboard standards. In 2010, follow-up rates were considerably higher in STAR Health than in any other program – at 70 percent for 7-day follow-up, and 92 percent for 30-day follow-up.
- *Mental health inpatient readmissions.* Mental health readmissions rates in both STAR and CHIP showed substantial declines between 2009 and 2010. The lowest rate of mental health inpatient readmissions was observed in CHIP, which decreased from 19 percent in 2008 to 8 percent in 2010. The 2010 rates were considerably higher in STAR+PLUS (25 percent) and STAR Health (22 percent).

EQRO Recommendations for SFY 2010

This report concludes with a list of recommendations made by the EQRO in SFY 2010, compiled from member survey reports and quality of care reports to improve the quality of care delivered to Texas Medicaid and CHIP members. The list of recommendations focuses on those that are relevant to meeting HHSC's current overarching goals for STAR, STAR+PLUS, and CHIP MCOs:

STAR overarching goals

1. Reduce emergency department utilization due to ambulatory care sensitive conditions (ACSCs) through improved treatment
2. Improve access to specialty care

STAR+PLUS overarching goals

1. Improve member understanding and utilization of service coordination
2. Reduce nursing facility admission rates

CHIP overarching goals

1. Reduce emergency department utilization due to ambulatory care sensitive conditions (ACSCs) through improved treatment
2. Increase access to or utilization of preventive care

Introduction

The delivery of cost-effective, high quality health services for beneficiaries in state Medicaid programs is a topic of national importance – one that has become even more relevant in a political and economic climate marked by growing Medicaid enrollment, sweeping federal and state budget cuts, and healthcare reform. Concerns regarding the efficiency of health services have led many states to turn to managed care as the predominant delivery model for public insurance programs. In contrast to the fee-for-service model, managed care is distinguished by a number of practices intended to improve access to care and control health care costs. These practices include:¹

- 1) Ensuring that members have a *medical home* – a primary care provider (PCP) who provides comprehensive and continuous preventive and primary care.
- 2) Establishing a network of providers under contract with the managed care organization (MCO), who is obligated to maintain access to providers based on standards that the state establishes.
- 3) Conducting utilization review and utilization management to monitor and evaluate the appropriateness, necessity, and efficacy of health services.
- 4) Implementing quality assessment and performance improvement (QAPI) programs, which assess performance using objective standards to lead to improvements in the structure and functioning of health services delivery.

Currently, about 70 percent of Medicaid beneficiaries receive services through managed care nationally.² This proportion is expected to rise as more states expand their Medicaid managed care programs. By fiscal year (FY) 2012, 41 states will have expanded their managed care programs, mainly by expanding the areas and populations covered by these programs.³ States are also expanding upon disease and care management programs and patient-centered medical homes to improve care coordination, focusing on high-cost and high-need populations. These changes are part of a larger effort to control spending and contain costs in state Medicaid programs, which includes the restriction of reimbursement rates to providers, cost-containment strategies focused on prescription drugs, and new copayments for beneficiaries (mainly for pharmacy and emergency department visits).

The state of Texas conducted its first Medicaid managed care pilot programs in 1991, and in 1995 passed legislation to enact a comprehensive restructuring of the Medicaid program, incorporating a managed care delivery system.⁴ In 2009, 65 percent of Texas Medicaid members were enrolled in a managed care program.⁵ The Texas Legislature passed Senate Bill 7 during the summer of 2011, mandating a statewide expansion of Medicaid managed care, which previously was limited to large urban areas.⁶ In August 2011, the state awarded \$10 billion in Medicaid managed care contracts, following the largest request for proposals in the history of such contracting.⁷

External Quality Review in Texas Medicaid and CHIP

When states and health plans make changes to the structure of health care delivery to control spending, the result can compromise the quality of health care – including elements such as access and effectiveness. The Institute of Medicine defines *quality* as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁸ High quality of care requires that health care delivery be safe, effective, patient-centered, timely, efficient, and equitable. Given the recent cost-containment and managed care expansion strategies being implemented nation-wide, evaluation research into the quality of care delivered to Medicaid members is of particular and timely importance.

Federal regulations require external quality review of approved Medicaid managed care programs to ensure compliance of state programs and their contracted MCOs with established standards.⁹ Specifically, states are required to validate participating MCO performance improvement projects, validate MCO performance measures, and assess MCO compliance with member access to care and quality of care standards. In addition to these required activities, states may also validate member-level data; conduct consumer surveys, provider surveys, or focus studies; assess performance improvement projects; and calculate performance measures. The Centers for Medicare and Medicaid (CMS) provides guidance for these mandatory and optional activities through protocols for evaluating the state’s quality assessment and improvement strategy.¹⁰

Through a contract with the Texas Health and Human Services Commission (HHSC), the Institute for Child Health Policy (IHP) at the University of Florida has been the Texas External Quality Review Organization (EQRO) since 2002. Following CMS protocols, IHP assesses access, utilization, and quality of care for members in Texas Medicaid and the Children’s Health Insurance Program (CHIP), and produces an annual summary of evaluation activities conducted during the prior year. This report summarizes the findings of EQRO activities conducted during state fiscal year (SFY) 2010 (September 1, 2009 to August 31, 2010), as well as activities using SFY 2010 data, providing an annual profile of Texas Medicaid and CHIP MCO performance.

To further assist Texas HHSC and participating MCOs in the development and implementation of future quality improvement strategies, this report shows performance trends for selected quality of care measures from SFY 2008 through SFY 2010.¹¹ Most of the trends presented in this report are at the program level (e.g., STAR, CHIP). The report includes a separate appendix of profiles of each MCO participating in Texas Medicaid and CHIP during SFY 2010, showing each MCO’s SFY 2010 results on HHSC Dashboard indicators and presenting the MCO’s three-year trends for selected performance measures.

A summary of the EQRO’s recommendations to Texas HHSC in its SFY 2010 activities is listed in **Appendix A**. The recommendations for Texas Medicaid and CHIP should be considered for future quality improvement initiatives in SFY 2012.

Managed Care Programs and Participating MCOs

In SFY 2010, Texas Medicaid and CHIP benefits were administered through the following programs: ¹²

- **STAR** – The State of Texas Access Reform (STAR) Program is a managed care program established to reduce service fragmentation, increase access to care, reduce costs, and promote more appropriate use of services. In SFY 2010, services were provided to STAR members through 14 MCOs and in nine service areas, as listed in **Table 1**.
- **PCCM** – The Primary Care Case Management (PCCM) Program combines elements of fee-for-service and managed care models, consisting of a non-capitated network of PCPs and hospitals under contract with HHSC. In SFY 2010, services were provided to PCCM members in 202 Texas counties, primarily in rural areas. As part of the Medicaid 1115 Waiver Managed Care Expansion, the PCCM Program will be phased out by March 2012, and PCCM members will transition to either the STAR or STAR+PLUS managed care delivery systems. In light of these upcoming changes, the SFY 2010 findings and three-year trends presented for PCCM in this report provide needed information for the quality improvement programs of STAR and STAR+PLUS MCOs moving into former PCCM areas.
- **STAR+PLUS** – The STAR+PLUS Program integrates acute health services with long-term care services using a managed care delivery system. STAR+PLUS serves members who are elderly or who have a physical or mental disability, and who qualify for Supplemental Security Income (SSI) benefits or for Medicaid due to low income. In SFY 2010, services were provided to STAR+PLUS members through four MCOs operating in five service areas (**Table 1**).
- **STAR Health** – STAR Health is a managed care program for children in foster care and other forms of state care. Implemented in April 2008, the program offers an integrated medical home where each child has access to PCPs, dentists, behavioral health clinicians, and other specialists. In SFY 2010, the exclusive MCO for STAR Health was Superior HealthPlan Network.
- **NorthSTAR** – NorthSTAR is a behavioral health managed care program operating in the Dallas service area. NorthSTAR provides an innovative approach to behavioral health service delivery, including: (1) blended funding from state and local agencies, (2) integrated treatment in a single system of care, (3) care management, (4) data warehouse and decision support for evaluation and management, and (5) services provided through a fully capitated contract with a licensed behavioral health organization (BHO). In SFY 2010, the exclusive BHO for NorthSTAR was ValueOptions®.
- **CHIP** – The Children's Health Insurance Program is designed for families whose income is too high to qualify for Medicaid but who cannot afford private insurance for their children. CHIP provides eligible children with coverage for a full range of health services, including regular checkups, hospital visits, immunizations, prescription drugs, lab tests,

and X-rays. In SFY 2010, services were provided to CHIP members through 16 health plans – including 15 MCOs and one exclusive provider organization (EPO) – operating in nine service areas (**Table 1**).

- *CHIP Dental* – CHIP Dental provides dental services to members through a single, state-wide managed care plan. In SFY 2010, the sole dental benefit contractor for CHIP Dental was Delta Dental Insurance Company.
- *CHIP Perinate* – CHIP Perinate expands CHIP services to unborn children of low income women who earn too much money to qualify for Medicaid. Benefits and eligible services are limited to prenatal care, labor and delivery, and postpartum care associated with the birth of the child. After birth, the newborn receives full CHIP benefits.

Table 1. Texas Medicaid and CHIP MCOs and Service Areas in SFY 2010

Health Plan	STAR	STAR+PLUS	CHIP
Aetna	✓		✓
AMERIGROUP	✓	✓	✓
Community First	✓		✓
Community Health Choice (CHC) ^a	✓		✓
Cook Children's	✓		✓
Driscoll	✓		✓
El Paso First	✓		✓
Evercare		✓	
FirstCare	✓		✓
Molina	✓	✓	✓
Parkland Community	✓		✓
Seton			✓
Superior	✓	✓	✓
Superior EPO			✓
Texas Children's (TCHP) ^a	✓		✓
UniCare	✓		✓
UnitedHealthcare-Texas (UHC-TX) ^a	✓		✓

^a The acronym listed in parentheses is used to refer to this MCO in certain tables and figures in this report.

Table 1. (continued)

Service Area	STAR	STAR+PLUS	CHIP
Bexar	✓	✓	✓
Dallas	✓		✓
El Paso	✓		✓
Harris	✓	✓	✓
Harris Expansion	✓	✓	
Lubbock	✓		✓
Nueces	✓	✓	✓
Tarrant	✓		✓
Travis	✓	✓	✓
Webb			✓

EQRO Activities

The EQRO annually conducts the following activities to address the mandatory and optional external quality review functions for Medicaid Managed Care and CHIP:

1. Ongoing Monitoring and Improvement of Data Quality
 - a. MCO Data Submission
 - b. Claims and Encounter Data Quality Certification
 - c. Encounter Data Validation (EDV)
2. Evaluation of MCO Structure and Processes
 - a. MCO Administrative Interviews
 - b. Evaluation of MCO QAPI Programs
 - c. Provider Office Surveys
3. Quality of Care Assessment
 - a. Member Satisfaction Surveys
 - b. Performance Measures
 - c. Children with Special Health Care Needs (CSHCN) Statewide Administrative Analysis
 - d. Focus Studies
4. Health-Based Risk Analysis

Activities such as surveys are specific to particular populations, and their content can vary from year to year. The STAR, PCCM, and CHIP surveys are conducted every two years. In this report, only one year of survey data is available for the STAR and PCCM populations (SFY 2009), and two years of data are available for the CHIP population (SFY 2008 and 2010). While the EQRO conducts the STAR+PLUS member survey every year, the population surveyed in SFY 2010 was different from the populations sampled in SFY 2008 and 2009, due to changes in the survey eligibility criteria.¹³ For this reason, STAR+PLUS survey findings are trended only for SFY 2008 and 2009. Data from the MCO Administrative Interview conducted in SFY 2011 was available at the time of this report, and is presented in various sections.

Most trending data for the STAR Health program is available only for SFY 2009 and 2010, largely because STAR Health was first implemented eight months into SFY 2008. Because a full year of administrative data was not available for STAR Health in SFY 2008, the EQRO selected a limited set of HEDIS[®] measures for the program's first Quality of Care Report. The first STAR Health Caregiver Survey was conducted in SFY 2009, and was repeated in SFY 2010.

Appendix B describes the methodologies of EQRO activities conducted for SFY 2010.

Conceptual Framework

Quality is defined, measured, and improved across three elements of health care: (1) *structure* – the organization of health care; (2) *process* – the clinical and non-clinical practices that comprise health care; and (3) *outcomes* – the effects of health care on the health and well-being of the population.^{14,15}

This report follows a framework based on these concepts to present findings in a way that is both useful and meaningful for readers. The report is divided into three sections:

Section 1 addresses the demographic, health, utilization, and cost characteristics of Texas Medicaid and CHIP members using data from performance measures and member surveys.

Section 2 addresses the structure and process of Medicaid managed care in Texas. Using administrative interviews with MCOs, member surveys, data certification, and EDV studies, the EQRO assesses MCO data management capabilities and data quality, disease management programs, and member relations.

Section 3 addresses the outcomes and quality of care provided to Medicaid managed care and CHIP members using data from performance measures and member surveys. This section is organized into two categories of health care quality: (1) Access and timeliness of care, and (2) Effectiveness of care. Findings include results from the Consumer Assessment of Healthcare Providers and Systems (CAHPS[®]) survey, various Healthcare Effectiveness Data and Information Set (HEDIS[®]) measures, and the Agency for Healthcare Research and Quality (AHRQ) prevention indicators for adult and pediatric patients.

1 – The Texas Medicaid and CHIP Populations

1.1 – Demographic Characteristics

Research has shown that disparities in health care access and quality are linked to a number of demographic factors, including socioeconomic status, education, and race/ethnicity.^{16,17} In particular, racial and ethnic minorities, as well as low-income groups, are at risk for receiving suboptimal health care quality and access.^{18,19} Due to the diverse background of the Texas population and the importance of ensuring accessible health care for disadvantaged populations, assessing demographic characteristics of Medicaid and CHIP members is crucial for defining health service needs and targeting appropriate interventions.

Figures 1 through 8 depict trends in the demographic characteristics of the Texas Medicaid and CHIP populations using MCO administrative data for the month of August in 2008, 2009, and 2010. **Figure 1** shows the number of members in STAR, PCCM, and CHIP (the programs with the largest populations), and **Figure 2** shows the number of members in STAR+PLUS, STAR Health, and NorthSTAR (the programs serving populations with a higher need for specialty care). All programs increased in membership from 2008 to 2010.

Figure 1. Number of Members in STAR, PCCM, and CHIP, 2008 - 2010

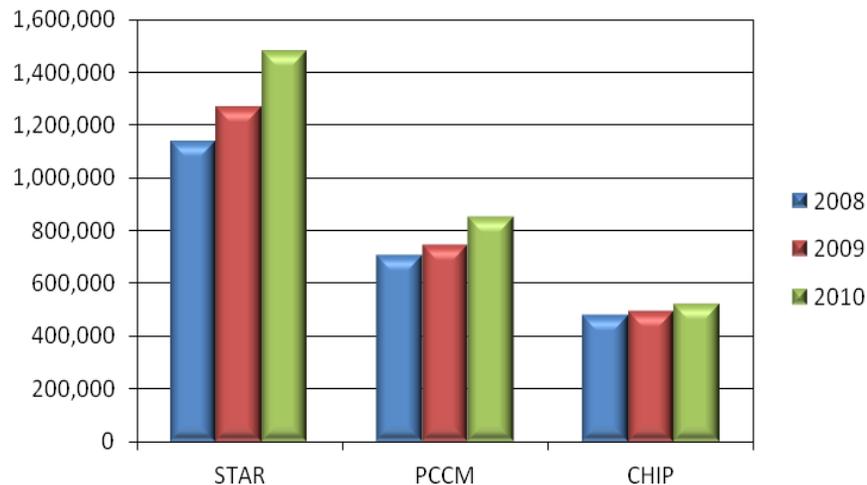
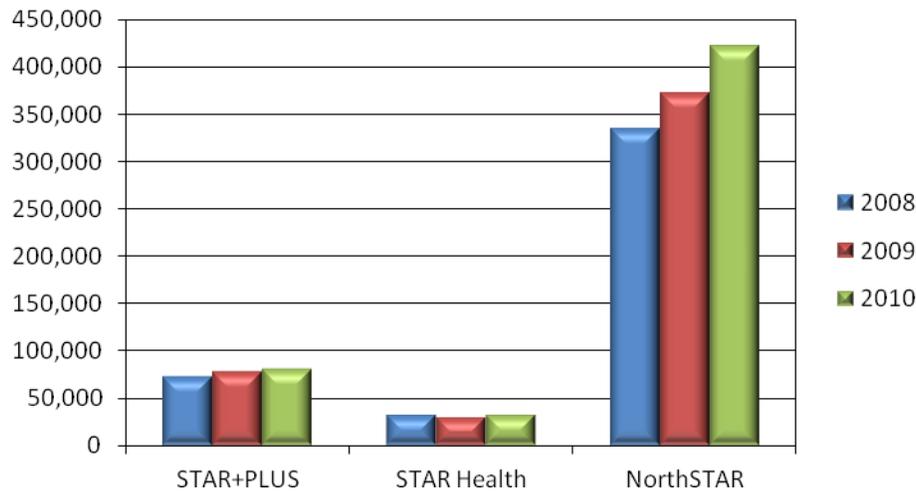


Figure 2. Number of Members in STAR+PLUS, STAR Health, and NorthSTAR, 2008 - 2010



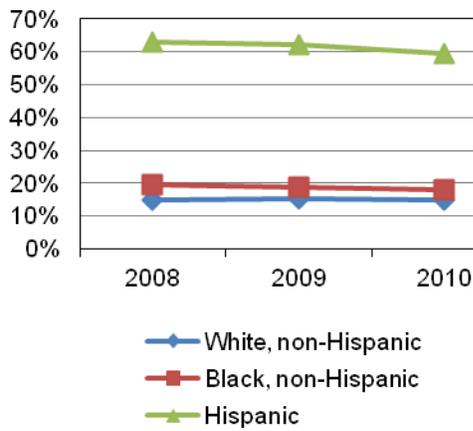
STAR, NorthSTAR, and PCCM had the greatest increases in membership over the three-year period, with each program showing an increase of at least 20 percent:

- STAR increased from 1,137,592 members to 1,477,897 members (+30 percent). Among the programs, STAR had both the highest increase in relation to its 2008 membership and the highest overall increase in members, at over 340,000 more members in 2010 than in 2008.
- NorthSTAR increased from 334,214 members to 421,202 members (+26 percent).
- PCCM increased from 703,474 members to 849,444 members (+21 percent).

STAR+PLUS and CHIP each had increases of approximately 10 percent over the three-year period, while the STAR Health membership remained relatively constant, increasing by only two percent.

Figures 3 through 8 present three-year trends in the distribution of members by race/ethnicity in each program. Trends are shown for White, non-Hispanics, Black, non-Hispanics, and Hispanics (the three most populous groups). Hispanic members were the largest group in every program. Asian and American Indian members accounted for less than five percent of the memberships in all programs during the three-year period, and are not shown in the figures.

Figure 3. Distribution of STAR Members by Race/Ethnicity, 2008 - 2010



In STAR, the distribution of members by race/ethnicity was constant from 2008 to 2010. The percentage of Hispanic members decreased slightly from 63 percent to 60 percent. The next largest group was Black, non-Hispanic members, who remained at approximately 20 percent of STAR members. The percentage of White, non-Hispanic members also stayed the same across the three years, at 15 percent. Asian members accounted for about two percent, and American Indian members accounted for less than one percent of all STAR members during the three-year period.

In PCCM, the distribution of members by race/ethnicity was constant from 2008 to 2010. The percentage of Hispanic members decreased negligibly, from 60 percent to 58 percent. The next largest group was White, non-Hispanic members, who remained at approximately 25 percent of PCCM members. The percentage of Black, non-Hispanic members also stayed the same across the three years, at 12 percent. Asian and American Indian members each accounted for less than one percent of all PCCM members during the three-year period.

Figure 4. Distribution of PCCM Members by Race/Ethnicity, 2008 - 2010

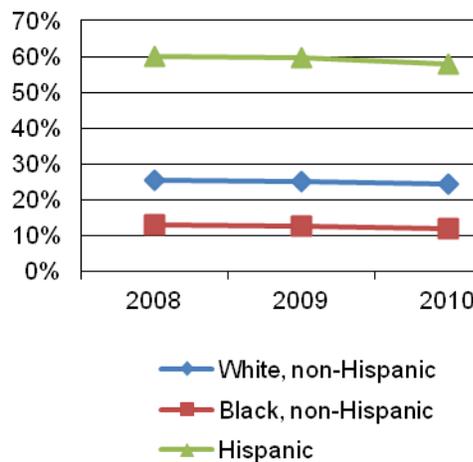
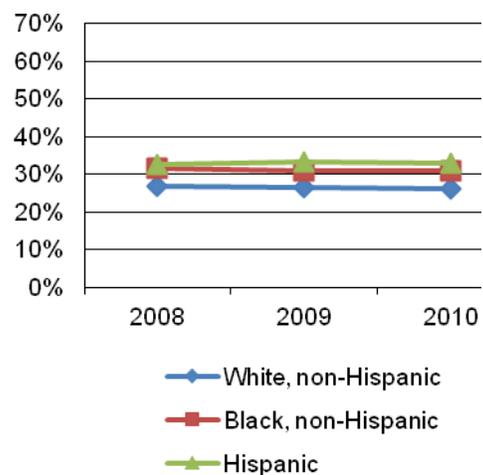
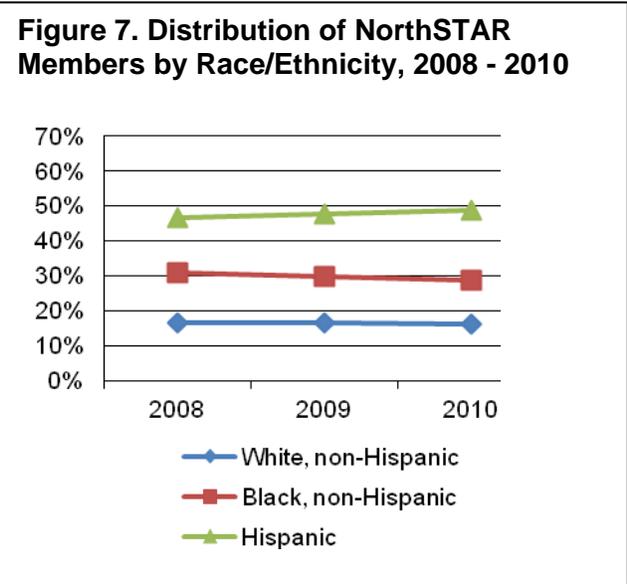
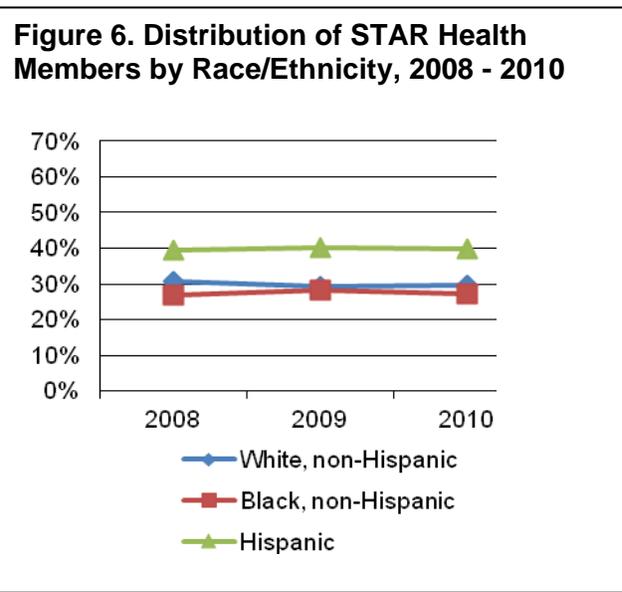


Figure 5. Distribution of STAR+PLUS Members by Race/Ethnicity, 2008 - 2010



In STAR+PLUS, the distribution of members by race/ethnicity was constant from 2008 to 2010. Compared to other Texas Medicaid programs, the percentage of members in STAR+PLUS was approximately equal between Black, non-Hispanics (31 to 32 percent) and Hispanics (33 percent). The percentage of White, non-Hispanic members was between 26 and 27 percent across the three years. Asian members accounted for about three percent, and American Indian members accounted for less than one percent of all STAR+PLUS members during the three-year period.

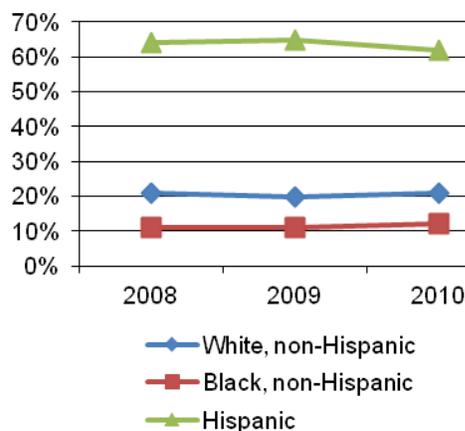
In STAR Health, the distribution of members by race/ethnicity was constant from 2008 to 2010. The percentage of Hispanic members remained at about 40 percent during the three-year period. The next largest group was White, non-Hispanic members, who remained at approximately 30 percent of STAR Health members. The percentage of Black, non-Hispanic members also stayed the same across the three years, at 27 percent. Asian and American Indian members together accounted for less than one percent of all STAR Health members during the three-year period.



In NorthSTAR, the distribution of members by race/ethnicity was constant from 2008 to 2010. The percentage of Hispanic members increased negligibly, from 47 percent to 49 percent. The next largest group was Black, non-Hispanic members, who decreased slightly from 31 percent to 29 percent. The percentage of White, non-Hispanic members remained at approximately 17 percent of NorthSTAR members. Asian members accounted for about three percent, and American Indian members accounted for less than one percent of all NorthSTAR members during the three-year period.

In CHIP, the distribution of members by race/ethnicity was constant from 2008 to 2010. The percentage of Hispanic members decreased slightly from 64 percent to 62 percent. The next largest group were White, non-Hispanic members, who remained at approximately 21 percent of the CHIP membership. The percentage of Black, non-Hispanic members also stayed the same across the three years, at about 11 percent. Asian members accounted for four percent, and American Indian members accounted for less than one percent of all CHIP members during the three-year period.

Figure 8. Distribution of CHIP Members by Race/Ethnicity, 2008 - 2010



The program-level profiles below provide the details of demographic characteristics, including member count, average age, and distribution of members by race/ethnicity and sex in August 2010. Estimates of other demographic characteristics, such as education and household type, are available for the CHIP population from the caregiver survey conducted in SFY 2010.

Program Profiles – Demographics, August 2010

STAR

Number of members: 1,477,897

Mean age: 9 years old

- 24 percent were less than 3 years old.
- 64 percent were less than 10 years old.

Member sex

Female: 53 percent

Male: 47 percent

Member race/ethnicity

Hispanic: 60 percent

Black, non-Hispanic: 18 percent

White, non-Hispanic: 15 percent

PCCM

Number of members: 849,444

Mean age: 11 years old

- 21 percent were less than 3 years old.
- 58 percent were less than 10 years old.

Member sex

Female: 52 percent

Male: 48 percent

Member race/ethnicity

Hispanic: 58 percent

White, non-Hispanic: 24 percent

Black, non-Hispanic: 12 percent

STAR+PLUS

Number of members: 80,259

Mean age: 42 years old

- 51 percent were 45 to 64 years old.

Member sex

Female: 54 percent

Male: 46 percent

Member race/ethnicity

Hispanic: 33 percent

Black, non-Hispanic: 31 percent

White, non-Hispanic: 26 percent

STAR Health

Number of members: 32,523

Mean age: 8 years old

- 43 percent were less than 6 years old.
- 52 percent were 6 to 18 years old.

Member sex

Male: 51 percent

Female: 49 percent

Member race/ethnicity

Hispanic: 40 percent

White, non-Hispanic: 30 percent

Black, non-Hispanic: 27 percent

NorthSTAR

Number of members: 421,202

Mean age: 14 years old.

- 38 percent were less than 6 years old.
- 42 percent were 6 to 17 years old.

Member sex

Female: 52 percent

Male: 48 percent

Member race/ethnicity

Hispanic: 49 percent

Black, non-Hispanic: 29 percent

White, non-Hispanic: 16 percent

CHIP

Number of members: 522,769

Mean age: 10 years old

- 17 percent were less than 6 years old.
- 77 percent were less than 15 years old.

One-third of surveyed parents (35 percent) had less than a high school education.

One-third of children in the survey (33 percent) lived in a single-parent household.

Member sex

Male: 51 percent

Female: 49 percent

Member race/ethnicity

Hispanic: 62 percent

White, non-Hispanic: 21 percent

Black, non-Hispanic: 12 percent

1.2 – Health Status

Health is a multi-dimensional concept that includes the absence of physical conditions, the absence of pain and/or disability, emotional well-being, and satisfactory social functioning. There is no single standard measurement of health status for individuals or population groups, and methods used to assess health can draw from administrative data on healthcare claims and encounters and/or from member-reported health status collected in surveys.

Rating health status is important for several reasons. First, knowing the health of a member population allows the program or health plan to determine its health care needs and anticipated utilization. Second, the regular monitoring of health status measurements over time helps to inform an MCO's efforts toward quality improvement (QI), allowing QI staff to determine the impact of interventions on the health outcomes of its members.

This section examines member health status in STAR, PCCM, STAR+PLUS, STAR Health, and CHIP using administrative and survey data collected between SFY 2008 and 2010. Specifically, this section presents findings on:

- *CSHCN*: (1) the percentage of CSHCN in STAR, PCCM, and CHIP for SFY 2008 to 2010, using Clinical Risk Group (CRG) categories assigned from administrative data; (2) characteristics of CSHCN in CHIP using survey data from 2008 and 2010; and (3) characteristics of CSHCN in STAR Health using survey data from 2009 and 2010.
- *STAR+PLUS adults*: STAR+PLUS member health status in SFY 2008 and 2009, using RAND[®]-36 scores collected from survey data to trend seven domains of health: physical functioning, pain, energy/fatigue, role limitations due to physical health, social functioning, role limitations due to emotional problems, and emotional well-being.
- *Obesity*: the percentage of obese members in STAR, PCCM, STAR+PLUS, STAR Health, and CHIP, using member- and caregiver-reported height and weight collected in surveys.

Children with Special Health Care Needs (CSHCN)

Of particular importance for the quality of care for children in Medicaid and CHIP is identifying children with special health care needs (CSHCN) in programs and health plans.

The Federal Maternal and Child Health Bureau defines *CSHCN* as:²⁰

- children who have or are at an increased risk for a chronic physical, developmental, behavioral, or emotional condition, and
- who also require health and related services of a type or amount beyond that required by children generally.

The EQRO uses two methods for identifying CSHCN: (1) CRG classification using ICD-9-CM and CPT codes from health care claims and encounter data;^{21,22} and (2) survey-based classification using the CSHCN Screener®.²³

Clinical Risk Group (CRG) categories	
1)	Healthy
2)	Significant Acute Conditions
3)	Minor Chronic Conditions
4)	Moderate Chronic Conditions
5)	Major Chronic Conditions

Five CRG categories are used in this report, ranging from healthy children to children with major chronic conditions. The *significant acute conditions* category includes illnesses or injuries, such as head injury with coma or meningitis, which could place a child at risk for developing a chronic condition. *Minor chronic conditions* include illnesses that can usually be managed effectively with few complications, such as hearing loss or attention deficit/hyperactive disorder (ADHD). *Moderate chronic conditions* include illnesses that vary in their severity and progression, can be complicated, and require extensive care, such as asthma, epilepsy, or major depression. *Major chronic conditions* are serious illnesses that often result in progressive deterioration, debilitation, and death, such as active malignancies or cystic fibrosis. Children in the three chronic conditions categories together are classified as CSHCN.

The CSHCN Screener® allows for the identification of five different types of special needs: (1) Dependence on medications; (2) Above-routine need for or use of services; (3) Functional limitations; (4) Need or use of specialized therapies; and (5) Need or use of treatment or counseling for emotional, behavioral, or developmental problems. A child is classified as CSHCN if he or she had one or more of these consequences due to a condition that lasted or was expected to last at least 12 months.

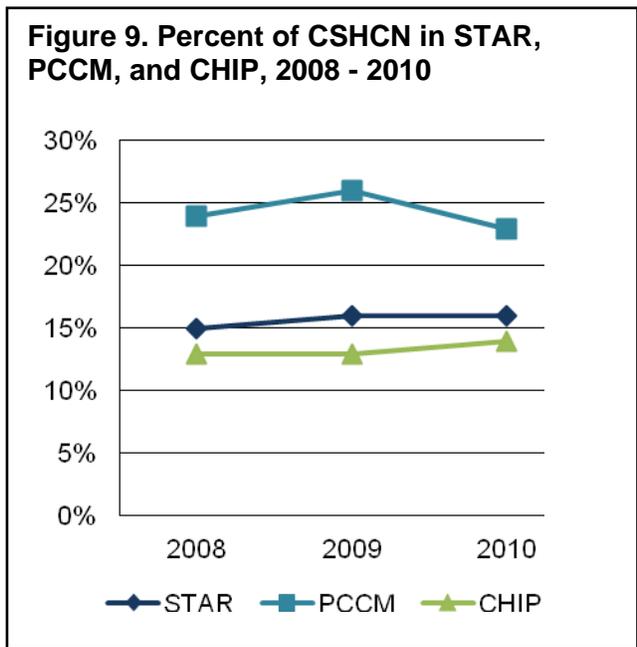


Figure 9 presents the percentage of CSHCN in the STAR, PCCM, and CHIP populations, assessed using CRGs for all programs. The PCCM program had the highest percentage of CSHCN in Texas for all three reporting periods. The percentage of CSHCN in PCCM decreased slightly between 2009 and 2010, from 26 percent to 23 percent. Both STAR and CHIP members have similar rates of CSHCN (between 13 and 16 percent), which have remained constant during the three-year period. The proportion of CSHCN in Texas Medicaid and CHIP is slightly above the national average of 14 percent for the 2005/2006 National Survey of CSHCN.²⁴

Figure 10 provides the percentage of STAR Health members who met the criteria for each of the five CSHCN categories in SFY 2009 and 2010. The most common special health care need among STAR Health members was need for/use of mental health treatment or counseling (48 percent for both reporting years), followed by dependence on medications (40 percent in 2009 and 43 percent in 2010). The percentage of caregivers who reported that their child needed or received special therapy (e.g. physical, occupational, speech therapy) increased from 16 percent in 2009 to 20 percent in 2010.

Figure 10. Characteristics of CSHCN in STAR Health, SFY 2009 and 2010

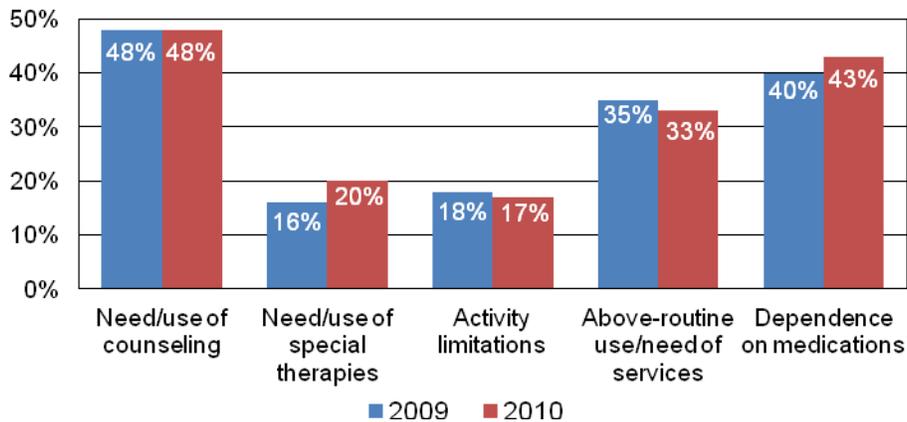
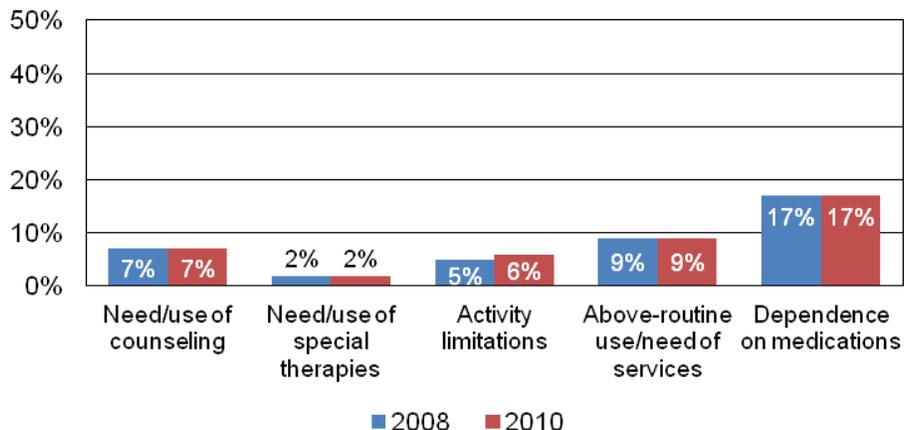


Figure 11 provides the percentage of CHIP members who met the criteria for each of the five CSHCN categories in SFY 2008 and 2010, as determined by the CSHCN Screener[®]. The most common special health care need among CHIP members was dependence on medications (17 percent), followed by using more medical care, mental health, or education services than is usual for most children (9 percent). These rates did not change between 2008 and 2010.

Figure 11. Characteristics of CSHCN in CHIP, SFY 2008 and 2010



STAR+PLUS Member Health Status - Physical/Social Functioning and ADLs

The health status of adults participating in the STAR+PLUS survey was also assessed using the RAND® 36-Item Health Survey, Version 1.0, which produces scores in eight physical and mental health domains. The RAND®-36 scores range from 0 to 100, with higher scores indicating better health status.

The RAND® Health Survey results indicate that the self-reported health status of STAR+PLUS members was poor, although there was little change between 2008 and 2009. Members experienced compromised functioning across physical, emotional, and social domains. **Figure 12** provides a two-year comparison of composite scores for four RAND®-36 domains related to the physical health of STAR+PLUS members. The domain *Role Limitations Due to Physical Health* had the lowest scores, which decreased from 34 points in 2008 to 31 points in 2009.

Figure 12. STAR+PLUS Member Physical Health RAND®-36 Scores, 2008 - 2009

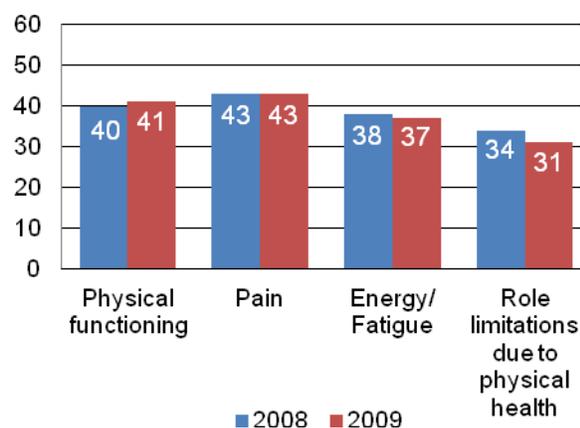


Figure 13. STAR+PLUS Member Mental Health RAND®-36 Scores, 2008 - 2009

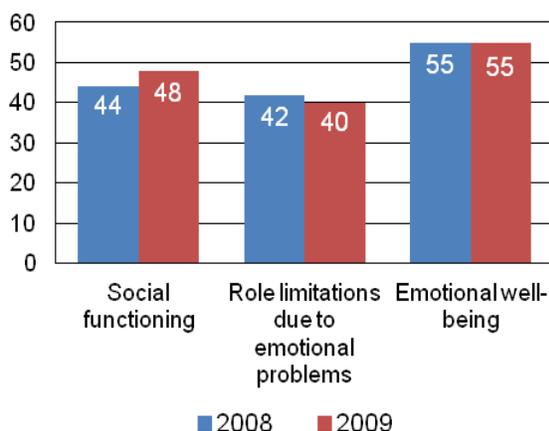
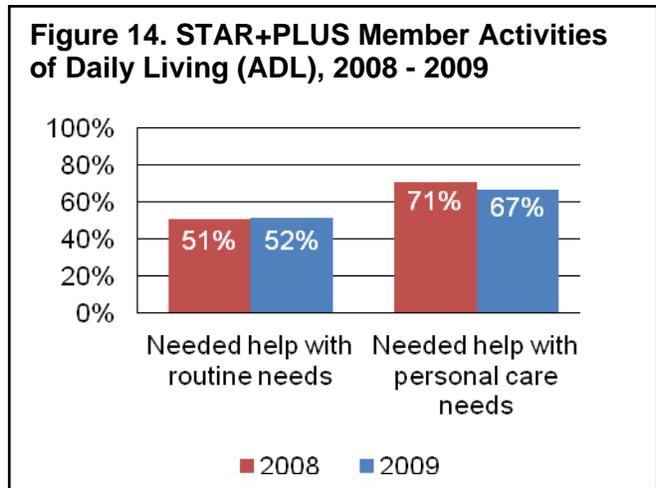


Figure 13 provides a two-year comparison of composite scores for four RAND®-36 domains related to the mental health of STAR+PLUS members. Overall, scores were generally higher for mental health domains than physical health domains. The domain *Social Functioning* increased from 44 points in 2008 to 48 points in 2009. *Emotional Well-Being* was reported as the highest domain score across both reporting years (55 points). *Role Limitations Due to Emotional Problems* declined slightly from 42 in 2008 to 40 in 2009.

Another component of health status involves a person's independence and ability to perform specific activities of daily living (ADLs), in which low levels of functioning indicate disability and dependence on others. **Figure 14** compares the proportion of STAR+PLUS members who needed help with either routine needs or personal care needs between 2008 and 2009. More than half of members in 2008 and 2009 reported they needed help with routine needs, such as everyday household chores, doing necessary business, shopping, or getting around for other

purposes because of an impairment or health problem. Little fluctuation was observed on this measure between the two years. More than two-thirds of members in 2008 and 2009 reported they needed help with their personal care needs, such as eating, dressing, or getting around the house because of an impairment or health problem. This rate decreased slightly during the two-year period, from 71 percent in 2008 to 67 percent in 2009.



Overweight and Obesity

The EQRO member surveys collect self-reported height and weight, which allow calculation of the body mass index (BMI) – a common population-level indicator of overweight and obesity. The Centers for Disease Control and Prevention (CDC) standards for classifying individuals by BMI differ for adults and children. Men and women 18 years of age and older are grouped into one of four BMI classifications:²⁵

- 1) Underweight – Below 18.5
- 2) Healthy weight – 18.5 to 24.9
- 3) Overweight – 25.0 to 29.9
- 4) Obese – 30.0 and above

For children and adolescents less than 18 years old, BMI classification depends on the child’s sex and age, and is determined using the CDC’s BMI-for-age growth charts.²⁶ **Table 2** provides a comparison of obesity rates (BMI ≥ 30.0) based on member or caregiver report between SFY 2008 and 2010 for members in STAR, PCCM, STAR+PLUS, STAR Health, and CHIP, along with available state- and national-level comparisons.²⁷ Members in the STAR+PLUS program had the highest obesity rates (54 percent in 2008 and 52 percent in 2009). In contrast, STAR Health members had the lowest obesity rate in Texas Medicaid (27 percent in SFY 2010). Obesity rates for adults in STAR+PLUS and PCCM adults exceeded the average rates of the general Texas and national populations.

Table 2. Obesity Rates by Medicaid Program, Texas Population, & U.S. Population (2008-2010)

	2008	2009	2010
STAR			
Adults	-	32%	-
Children	-	33%	-
PCCM			
Adults	-	50%	-
Children	-	30%	-
STAR+PLUS	54%	52%	-
STAR Health	-	-	27%
CHIP	27%	-	28%
Texas Adults	29%	29%	31%
United States Adults	34%	-	-

The program-level profiles below provide the details of caregiver-reported health status characteristics for children in the SFY 2010 STAR Health and CHIP surveys, including overall physical and mental health status, special health care needs, and BMI classification.

Program Profiles – Health Status, SFY 2010

STAR Health	
<u>Child Health Status</u>	<u>BMI Classification</u>
<ul style="list-style-type: none"> • “Excellent”/“Very Good” physical health: 65 percent • “Excellent”/“Very Good” mental health: 47 percent 	<ul style="list-style-type: none"> • Underweight: 10 percent • Healthy weight: 43 percent • Overweight: 20 percent • Obese: 27 percent
<u>CSHCN prevalence: 62 percent</u>	
<ul style="list-style-type: none"> • Dependence on medications: 43 percent • Above-routine need/use of services: 33 percent • Need/use of counseling: 48 percent • Functional limitations: 17 percent • Need/use of special therapies: 20 percent 	

CHIP	
<u>Child Health Status</u>	<u>BMI Classification</u>
<ul style="list-style-type: none"> • “Excellent”/“Very Good” physical health: 68 percent • “Excellent”/“Very Good” mental health: 73 percent 	<ul style="list-style-type: none"> • Underweight: 6 percent • Healthy weight: 48 percent • Overweight: 19 percent • Obese: 28 percent
<u>CSHCN prevalence: 20 percent</u>	
<ul style="list-style-type: none"> • Dependence on medications: 17 percent • Above-routine need/use of services: 9 percent • Need/use of counseling: 7 percent • Functional limitations: 6 percent • Need/use of special therapies: 2 percent 	

1.3 – Utilization and Cost of Care

Monitoring the use of health services by program and MCO can reveal whether members are receiving the appropriate level of care. When considered alongside quality and cost of care metrics, utilization measures can also indicate the efficiency of health care programs, treatments, and procedures. This section presents the EQRO's findings on utilization and cost of care from SFY 2008 to 2010 in STAR, PCCM, STAR+PLUS, STAR Health, NorthSTAR, and CHIP, using administrative data to assess utilization of well-care visits, prescription drugs, and mental health services. Findings from five HEDIS[®] and HEDIS[®]-based measures are presented in this section, as shown in **Table 3** below.

Table 3. Utilization and Cost Measures

Measure	Program/s	Measurement Years
Well-Child Visits in the First 15 Months of Life	STAR, PCCM, STAR Health	2008, 2009, 2010
Well-Child Visits, in the 3 rd , 4 th , 5 th , and 6 th Years of Life	STAR, PCCM, STAR+PLUS, STAR Health, CHIP	2008, 2009, 2010
Adolescent Well-Care Visits	STAR, PCCM, STAR+PLUS, STAR Health, CHIP	2008, 2009, 2010
HEDIS [®] Outpatient Drug Utilization	STAR, PCCM, STAR+PLUS, STAR Health, CHIP	2008, 2009
Mental Health Utilization	STAR Health, NorthSTAR	2008, 2009, 2010

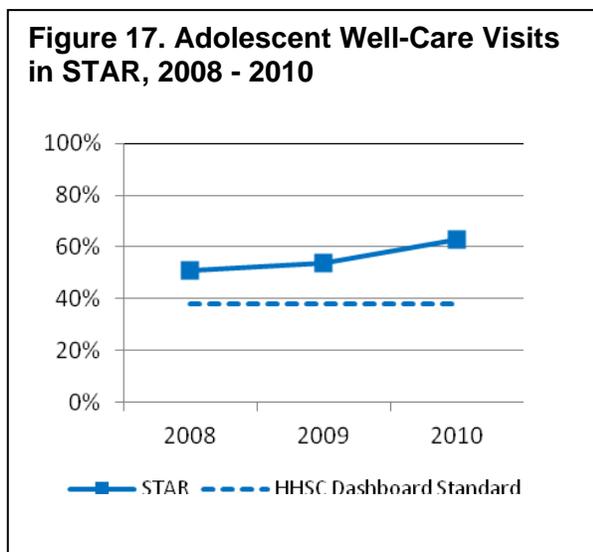
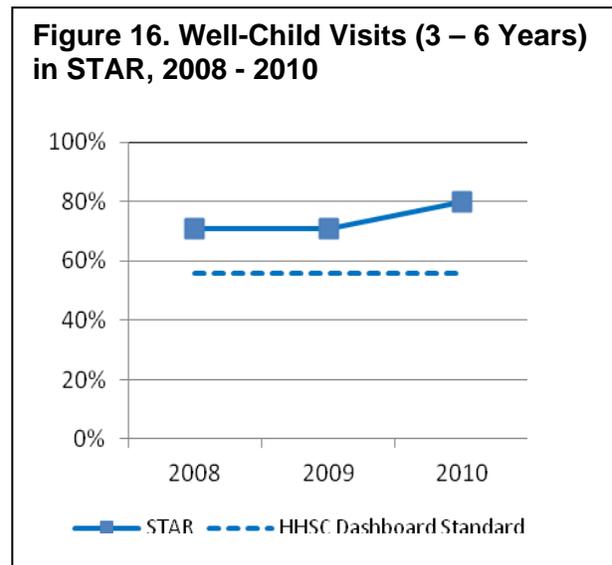
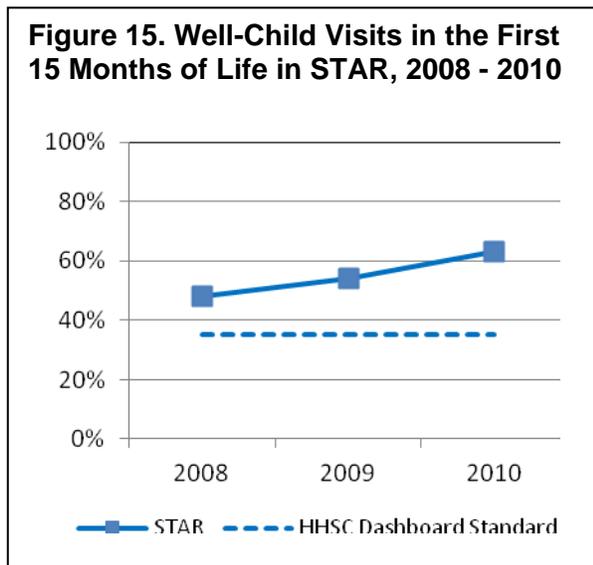
Well-Care Visits

The Early Periodic Screening, Diagnosis, and Treatment (EPDST) Program is a required component of all state Medicaid programs, designed to improve the health of low-income children and adolescents under the age of 21.²⁸ Benefits under EPSDT include screening services to detect physical and mental conditions, an unclothed physical exam, appropriate immunizations, laboratory tests, and health education. The well-care measures discussed in this section are grouped into three age categories.

- **Well-Child Visits in the First 15 Months of Life (W15)** assesses the percentage of members who turned 15 months old during the measurement year and who had six or more well-child visits with a PCP during their first 15 months of life.
- **Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34)** assesses the percentage of members 3 to 6 years of age who received one or more well-child visits with a PCP during the measurement year.
- **Adolescent Well-Care Visits (AWC)** assesses the percentage of members 12 to 21 years of age who had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.

It should be noted that these measures are based on HEDIS® measures of the same name. However, at the request of HHSC, the EQRO lifted the provider constraints for these measures. Thus, while strict HEDIS® specifications call for well-care visits to be performed by a primary care provider (PCP) or OB/GYN, the results shown here allow any well-care visit to be counted, regardless of provider type. The resulting rates are therefore slightly inflated, which should be taken into consideration when making comparisons with the corresponding national means.²⁹

Figures 15, 16, and 17 depict rates of well-care visits in each of the three age categories in STAR for SFY 2008, 2009, and 2010, along with the corresponding HHSC Dashboard standards for the measures. For all three well-care measures, rates in STAR increased over the three-year period, and exceeded the HHSC Dashboard standards.



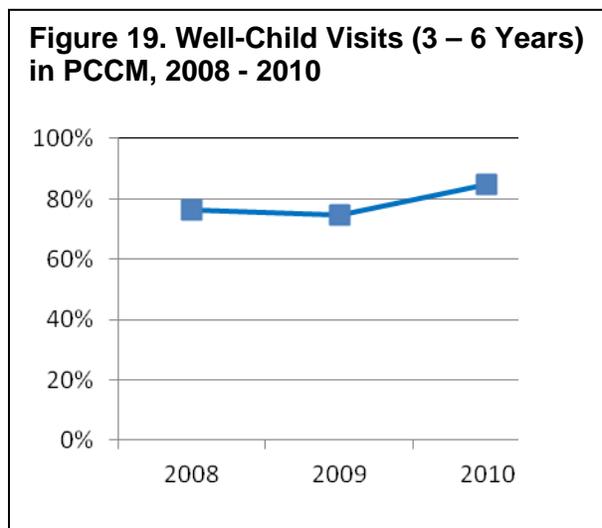
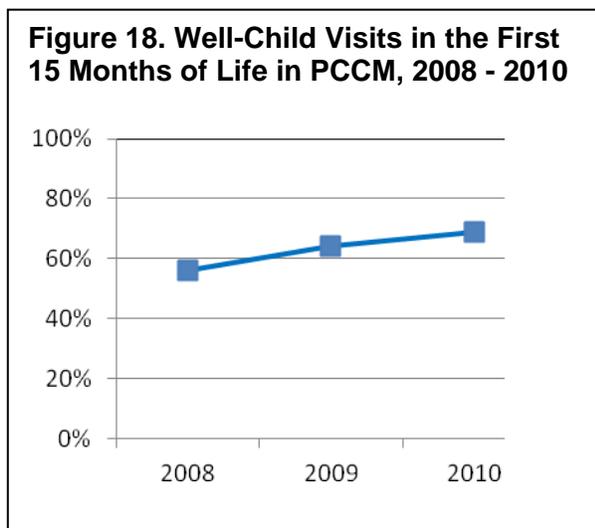
The rate of Well-Child Visits in the First 15 months of Life in STAR increased by 1.3 times, from 48 percent in 2008 to 63 percent in 2010. Rates exceeded the HHSC Dashboard standard of 35 percent in all three years.

The rate of Well-Child Visits for STAR members three to six years old increased slightly, from 71 percent in 2008 to 80 percent in 2010. Rates exceeded the HHSC Dashboard standard of 56 percent in all three years.

The rates of Adolescent Well-Care Visits in STAR increased by 1.2 times, from 51 percent in 2008 to 63 percent in 2010. Rates exceeded

the HHSC Dashboard standard of 38 percent in all three years.

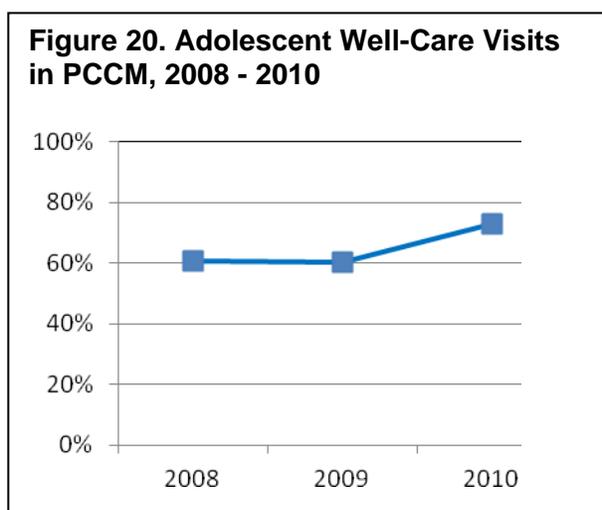
Figures 18, 19, and 20 depict rates of well-care visits in each of the three age categories in PCCM for SFY 2008, 2009, and 2010. For all three well-care measures, rates in PCCM increased over the three-year period.



The rate of Well-Child Visits in the First 15 months of Life in PCCM increased by 1.2 times, from 56 percent in 2008 to 69 percent in 2010.

The rate of Well-Child Visits for PCCM members three to six years old increased slightly, from 76 percent in 2008 to 85 percent in 2010.

The rate of Adolescent Well-Care Visits in PCCM increased by 1.2 times, from 61 percent in 2008 to 73 percent in 2010.



Figures 21 and 22 depict rates of Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life and Adolescent Well-Care Visits in STAR+PLUS for SFY 2008, 2009, and 2010, along with the corresponding HHSC Dashboard standards for these measures.³⁰ For both measures, rates increased slightly over the two-year period.

The rate of Well-Child Visits for STAR+PLUS members three to six years old increased slightly, from 62 percent in 2008 to 69 percent in 2010. Rates exceeded the HHSC Dashboard standard of 56 percent in all three years. The rate of Adolescent Well-Care Visits in STAR+PLUS increased by 1.3 times, from 35 percent in 2008 to 46 percent in 2010. The rate in SFY 2008

(35 percent) was slightly lower than the HHSC Dashboard standard of 38 percent, while rates in SFY 2009 and SFY 2010 exceeded the standard.

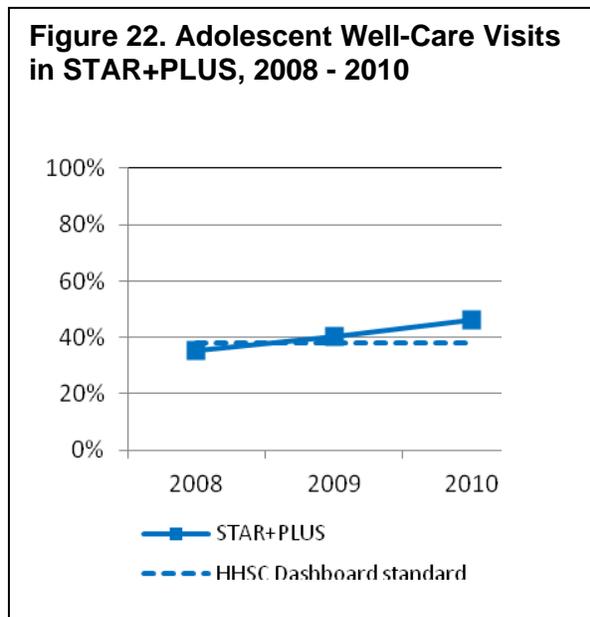
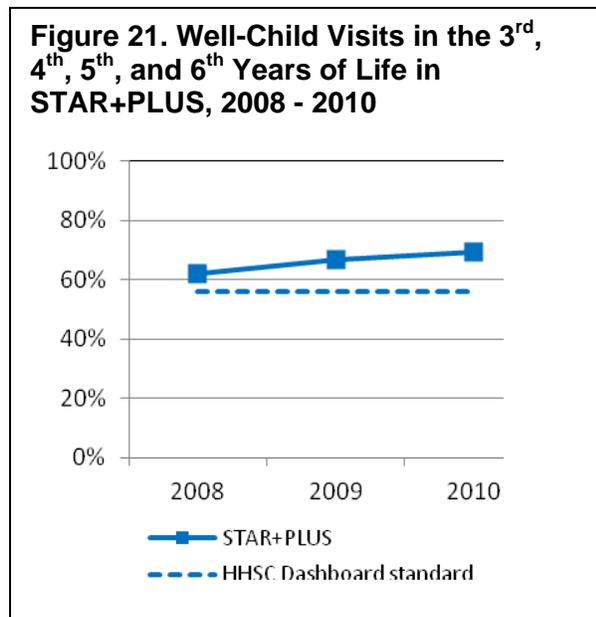
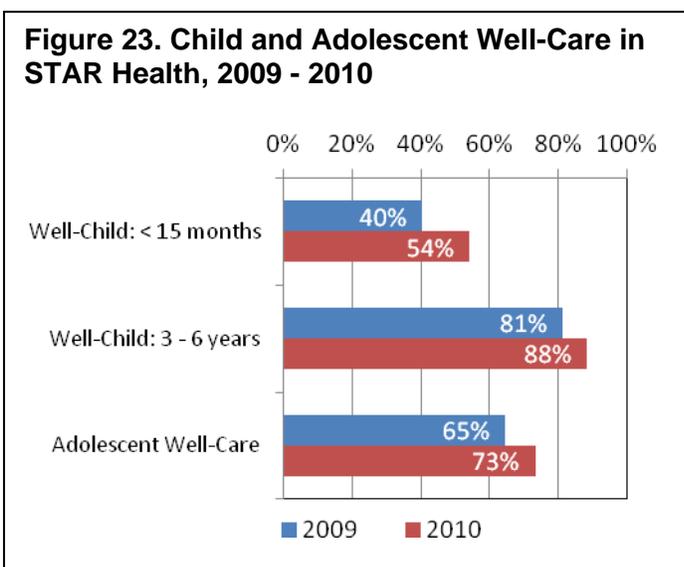


Figure 23 depicts rates of well-child and adolescent well-care visits in STAR Health for SFY 2009 and 2010. Rates of well-care visits increased between the two years for all age groups.

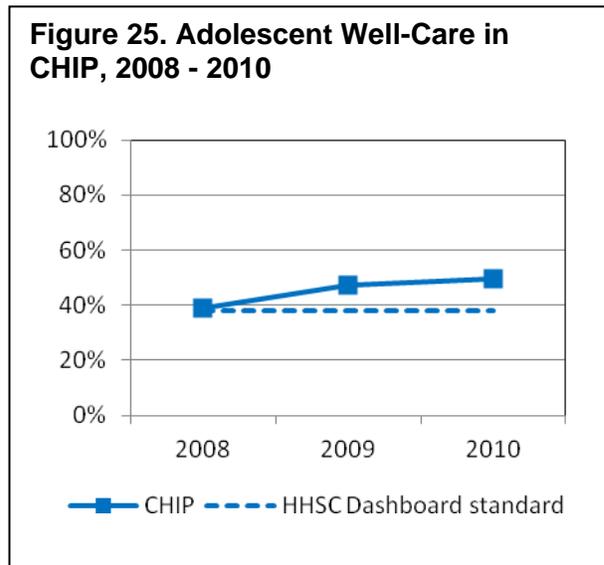
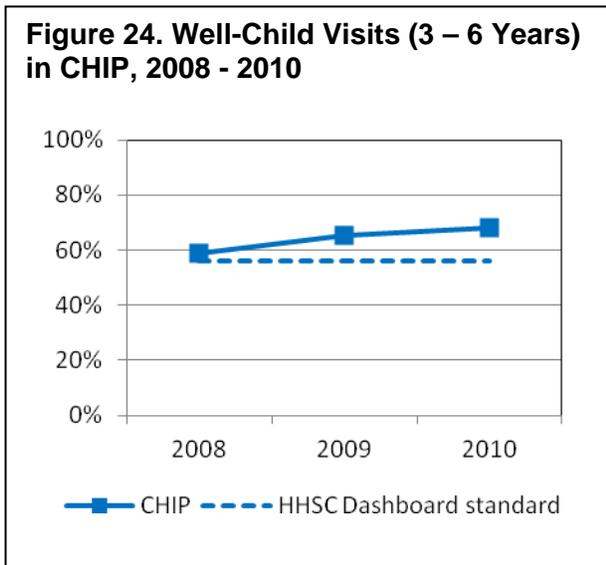


The greatest increase occurred for STAR Health members 15 months of age and younger, whose rate of well-care visits increased from 40 percent in 2009 to 54 percent in 2010. However, the rate in SFY 2010 was still lower than the HEDIS[®] 2010 national mean of 59 percent for this measure.³¹

The rates of well-care visits for members 3 to 6 years old and adolescents in STAR Health were considerably better, exceeding their HEDIS[®] 2010 national means (72 percent and 48 percent, respectively) in both years.

Figures 24 and 25 show rates of well-care visits for children 3 to 6 years old and adolescents in CHIP, for SFY 2008, 2009, and 2010, along with the corresponding HHSC Dashboard standards for the measures. Both well-child visits and adolescent well-care visits were slightly

above the HHSC Dashboard standards (56 percent and 38 percent, respectively), and increased slightly over the three-year period.



HEDIS® Outpatient Drug Utilization

The HEDIS® Outpatient Drug Utilization measure provides: (1) the mean monthly cost of drug prescriptions per member, and (2) the mean number of prescriptions filled annually per member. The EQRO calculated rates of drug utilization for SFY 2008 and 2009 in STAR, PCCM, STAR+PLUS, STAR Health, and CHIP. The NCQA discontinued this measure in HEDIS® 2011; therefore, results for SFY 2010 are not available. Specifications for this measure permit the calculation of rates for eight separate age groups. The rates shown in this report are for all age groups combined.

Figures 26 and 27 depict the average cost of prescriptions (per member per month) and the average number of prescriptions (per member per year) for STAR, PCCM, and CHIP in SFY 2008 and 2009.

- The average cost of prescriptions remained fairly constant in the three programs, with PCCM having the highest average cost (and the only one above the national HEDIS® mean), at \$57 in 2009. The lowest average cost of prescriptions occurred in CHIP, at \$25 per member per month in 2009.
- The average number of prescriptions also remained constant in the three programs, with PCCM having the highest average number (slightly above the HEDIS® mean), at 12.6 in 2009. The lowest average number of prescriptions occurred in CHIP, at 4.5 annual prescriptions per member in 2009.

Figure 26. Average Cost of Prescriptions Per Member Per Month in STAR, PCCM, and CHIP, 2008-2009

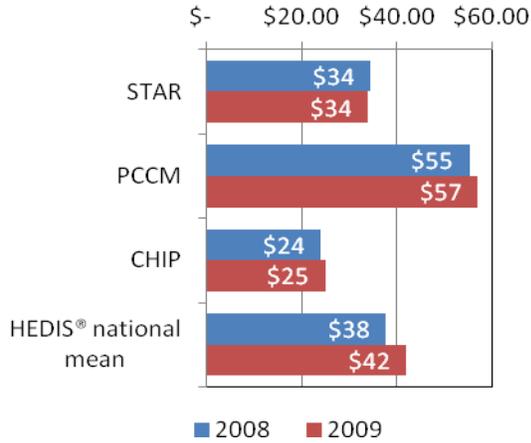
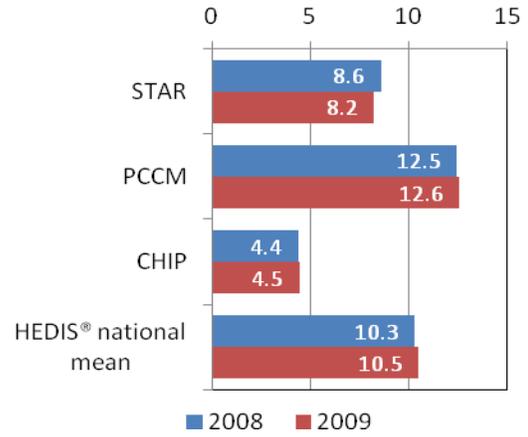


Figure 27. Average Number of Prescriptions Per Member Per Year in STAR, PCCM, and CHIP, 2008-2009



Medicaid members requiring a higher level of specialty care, such as the chronically ill, disabled, and children in foster care, are also expected to have higher utilization and cost of prescription drugs. **Figures 28 and 29** depict the average cost of prescriptions (per member per month) and the average number of prescriptions (per member per year) for STAR+PLUS and STAR Health in SFY 2008 and 2009.

Figure 28. Average Cost of Prescriptions Per Member Per Month in STAR+PLUS and STAR Health, 2008-2009

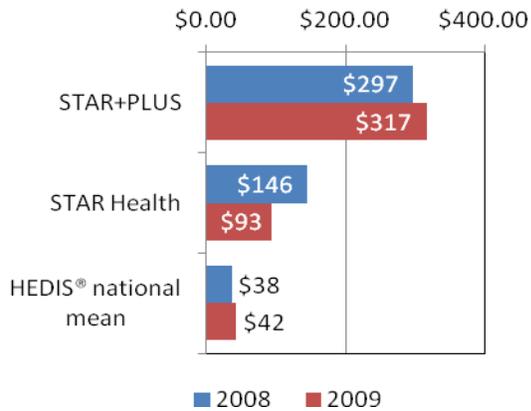
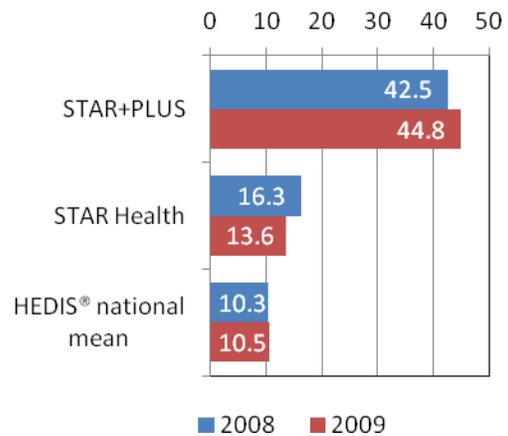


Figure 29. Average Number of Prescriptions Per Member Per Year in STAR+PLUS and STAR Health, 2008-2009



The average cost of prescriptions increased slightly in STAR+PLUS, to \$317 per member per month in 2009. This corresponded with a slight increase in the average number of prescriptions, at 44.8 per member per year in 2009. In STAR Health, the average cost of prescriptions decreased considerably (by 36 percent), to \$93 per member per month in 2009. This was accompanied by a more modest decrease in the average number of prescriptions (by 16 percent), to 13.6 per member per year in 2009. These findings suggest that high prescription costs incurred shortly after implementation of the STAR Health Program were controlled partly through a reduction in the number of prescriptions, and partly through the prescribing of less expensive medications.

Use of Mental Health Services

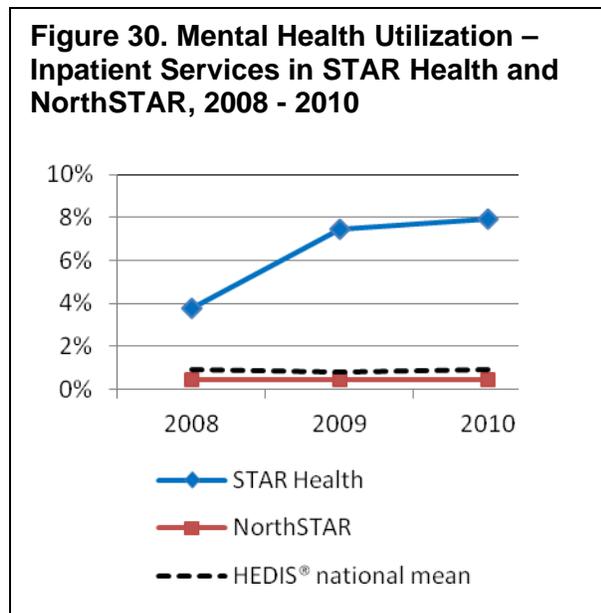
Mental and behavioral health (BH) services are particularly important for Medicaid members who are more likely to require specialty BH care, such as those enrolled in the STAR Health and NorthSTAR programs. To assess the utilization of mental health services in these programs, the EQRO used a modified version of the HEDIS[®] Mental Health Utilization measure. This measure identifies the percentage of members who received a mental health service during the one-year measurement period, in the following categories:

- 1) Inpatient services;
- 2) Intensive outpatient or partial hospitalization services; and
- 3) Outpatient or emergency department (ED) services

It should be noted that this measure is based on a HEDIS[®] measure of the same name. However, at the request of HHSC, the EQRO lifted the provider constraints for this measure, while following all other technical specifications. Thus, while strict HEDIS[®] specifications call for certain visits in this measure to be with a mental health provider, these results allow any mental health service to be counted, regardless of provider type. The resulting rates are therefore

slightly inflated, which should be taken into consideration when making comparisons with the corresponding national means.³²

Figure 30. Mental Health Utilization – Inpatient Services in STAR Health and NorthSTAR, 2008 - 2010



Figures 30 to 32 depict rates of inpatient services, intensive outpatient/partial hospitalization services, and outpatient/ED services in STAR Health and NorthSTAR in SFY 2008, 2009, and 2010, along with the corresponding national HEDIS[®] means. Both the STAR Health and NorthSTAR memberships differ significantly from the general Medicaid population, which should be taken into consideration when comparing mental health utilization rates with national HEDIS[®] means.

Figure 31. Mental Health Utilization – Intensive Services in STAR Health and NorthSTAR, 2008 - 2010

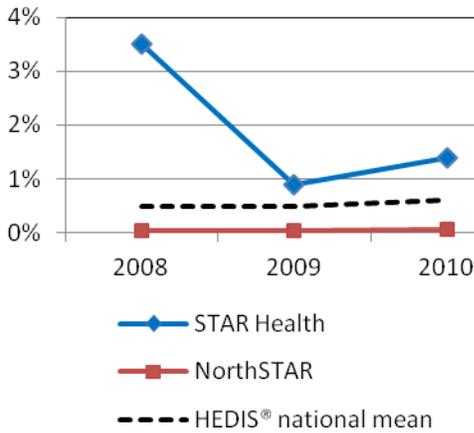
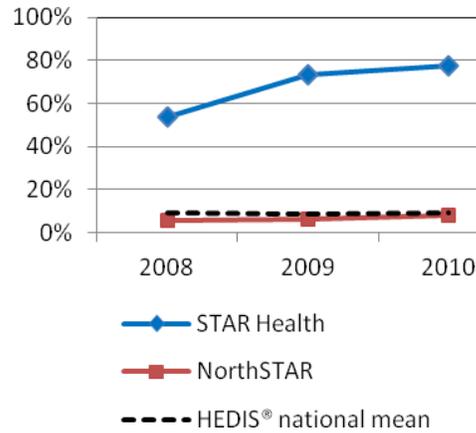


Figure 32. Mental Health Utilization – Outpatient/ED Services in STAR Health and NorthSTAR, 2008 - 2010



Studies have found that children in foster care are more likely to have mental or behavioral health diagnoses, and to utilize both inpatient and outpatient mental health services at significantly higher rates (4-fold to 15-fold) than their Medicaid eligible peers.^{33,34} The findings in STAR Health for SFY 2008 to 2010 support these studies, with rates that are much higher than the HEDIS® means for all three types of mental health utilization. Trends in mental health service utilization in STAR Health depended on the type of service:

- For inpatient services, the STAR Health program started at 3.8 percent in 2008, and then increased to 7.9 percent in 2010. The SFY 2010 rate was nine times the national HEDIS® mean of 0.9 percent.
- For intensive outpatient and partial hospitalization services, the STAR Health program started at 3.5 percent in 2008, then decreased to 1.4 percent in 2010. The SFY 2010 rate was more than twice the national HEDIS® mean of 0.6 percent.
- Outpatient and ED services related to mental health were the most common type in STAR Health, increasing from 53.7 percent in 2008 to 77.7 percent in 2010. The SFY 2010 rate was nearly nine times the national HEDIS® mean of 9.1 percent.

The NorthSTAR Program specifically provides mental and behavioral health services for Medicaid members in the Dallas service area. Higher rates of mental health utilization would also be expected in this population, although this was not observed during the three-year period.³⁵ Rates of inpatient and intensive service utilization were below one percent in all three years. The rate of outpatient or ED services for mental health increased from 5.7 percent in 2008 to 8.0 percent in 2010. Mental health utilization in NorthSTAR was consistently lower than the national HEDIS® means, particularly for intensive services.

The program-level profiles below provide the details of member utilization of services in Medicaid and CHIP, showing rates of well-care, ambulatory care, and mental health care visits in SFY 2010. These profiles do not include outpatient drug utilization measures, which were not run for SFY 2010 data.

Program Profiles – Service Utilization, SFY 2010

STAR	
<u>Well-care visits</u>	
Well-child visits ≤ 15 months:	63%
Well-child visits 3 – 6 years:	80%
Adolescent well-care:	63%
<u>Ambulatory care (per 1,000 member-months)</u>	
Outpatient visits:	440.3
ED visits:	58.8

PCCM	
<u>Well-care visits</u>	
Well-child visits ≤ 15 months:	69%
Well-child visits 3 – 6 years:	85%
Adolescent well-care:	73%

STAR+PLUS	
<u>Well-care visits</u>	
Well-child visits 3 – 6 years:	69%
Adolescent well-care:	46%
<u>Ambulatory care (per 1,000 member-months)</u>	
Outpatient visits:	577.9
ED visits:	87.6

CHIP	
<u>Well-care visits</u>	
Well-child visits 3 – 6 years:	68%
Adolescent well-care:	56%
<u>Ambulatory care (per 1,000 member-months)</u>	
Outpatient visits:	261.2
ED visits:	22.7

STAR Health	
<u>Well-care visits</u>	
Well-child visits ≤ 15 months:	54%
Well-child visits 3 – 6 years:	88%
Adolescent well-care:	73%
<u>Mental health utilization</u>	
Inpatient services:	7.9%
Intensive services:	1.4%
Outpatient services:	77.7%

NorthSTAR	
<u>Mental health utilization</u>	
Inpatient services:	0.43%
Intensive services:	0.05%
Outpatient services:	8.01%

2. Managed Care Organization Structure and Process

2.1 – Health Plan Information

Producing and maintaining valid, complete, and up-to-date healthcare claims and encounter data are critical components for ensuring high quality of care in state Medicaid and CHIP MCOs. These data are necessary for: (1) implementing timely and comprehensive care coordination based on member diagnostic and health care use profiles, and (2) calculating and validating numerous quality of care measures that are based on administrative data. Following recommendations made by the Institute of Medicine in 2001, MCOs have worked toward implementing electronic health records (EHR) – permitting the automation of clinical, financial, and administrative information and the electronic sharing of this information.³⁶ More recently, the American Recovery and Reinvestment Act of 2009 includes an incentive program to encourage Medicaid and Medicare providers to implement EHR technology, with incentive payments of up to \$63,750 over six years, beginning in 2011.³⁷

As part of its mandatory and optional review activities, the EQRO annually conducts:

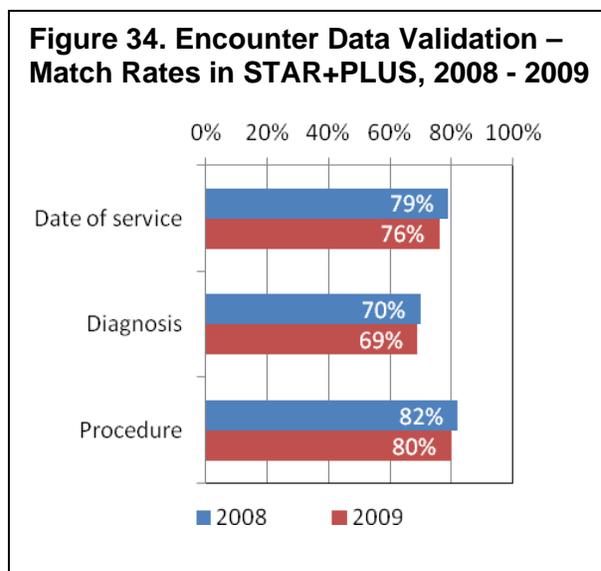
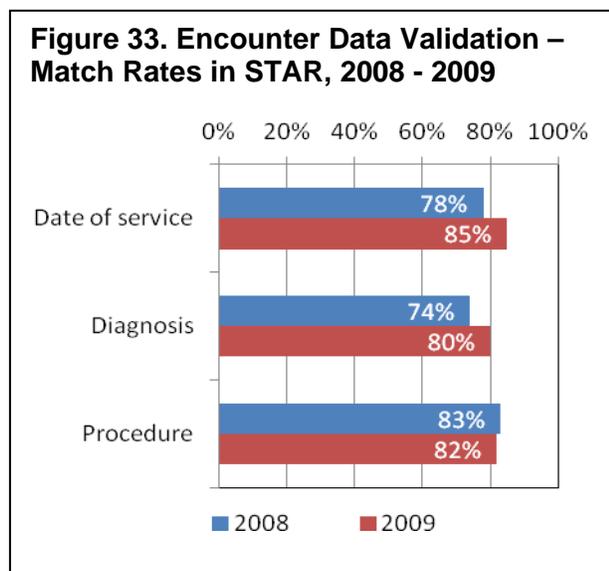
- Encounter data validation (EDV) studies, in which elements of MCO claims and encounter data are validated using provider health records.
- Studies of MCO data systems capabilities and processes – including MCO-reported electronic claims submission rates – using the annual MCO Administrative Interviews.
- Data certification to assess the completeness and validity of claims and encounter data maintained by Texas Medicaid and CHIP MCOs.

This section presents trends in EDV results and electronic claims submission at the program level, from SFY 2008 to 2010 (and 2011, when available). It concludes with the EQRO's data certification findings on SFY 2010 data.

Encounter Data Validation

According to CMS guidelines for Medicaid MCOs, states can set a targeted match rate between information found in an MCO's claims and encounter data relative to that found in the members' health records.³⁸ A match rate of 95 percent or greater between the two data sources is desired, and states can work toward that goal. Texas HHSC established a target match rate of 80 percent, with the goal of requiring a higher match rate in future years. To determine Texas Medicaid and CHIP MCO compliance the established benchmark, the EQRO annually conducts an EDV study, using provider health records to calculate match rates for a random sample of encounters, focused on the validation of three data elements: (1) date of service; (2) diagnosis; and (3) procedure.

Figures 33 to 36 provide match rates for date of service, diagnosis, and procedure data elements in STAR, STAR+PLUS, STAR Health, and CHIP, for SFY 2008 and 2009.³⁹



In STAR, match rates for all three data elements met or exceeded the HHSC standard of 80 percent by SFY 2009. Notable improvements in the completeness and accuracy of data were observed for date of service (from 78 percent in 2008 to 85 percent in 2009) and diagnosis (from 74 percent in 2008 to 80 percent in 2009).

In STAR+PLUS, the match rate for procedure met or exceeded the HHSC standard of 80 percent, while the match rate for date of service was slightly below the standard. The match rate for diagnosis was below standard, at 69 percent in SFY 2009. There were only slight differences in match rates between the two years.

Figure 35. Encounter Data Validation – Match Rates in STAR Health, 2008 - 2009

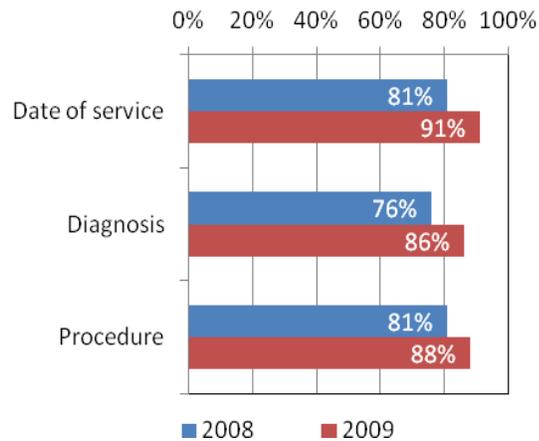
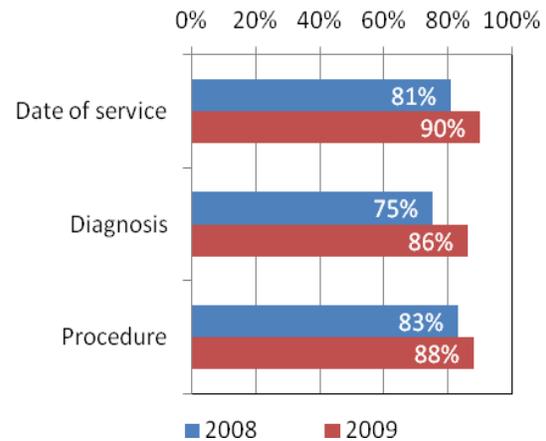


Figure 36. Encounter Data Validation – Match Rates in CHIP, 2008 - 2009



Match rates in STAR Health were typically higher than in the other Medicaid programs, and increased notably over the two-year period for all three data elements. The greatest increases were for date of service (from 81 percent in 2008 to 91 percent in 2009) and diagnosis (from 76 percent in 2008 to 86 percent in 2009).

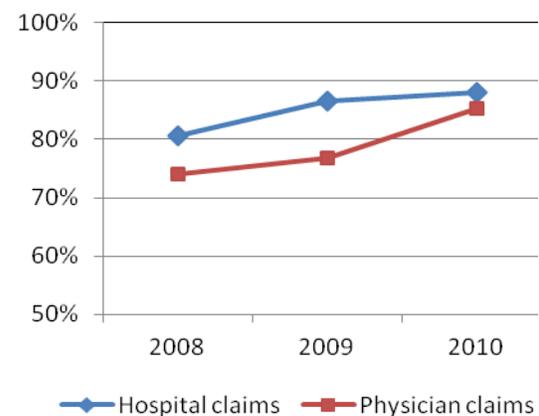
Match rates in CHIP also increased over the two-year period for all data elements. The match rate for diagnosis increased from 75 percent in 2008 to 86 percent in 2009. Although match rates in all programs were greater than the HHSC standard of 80 percent in SFY 2009, none met CMS' targeted standard of 95 percent.

Electronic Data Submission

As part of the annual MCO Administrative Interview, the EQRO collected information on the percentage of claims that each MCO received from its network providers electronically. This information is important for determining the extent to which an MCO's provider network has moved toward implementation of up-to-date, computerized systems for managing authorization, payment, and health information.

Figure 37 provides trends in the percentage of hospital and physician claims submitted electronically in all Medicaid programs and CHIP combined, for SFY 2008, 2009, and 2010. Overall, there were higher rates of electronic submission for hospital claims than for physician

Figure 37. Percent of Hospital and Physician Claims Submitted Electronically, 2008 - 2010



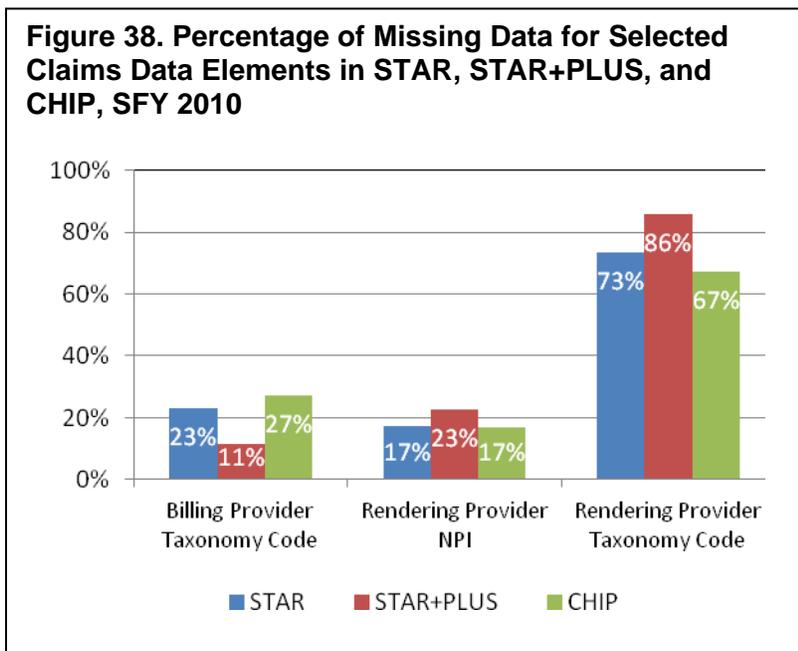
claims. The percentage of hospital claims submitted electronically increased from 81 percent in 2008 to 88 percent in 2010. The percentage of physician claims submitted electronically had a greater increase, from 74 percent in 2008 to 85 percent in 2010.

Data Certification in SFY 2010

The EQRO annually assesses the completeness of key data elements in claims and encounter data that the Texas Medicaid and CHIP MCOs maintain. The data elements discussed here are those that are critical for proper care coordination and quality of care measurement. These include:

- Place of service code
- Admission date
- Primary diagnosis code
- Procedure code
- Discharge date
- Discharge status
- Billing provider National Provider Identifier (NPI)
- Billing provider taxonomy code
- Rendering provider NPI
- Rendering provider taxonomy code

The majority of these data elements were found to be complete and valid across the three programs. With the exception of billing provider taxonomy code, rendering provider NPI, and rendering provider taxonomy code, all data elements had program-level rates of 0 percent for



the percentage of missing elements.⁴⁰ All ten selected data elements had program-level rates of 0 percent for the percentage of invalid elements.⁴¹

Figure 38 provides the percentage of missing billing provider taxonomy codes, rendering provider NPIs, and rendering provider taxonomy codes in STAR, STAR+PLUS, and CHIP claims in SFY 2010. About one-quarter of claims in STAR and CHIP had missing billing provider taxonomy codes. Rendering provider codes were

more frequently missing from STAR+PLUS claims than STAR or CHIP claims. The most frequently missing data element in all programs was rendering provider taxonomy code, at 73 percent missing in STAR, 86 percent missing in STAR+PLUS, and 67 percent missing in CHIP. These fields provide important information that the EQRO uses to identify provider specialty and location.

2.2 – Disease Management Programs

Although approximately three-quarters of the national Medicaid population are children, parents, and pregnant women, about two-thirds of Medicaid expenditures go to care for elderly and disabled adults.⁴² These members use more long-term care services, which account for more than one-third of Medicaid spending. Many states are adopting Medicaid disease management (DM) programs as a way to improve health care quality and reduce costs for these members.

HHSC requires that all MCOs participating in STAR, STAR+PLUS, and CHIP provide DM services covering asthma and diabetes.⁴³ In addition to asthma and diabetes, HHSC requires MCOs participating in STAR+PLUS to offer DM services for chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and coronary artery disease (CAD). Finally, all MCOs are required by HHSC to provide DM services for other chronic diseases based upon an evaluation of disease prevalence within the MCO's membership.⁴⁴

This section presents findings from the SFY 2011 MCO Administrative Interview on the structure and practices of DM programs operating in Texas Medicaid and CHIP MCOs, focusing on programs that are required by the state. All STAR and CHIP MCOs had the required asthma and diabetes DM programs, in addition to various DM programs focused on the needs of their populations. These included programs for depression, high-risk perinatal, HIV/AIDS, hypertension, and obesity. All STAR+PLUS MCOs had the required asthma, diabetes, COPD, CHF, and CAD DM programs.

In some cases, DM functions were administered through an externally contracted disease management organization (DMO). Six CHIP MCOs and four STAR MCOs delegated asthma and diabetes DM functions fully or in part to a DMO in 2011.⁴⁵ In STAR+PLUS, only Superior delegated DM functions to a DMO, while AMERIGROUP, Evercare, and Molina administered DM programs in-house. Across Medicaid and CHIP, FirstCare and Superior consistently delegated all DM functions, and Community First used a combination of in-house and delegated programs. All MCOs reported calculating performance measures for their DM programs, regardless of delivery model.

Fourteen of 17 MCOs operating in Texas Medicaid and CHIP in SFY 2011 assigned members participating in their DM programs to risk groups – allowing for more appropriate care according to the member's health status, disease severity, and special needs.⁴⁶ **Table 4** shows details on asthma and diabetes DM program participation in STAR, STAR+PLUS, STAR Health, and CHIP. For asthma DM, STAR had both the highest number of members eligible (78,398) and the highest number of members participating (20,648). However, the resulting participation rate of 26 percent was the lowest among the programs. For diabetes DM, STAR+PLUS had the highest number of members eligible (12,517), the highest number of members participating (8,642), and the highest participation rate (69 percent). In CHIP, slightly more than half of eligible members were enrolled in asthma DM (57 percent) and diabetes DM (54 percent). STAR Health had a relatively low asthma DM participation rate (35 percent), and did not report on a diabetes DM program in SFY 2011.

Table 4. Member Participation in Asthma and Diabetes DM Programs, SFY 2011

	Asthma DM			Diabetes DM		
	Members eligible	Members enrolled	Participation rate	Members eligible	Members enrolled	Participation rate
STAR	78,938	20,648	26%	5,842	2,547	44%
STAR+PLUS	3,399	2,289	67%	12,517	8,642	69%
STAR Health	2,147	755	35%	N/A	N/A	N/A
CHIP	23,654	13,430	57%	1,468	797	54%

In STAR+PLUS, DM participation rates were high for COPD (72 percent) and CHF (80 percent). About two-thirds of eligible STAR+PLUS members were enrolled in the CAD DM program (66 percent). It should be noted that these rates are calculated from MCO Administrative Interview responses from AMERIGROUP, Molina, and Superior. Evercare did not report participation rates for its SFY 2011 DM programs.

2.3 – Health Plan Information and Customer Service

Customer service is an important component of managed care that impacts member satisfaction, member compliance with treatment, performance improvement, and ultimately, the size of an MCO's overall membership.⁴⁷ Better service translates to higher member satisfaction, which in turn means that members are more likely to return to the same providers, ensuring their continuity of care. Conversely, dissatisfaction with customer service generates potential new costs, lowers treatment compliance, and leads to worse health outcomes. By allowing members to provide feedback on the health services they receive, customer service can contribute to an MCO's overall performance improvement strategy – helping to understand where improvements must be made to ensure high member satisfaction.

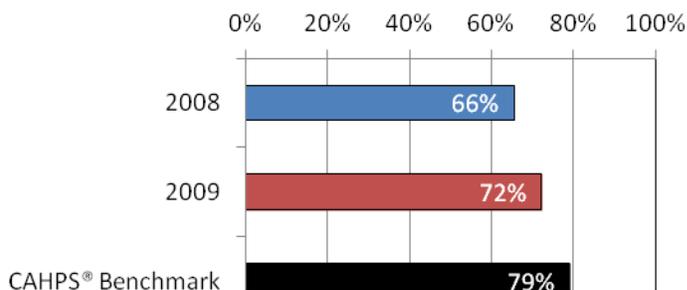
This section presents trends in the CAHPS® *Health Plan Information and Customer Service* composite, which assesses members' experiences and satisfaction with the information and customer service they receive through their health plan. The composite combines responses to two questions:

- 1) In the last six months, how often did customer service at your (or your child's) health plan give you the information or help you needed?
- 2) In the last six months, how often did customer service staff at your (or your child's) health plan treat you with courtesy and respect?

Respondents had the option to answer "Always," "Usually," "Sometimes," or "Never" to each question. Composite scores are expressed as the percentage of members who "usually" or "always" had positive experiences with the domain in question. Program-level means are compared to national CAHPS® benchmarks for the Medicaid Health Plan Survey in 2010.⁴⁸ In

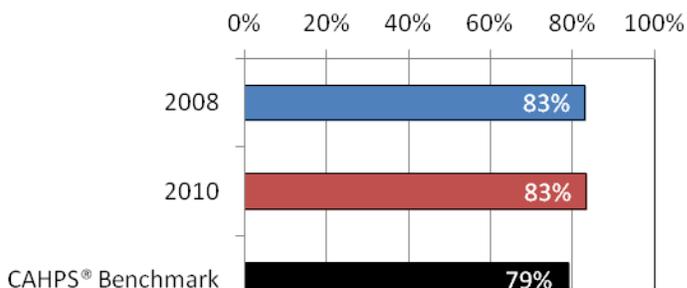
the absence of national benchmarks, the EQRO considers a score below 75 percent to indicate a need for improvement in the program or MCO to which the score pertains.

Figure 39. CAHPS® Customer Service – Percent of STAR+PLUS Members “Usually” or “Always” Having Positive Experiences, 2008 - 2009



Trends in customer service using member survey data are shown in **Figure 39** for STAR+PLUS (for 2008 and 2009), and in **Figure 40** for CHIP (for 2008 and 2010). For STAR and PCCM, customer service scores are available only from SFY 2009 surveys. For STAR Health, customer service scores are available only for SFY 2010.

Figure 40. CAHPS® Customer Service – Percent of CHIP Caregivers “Usually” or “Always” Having Positive Experiences, 2008 - 2010



In STAR+PLUS, the percent of members with positive customer service experiences increased from 66 percent in 2008 to 72 percent in 2009. Both rates were below the CAHPS® benchmark of 79 percent. The national benchmark is based on the general Medicaid population; it is possible that lower scores in STAR+PLUS result from more specialized information needs, and the inability of customer service at some MCOs to provide specialized information and help in a timely and courteous manner.

In CHIP, the percent of caregivers with positive customer service at their child’s health plan remained constant, at 83 percent in both 2008 and 2010. The rate of positive customer experiences in CHIP was slightly higher than the CAHPS® benchmark of 79 percent.

The program-level profiles below provide the details of MCO structure and process in STAR, STAR+PLUS, STAR Health, and CHIP, using information collected in the MCO Administrative Interviews for SFY 2010 and/or 2011, the SFY 2010 data certification study, and (for STAR Health and CHIP) the SFY 2010 caregiver surveys.^{49, 50}

Program Profiles – MCO Structure and Process, SFY 2010/2011

STAR

PCP Staffing Ratios (SFY 2011)

- Child PCPs: 10.1 per 1,000 members
- Adult PCPs: 87.3 per 1,000 members

Data Certification (SFY 2010)

Percent of claims missing data element

- Billing provider taxonomy: 23%
- Rendering provider NPI: 17%
- Rendering provider taxonomy: 73%

DM Programs (SFY 2011)

- Number of MCOs with DMOs: 4
- Asthma DM participation rate: 26%
- Diabetes DM participation rate: 44%

STAR+PLUS

PCP Staffing Ratios (SFY 2011)

- Child PCPs: 838.0 per 1,000 members
- Adult PCPs: 84.2 per 1,000 members

Data Certification (SFY 2010)

Percent of claims missing data element

- Billing provider taxonomy: 11%
- Rendering provider NPI: 23%
- Rendering provider taxonomy: 86%

DM Programs (SFY 2011)

- Number of MCOs with DMOs: 1
- Asthma DM participation rate: 67%
- Diabetes DM participation rate: 69%

STAR Health

PCP Staffing Ratios (SFY 2011)

- Child PCPs: 207.7 per 1,000 members

Data Certification (SFY 2010)

Percent of claims missing data element

- Billing provider taxonomy: 3%
- Rendering provider NPI: 13%
- Rendering provider taxonomy: 84%

DM Programs (SFY 2011)

- Number of MCOs with DMOs: 1
- Asthma DM participation rate: 35%
- Diabetes DM participation rate: N/A

CAHPS® Customer Service (SFY 2010)

Percent of caregivers “usually” or “always” having positive experiences

- Usually/Always: 85%

CHIP

PCP Staffing Ratios (SFY 2011)

- Child PCPs: 22.8 per 1,000 members
- EPO PCPs: 58.7 per 1,000 members

Data Certification (SFY 2010)

Percent of claims missing data element

- Billing provider taxonomy: 27%
- Rendering provider NPI: 17%
- Rendering provider taxonomy: 67%

DM Programs (SFY 2011)

- Number of MCOs with DMOs: 6
- Asthma DM participation rate: 57%
- Diabetes DM participation rate: 54%

CAHPS® Customer Service (SFY 2010)

Percent of caregivers “usually” or “always” having positive experiences

- Usually/Always: 83%

3. Quality of Care

3.1 – Access and Timeliness of Care

The Institute of Medicine defines *access to health care* as “the timely use of personal health services to achieve the best possible outcomes,” and considers *timeliness* to be one of six aims for improving the 21st-century health care system.^{51,52} Many quality of care indicators assess quality only for people who have interacted with the health care system, which can overstate the quality of care received by the general population. Measures of access are therefore critical for understanding whether *all* members in public insurance programs are receiving the care they need, and whether that care is being delivered quickly enough to prevent the onset or exacerbation of illness, complications due to injury, disability, and mortality.

Primary and Specialist Care

The EQRO evaluates the accessibility and timeliness of primary and specialist care for Texas Medicaid/CHIP members using both survey and administrative data. These evaluations focus on aspects of care most vital for positive health outcomes, including access to PCPs, getting appointments with specialists, and having accessible urgent and routine care.

The Texas HHSC Performance Dashboard for Medicaid and CHIP MCOs includes eight CAHPS®-based indicators for adults and children that address different aspects of access to primary and specialist care. **Table 5** lists these indicators, the CAHPS® questions from which they are derived, and their basic method of calculation.

Table 5. HHSC Dashboard - Survey-based Primary/Specialist Care Access Indicators

HHSC Dashboard Indicator	Survey Question ^a	Calculation
Good access to urgent care	When you/your child needed care right away, how often did you get care as soon as you thought it was needed?	Combined responses of "usually" and "always"
Good access to routine care	Not counting times you/your child needed care right away, how often did you get an appointment for health care at a doctor's office or clinic as soon as you thought it was needed?	Combined responses of "usually" and "always"
Good access to specialist referral	How often was it easy to get a referral for a specialist you/your child needed to see?	Combined responses of "usually" and "always"
Good access to special therapies ^b	How often was it easy to get the special therapy you needed from the health plan?	Combined responses of "usually" and "always"
Good access to service coordination ^b	When you needed a service coordinator from your STAR+PLUS health plan to help you, how often did you get service coordination help as soon as you thought you needed?	Combined responses of "usually" and "always"
Good access to behavioral health treatment and counseling ^c	How often was it easy to get treatment or counseling for your child for an emotional, developmental, or behavioral health problem?	Combined responses of "usually" and "always"
No delays for health plan approval ^d	How often did you have problems with delays in your/your child's health care while you waited for approval from the health plan?	Responses of "Never"
No exam room wait > 15 minutes ^d	How often were you/your child taken to the exam room within 15 minutes of the appointment?	Responses of "Always"

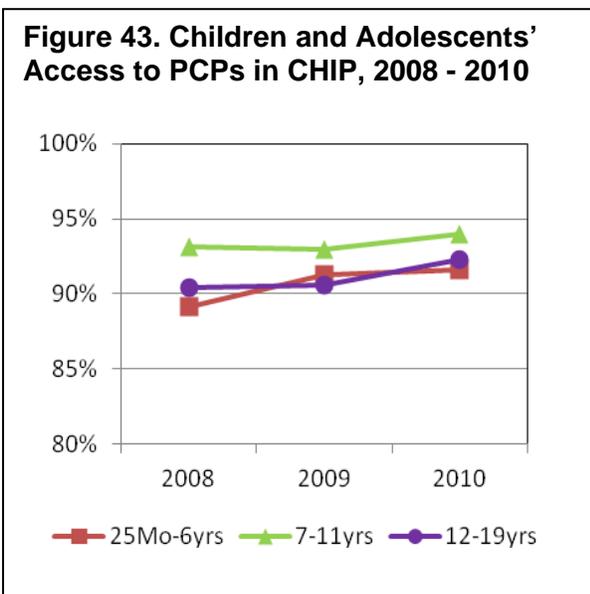
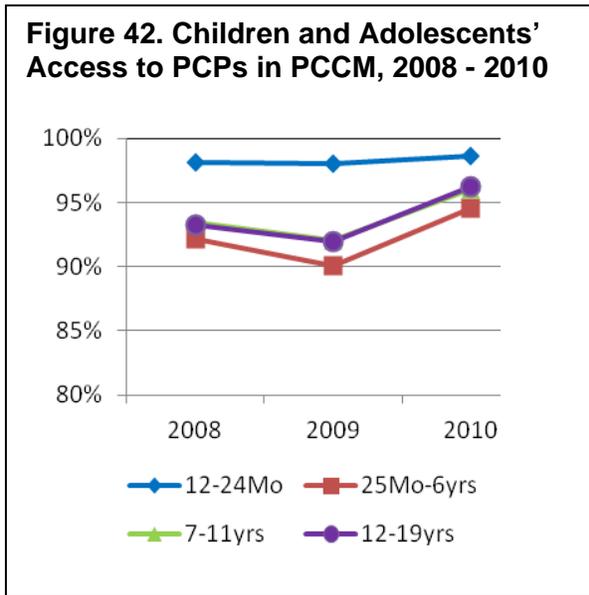
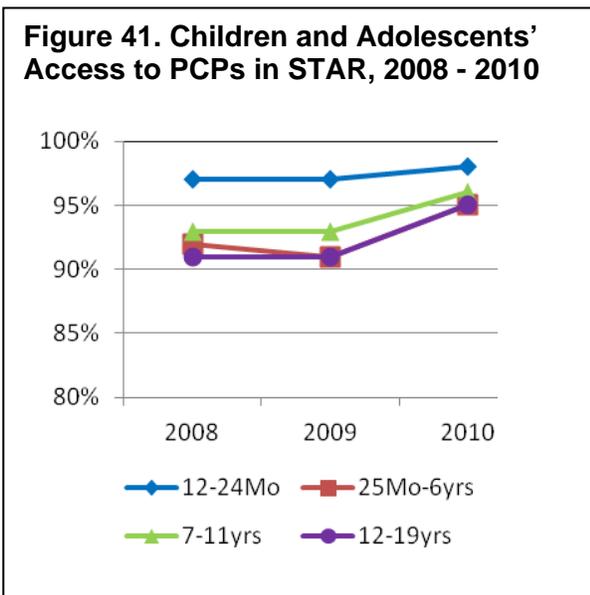
^a All questions are taken from the CAHPS[®] Health Plan Survey for Medicaid Managed Care. Minor changes to wording were made to combine the adult and child versions.

^b These measures only apply to STAR+PLUS.

^c This measure only applies to CHIP.

^d The original "problem-based" response set for these questions (in Version 3.0) was changed to a "frequency-based" response set to correspond with Version 4.0.

Figures 41 to 43 show program-level results for Children and Adolescents' Access to Primary Care Practitioners for STAR, PCCM, and CHIP in SFY 2008, 2009, and 2010.⁵³ This HEDIS®-based measure assesses the percentage of members 12 months to 19 years of age who had a visit with a PCP over the course of one year (for children up to six years old) or two years (for children and adolescents older than six). At HHSC's request, the EQRO lifted the provider constraints for these measures. All other technical specifications for the measure were followed. Thus, while strict HEDIS® specifications call for specialist visits to be excluded from this measure, the results produced for external quality review allow any PCP visit to be counted, regardless of provider type. The resulting rates are therefore slightly inflated, which should be taken into consideration when making comparisons with the corresponding national means.⁵⁴



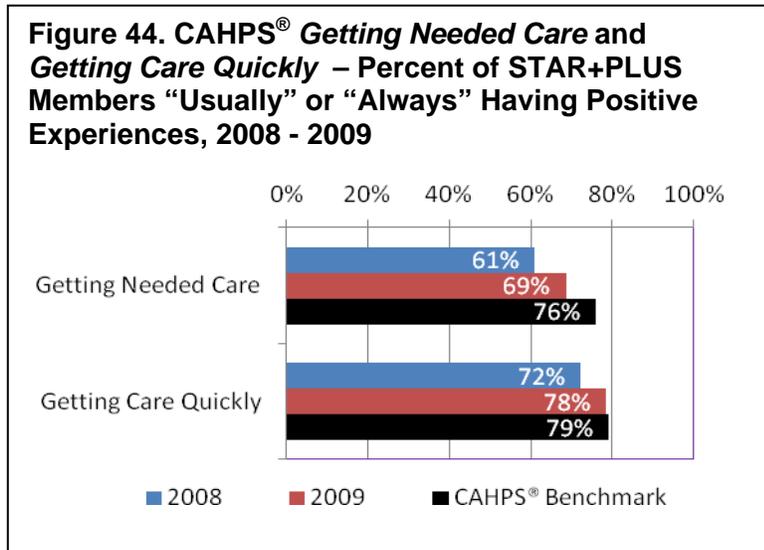
Rates of PCP visits for all age categories generally increased between 2008 and 2010 in all programs, although the actual changes were small. In STAR and PCCM, children 12 to 24 months old had the highest rates, with up to 99 percent of members having a PCP visit. In PCCM, trends for children 25 months to 6 years old were nearly equal to trends for children 7 to 11 years. (As a result, the line for the 7 to 11 year age group is not visible in the figure.) Children 7 to 11 years old and adolescents 12 to 19 years old had slightly lower rates, although by SFY 2010, greater than 90 percent of members in these age groups had visited a PCP.

The Children and Adolescents' Access to PCPs measure was calculated for STAR Health in SFY 2009 and 2010. Trends between the years were assessed for children 12 to 24 months old and 25 months to 6 years old, showing high rates overall and increases by two to three percentage points. The rate for children 12 to 24 months old increased from 96 percent to 99 percent. The rate for children 25 months to 6 years old increased from 94 percent to 96 percent. In SFY 2010, rates of access to PCPs were also high for children 7 to 11 years old (99 percent) and adolescents 12 to 19 years old (98 percent).

Figures 44, 45, and 46 show trends in primary care access measures collected from member surveys for STAR+PLUS (SFY 2008 and 2009), STAR Health (SFY 2009 and 2010), and CHIP (SFY 2008 and 2010). The CAHPS® *Getting Needed Care* and *Getting Care Quickly* composites assess members' experiences and satisfaction with the access and timeliness of general and specialist care they receive through their health plan.

- *Getting Needed Care* combines responses to questions regarding access to: (1) appointments with specialists; and (2) care, tests, or treatment through the health plan.
- *Getting Care Quickly* combines responses to questions regarding the timeliness of: (1) urgent care; and (2) appointments for health care at a doctor's office or clinic.

Respondents had the option to answer "Always," "Usually," "Sometimes," or "Never" to each question. Composite scores are expressed as the percentage of members who "usually" or "always" had positive experiences with the domain in question. Program-level means are

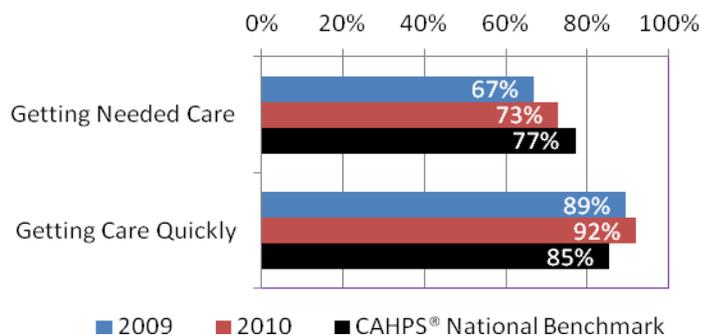


compared to national CAHPS® benchmarks for the Medicaid Health Plan Survey in 2010.⁵⁵ In the absence of national benchmarks, the EQRO considers a score below 75 percent to indicate a need for improvement in the program or MCO to which the score pertains.

In STAR+PLUS, *Getting Needed Care* scores increased considerably from 61 percent in SFY 2008 to 69 percent in SFY 2009. These results were below the CAHPS® national benchmark

of 76 percent for adults. The timeliness of care in STAR+PLUS also improved, with *Getting Care Quickly* scores increasing from 72 percent in 2008 to 78 percent in 2009. The result in SFY 2009 is approximately equal to the CAHPS® national benchmark of 79 percent.

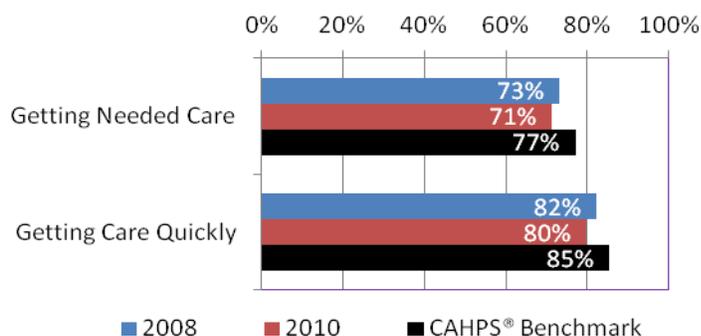
Figure 45. CAHPS® Getting Needed Care and Getting Care Quickly – Percent of STAR Health Caregivers “Usually” or “Always” Having Positive Experiences, 2009 - 2010



In STAR Health, *Getting Needed Care* scores increased from 67 percent in 2009 to 73 percent in 2010. These results were below the CAHPS® national benchmark of 77 percent for children. The timeliness of care in STAR Health improved slightly, with *Getting Care Quickly* scores increasing from 89 percent in 2009 to 92 percent in 2010. The result in SFY 2010 is considerably higher than the CAHPS® national benchmark of 85 percent.

In CHIP, *Getting Needed Care* and *Getting Care Quickly* scores remained fairly constant between 2008 and 2010. Results for both composites in SFY 2010 (71 percent and 80 percent, respectively) were below the corresponding CAHPS® national benchmarks. However, the score for *Getting Care Quickly* (80 percent) is still a positive finding.

Figure 46. CAHPS® Getting Needed Care and Getting Care Quickly – Percent of CHIP Caregivers “Usually” or “Always” Having Positive Experiences, 2008 - 2010



The CAHPS® national benchmarks are determined from the general population of Medicaid members. Lower scores for *Getting Needed Care* in STAR+PLUS, STAR Health,

and CHIP may be due to multiple factors, including insufficient specialist availability within the programs, suggesting the need for MCO quality improvement in this area.

Tables 6 and 7 provide results of survey-based HHSC Dashboard indicators that address access to primary and specialist care for STAR+PLUS in SFY 2008 and 2009, and CHIP in SFY 2008 and 2010.

In STAR+PLUS, results of most indicators increased considerably between 2008 and 2009, and were equal to or above their corresponding HHSC Dashboard standards.

- Good access to urgent care increased from 73 percent to 80 percent, and was above the standard.

- Good access to routine care increased from 71 percent to 78 percent, and was equal to the standard.
- Good access to specialist referral increased slightly from 63 percent to 66 percent, and was slightly above the standard.
- Good access to special therapies increased considerably, from 45 percent to 66 percent, and was well above the standard. This suggests that STAR+PLUS MCOs have been successful in quality improvement efforts aimed at improving access to special therapies.
- Good access to service coordination decreased from 72 percent to 64 percent, although there is no current HHSC Dashboard standard for this indicator. However, the findings are below the 75 percent threshold set by the EQRO to indicate positive experiences.
- Although the percentage of members having no delays for health plan approval also increased (by 11 percentage points), the result in SFY 2009 (44 percent) was still lower than the standard.
- Having no exam room wait greater than 15 minutes in SFY 2009 (30 percent) was also considerably below the standard.

Table 6. Access to Care in STAR+PLUS: HHSC Dashboard Survey Indicators, 2008 - 2009

HHSC Dashboard Indicator	2008	2009	HHSC Standard
Good access to urgent care	73%	80%	76%
Good access to routine care	71%	78%	78%
Good access to specialist referral	63%	66%	62%
Good access to special therapies	45%	66%	47%
Good access to service coordination	72%	64%	N/A
No delays for health plan approval	33%	44%	57%
No exam room wait > 15 minutes	27%	30%	42%

In CHIP, results for HHSC Dashboard Survey indicators of access to primary and specialist care varied considerably according to the specific measure.

- Good access to urgent care was constant between the two years, and was equal to the corresponding standard in SFY 2009 (86 percent).
- Good access to routine care decreased from 79 percent to 71 percent, and was below the standard.
- Good access to specialist referral was constant, at about 70 percent, and considerably greater than the standard.

- Good access to behavioral health treatment and counseling was 62 percent in both years. There is no current HHSC Dashboard standard for this indicator. However, the findings are below the 75-percent threshold set by the EQRO to indicate positive experiences.
- Having no delays for health plan approval increased from 82 percent to 86 percent, and was substantially above the standard.
- Having no exam room wait greater than 15 minutes decreased from 41 percent to 36 percent, although the rate was roughly equal to the standard.

Table 7. Access to Care in CHIP: HHSC Dashboard Survey Indicators, 2008 - 2010

HHSC Dashboard Indicator	2008	2010	HHSC Standard
Good access to urgent care	85%	86%	86%
Good access to routine care	79%	72%	84%
Good access to specialist referral	71%	70%	59%
Good access to BH treatment/counseling	62%	62%	N/A
No delays for health plan approval	82%	86%	65%
No exam room wait > 15 minutes	41%	36%	35%

Potentially Preventable Events

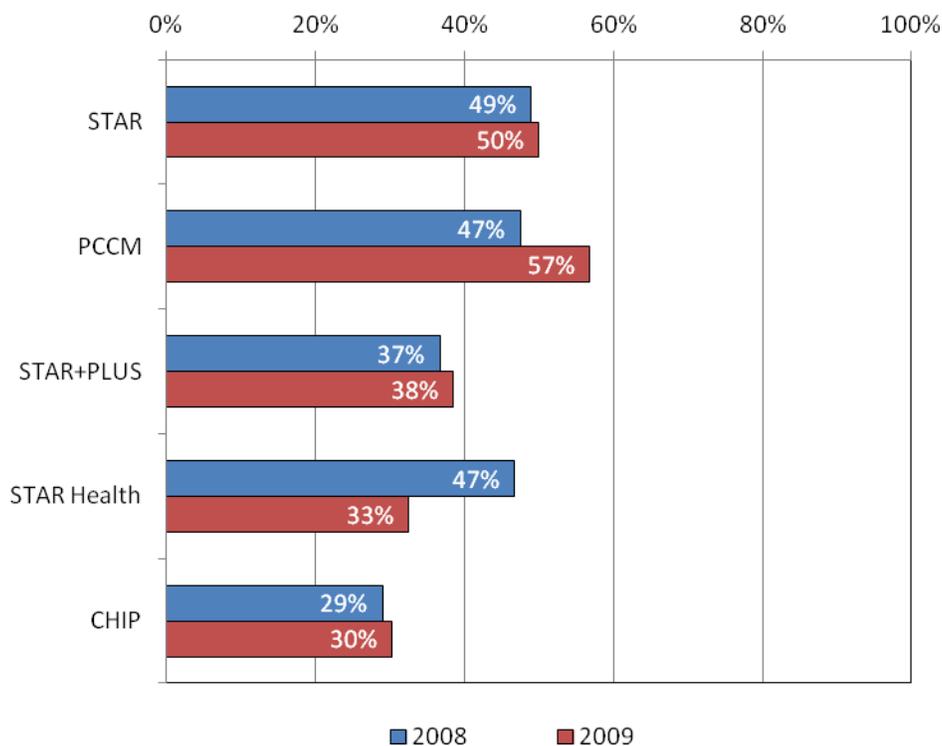
Potentially avoidable visits to the emergency department (ED) and inpatient admissions to the hospital are costly, and present a particularly relevant challenge for the efficient delivery of health services in state Medicaid programs. In 2006, approximately 1,761 U.S. adults per 100,000 had a potentially preventable admission to the hospital, at a cost of \$30.1 billion nationally.⁵⁶ In the same year, the National Association of Community Health Centers estimated that over \$18 billion was wasted on potentially preventable ED visits nationally.⁵⁷ In Texas, the cost of potentially preventable ED visits was estimated at \$1.2 billion.

During SFY 2008 to 2010, the EQRO assessed potentially preventable events using administrative data, identifying members who were admitted to the ED or the hospital for an ambulatory care sensitive condition (ACSC). The AHRQ defines *ambulatory care sensitive conditions* as "conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease."⁵⁸ Emergency department visits and hospital admissions for ACSCs function as indicators of access to and quality of outpatient care. They represent events that could have been avoided with accessible, effective outpatient care for common chronic conditions, such as asthma and diabetes. Unlike most other performance measures in this report, higher values represent lower access to and quality of care.

This section presents three sets of measures used to assess the occurrence of potentially preventable events in Texas Medicaid and CHIP: (1) Percentage of ED Visits With a Primary Diagnosis of an ACSC; (2) AHRQ Pediatric Quality Indicators (PDIs), showing rates of inpatient admissions for selected ACSCs common to children; and (3) AHRQ Prevention Quality Indicators (PQIs), showing rates of inpatient admissions for selected ACSCs common to adults.

Figure 47 depicts trends in the percentage of ED visits with a primary diagnosis of an ACSC for STAR, PCCM, STAR+PLUS, STAR Health, and CHIP in SFY 2008 and 2009. This measure was developed by the EQRO, and has not been validated for use in identifying potentially preventable ED visits. For this reason, the EQRO discontinued reporting of this measure. Starting in SFY 2010, the EQRO has moved to calculating avoidable ED visits using 3M Health Information Systems (HIS) Enhanced Ambulatory Patient Groups (EAPG) software.⁵⁹

Figure 47. Percentage of ED Visits for an ACSC in Texas Medicaid and CHIP, 2008 - 2009

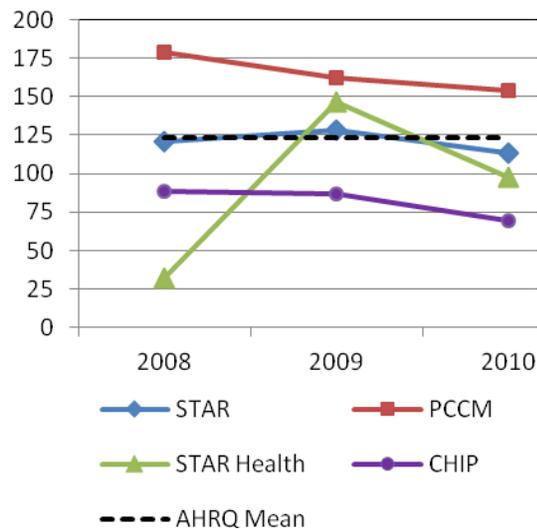


The highest rates of ACSC-related ED visits were observed in PCCM, which showed an increase from 47 percent in 2008 to 57 percent in 2009. Rates in STAR were also high, with approximately half of ED visits having a primary diagnosis of an ACSC for both years. Efforts to reduce the occurrence of potentially preventable ED visits should focus on these two programs.

Rates of ACSC-related ED visits were lower in STAR+PLUS, at 38 percent in SFY 2009, and lowest in CHIP, at 30 percent in SFY 2009. STAR Health showed a marked improvement in performance on this measure, decreasing rates from 47 percent in 2008 to 33 percent in 2009.

Figures 48 to 51 depict trends in AHRQ PDIs for asthma, diabetes short-term complications, gastroenteritis, and urinary tract infection among children in STAR, PCCM, STAR Health, and CHIP, for SFY 2008, 2009, and 2010. Rates are per 100,000 eligible members. The figures include AHRQ-reported national means for comparison.⁶⁰ The AHRQ estimates are based on data collected in 2008 and are area-level indicators, including commercial and Medicaid populations.

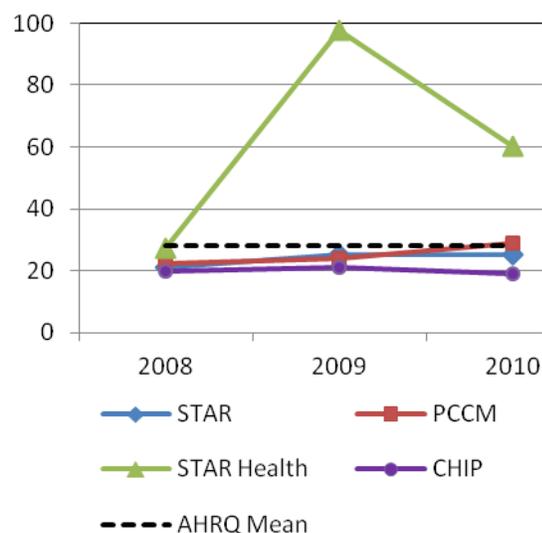
Figure 48. AHRQ Asthma PDI Rates in Texas Medicaid and CHIP, 2008 - 2010



Pediatric inpatient admissions rates for asthma showed a slight decline in STAR, PCCM, and CHIP between 2008 and 2010. The SFY 2010 rate in STAR (113 per 100,000) was similar to the AHRQ national mean of 123 per 100,000. In SFY 2010, the rate in PCCM (154 per 100,000) was greater than the national mean, and the rate in CHIP (70 per 100,000) was lower than the national mean.

Asthma PDI rates in STAR Health fluctuated considerably over the three-year period, increasing from 32 per 100,000 in SFY 2008 to 147 per 100,000 in SFY 2009. The rate declined to 97 per 100,000 in SFY 2010, placing STAR Health below the AHRQ national mean.

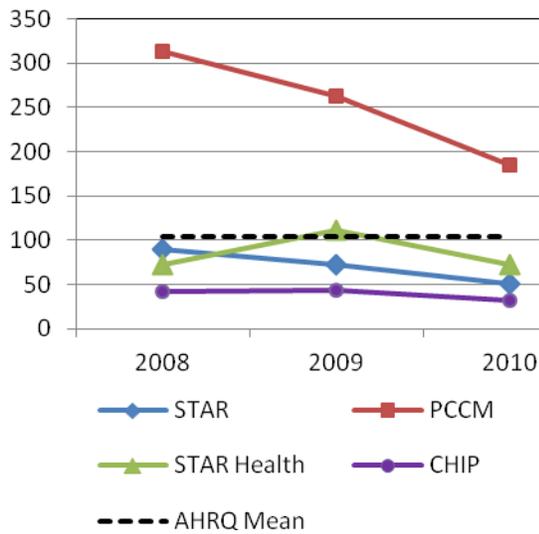
Figure 49. AHRQ Diabetes Short-Term Complications PDI Rates in Texas Medicaid and CHIP, 2008 - 2010



Pediatric inpatient admissions for diabetes short-term complications remained fairly constant across the three-year period in STAR, PCCM, and CHIP. The SFY 2010 rates in STAR (25 per 100,000), PCCM, (29 per 100,000), and CHIP (19 per 100,000) were all equal to or below the AHRQ national mean of 28 per 100,000.

Diabetes short-term complications PDI rates in STAR Health had fluctuations similar to those observed for asthma. The rate increased considerably from 27 per 100,000 in SFY 2008 to 98 per 100,000 in SFY 2009. The SFY 2010 rate of 60 per 100,000 is considerably higher than the AHRQ national mean.

Figure 50. AHRQ Gastroenteritis PDI Rates in Texas Medicaid and CHIP, 2008 - 2010

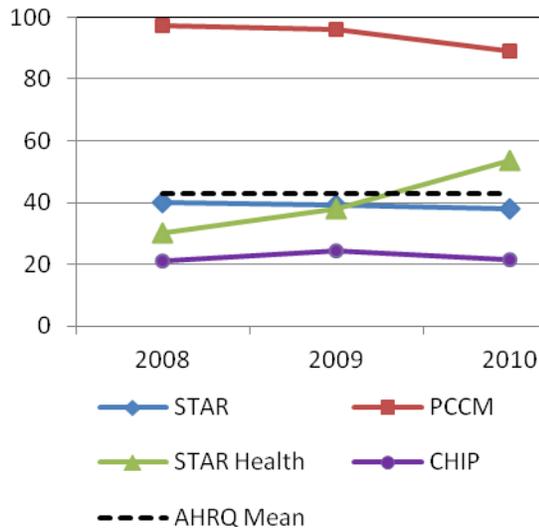


Pediatric inpatient admissions for gastroenteritis showed a slight decline across the three-year period for STAR and CHIP. In SFY 2010, the rates in STAR (50 per 100,000), STAR Health (73 per 100,000), and CHIP (52 per 100,000) were all below the AHRQ national mean of 105 per 100,000.

A substantial decline in gastroenteritis admissions was observed in PCCM, from 313 per 100,000 in SFY 2008 to 185 per 100,000 in SFY 2010. However, the SFY 2010 rate in PCCM was still considerably greater than the AHRQ national mean, by approximately 1.8 times.

Pediatric inpatient admissions for urinary tract infection remained fairly constant across the three-year period in STAR and CHIP. The SFY 2010 rates in both STAR (38 per 100,000) and CHIP (21 per 100,000) were below the AHRQ national mean of 43 per 100,000. STAR Health showed a moderately rising trend in urinary tract infection admissions, from 30 per 100,000 in SFY 2008 to 53 per 100,000 in SFY 2010. The STAR Health rate in 2010 was slightly higher than the AHRQ national mean.

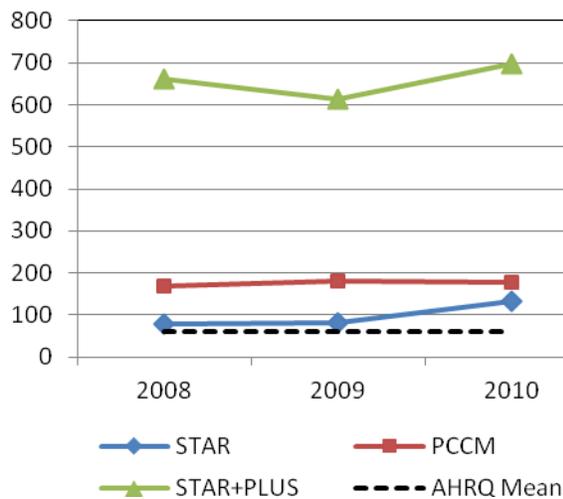
Figure 51. AHRQ Urinary Tract Infection PDI Rates in Texas Medicaid and CHIP, 2008 - 2010



Potentially preventable inpatient admissions for urinary tract infection were uniformly high in PCCM, decreasing slightly from 97 per 100,000 in SFY 2008 to 89 per 100,000 in SFY 2010. The PCCM rate in 2010 was 1.2 times greater than the AHRQ national mean.

Figures 52 to 56 depict trends in AHRQ PQIs for adult asthma, diabetes short-term complications, diabetes long-term complications, uncontrolled diabetes, and hypertension among adults in STAR, PCCM, and STAR+PLUS, for SFY 2008, 2009, and 2010. Rates are per 100,000 eligible members. The figures include AHRQ-reported national means for comparison.⁶¹ The AHRQ estimates are based on data collected in 2008 and are area-level indicators, including commercial and Medicaid populations.

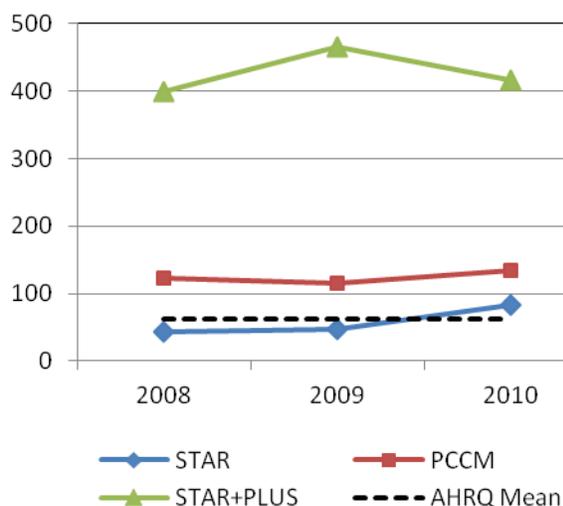
Figure 52. AHRQ Adult Asthma PQI Rates in Texas Medicaid, 2008 - 2010



Inpatient admissions for adult asthma remained relatively constant across the three-year period in STAR and PCCM. SFY 2010 rates for STAR (134 per 100,000) and CHIP (177 per 100,000) were both greater than the AHRQ national rate of 60 per 100,000.

Adult asthma PQI rates fluctuated slightly in STAR+PLUS, and these rates were substantially greater than rates in the other programs or the AHRQ mean. In SFY 2010, the rate of adult asthma inpatient admissions in STAR+PLUS was 696 per 100,000, which is 11.7 times greater than the AHRQ national mean.

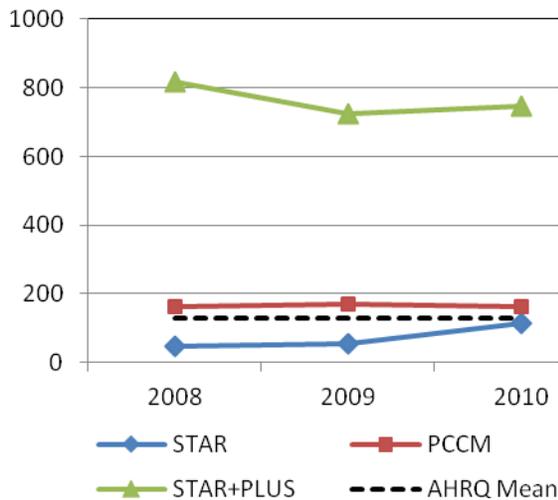
Figure 53. AHRQ Diabetes Short-Term Complications PQI Rates in Texas Medicaid, 2008 - 2010



Adult inpatient admissions for diabetes short-term complications were fairly constant across the three-year period in STAR and PCCM. SFY 2010 rates for STAR (84 per 100,000) and PCCM (133 per 100,000) were slightly greater than the AHRQ national rate of 62 per 100,000.

Potentially avoidable inpatient admissions for diabetes short-term complications in STAR+PLUS fluctuated slightly over the three-year period, and were considerably greater than rates in the other programs or the AHRQ mean. In SFY 2010, the rate in STAR+PLUS was 417 per 100,000, which is 6.8 times greater than the AHRQ national mean.

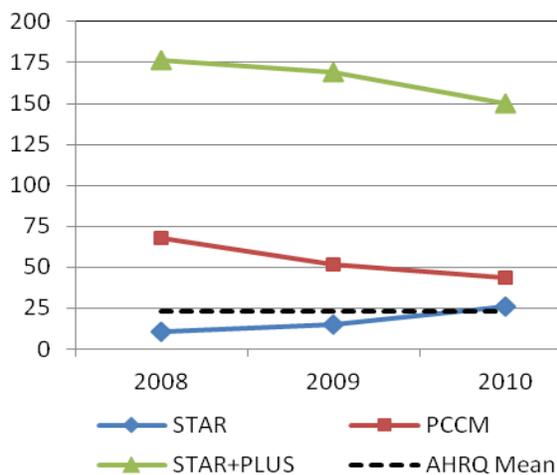
Figure 54. AHRQ Diabetes Long-Term Complications PQI Rates in Texas Medicaid, 2008 - 2010



Adult inpatient admissions for diabetes long-term complications remained constant in PCCM over the three-year period. The SFY 2010 rate for PCCM was 162 per 100,000, which is slightly greater than the AHRQ national rate of 129 per 100,000. Although a slight increase in rates was observed in STAR, the SFY 2010 rate of 113 per 100,000 was lower than the AHRQ mean.

Potentially avoidable inpatient admissions for diabetes long-term complications decreased slightly in STAR+PLUS, to 747 per 100,000. This rate is still substantially higher than rates in the other programs and 5.8 times the AHRQ national mean.

Figure 55. AHRQ Uncontrolled Diabetes PQI Rates in Texas Medicaid, 2008 - 2010



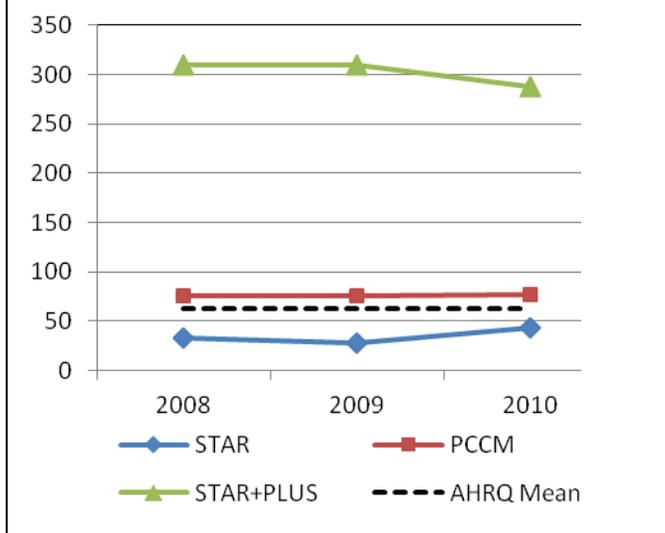
Adult Inpatient admissions for uncontrolled diabetes increased slightly in STAR, and decreased slightly in PCCM and STAR+PLUS over the three-year period. SFY 2010 rates were approximately equal to the AHRQ national mean of 23 per 100,000 in STAR (26 per 100,000), and slightly greater than the national mean in PCCM (44 per 100,000).

While rates of inpatient admissions for uncontrolled diabetes decreased in STAR+PLUS, the SFY 2010 rate of 150 per 100,000 was still 6.5 times the AHRQ national mean.

Overall, findings on potentially avoidable diabetes-related inpatient admissions show a need to improve care for adults

with diabetes living in former PCCM areas, and particularly for those in STAR+PLUS. While the lower health status of STAR+PLUS members may explain the disparities in the program's PQI rates, relative to other Medicaid programs, the potentially preventable admissions accounted for in this analysis are costly and suggest a need for STAR+PLUS MCOs to target improvements in outpatient diabetes care in their QI programs.

Figure 56. AHRQ Hypertension PQI Rates in Texas Medicaid, 2008 - 2010



Adult inpatient admissions for hypertension remained relatively constant in all Medicaid programs during the three-year period. The lowest rates were observed in STAR, which in SFY 2010 had a hypertension PQI rate of 43 per 100,000. Rates in STAR were lower than the AHRQ national mean of 62 per 100,000, while rates in PCCM were approximately equal to the national mean.

Although rates of inpatient admissions for hypertension decreased slightly in STAR+PLUS, the SFY 2010 rate of 288 per 100,000 was still 4.6 times the AHRQ national mean for this measure.

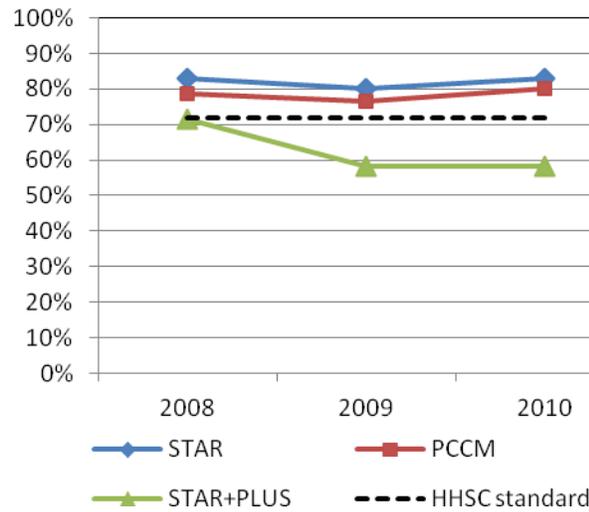
Prenatal and Postpartum Care

The EQRO assesses women's access to prenatal and postpartum care in Texas Medicaid using a modified version of the HEDIS® measure, Prenatal and Postpartum Care. This measure provides the percentage of women who had live births during the measurement period who: (1) received a prenatal care visit in their first trimester (or within 42 days of enrollment in their MCO); and (2) received a postpartum visit on or between 21 and 56 days after delivery.

At HHSC's request, the EQRO lifted the provider constraints for this measure. All other technical specifications for the measure were followed. Thus, while strict HEDIS® specifications require visits to be with an OB/GYN practitioner, midwife, family practitioner, or other PCP, the results produced for external quality review allow any provider type to be counted. The resulting rates are therefore slightly inflated, which should be taken into consideration when making comparisons with the corresponding national means.⁶² The Prenatal and Postpartum Care measures are also HHSC Performance Dashboard indicators for STAR and STAR+PLUS.

Figure 57 provides trends in the percentage of women who had live births in STAR, PCCM, and STAR+PLUS who received prenatal care within their first trimester, in SFY 2008, 2009, and 2010. Rates of timely prenatal care were consistently above the HHSC Dashboard standard of 72 percent in STAR (83 percent in 2010) and PCCM (80 percent in 2010). The rate of timely prenatal care for women in STAR+PLUS was lower, and decreased from 71 percent in SFY 2008 to 58 percent in SFY 2010. This finding suggests that STAR+PLUS MCOs should identify reasons for the decrease in timeliness of prenatal care and regularly monitor this indicator.

Figure 57. Timeliness of Prenatal Care in Texas Medicaid, 2008 - 2010



The Prenatal and Postpartum Care measure was run for STAR Health in SFY 2009 and 2010. The rate of timely prenatal care in STAR Health was lower than rates in STAR or PCCM, although it did show an increase from 53 percent in SFY 2008 to 58 percent in SFY 2009. Given the special health care needs of STAR Health members, this finding suggests that Superior (the exclusive MCO for STAR Health) should identify reasons for low timeliness of prenatal care in this population and regularly monitor this indicator.

Figure 58. Postpartum Care in Texas Medicaid, 2008 - 2010

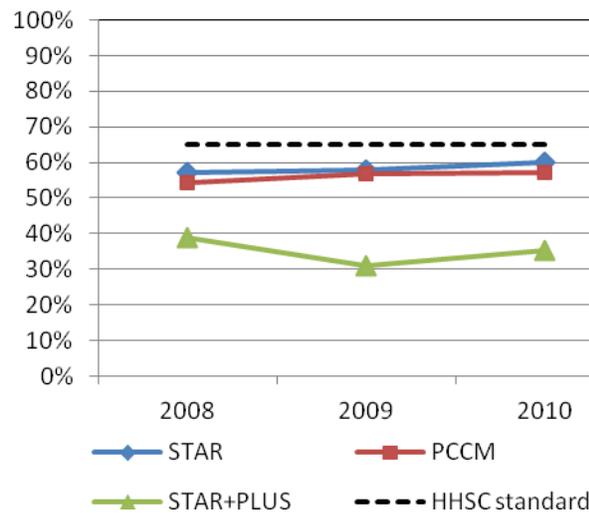


Figure 58 provides trends in the percentage of women who had live births in STAR, PCCM, and STAR+PLUS who received a postpartum care visit on or between 21 and 56 days after delivery, in SFY 2008, 2009, and 2010. Rates of postpartum care were consistently below the HHSC Dashboard standard of 65 percent in all three programs. Rates in SFY 2010 were approximately equal between STAR (60 percent) and PCCM (57 percent), and neither program showed any notable changes over the three-year period. The rate of postpartum care was considerably lower in STAR+PLUS than in the other programs, at 35 percent in SFY 2010.

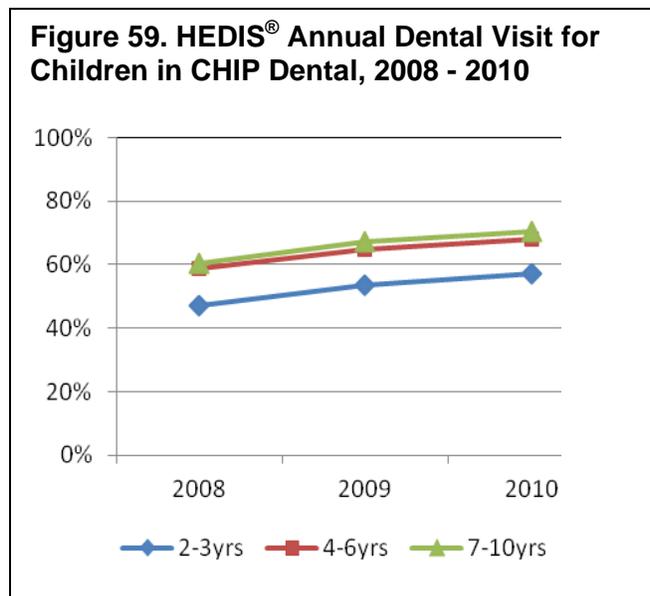
The rate of postpartum care in STAR Health was also lower than rates in STAR

or PCCM, although it did show an increase from 46 percent in SFY 2008 to 50 percent in SFY 2010. Together, these findings suggest there is need for improved access to postpartum care in all Texas Medicaid programs – particularly in STAR Health and STAR+PLUS.

Dental Care

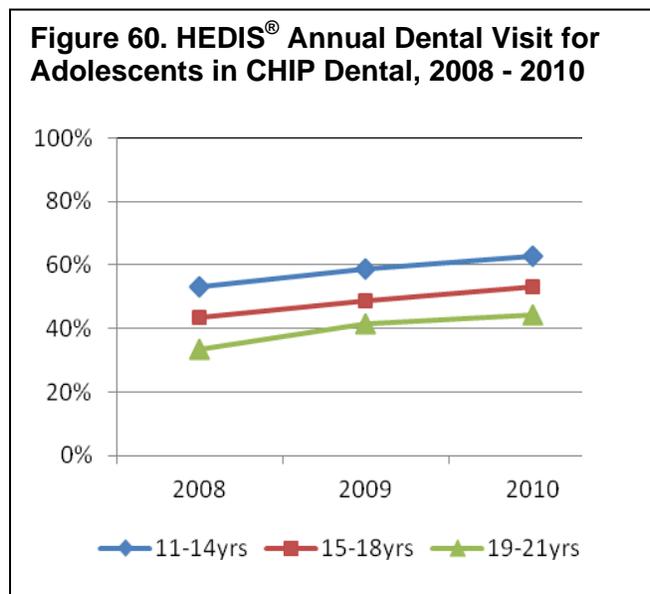
The EQRO measures access to dental care in CHIP Dental using the HEDIS® Annual Dental Visit measure, which provides the percentage of members 2 to 18 years of age who had at least one dental visit during the measurement year. Specifications for this measure allow separate rates to be calculated for five age groups, as well as an overall rate.

Figures 59 and 60 depict trends in access to dental care in CHIP Dental for children and adolescents, respectively, in SFY 2008, 2009, and 2010. Rates for all age groups increased by approximately 10 percentage points between SFY 2008 and 2010.



Overall, the rate of annual dental visits in CHIP Dental increased from 53 percent in SFY 2008 to 63 percent in SFY 2010, with rates in all years exceeding the corresponding HEDIS® national means (46 percent in 2010).

Among children, members 2 to 3 years old had the lowest rates of dental visits – at 57 percent in SFY 2010. However, the rate for this age group in 2010 was considerably higher than the HEDIS® national mean of 29 percent. Rates for children 4 to 6 years old and children 7 to 10 years old were higher, and approximately equal in SFY 2010 – at 68 percent and 71 percent, respectively.



Adolescents had greater differences among the age groups in rates of dental visits. Across all three years, members 11 to 14 years old had the highest rates (at 63 percent in SFY 2010), followed by adolescents 15 to 18 years old (at 53 percent in SFY 2010). Members 19 to 21 years old, who were phasing out of CHIP due to age requirements, had the lowest rates (at 44 percent in SFY 2010). All dental visit rates for adolescents in CHIP Dental exceeded the corresponding HEDIS® national means.

Program Profiles – Access and Timeliness, SFY 2010

STAR

Children/adolescents' access to PCPs

- 12 – 24 months: 98%
- 25 months – 6 years: 95%
- 7 to 11 years: 96%
- 12 to 19 years: 95%

Prenatal and postpartum care access

- Prenatal: 83%
- Postpartum: 60%

AHRQ PDIs (admissions per 100,000)

- Asthma: 113
- Diabetes ST complications: 25
- Gastroenteritis: 50
- Urinary tract infection: 38

AHRQ PQIs (admissions per 100,000)

- Adult asthma: 134
- Diabetes ST complications: 84
- Diabetes LT complications: 113
- Uncontrolled diabetes: 26
- Hypertension: 43

PCCM

Children/adolescents' access to PCPs

- 12 – 24 months: 99%
- 25 months – 6 years: 94%
- 7 to 11 years: 96%
- 12 to 19 years: 96%

Prenatal and postpartum care access

- Prenatal: 80%
- Postpartum: 57%

AHRQ PDIs (admissions per 100,000)

- Asthma: 154
- Diabetes ST complications: 29
- Gastroenteritis: 185
- Urinary tract infection: 89

AHRQ PQIs (admissions per 100,000)

- Adult asthma: 177
- Diabetes ST complications: 133
- Diabetes LT complications: 162
- Uncontrolled diabetes: 44
- Hypertension: 77

STAR+PLUS

Prenatal and postpartum care access

- Prenatal: 58%
- Postpartum: 35%

AHRQ PDIs (admissions per 100,000)

- Asthma: 127
- Diabetes ST complications: 28
- Gastroenteritis: 113
- Urinary tract infection: 75

AHRQ PQIs (admissions per 100,000)

- Adult asthma: 696
- Diabetes ST complications: 417
- Diabetes LT complications: 747
- Uncontrolled diabetes: 150
- Hypertension: 288

CHIP

Children/adolescents' access to PCPs

- 25 months – 6 years: 92%
- 7 to 11 years: 94%
- 12 to 19 years: 92%

AHRQ PDIs (admissions per 100,000)

- Asthma: 67
- Diabetes ST complications: 19
- Gastroenteritis: 32
- Urinary tract infection: 21

CAHPS® Getting Needed Care: 71%

CAHPS® Getting Care Quickly: 80%

HHSC Dashboard survey indicators

- Good access to urgent care: 86%
- Good access to routine care: 72%
- Good access to specialist referral: 70%
- Good access to BH treatment: 62%
- No delays for an approval: 86%
- No exam room wait > 15 min.: 36%

STAR Health

Children/adolescents' access to PCPs

- 12 – 24 months: 99%
- 25 months – 6 years: 95%
- 7 to 11 years: 99%
- 12 to 19 years: 98%

Prenatal and postpartum care access

- Prenatal: 58%
- Postpartum: 50%

AHRQ PDIs (admissions per 100,000)

- Asthma: 97
- Diabetes ST complications: 60
- Gastroenteritis: 73
- Urinary tract infection: 53

3.2 – Effectiveness of Care

The Institute of Medicine defines *effectiveness* as a quality of care that is "based on the use of systematically acquired evidence to determine whether an intervention, such as a preventive service, diagnostic test, or therapy, produces better outcomes than alternatives – including the alternative of doing nothing."⁶³ Ensuring that care is effective is one of six aims outlined by the Institute of Medicine for improving the 21st-century health care system and requires that services based on scientific knowledge be provided to all who could benefit.

The EQRO evaluates the effectiveness of care in Texas Medicaid and CHIP using a number of HEDIS[®] measures, including measures that assess rates of cervical cancer screening, appropriate treatment for children with pharyngitis, the effective management of chronic diseases such as asthma, diabetes, and hypertension, and care for children and adults with behavioral health conditions. Most of the measures presented in this section are also HHSC Performance Dashboard Indicators for STAR, CHIP, and/or STAR+PLUS.

The majority of these measures provide an indirect assessment of effectiveness. Rather than assessing health outcomes, these measures assess compliance with evidence-based practices that are known to be effective in the clinical setting. Therefore, if a program or MCO is compliant with one of these measures, then the care delivered to its members is considered to be appropriate and effective.

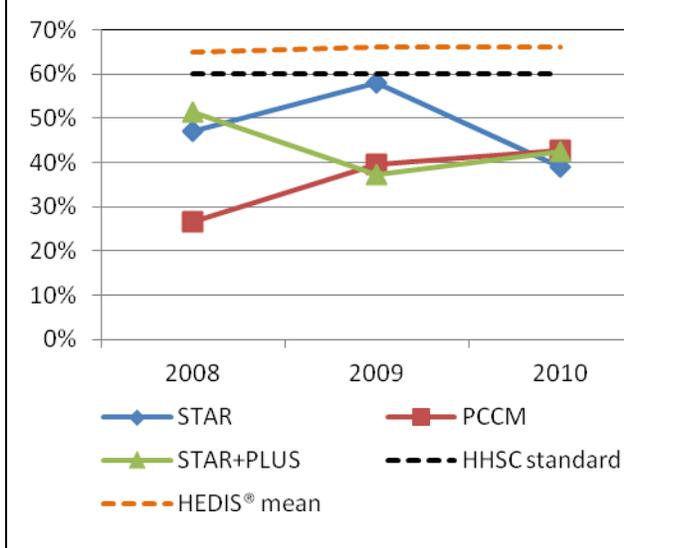
Preventive Care – Cervical Cancer Screening

Since the introduction of Papanicolaou (Pap) smears as a standard screening practice for cervical cancer, the incidence of cervical cancer in the United States has dropped considerably – from 32 cases per 100,000 women in the 1940s to 8.3 cases per 100,000 women in the 1980s.⁶⁴ The Pap test is known to be an effective screening practice for cervical cancer, and is recommended as an annual exam for women 21 years and older by the American Cancer Society, the American Congress of Obstetricians and Gynecologists, and other respected professional associations.

To assess whether women of the appropriate age in STAR, PCCM, and STAR+PLUS are receiving their recommended screening for cervical cancer, the EQRO uses the HEDIS[®] Cervical Cancer Screening measure. This measure assesses the percentage of women 21 to 64 years of age who received one or more Pap tests to screen for cervical cancer during the measurement year.

Figure 61 provides results for the HEDIS[®] Cervical Cancer Screening measure for STAR, PCCM, and STAR+PLUS in SFY 2008, 2009, and 2010 – showing comparisons to the HHSC Dashboard Standard and HEDIS[®] national means for this measure. Overall, rates of cervical cancer screening were low in all three programs, with rates consistently below both the HHSC Dashboard Standard (60 percent) and HEDIS[®] national mean (66 percent in SFY 2010) over the three-year period.

Figure 61. HEDIS® Cervical Cancer Screening in STAR, PCCM, and STAR+PLUS, 2008 - 2010



In STAR and PCCM, rates of cervical cancer screening increased considerably between SFY 2008 and SFY 2009. In STAR, this rate dropped to 39 percent in SFY 2010, which is the lowest this rate has been in STAR over the three-year period. In PCCM, the rate continued to increase in SFY 2010, although the PCCM rate (43 percent) was similar to that observed in STAR.

STAR+PLUS showed an overall decline in rates of cervical cancer screening over the three-year period, from 51 percent in SFY 2008 to 42 percent in SFY 2010. Rates in all programs suggest a need for statewide improvement in cervical cancer screening rates for women in Medicaid.

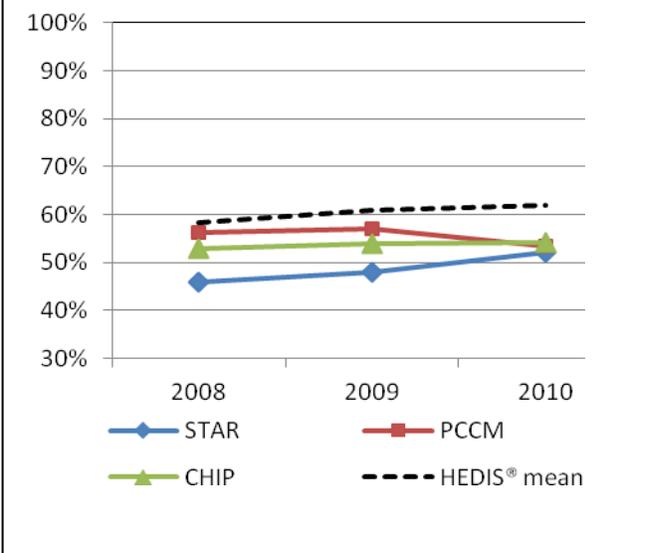
Primary Care – Treatment for Children with Pharyngitis

Pharyngitis is a common childhood complaint that can be caused by a number of viral and bacterial agents, including the Group A Streptococcus (GAS) bacteria, which can include complications of acute rheumatic fever, peritonsillar abscess and rheumatic heart disease.⁶⁵ One popular approach to the treatment of pharyngitis is the prescription of antibiotics without testing, under the assumption that no case of GAS pharyngitis will go untreated. However, this approach raises concerns regarding the overuse and misuse of antibiotics, recognizing that only 10 percent to 30 percent of pharyngitis cases are caused by GAS. Many government and professional associations, including the CDC and the AAP, recommend that all cases of childhood pharyngitis be tested for GAS, and that antibiotics be used only if the GAS test is positive.⁶⁶

To assess the appropriateness of treatment for pediatric pharyngitis in Texas Medicaid and CHIP, the EQRO uses the HEDIS® Appropriate Testing for Children with Pharyngitis measure. This measure assesses the percentage of children 2 to 18 years of age who were diagnosed with pharyngitis, dispensed an antibiotic and received a GAS test for the episode.

Figure 62 provides results for the HEDIS® Appropriate Testing for Children With Pharyngitis measure for STAR, PCCM, and CHIP in SFY 2008, 2009, and 2010 – showing comparisons with the HEDIS® national means for this measure.⁶⁷ Overall, rates of appropriate testing for pediatric pharyngitis were low in all three programs, with rates consistently below the HEDIS® national mean (62 percent in SFY 2010) over the three-year period.

Figure 62. HEDIS® Appropriate Testing for Children With Pharyngitis in STAR, PCCM, and CHIP, 2008 - 2010



Rates in all three programs changed little over the three-year period, and by SFY 2010, these rates were approximately the same – 52 percent in STAR, 53 percent in PCCM, and 54 percent in CHIP.

This measure was also calculated for STAR Health on SFY 2009 and 2010 data. In STAR Health, appropriate testing for children with pharyngitis remained constant between the two years – at 48 percent. This result is considerably lower than the HEDIS® national mean of 62 percent for 2010.

Texas Medicaid and CHIP rates were on average 10 percentage points below the HEDIS® national means for this measure. These findings suggest there is a

statewide need to encourage MCO network providers to follow the most up-to-date guidelines for the appropriate prescription of antibiotics in children.

Management of Chronic Disease – Asthma

Asthma is a prevalent chronic condition affecting both children and adults in Texas Medicaid and CHIP, and is one of many chronic conditions that contribute substantially to rates of potentially avoidable ED and hospital admissions. The National Asthma Education and Prevention Program (NAEPP) recommends that patients with persistent asthma be prescribed long-term control medications for daily use to achieve and maintain control of their symptoms.⁶⁸

To assess the appropriateness of asthma medication use in Texas Medicaid and CHIP, the EQRO uses the HEDIS® Use of Appropriate Medications for People with Asthma measure. This measure assesses the percentage of members 5 to 56 years old who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement period. This measure is monitored on the HHSC Performance Dashboard using three age groups: (1) 5 to 9 years old; (2) 10 to 17 years old; and (3) 18 to 56 years old.⁶⁹

Figure 63 provides the percentage of children and adolescents with persistent asthma in STAR who were appropriately prescribed medication in SFY 2008, 2009, and 2010 – showing comparisons to the available HHSC Dashboard Standard for this measure.^{70,71} Over the three-year period, rates of appropriate treatment for asthma were consistently high among children and adolescents in STAR. In SFY 2010, the rate was 96 percent for children 5 to 9 years old, and 94 percent for adolescents 10 to 17 years old. The rate for adolescents substantially exceeded the HHSC Dashboard Standard of 57 percent, by approximately 1.7 times.⁷²

Figure 63. HEDIS® Use of Appropriate Medications for People With Asthma in STAR, 2008 - 2010

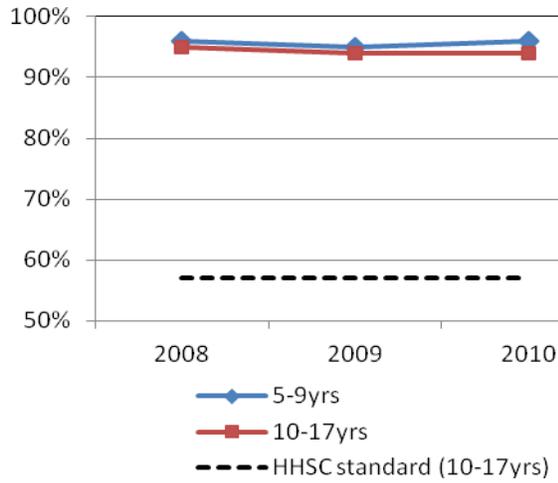
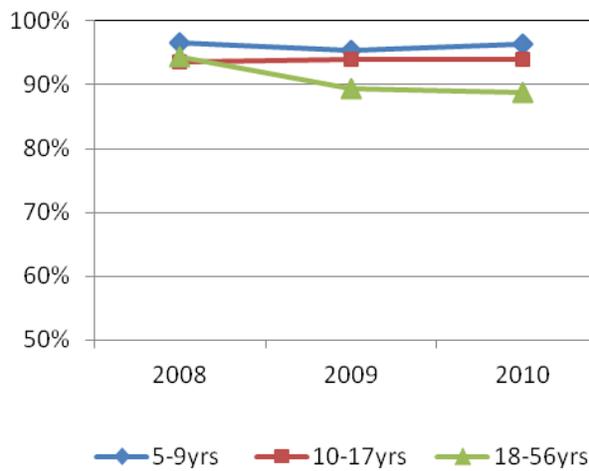


Figure 64 provides the percentage of children, adolescents, and adults with persistent asthma in PCCM who were appropriately prescribed medication in SFY 2008, 2009, and 2010. There are no HHSC Dashboard Standards for PCCM for comparison.

Over the three-year period, rates of appropriate treatment for asthma were consistently high among children and adolescents in PCCM. In SFY 2010, the rate was 96 percent for children 5 to 9 years old, and 94 percent for adolescents 10 to 17 years old. For adults 18 to 56 years old, the rate of appropriate care for asthma dropped slightly, from 94 percent in SFY 2008 to 89 percent in SFY 2010.

Figure 64. HEDIS® Use of Appropriate Medications for People With Asthma in PCCM, 2008 - 2010



Results for this measure in STAR+PLUS were calculated only on SFY 2010 data, and only for the 18 to 56 year old age group.⁷³ The rate of appropriate asthma treatment among adults in STAR+PLUS (91 percent) was considerably higher than the HHSC Dashboard Standard of 62 percent, by approximately 1.5 times.

In CHIP, low denominators (less than 30 members) prevented the EQRO from reporting results for this measure in SFY 2008 for the child and adolescent age groups, or in SFY 2009 for the child age group. Between SFY 2009 and 2010, adolescents 10 to 17 years old had consistently high rates of appropriate treatment for asthma, at approximately 95

percent in both years. This rate is 2 times greater than the HHSC Dashboard Standard of 57 percent. In SFY 2010, the rate among children 5 to 9 years old was also considerably high (97 percent).

Management of Chronic Disease – Diabetes

Diabetes is a prevalent chronic condition among both children and adults in Texas Medicaid and CHIP, and is one of many chronic conditions that contribute substantially to rates of potentially avoidable ED and hospital admissions. The American Diabetes Association has established a comprehensive set of guidelines for the management of diabetes, which include: (1) goals for glycemic control (HbA1c < 7.0 percent), blood pressure control (BP < 130/80 mm Hg), and lipid control (LDL-C < 100 mg/dL); (2) recommendations for neuropathy screening and treatment; and (3) recommendations for managing retinopathy, which include annual eye exams.⁷⁴

To assess the appropriateness and effectiveness of diabetes care in Texas Medicaid, the EQRO uses the HEDIS[®] Comprehensive Diabetes Care measure. This measure provides the percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) who had testing for hemoglobin A1c (HbA1c), screening for LDL-C, eye exams, medical attention for nephropathy, and various control thresholds for HbA1c, LDL-C, and blood pressure during the measurement period. The EQRO typically calculates rates for five of these sub-measures using either administrative or hybrid specifications, as shown below.

<u>HEDIS[®] Comprehensive Diabetes Care measure</u>	<u>Specifications</u>
HbA1c testing	Administrative
Eye exam (retinal) performed	Administrative
LDL-C screening	Administrative
Medical attention for nephropathy	Administrative
HbA1c poor control (>9.0 percent)	Hybrid (STAR+PLUS only)

Figure 65. HEDIS[®] Comprehensive Diabetes Care (HbA1c Testing) in STAR, PCCM, and STAR+PLUS, 2008 - 2010

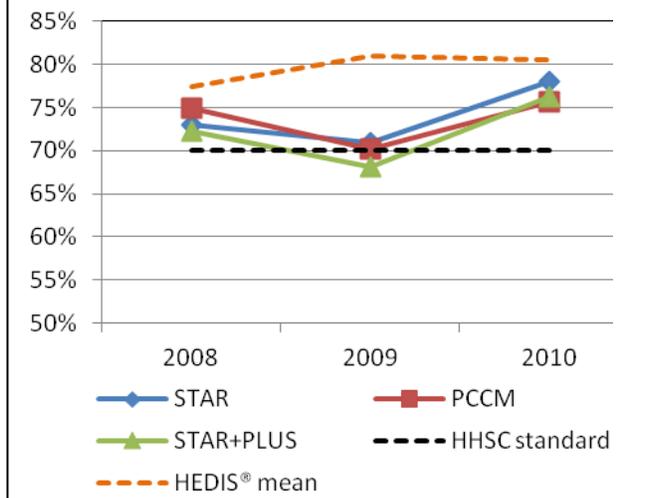


Figure 65 provides trends in HbA1c testing for STAR, PCCM, and STAR+PLUS in SFY 2008, 2009, and 2010 -- showing comparisons to the HHSC Dashboard Standard and HEDIS[®] national means for this measure.⁷⁵ In all three programs, rates of HbA1c testing dropped from SFY 2008 to 2009, and then increased in SFY 2010 to 78 percent in STAR, and 76 percent in both PCCM and STAR+PLUS. These rates were well above the HHSC Dashboard Standard of 70 percent for this measure, but slightly below the HEDIS[®] national mean of 81 percent

Figure 66. HEDIS® Comprehensive Diabetes Care (Eye Exam) in STAR, PCCM, and STAR+PLUS, 2008 - 2010

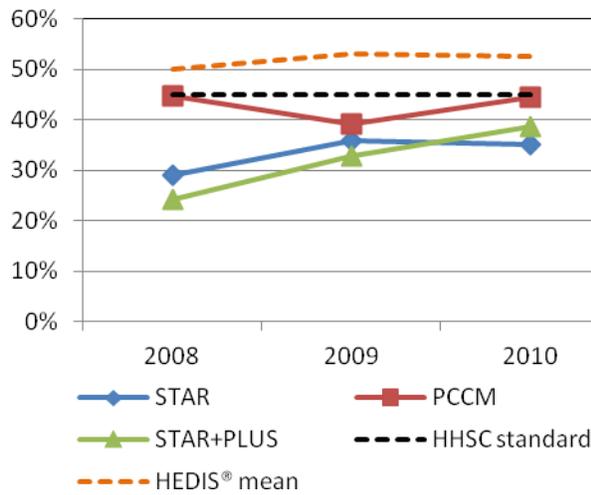


Figure 66 provides trends in diabetic eye exams for STAR, PCCM, and STAR+PLUS in SFY 2008, 2009, and 2010 – showing comparisons to the HHSC Dashboard Standard and HEDIS® national means for this measure. In all three programs, rates were generally below both standards. STAR showed a slight increase from 29 percent in SFY 2008 to 35 percent in SFY 2010. PCCM showed no meaningful change in rates, with 45 percent of diabetic members having eye exams in SFY 2010.

In STAR+PLUS, rates of eye exams increased consistently, from 24 percent in SFY 2008 to 39 percent in SFY 2010. This finding may be the result of successful efforts on the part of STAR+PLUS MCOs toward improving rates of eye exams among their diabetic members.

Figure 67. HEDIS® Comprehensive Diabetes Care (LDL-C Screening) in STAR, PCCM, and STAR+PLUS, 2008 - 2010

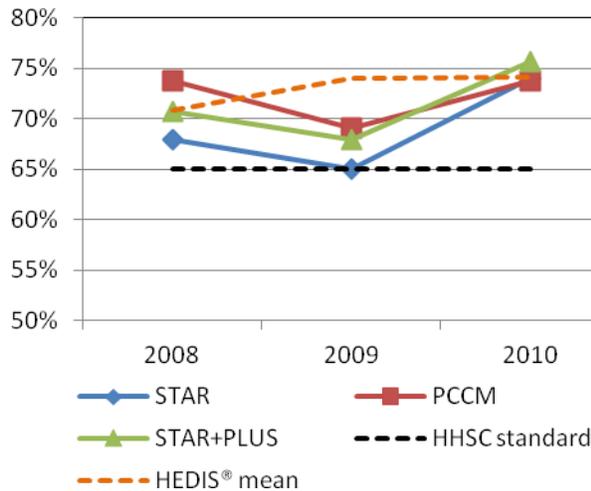
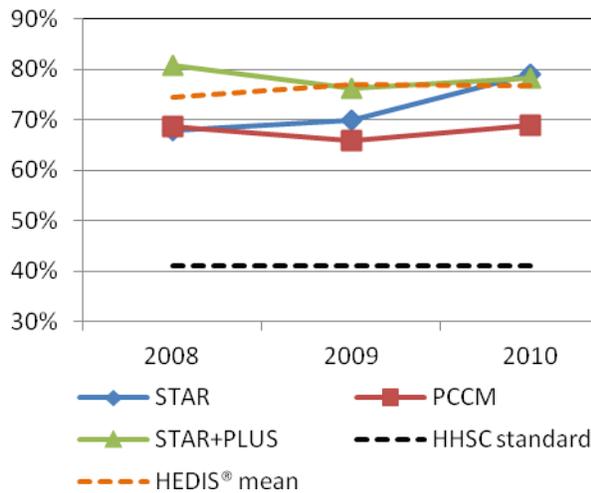


Figure 67 provides trends in LDL-C screening for STAR, PCCM, and STAR+PLUS in SFY 2008, 2009, and 2010 – showing comparisons to the HHSC Dashboard Standard and HEDIS® national means for this measure.⁷⁶ In all three programs, rates of LDL-C screening dropped from SFY 2008 to 2009, and then increased in SFY 2010 to 74 percent in STAR and PCCM, and 76 percent in STAR+PLUS. These rates were well above the HHSC Dashboard Standard of 65 percent for this measure, and approximately equal to the HEDIS® national mean of 74 percent.

Figure 68 provides trends in medical attention for nephropathy for STAR, PCCM, and STAR+PLUS in SFY 2008, 2009, and 2010 – showing comparisons to the HHSC Dashboard Standard and HEDIS® national means for this measure.⁷⁷ In all programs, rates for this measure substantially exceeded the HHSC Dashboard Standard of 41 percent. The rate of medical attention for nephropathy in STAR increased consistently, from 68 percent in SFY 2008 to 79 percent in SFY 2010. The rate in PCCM remained fairly constant during the three-year period, at 69 percent in SFY 2010. STAR+PLUS showed a slight decrease in rates, from 81 percent in

Figure 68. HEDIS® Comprehensive Diabetes Care (Nephropathy Monitored) in STAR, PCCM, and STAR+PLUS, 2008 - 2010



SFY 2008 to 78 percent in SFY 2010. However, the SFY 2010 rates for both STAR and STAR+PLUS were approximately equal to the national HEDIS® mean of 77 percent.

This report does not present findings from the EQRO’s hybrid/record review study on HbA1c poor control (>9.0 percent). Results will be available at a later date.

Behavioral Health Care – Hospitalizations for Mental Illness

Patients who have been recently discharged after hospitalization for mental illness are at particular risk of readmission, often because of poor adherence to prescribed medications, or from efforts to contain behavioral health care costs such as reducing the initial length of stay.^{78,79} These readmissions, which are potentially avoidable, lead to reduced health outcomes and higher health care costs. For patients admitted to the hospital for mental illness, follow-up care after discharge supports their transition back to the community and often reduces the risk of readmission. Ensuring that these patients receive proper follow-up care can help to improve the overall quality of behavioral health care.

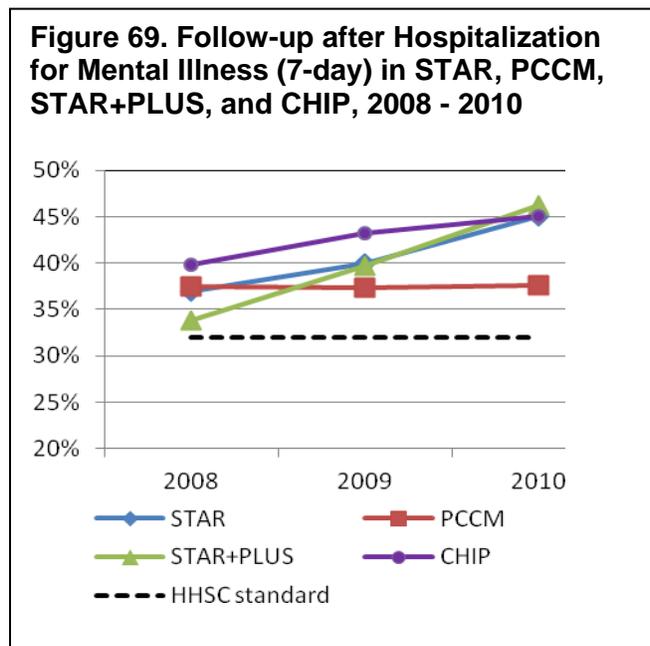
The EQRO uses two measures to assess the effectiveness of post-discharge practices for Texas Medicaid and CHIP members admitted to the hospital for mental illness:

- 1) **Follow-up After Hospitalization for Mental Illness.** This is a modified version of a HEDIS® measure with the same name. It assesses the percentage of members six years of age or older who were hospitalized for mental illness and who had an outpatient visit, an intensive outpatient encounter, or a partial hospitalization with a physician provider during the measurement period. It includes two sub-measures, which assess follow-up at 7 days and 30 days after discharge, respectively.
- 2) **Readmission within 30 Days after an Inpatient Stay for Mental Health.** This measure, developed by the EQRO, represents the percentage of members having a hospital stay for mental health who were readmitted to the hospital within 30 days of discharge. Unlike other measures discussed in this report, higher values of readmission indicate poorer quality of care.

Trends between SFY 2008 and 2010 for Follow-Up after Hospitalization for Mental Illness are presented in:

- **Figure 69** - 7-day follow-up for STAR, PCCM, STAR+PLUS, and CHIP
- **Figure 70** - 7-day follow-up for STAR Health and NorthSTAR
- **Figure 71** - 30-day follow-up for STAR, PCCM, STAR+PLUS, and CHIP
- **Figure 72** - 30-day follow-up for STAR Health and NorthSTAR

At HHSC’s request, the EQRO lifted the provider constraints for this measure. All other technical specifications were followed. Thus, while strict HEDIS® specifications require visits to be with a mental health practitioner, the results produced for external quality review allow any provider type to be counted. The resulting rates are therefore slightly inflated, which should be taken into consideration when making comparisons with the corresponding national means.⁸⁰

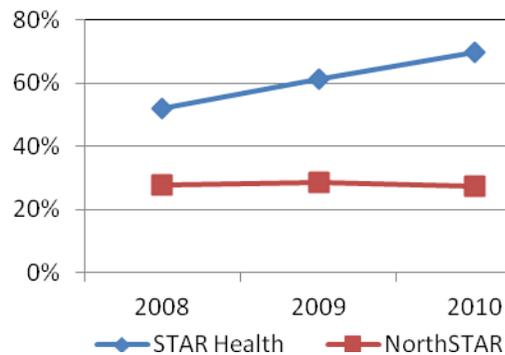


In all programs, follow-up within seven days of discharge from a hospitalization for mental illness was consistently above the HHSC standard of 32 percent for this measure. STAR, STAR+PLUS, and CHIP all showed substantial increases in rates of 7-day follow-up during the three-year period. The highest rates were observed in CHIP, which increased from 40 percent in SFY 2008 to 45 percent in SFY 2010. The greatest increase was observed in STAR+PLUS, which increased from 34 percent in SFY 2008 to 46 percent in SFY 2010. The rate of 7-day follow-up remained fairly constant in PCCM, at 38 percent in SFY 2010.

Follow-up within seven days of hospitalization was considerably higher in STAR Health than in any other program. The rate of 7-day follow-up in STAR Health increased from 52 percent in SFY 2008 to 70 percent in SFY 2010 – an increase that may have resulted from successful efforts on the part of the STAR Health MCO (Superior) to improve follow-up BH care for this population.

Conversely, NorthSTAR had the lowest rates of 7-day follow-up among the Texas Medicaid programs. The rate of 7-day follow-up in NorthSTAR remained fairly constant across the three-year period, at 27 percent in SFY 2010. This finding suggests a need to improve discharge planning and follow-up care for members in this program, which is specific to mental and behavioral health.

Figure 70. Follow-up after Hospitalization for Mental Illness (7-day) in STAR Health and NorthSTAR, 2008 - 2010



In all programs, results for 30-day follow-up after a hospitalization for mental illness were also consistently above the HHSC Dashboard Standard of 52 percent. These differences were greater than those observed for 7-day follow-up. During the three-year period, rates increased in all programs except NorthSTAR.

The greatest increase was observed in STAR+PLUS, where the rate of 30-day follow-up increased from 64 percent in SFY 2008 to 72 percent in SFY 2010. In SFY 2010, STAR, PCCM, STAR+PLUS, and CHIP all had approximately the same rate of 30-day follow-up (72 percent).

Figure 71. Follow-up after Hospitalization for Mental Illness (30-day) in STAR, PCCM, STAR+PLUS, and CHIP, 2008 - 2010

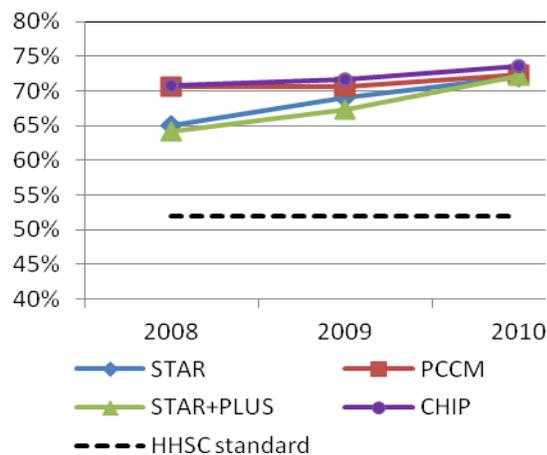
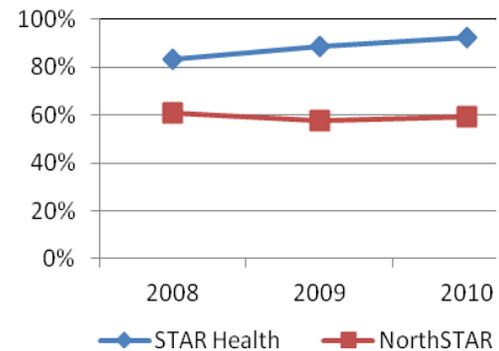


Figure 72. Follow-up after Hospitalization for Mental Illness (30-day) in STAR Health and NorthSTAR, 2008 - 2010



Follow-up within 30 days of hospitalization for mental illness was higher in STAR Health than in any other program. The rate of 30-day follow-up in STAR Health increased from 83 percent in SFY 2008 to 92 percent in SFY 2010.

As with the 7-day follow-up measure, NorthSTAR had the lowest rates of 30-day follow-up among the Texas Medicaid programs. The rate of 30-day follow-up in NorthSTAR remained fairly constant across the three-year period, at 59 percent in SFY 2010.

Figure 73. Readmission within 30 Days after an Inpatient Stay for Mental Health in STAR, PCCM, and CHIP, 2008 - 2010

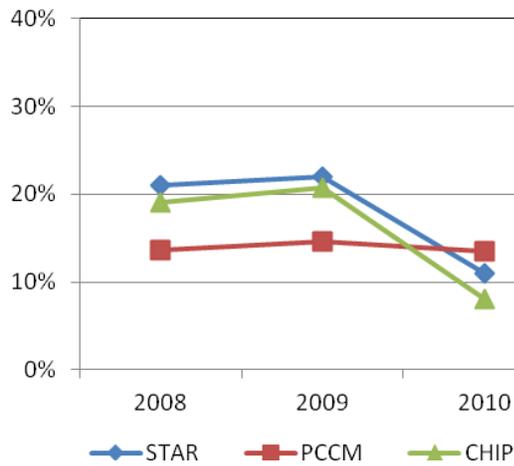


Figure 73 provides trends in mental health inpatient readmission rates for STAR, PCCM, and CHIP in SFY 2008, 2009 and 2010. Rates in both STAR and CHIP showed substantial declines between SFY 2009 and 2010. The lowest rate of mental health inpatient readmissions (and therefore the highest-performing) was observed in CHIP, which decreased from 19 percent in SFY 2008 to 8 percent in SFY 2010. These improvements may have resulted from successful efforts on the part of STAR and CHIP MCOs toward improving BH follow-up care for their member populations.

In PCCM, rates of mental health inpatient readmissions remained fairly constant over the three-year period, at 13 percent in SFY 2010.

Figure 74. Readmission within 30 Days after an Inpatient Stay for Mental Health in STAR Health and NorthSTAR, 2008 - 2010

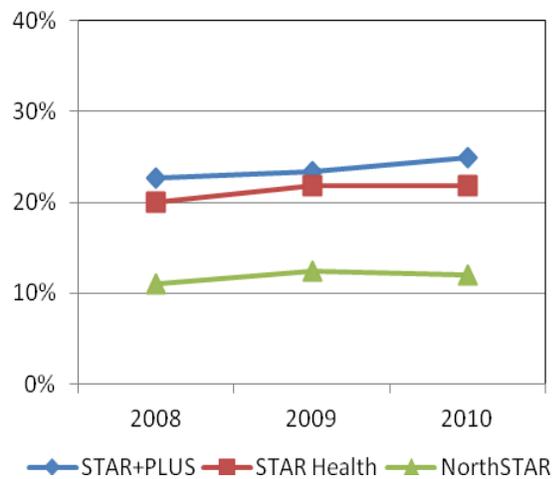


Figure 74 provides trends in mental health inpatient readmission rates for STAR+PLUS, STAR Health, and NorthSTAR in SFY 2008, 2009, and 2010. Rates for all three programs remained relatively constant over the three-year period. The SFY 2010 rates were 25 percent in STAR+PLUS, 22 percent in STAR Health, and 12 percent in NorthSTAR.

Higher rates of readmission in STAR+PLUS and STAR Health are not surprising, given the special needs of these populations. Rates of readmission in NorthSTAR were similar to those observed in Medicaid generally. The NorthSTAR program is specific to behavioral health, and higher performance on this measure is expected.

Program Profiles – Effectiveness of Care, SFY 2010

STAR

Cervical cancer screening: 39%

Testing for children with pharyngitis: 52%

Appropriate asthma medications

- 5 to 9 years: 96%
- 10 to 17 years: 94%
- 18 to 56 years: 91%

Comprehensive diabetes care

- HbA1c testing: 78%
- Eye exam: 35%
- LDL-C screening: 74%
- Attention for nephropathy: 79%

Hospitalizations for mental illness

- 7-day follow-up: 45%
- 30-day follow-up: 72%
- Readmission within 30 days: 11%

PCCM

Cervical cancer screening: 43%

Testing for children with pharyngitis: 53%

Appropriate asthma medications

- 5 to 9 years: 96%
- 10 to 17 years: 94%
- 18 to 56 years: 89%

Comprehensive diabetes care

- HbA1c testing: 76%
- Eye exam: 45%
- LDL-C screening: 74%
- Attention for nephropathy: 69%

Hospitalizations for mental illness

- 7-day follow-up: 38%
- 30-day follow-up: 72%
- Readmission within 30 days: 13%

STAR+PLUS

Cervical cancer screening: 42%

Appropriate asthma medications

- 18 to 56 years: 91%

Comprehensive diabetes care

- HbA1c testing: 76%
- Eye exam: 39%
- LDL-C screening: 76%
- Attention for nephropathy: 78%

Hospitalizations for mental illness

- 7-day follow-up: 46%
- 30-day follow-up: 72%
- Readmission within 30 days: 25%

CHIP

Testing for children with pharyngitis: 54%

Appropriate asthma medications

- 5 to 9 years: 97%
- 10 to 17 years: 95%

Hospitalizations for mental illness

- 7-day follow-up: 45%
- 30-day follow-up: 74%
- Readmission within 30 days: 8%

STAR Health

Hospitalizations for mental illness

- 7-day follow-up: 70%
- 30-day follow-up: 92%
- Readmission within 30 days: 22%

NorthSTAR

Hospitalizations for mental illness

- 7-day follow-up: 27%
- 30-day follow-up: 59%
- Readmission within 30 days: 12%

Appendix A. SFY 2010 Recommendations

Care Coordination

Area	Recommendation	Rationale
Service/care coordination in STAR+PLUS	Evaluate the need for service coordination among members, examine the health plan staffing capacity and resources for providing service coordination, and educate members about available services.	<p>The STAR+PLUS Survey found that the majority of members reported they did not have a service coordinator (77 percent), which may account for why some members experienced problems getting the care they needed, such as specialist care and specialized services.</p> <p>All STAR+PLUS members have an assigned service coordinator. This finding indicates a lack of knowledge on the part of many STAR+PLUS members that this service is available. Improving member understanding of service coordination is one of HHSC's overarching goals for STAR+PLUS MCOs in the design and implementation of performance improvement projects.</p>
Care coordination in CHIP	<p>Adopt performance standards to connect care coordination with financial incentives/disincentives.</p> <p>Encourage health plans to implement strategies to enhance care coordination, working with both primary care providers and specialists.</p>	<p>The CHIP Caregiver Survey found that among children who received care from more than one health care provider, only half received care coordination from their child's health plan, doctor's office, or clinic.</p> <p>Performance on the CAHPS® composite Care Coordination was low overall, with 12 health plans scoring below 75 points.</p> <p>Adequate care coordination is essential to meeting the primary health care needs of the CHIP population, and can help to reduce potentially avoidable emergency department visits. Reducing emergency department visits for ambulatory care sensitive conditions is one of HHSC's overarching goals for CHIP MCOs in the design and implementation of</p>

		performance improvement projects.
--	--	-----------------------------------

Access and Timeliness of Care

Area	Recommendation	Rationale
Getting timely care for adults in STAR+PLUS	<p>Assess the reasons why members experienced delays in their health care while waiting for health plan approval.</p> <p>Encourage providers to evaluate their patient flow problems and implement strategies to reduce the office wait time for members.</p>	<p>Members in STAR+PLUS experienced delays in getting timely health care from their health plan and in getting care at the provider's office. Almost half of members had delays in their health care while waiting for health plan approval (48 percent).</p> <p>Delays in treatment that occur while STAR+PLUS members are waiting for health plan approval can contribute to the exacerbation of existing conditions and health complications, which frequently leads to admission to a nursing facility. Reducing rates of nursing facility admissions is one of HHSC's overarching goals for STAR+PLUS MCOs in the design and implementation of performance improvement projects.</p>
Getting needed care in STAR+PLUS	<p>Expedite the referral process to improve member access to specialist care and other types of care and treatment, and ensure that members have access to service coordination.</p>	<p>Twenty-eight percent of STAR+PLUS survey respondents had difficulty getting an appointment with a specialist, and 29 percent had difficulty getting the care, tests, or treatment they thought they needed from their health plan.</p> <p>Addressing barriers to specialist care can help to reduce rates of nursing facility admissions, which is one of HHSC's overarching goals for STAR+PLUS.</p>

Effectiveness of Care

Area	Recommendation	Rationale
Diabetes care for adults in PCCM	<p>Ensure that provider networks in former PCCM counties include outpatient services for diabetes care adequate to meet the needs of this population.</p> <p>Prioritize implementation of existing diabetes disease management programs for adults to improve effectiveness of diabetes care.</p>	<p>Rates of potentially avoidable inpatient stays for diabetes short-term complications and uncontrolled diabetes were twice the national averages.</p> <p>Adult PCCM members also had lower rates of eye exams, HbA1c testing, and medical attention for diabetic nephropathy.</p> <p>These findings suggest a need for improved outpatient care for diabetes as these PCCM members transition to the STAR and STAR+PLUS programs in the coming year. Diabetes is a common ambulatory care sensitive condition contributing to potentially preventable inpatient and emergency department admissions. Reducing emergency department visits for ACSCs is one of HHSC's overarching goals for STAR MCOs in the design and implementation of performance improvement projects.</p>
Chlamydia screening in CHIP	<p>Provide physicians with STI training, specifically targeting physicians who have a lower likelihood of recommending Chlamydia screening.</p> <p>Provide physicians with a toolkit to facilitate screenings. Increase patient awareness and compliance with preventive screenings.</p>	<p>Thirty percent of sexually active female CHIP members between 16 and 20 years old were screened for Chlamydia. This rate is considerably lower than the HEDIS[®] average of 54 percent for this measure, and falls below the 10th percentile nationally.</p> <p>Increasing access to and utilization of preventive care, such as STI screening, is one of HHSC's overarching goals for CHIP MCOs in the design and implementation of performance improvement projects.</p>

Appendix B. EQRO Methodologies

Calculation of Performance Measures – SFY 2010

Quality of Care (QOC) Reports – STAR, STAR+PLUS, CHIP, CHIP Dental, STAR Health, NorthSTAR, and PCCM

Measurement Period: September 1, 2009 through August 31, 2010.

Data Sources and Measures

Information regarding the calculation of all measures included in the SFY 2010 Quality of Care Reports can be found in the document *“Technical Specifications Report for Annual Quality of Care Measures, July 2011.”*⁸¹ This document, prepared by the EQRO, provides specifications for HEDIS[®] and other quality of care measures.

Three data sources were used to calculate the quality of care indicators: 1) member-level enrollment information; 2) member-level health care claims/encounter data; and 3) member-level pharmacy data. The enrollment files contain information about the member’s age, gender, the MCO in which the member is enrolled, and the number of months the member has been enrolled in the program. The member-level claims/encounter data contain CPT codes, ICD-9-CM codes, place of service codes, and other information necessary to calculate the quality of care indicators. The member-level pharmacy data contain information about filled prescriptions, including the drug name, dose, date filled, and refill information.

HEDIS[®] 2010 measures

The majority of measures follow the Healthcare Effectiveness Data and Information Set (HEDIS[®]) 2010 Technical Specifications calculated using a National Committee for Quality Assurance (NCQA) certified software tool. HHSC approved the use of this software so that all HEDIS[®] results could be reported using a tool recognized by the NCQA. At HHSC’s request, the EQRO developed a methodology to allow for flexibility in the provider specialty codes when determining eligibility for HEDIS[®] measures. The EQRO modified the NCQA specifications to lift provider constraints when determining eligibility for HEDIS[®] measures. All other technical specifications were followed. Provider specialty codes are an important component for some HEDIS[®] measures, and lifting the provider constraints may result in some rate inflation for these measures.

Whenever possible, comparisons were provided to other Medicaid programs, in addition to the overall Texas state means. NCQA gathers and compiles data from Medicaid managed care plans nationally. Submission of HEDIS[®] data to NCQA is a voluntary process; therefore, health

plans that submit HEDIS® data are not fully representative of the industry. Health plans participating in NCQA HEDIS® reporting tend to be older, are more likely to be federally qualified, and are more likely to be affiliated with a national managed care company than the overall population of health plans in the United States.⁸² NCQA reports the national results as a mean and at the 10th, 25th, 50th, 75th, and 90th percentiles for the participating plans.

Agency for Healthcare Research and Quality Indicators

Indicators developed for the Agency for Healthcare Research and Quality (AHRQ) were used to evaluate the performance of MCOs related to inpatient admissions for various ambulatory care sensitive conditions (ACSCs). The AHRQ considers ACSCs “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.” The Quality Indicators use hospital inpatient discharge data and are measured as rates of admission to the hospital. Specifically, two sets of indicators were used in the analysis and are reported herein: Prevention Quality Indicators (PQIs) for adult enrollees and Pediatric Quality Indicators (PDIs) for child enrollees. Unlike most other measures provided in the Quality of Care reports, low quality indicator rates are desired, as they suggest a better quality health care system outside the hospital setting. This year, the specifications used to calculate rates for these measures come from AHRQ’s PDI and PQI versions 4.1.

The following indicators were used to assess adult admissions for ambulatory care sensitive conditions: (1) Diabetes Short-Term Complications, (2) Perforated Appendix, (3) Diabetes Long-Term Complications, (4) Chronic Obstructive Pulmonary Disease, (5) Low Birth Weight, (6) Hypertension, (7) Congestive Heart Failure, (8) Dehydration, (9) Bacterial Pneumonia, (10) Urinary Tract Infection, (11) Angina without Procedure, (12) Uncontrolled Diabetes, (13) Adult Asthma, and (14) Rate of Lower Extremity Amputation among Patients with Diabetes. For these measures, adults are those individuals ages 18 or older.

For children, there are five quality indicators measuring pediatric admissions for ambulatory care sensitive conditions: (1) Asthma, (2) Diabetes Short-Term Complications, (3) Gastroenteritis, (4) Perforated Appendix, and (5) Urinary Tract Infection. The age eligibility for these measures is 17 years old and younger.

Claims and Encounter Data Quality Certification – SFY 2010

The EQRO evaluated the quality of the administrative encounter data for STAR, STAR+PLUS, STAR Health, CHIP, and CHIP Dental for SFY 2009. Two documents defined the procedures used to certify this data: (1) Texas Government Code § 533.0131—Use of Encounter Data in Determining Premium Payment Rates, and (2) CMS Department of Health and Human Services Final Protocol for Validating Encounter Data.⁸³

The EQRO evaluated the MCO data in three ways:

- 1) **Data validity and completeness analysis:** The EQRO checked whether the MCOs provided critical data elements in their claims extracts and whether the elements provided were valid.
- 2) **Volume analysis based on service category:** To assess whether the data was consistent, the EQRO determined whether the number of records for facility, physician, and total services in each service category varied significantly from month to month.
- 3) **Consistency check between encounter data and MCO financial summary reports (FSRs):** The EQRO compared payments documented in the claims data to payments reported by the MCOs in their FSRs.

Only the data validity and completeness analysis is discussed in this report.

Encounter Data Validation – SFY 2009

In consultation with Texas HHSC, the EQRO divided the Encounter Data Validation Study into four distinct parts:

1. Standard Encounter Data Validation, in which the EQRO compared information in health records requested with information in the administrative data for date of service, place of service or type of bill, diagnosis, and procedures for institutional and professional transaction types.
2. Children's Health Insurance Program (CHIP) Dental Encounter Data Validation, in which the EQRO compared information in health records with information in the administrative data on date of service, procedures, and application of sealants.
3. Validation of coding of diagnosis and procedure, in which the EQRO compared data in health records to administrative data. Diagnosis and procedure codes were not validated for claims with place of service codes for independent laboratory.

4. Selection of place of service and type of bill, in which the EQRO compared information in health records with information in the administrative data on date of service, place of service or type of bill, diagnosis, and procedures.

Health Record Confidentiality

The EQRO designed record request, submission, logging in, and abstraction procedures to protect confidentiality in accordance with federal and state regulations. To ensure confidentiality, the following steps were taken:

- Envelopes that were used to mail out health record requests were stamped with “Confidential Request,” “To Be Opened by Addressee Only,” and “If you are not the addressee or are not otherwise authorized to view protected health information, you may be prohibited by law from opening this envelope.”
- Patient- and provider-specific data were maintained in a password-protected database.
- All health records received were logged in to the password-protected database, placed in file folders with a provider code, and filed in locked filing cabinets.
- All personnel involved in record processing and review were trained in the handling of patient identifiable data, as required by the University of Florida Health Science Center Privacy Office.

Data Sources

The EQRO obtained MCO encounter data from the Texas Vision 21 Encounter Data Warehouse. For health record requests, the EQRO acquired provider data from the Texas Master Provider File and the Long Term Services and Support (LTSS) provider file.

Study Population

The EQRO randomly selected encounters of enrollees in Texas Medicaid Managed Care (STAR, STAR+PLUS, STAR Health), the Children’s Health Insurance Program (CHIP), and the CHIP Dental Program.

Sample Size

The goal of the sampling strategy was to ensure that findings for each MCO constituted a statistically sound representation of that MCO’s performance. The EQRO used the quadratic method described in “Statistical Methods for Rates and Proportions.”⁸⁴ In consultation with the EQRO’s biostatistician, the sample size was calculated using a 95% confidence interval to ensure match rates within 5 percentage points of actual match rates in the population. The calculations were based on prior match rates that were at or above 75%.

The samples were randomly selected across each MCO's entire population and were not stratified by Service Area (SA). Requests for health records were limited to 20 members per provider, unless this limitation prevented the EQRO from reaching the required sample size.

Validation Procedure

The EQRO conducted the validation study by matching information found in the MCO encounter data with information found in the health records that providers submitted. The first step was to match the member's name, Medicaid ID number, date of service, and type of bill or place of service. In the next step, certified coders validated the coding accuracy of diagnosis and procedures by comparing the encounter data to the health record, and determining the match or disagreement rate for each data field.

For each encounter, reviewers used the following codes to document agreement between the encounter data and the health record for each data element.

- Match: The data element has an exact match between the encounter data and the health record.
- In Health Record/Not in Administrative Data: The health record documentation contains evidence of a service or condition that is not reflected in the encounter data (under-reporting).
- In Administrative Data/Not in Health Record: The encounter data contains evidence of a service or condition that was not documented in the health record for the selected date of service (over-reporting).
- Care Outside Evaluation Timeframe: The record received covered an encounter that was not within the study timeframe.
- Illegible: Reviewers were unable to read the health record documentation.
- Other: The record did not meet any of the above criteria.

Inter-Rater Reliability

Inter-rater reliability assesses the degree to which different reviewers gave consistent results. Of the 1321 records selected, the team leader and the reviewers agreed 1281 times, producing a match rate of 97 percent.

MCO Administrative Interviews – SFY 2011

According to CMS protocols, Medicaid Managed Care external quality review should include interviews with MCO administrators to understand how MCOs provide care and how they monitor the quality of that care. The EQRO uses information from these interviews to support evaluation activities and to assist HHSC in determining MCO compliance with state and federal requirements.

The MCO Administrative Interview addressed the following areas:

- Organizational structure
- Member enrollment and disenrollment
- Children's programs and preventative care
- Care coordination and disease management programs
- Member services
- Member complaints and appeals
- Provider network and reimbursement
- Authorizations and utilization management
- Quality assessment and performance improvement (QAPI)
- Delegated entities
- Information systems
- Data acquisition

In addition, the NorthSTAR questionnaire included items specific to behavioral health, and the CHIP Dental questionnaire included items specific to dental health.

The EQRO asked all MCOs to update information provided in the prior year's interview and add information as requested. In addition, the EQRO sought clarification of the information provided by the MCOs by phone and through site visits where necessary.

Member Satisfaction Surveys – SFY 2009 and SFY 2010

This report includes information from three EQRO member satisfaction surveys: 1) SFY 2009 STAR+PLUS Enrollee Survey; 2) SFY 2010 CHIP Caregiver Survey; and 3) SFY 2010 STAR Health Enrollee Survey.

The Bureau of Economic and Business Research (BEBR) at the University of Florida conducted the telephone surveys using computer-assisted telephone interviewing (CATI). Advance letters were sent to all sampled members prior to the telephone surveys, requesting their participation.

Data for the all surveys were analyzed using SPSS 17.0 software. Descriptive analyses were conducted on all survey questions. Statistical tests of differences between relevant subgroups used the Pearson chi-square test (for differences in proportions) and t-tests and one-way ANOVA (for differences in means).

STAR+PLUS Enrollee Survey – SFY 2009

A stratified random sample of adults enrolled in the STAR+PLUS Program in Texas was selected to participate in this survey using the following criteria:

- 1) the adult must have been enrolled in the STAR+PLUS Program in Texas for at least nine months;
- 2) the adult must be over the age of 18; and,
- 3) the adult must not be dually eligible for both Medicaid and Medicare, and must only be eligible for Medicaid.⁸⁵

Target samples of 300 completed telephone surveys with STAR+PLUS enrollees in each of the four health plans were set, for a total of 1,200 surveys. Using a 95 percent confidence interval, this sample size ensured that survey responses were within ± 4 percentage points of the “true” responses for the STAR+PLUS enrollee health plans.

The 2009 STAR+PLUS enrollee survey was comprised of the following sections:

- The CAHPS[®] Health Plan Survey, version 4.0;
- The RAND[®] 36-Item Health Survey, version 1.0;
- Questions regarding care coordination services;
- Sociodemographic and household characteristics; and

- Questions related to members' housing and employment status.

The surveys were conducted by phone from December 2008 through April 2009. Attempts were made to contact 8,047 adults who were enrolled in the STAR+PLUS Program in Texas and who met the inclusion criteria. Fifty-two percent of families could not be located. Among those located, 36 percent of respondents were not eligible to complete the survey, two percent reported that they were not enrolled in STAR+PLUS, and nine percent refused to participate. The response rate was 53 percent and the cooperation rate was 78 percent. There were 1,201 completed surveys.

CHIP Caregiver Survey – SFY 2010

Survey participants were selected from a stratified random sample of families with children who were enrolled in CHIP in Texas for nine months or longer between September 2008 and August 2009. The sample was stratified to include representation from the 17 health plans participating in CHIP during SFY 2009.

A target sample of 5,100 completed telephone interviews was set, representing 300 respondents per health plan. Using a 95 percent confidence interval, this sample size ensured that survey responses were within ± 1.4 percentage points of the “true” responses in the CHIP enrollee population and ± 5.7 percentage points of “true” responses at the MCO level. Target samples were met for all health plans except Mercy and Molina health plans, each of which had fewer than 1,500 members in the enrollment data who met the study criteria. With the transition of CHIP members in Mercy to Molina Healthcare in October 2009, most contacted members in the Mercy sample were considered ineligible to participate in the survey.

The CHIP Caregiver Survey was comprised of the following sections:

- The CAHPS[®] Health Plan Survey, version 4.0;
- The CSHCN Screener[®];
- Questions from the National Survey of CSHCN dealing with the health care needs of children with chronic conditions as they transition into adulthood;
- The Pediatric Quality of Life Inventory (PedsQL[™]), version 4.0; and
- Demographic and household characteristics of the respondent and child.

The surveys were conducted by phone between November 2009 and April 2010. Attempts were made to contact caregivers of 21,086 children who were enrolled in CHIP. Thirty percent of families could not be located. Among those located, 11 percent of respondents were not eligible to complete the survey, 24 percent indicated that their child was not enrolled in CHIP, and 13 percent refused to participate. The response rate was 52 percent and the cooperation rate was 72 percent. There were 4,748 completed surveys.

STAR Health Caregiver Survey – SFY 2010

Survey participants were selected from a simple random sample of families with children in foster care 18 years old and younger who were enrolled in STAR Health in Texas for at least six months prior to July 31, 2009.

A target sample of 400 completed telephone interviews with caregivers of STAR Health enrollees was set. Using a 95 percent confidence interval, this sample size ensured that survey responses were within ± 5 percentage points of the “true” caregiver responses regarding the STAR Health enrollee population.

The STAR Health Caregiver Survey was comprised of the following sections:

- The CAHPS[®] Health Plan Survey, version 4.0;
- The CSHCN Screener[®]; and
- The Pediatric Quality of Life Inventory (PedsQL[™]), version 4.0.

The surveys were conducted by phone between December 2009 and February 2010. Attempts were made to contact 1,248 caregivers of children in foster care enrolled in the STAR Health program. Twenty-six percent of caregivers could not be located. Among those caregivers located, 17 percent of respondents were not eligible to complete the survey, 5 percent indicated that their child in foster care was not enrolled in STAR Health, and 11 percent refused to participate. The response rate was 59 percent and the cooperation rate was 80 percent. There were 400 completed surveys.

Endnotes

¹ HHSC (Texas Health and Human Services Commission). 2011. *Texas Medicaid and CHIP in Perspective, Seventh Edition*. Available at: <http://www.hhsc.state.tx.us/medicaid/reports/PB8/PinkBookTOC.html>.

² Kaiser Family Foundation. 2010a. *Medicaid and Managed Care: Key Data, Trends and Issues*. Available at: <http://www.kff.org/kcmu/>.

³ Kaiser Family Foundation. 2011. *Moving Ahead Amid Fiscal Challenges: A Look at Medicaid Spending, Coverage and Policy Trends*. Available at: <http://www.kff.org/medicaid/8248.cfm>.

⁴ HHSC. 2011.

⁵ Kaiser Family Foundation. 2010b. *Texas & United States. State Medicaid Fact Sheets*. Available at: <http://www.kff.org/MFS/>.

⁶ Ortolon, K. 2011. "Managing Medicaid." *Texas Medicine* 107(10): 53-56.

⁷ Inglehart, J.K. 2011. "Desperately Seeking Savings: States Shift More Medicaid Enrollees to Managed Care." *Health Affairs* 30(9): 1627-1629.

⁸ IOM (Institute of Medicine). 2001. *Crossing the Quality Chasm: A New Health System for the 20th Century*. Washington, D.C.: National Academy Press.

⁹ The U.S. Department of Health and Human Services first proposed regulations to specify these standards in a Notice of Proposed Rulemaking published in the Federal Register on September 29, 1998, and in a final regulation issued in the Federal Register on January 19, 2001. The final regulations published in the Federal Register on June 14, 2002 amended the Medicaid Managed Care regulations published on January 19, 2001.

¹⁰ CMS (Centers for Medicare & Medicaid Services), 2003. *Monitoring Medicaid Managed Care Organizations (MCOs) and Prepaid Inpatient Health Plans (PIHPs): A protocol for determining compliance with Medicaid Managed Care Proposed Regulations at 42 CFR Parts 400, 430, et al*. Final Protocol Version 1.0. February 11, 2003. Available at: <http://www.cms.hhs.gov/>.

¹¹ For trends involving the MCO Administrative Interviews, SFY 2011 data is also available.

¹² HHSC. 2011.

¹³ The SFY 2010 STAR+PLUS Member Survey included Medicaid-only members and some members who were dual-eligible with Medicaid, while the SFY 2008 and 2009 surveys excluded all dual-eligible members. As a result, members in the SFY 2010 survey sample had a lower health status on average than sampled members in the other two survey years.

¹⁴ Donabedian, A. 1980. *Explorations in Quality Assessment and Monitoring, Volume I. The Definition of Quality and Approaches to its Assessment*. Ann Arbor, MI: Health Administration Press.

¹⁵ Donabedian, A. 1988. "The quality of care. How can it be assessed?" *JAMA* 260:1743–1748.

-
- ¹⁶ DHHS (U.S. Department of Health and Human Services). 2002. *Protecting the Health of Minority Communities*. Washington, D.C.: U.S. Department of Health and Human Services.
- ¹⁷ Cutler, D. and A. Lleras-Muney. 2006. *Education and Health: Evaluating Theories and Evidence*. Ann Arbor, MI: National Poverty Center. Available at http://www.npc.umich.edu/news/events/healtheffects_agenda/cutler.pdf.
- ¹⁸ AHRQ (Agency for Healthcare Research and Quality). 2010. "National Healthcare Disparities Report." Available at <http://www.ahrq.gov/qual/grdr10.htm>.
- ¹⁹ H. Mead, L. Cartwright-Smith, K. Jones, C. Ramos, K. Woods, and B. Siegel. 2008. *Racial and Ethnic Disparities in U.S. Health Care: A Chartbook*. The Commonwealth Fund, March 2008.
- ²⁰ McPherson M., Arango P., Fox H., et al. 1998. "A new definition of children with special health care needs." *Pediatrics*. 102:137-140.
- ²¹ Neff J., V. Sharp, J. Muldoon, J. Graham, J. Popalisky, and J.C. Gay. 2002. "Identifying and Classifying Children with Chronic Conditions Using Administrative Data with the Clinical Risk Group Classification System." *Ambulatory Pediatrics* 2(1): 1-79.
- ²² Hughes J.S., R.F. Averill, J. Eisenhandler, N.I. Goldfield, J. Muldoon, J.M. Neff, and J.C. Gay. 2004. "Clinical Risk Groups (CRGs): A Classification System for Risk-Adjusted Capitation-Based Payment and Health Care Management." *Medical Care* 42(1): 81-90.
- ²³ CAHMI (Child and Adolescent Health Measurement Initiative). 2008. "Children with Special Health Care Needs (CSHCN) Screener." Available at <http://cahmi.org>.
- ²⁴ National Survey of Children with Special Health Care Needs (NS-CSHCN). 2005/2006. Available at: <http://cshcndata.org>.
- ²⁵ CDC (Centers for Disease Control and Prevention). 2008a. "Defining Overweight and Obesity." Available at <http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm>
- ²⁶ CDC. 2009. "Growth Charts – Clinical Growth Charts." Available at http://www.cdc.gov/growthcharts/clinical_charts.htm.
- ²⁷ CDC. 2008b. *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services.
- ²⁸ HRSA (U.S. Health Resources and Services Administration). 2011. *EPSDT and Title V Collaboration to Improve Child Health*. Available at <http://www.hrsa.gov/epsdt/>.
- ²⁹ For this reason, the "HEDIS[®]" name is not included in table or figure titles, labels, or column headers that specify program-level results for these measures.
- ³⁰ The number of eligible members was too small to calculate the Well-Child Visits in the First 15 Months of Life measure in STAR+PLUS.
- ³¹ Because provider constraints were lifted for this measure, a program rate that is lower than the national mean (which is calculated using more restrictive criteria) suggests lower performance on the measure.

³² For this reason, the “HEDIS®” name is not included in table or figure titles, labels, or column headers that specify program-level results for these measures.

³³ Harman, J. S., G.E. Childs, and K.J. Kellcher. 2000. “Mental Health Care Utilization and Expenditures by Children in Foster Care.” *Archives of Pediatric and Adolescent Medicine*, 154: 1114-1117.

³⁴ Halfron, N., G. Berkowitz, and L. Klee. 1992. “Mental Health Services Utilization by Children in Foster Care in California.” *Pediatrics* 89(6): 1238-1244.

³⁵ The low rate of mental health service utilization in NorthSTAR (6 percent) may have occurred because deficiencies in access to care, inadequate documentation of mental health services in encounter and claims data, or other reasons.

³⁶ IOM. 2001.

³⁷ Habib, J.L. 2010. "EHRs, Meaningful Use, and a Model EMR." *Drug Benefit Trends* 22(4).

³⁸ CMS. 2002. *Validating Encounter Data: A Protocol for Use in Conducting External Quality Review of Medicaid Managed Care Organizations and Prepaid Health Plans*. Baltimore, MD.

³⁹ Data for the Encounter Data Validation study on SFY 2010 data or later was not available at the time of this report.

⁴⁰ A number of other data elements had negligible, non-zero program-level rates of missing data – including primary diagnosis (0.0004% in CHIP), discharge date (0.003% in STAR, 0.001% in STAR+PLUS, 0.0004% in CHIP), discharge status (0.02% in STAR, 0.002% in STAR+PLUS, 0.001% in CHIP), and billing provider NPI (0.17% in STAR+PLUS).

⁴¹ Two other data elements had negligible, non-zero program-level rates of invalid data – including discharge status (0.001% in STAR+PLUS) and place of service (0.002% in STAR and 0.03% in STAR+PLUS).

⁴² Kaiser Commission on Medicaid and the Uninsured. 2010. *A Primer: Key Information our Nation's Health Coverage Program for Low-Income People*. June 2010. Available at <http://www.kff.org/medicaid/upload/7334-04.pdf>

⁴³ HHSC. 2008. *HHSC Uniform Managed Care Manual: Disease Management*. Available at http://www.hhsc.state.tx.us/medicaid/UMCM/Chp9/9_1.pdf.

⁴⁴ HHSC. 2008.

⁴⁵ In both STAR and CHIP, Community First, FirstCare, Parkland, and Superior contracted with DMOs. In CHIP, Seton and United also contracted with DMOs.

⁴⁶ Only Driscoll, FirstCare, and Parkland did not report assigning DM participants to risk groups.

⁴⁷ CAHPS (Consumer Assessment of Healthcare Providers and Systems). 2008. *The CAHPS Improvement Guide: Practical Strategies for Improving the Patient Care Experience. Paying Attention to Customer Service*. Available at: http://www.cahps.ahrq.gov/QIGuide/content/areyouready/CustomerService.aspx#_ftnref1.

⁴⁸ CAHPS. 2011. *Comparative Data*. Available at: <https://www.cahps.ahrq.gov/CAHPS-Database/Comparative-Data.aspx>.

⁴⁹ The PCCM program is not included in the profiles because the EQRO does not conduct an Administrative Interview for this program.

⁵⁰ The PCP staffing ratios are calculated using MCO responses to the SFY 2011 Administrative Interview for the number of child and adult PCPs in their networks, divided by the number of members in August 2010 (by age group), using administrative data.

⁵¹ Institute of Medicine. 1993. *Access to Health Care in America*. Washington, D.C.: National Academy Press.

⁵² IOM. 2001.

⁵³ The y-axis on all figures has been adjusted (minimum set to 80 percent) to allow a clearer representation of trends.

⁵⁴ For this reason, the “HEDIS®” name is not included in table or figure titles, labels, or column headers that specify program-level results for these measures.

⁵⁵ CAHPS. 2011.

⁵⁶ AHRQ. 2009. *National Healthcare Quality Report, 2009 – Chapter 6: Efficiency*. Available at: <http://www.ahrq.gov/qual/nhqr09/Chap6.htm>

⁵⁷ NACHC (National Association of Community Health Centers). 2006. *Data on Community Health Centers: Summary of Findings*. <http://www.nachc.com/client/documents/issues-advocacy/policy-library/research-data/research-reports/2006Datsumary.pdf>.

⁵⁸ AHRQ. 2004. *Prevention Quality Indicators Overview*. Available at http://www.qualityindicators.ahrq.gov/pqi_overview.htm.

⁵⁹ Results of potentially preventable events in SFY 2010 will be provided in the EQRO’s SFY 2011 Quarterly Topic Reports.

⁶⁰ AHRQ. 2011. *Pediatric Quality Indicator Comparative Data, Version 4.3*. Available at: <http://www.qualityindicators.ahrq.gov/>.

⁶¹ AHRQ. 2011. *Prevention Quality Indicator Comparative Data, Version 4.3*. Available at: <http://www.qualityindicators.ahrq.gov/>.

⁶² For this reason, the “HEDIS®” name is not included in table or figure titles, labels, or column headers that specify program-level results for these measures.

⁶³ IOM. 2001.

⁶⁴ Canavan, T.P. and N.R. Doshi. 2000. "Cervical Cancer." *American Family Physician*. March 1, 2000.

⁶⁵ Van Howe, R.S. and L.P. Kusnier II. 2006. "Diagnosis and Management of Pharyngitis in a Pediatric Population Based on Cost-Effectiveness and Projected Health Outcomes." *Pediatrics* 117(3):609-619.

⁶⁶ CDC/AAP. 2009. *Get Smart: Know When Antibiotics Work. Pharyngitis: Treat Only Proven GAS: Physician Information Sheet (Pediatrics)*. Available at: <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-pharyngitis.html>.

⁶⁷ The y-axis has been adjusted (minimum set to 30 percent) to allow a clearer representation of trends.

⁶⁸ National Asthma Education and Prevention Program (NAEPP). 2007. *Expert panel report 3: guidelines for the diagnosis and management of asthma*. Bethesda, MD: National Heart, Lung, and Blood Institute.

⁶⁹ It should be noted that since publication of the EQRO's Quality of Care reports on SFY 2008 data, age groups for the HEDIS[®] Use of Appropriate Medications for People With Asthma measure have changed. To correspond with HHSC Dashboard standards, the EQRO has continued use of the older HEDIS[®] 2009 age groups, which are presented in this report.

⁷⁰ Trending data were not available for the adult age group due to low denominators (< 30 members).

⁷¹ The y-axis has been adjusted (minimum set to 50 percent) to allow a clearer representation of trends.

⁷² HHSC does not currently have a Performance Dashboard standard for appropriate asthma medication in the 5 to 9 year age group.

⁷³ In STAR+PLUS, the 5 to 9 year and 10 to 17 year age groups had low denominators (< 30 members) for the appropriate asthma medication measure.

⁷⁴ ADA (American Diabetes Association). 2010. "Clinical practice recommendations – 2010." *Diabetes Care* 33(suppl 1): S31.

⁷⁵ The y-axis has been adjusted (minimum set to 50 percent) to allow a clearer representation of trends.

⁷⁶ The y-axis has been adjusted (minimum set to 50 percent) to allow a clearer representation of trends.

⁷⁷ The y-axis has been adjusted (minimum set to 30 percent) to allow a clearer representation of trends.

⁷⁸ Klinkenberg, W.D. and R.J. Calsyn. 1998. "Predictors of psychiatric hospitalization: a multivariate analysis." *Administration and Policy in Mental Health* 25(4): 403-410.

⁷⁹ Figueroa, R., J. Harman, and J. Engberg. 2004. "Use of Claims Data to Examine the Impact of Length of Inpatient Psychiatric Stay on Readmission Rate." *Psychiatric Services* 55(5): 560-565.

⁸⁰ For this reason, the "HEDIS[®]" name is not included in table or figure titles, labels, or column headers that specify program-level results for these measures.

⁸¹ ICHP (Institute for Child Health Policy). 2011. *Technical Specifications Report for Annual Quality of Care Measures, July 2011*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

⁸² Beaulieu, N.D. and A.M. Epstein. 2002. "National Committee on Quality Assurance Health-Plan Accreditation: Predictors, Correlates of Performance, and Market Impact." *Medical Care* 40(4): 325-337.

⁸³ CMS. 2002. *Validating Encounter Data: A Protocol for Use in Conducting External Quality Review of Medicaid Managed Care Organizations and Prepaid Health Plans*. Baltimore, MD.

⁸⁴ Fleiss, Joseph J., 2003. *Statistical Methods for Rates and Proportions, 3rd Edition*. New Jersey: Wiley-Interscience.

⁸⁵ This criterion was not strictly followed, and the resulting sample included both Medicaid-only members and dually-enrolled members. For this reason, the SFY 2010 STAR+PLUS Survey results are not included in trends in this report.