Institute for Child Health Policy at the University of Florida
Texas External Quality Review Organization

Texas Medicaid Managed Care and Children's Health Insurance Program

EQRO Summary of Activities and Trends in Healthcare Quality

Contract Year 2012

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Executive Summary

Introduction

This report summarizes the evaluation activities conducted by the Institute for Child Health Policy (ICHP) 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). ICHP 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 Fiscal Year (FY) 2011 – September 1, 2010 to August 31, 2011. This report also presents trends in healthcare quality in Texas Medicaid and CHIP between FY 2009 and FY 2011.

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) participating in STAR, STAR+PLUS, STAR Health, NorthSTAR, and CHIP. 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 FY 2011 for improving quality of care in Texas Medicaid and CHIP.

Summary of Findings

<u>Demographic Characteristics</u>

- *Enrollment.* In 2011, the STAR program had the largest number of members (1,746,595), followed by Primary Care Case Management (PCCM) (804,327) and CHIP (562,647). The membership in STAR, STAR+PLUS, and NorthSTAR increased by at least 20 percent over the three-year period. STAR+PLUS Medicaid-only enrollment increased by more than three-fourths from 2009 to 2011 (76 percent), following the Medicaid managed care expansion in September 2011.
- *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 the Medicaid-only population was 43 years old and the average age of dual-eligible members was 65 years old.
- *Member race/ethnicity.* Hispanic members were the largest group in every program, with the exception of STAR+PLUS, ranging from 43 percent in STAR Health to 65 percent in CHIP. In STAR+PLUS, Black, non-Hispanics represented the largest racial/ethnic group, at 38 percent in December 2011.

Health Status

- *Child members with special health care needs (MSHCN) prevalence (administrative).* The prevalence of child MSHCN was determined using the Clinical Risk Group (CRG) classification system in STAR, CHIP, and PCCM in 2011. The PCCM program had the highest percentage of child MSHCN across all programs, at 27 percent in 2011. STAR and CHIP both had similar rates (16 percent and 15 percent, respectively), with the percentage in STAR remaining constant over the three-year period and the percentage in CHIP increasing marginally.
- *Child MSHCN prevalence (survey)*. The prevalence of child MSHCN was also determined by parent-report using the CSHCN screener in STAR, CHIP, and PCCM in 2011, and in STAR Health in 2012. The rates in STAR (18 percent) and CHIP (20 percent) were comparable to the national average (reported by the National Survey of CSHCN), while the rate in STAR Health was considerably higher (48 percent).
- *Child MSHCN characteristics (survey).* The characteristics of child MSHCN were determined using the parent-report CSHCN screener in STAR, CHIP, and PCCM in 2011 and in STAR Health in 2012. The most common special health care need among child MSHCN was dependence on prescription medications in STAR (15 percent), CHIP (16 percent), and PCCM (18 percent). In STAR Health, the most common special health care needs were dependence on medications (35 percent) and problems that require mental health treatment or counseling (36 percent). The distribution of special needs among child MSHCN was relatively constant in STAR and CHIP across the three-year period.
- *Caregiver-reported child member health status.* Approximately 70 percent of caregivers rated their child's health status as excellent or very good for all programs. Both STAR and CHIP had an increase in reported child health status from 2009 to 2011.
- *Childhood obesity.* The PCCM and STAR Health programs had the highest reported obesity rates, with nearly one-third of members classified as obese (31 percent and 30 percent, respectively). STAR and CHIP both showed a decrease in the rate of child/adolescent obesity from 2009 to 2011, with CHIP having the lowest obesity rate at 25 percent.
- *Member-reported health status in STAR+PLUS.* Overall, member self-rated health status in STAR+PLUS was low, with over 60 percent of Medicaid-only and dual-eligible members reporting being in "fair" or "poor" health. Only 15 percent of Medicaid-only STAR+PLUS members and 16 percent of STAR+PLUS dual-eligible members rated their health as "excellent" or "very good". Self-reported mental health status was generally higher, with more than one-quarter of members in both eligibility groups reporting their mental health as "excellent" or "very good".

- *Activities of daily living in STAR+PLUS.* Approximately two-thirds of STAR+PLUS members in both eligibility groups reported having a condition that interferes with their quality of life. Approximately half of STAR+PLUS members reported needing assistance with *routine needs*, and approximately one-third of members reported needing assistance with *personal* needs.
- *Obesity in STAR+PLUS.* For the STAR+PLUS Medicaid-only and dual-eligible populations, nearly one-half of all members were considered obese, and one-fourth of all members were considered overweight.

Pediatric Preventive Care

- *Access to primary care.* Across programs, child and adolescent members had good access to primary care practitioners, with over 90 percent of members visiting a PCP during the measurement period.
- *Well-care visits*. Rates of well-child and well-care visits increased slightly over the three-year period for all programs. Rates of increase were especially pronounced in STAR Health. All programs met HHSC Dashboard standards for well-child/well-care visits in all age groups across the three-year period.
- *Childhood immunization*. Less than one-half of two-year-olds in STAR received the appropriate vaccinations by their second birthday (45 percent), exceeding the 2011 HEDIS® national mean of 32 percent. The rate in CHIP was 39 percent.
- *Access to dental care*. Overall, the rate of annual dental visits in CHIP Dental increased from 59 percent in 2009 to 66 percent in 2011, exceeding the 2011 HEDIS® national average of 48 percent.

Adult Preventive Care

- *Access to ambulatory health services.* STAR+PLUS members over 45 years of age generally had good access to preventive care. Eighty-seven percent of members in both older age cohorts (45 to 64 years and 65 years and older) had an ambulatory or preventive care visit in CY 2011. Preventive care was lower among 20- to 44-year-old STAR+PLUS members than among older members (72 percent).
- *Prenatal care*. The rate of timely prenatal care in STAR (83 percent) was comparable to the national HEDIS® mean of 84 percent. It should be noted that this sub-measure follows HEDIS® specifications with the exception of provider constraints; therefore, comparisons to the HEDIS® national means are approximate and for illustrative purposes only. Rates of timely prenatal care increased in STAR, STAR+PLUS and STAR Health between 2009 and 2011. Despite the increase in STAR+PLUS, the 2011 rate remained below the HHSC Dashboard standard. Nearly two-thirds of deliveries in STAR had $\geq$ 81 percent of the expected number of prenatal visits (63 percent), which is slightly higher than the HEDIS® mean of 61 percent for this performance threshold. This rate was lower in CHIP (40 percent) and STAR Health (47 percent).

- *Postpartum care.* Fifty-nine percent of deliveries in STAR received a postpartum visit, which is lower than the national HEDIS® mean of 64 percent. The percentage of deliveries receiving a postpartum visit in STAR+PLUS increased slightly across the three-year period, while remaining fairly consistent in STAR and STAR Health. The rate in STAR+PLUS was below the HHSC Dashboard standard, despite increasing between 2009 and 2011.
- *Breast cancer screening.* Forty-six percent of eligible women in STAR+PLUS had a mammogram to screen for breast cancer during the measurement period.
- *Cervical cancer screening.* Rates of cervical cancer screening increased very slightly during the three-year period in STAR (to 59 percent in 2011), but were still lower than the 2011 HEDIS® national mean of 67 percent. Rates in STAR+PLUS also showed a very slight increase over the three-year period (to 40 percent in 2011).
- *Chlamydia screening in women.* Approximately half of eligible women in STAR (51 percent) and one-third in CHIP (31 percent) received Chlamydia screening in CY 2011. Fifty-eight percent of eligible female members in STAR Health received Chlamydia screening in CY 2011.

Ambulatory Care

- *Emergency department visits.* The rate of emergency department visits per 1,000 member-months ranged from 21 in CHIP to 114 in STAR+PLUS.
- *Outpatient visits.* The rate of outpatient visits per 1,000 member-months ranged from 231 in CHIP to 565 in STAR+PLUS.

Pediatric Quality Indicators

- *Asthma PDI*. Over the three-year period, pediatric inpatient admissions (PDIs) for asthma declined in STAR, CHIP, and STAR Health, and fluctuated considerably in STAR+PLUS.
- *Diabetes short-term complications PDI*. Pediatric inpatient admissions for diabetes short-term complications remained fairly constant in STAR, CHIP, and STAR+PLUS, and declined considerably in STAR Health.
- *Gastroenteritis PDI*. Pediatric inpatient admissions for gastroenteritis declined for all programs during the three-year period, particularly in STAR+PLUS.
- *Urinary tract infection PDI*. Pediatric inpatient admissions for UTI decreased slightly in STAR and CHIP, fluctuated in STAR+PLUS, and increased in STAR Health.

Prevention Quality Indicators

- *Diabetes short-term complications PQI*. Over the three-year period, adult inpatient admissions for diabetes short-term complications remained relatively constant in STAR and declined in STAR+PLUS.

- *Diabetes long-term complications PQI*. Adult inpatient admissions for diabetes long-term complications remained constant in STAR and declined in STAR+PLUS.
- *Bacterial pneumonia PQI*. Adult inpatient admissions for bacterial pneumonia remained fairly constant in STAR and declined in STAR+PLUS.
- *Urinary tract infection PQI*. Adult inpatient admissions for UTI remained constant in STAR and decreased in STAR+PLUS.

Potentially Preventable Readmissions (3M)

- In CY 2011, rates of potentially preventable readmissions were 2 percent in STAR, 5 percent in CHIP, 13 percent in STAR+PLUS, and 16 percent in STAR Health.

Behavioral Health Service Utilization

- *Use of mental health services*. Use of outpatient or ED mental health services was considerably greater in STAR Health (78 percent) than in STAR (9 percent), STAR+PLUS (32 percent), or NorthSTAR (9 percent).
- *Use of alcohol and other drug (AOD) services.* Use of ambulatory AOD services was higher in STAR+PLUS (11 percent) than in STAR (1 percent) or NorthSTAR (2 percent).

Health Plan Information

- *Encounter data validation.* Match rates for date of service, diagnosis, and procedure were over 90 percent for all programs. Match rates for date of service and procedure were over the desired 95 percent in the STAR, CHIP, STAR+PLUS, and STAR Health programs.
- *Electronic health records*. Nine out of 18 health plans monitored whether providers implemented electronic health records (EHR) during FY 2011. ValueOptions reported the highest percentage of providers implementing EHR (70 percent). Evercare and UnitedHealthcare-Texas reported that none of their providers had implemented EHR during FY 2011.
- *Data certification*. The EQRO conducted the following analyses to certify claims data for all programs: (1) Volume analysis based on service category; (2) Data validity and completeness analysis; (3) Consistency analysis between encounter data and financial summary reports provided by the MCOs; and (4) Validity and completeness analysis of provider information. Volume data were found to be consistent for all plan codes based on overall volumes. All critical fields were found to be present in the data. Overall, the results of these analyses were positive and suggest that completeness of MCO administrative data has improved.

Disease Management (DM) Programs

- *Asthma DM participation rates.* In 2011, rates of participation in MCO asthma DM programs in STAR, CHIP, and STAR+PLUS were 59 percent, 69 percent, and 90 percent, respectively.

- *Diabetes DM participation rates*. In 2011, rates of participation in MCO diabetes DM programs were 43 percent in STAR, 74 percent in CHIP, and 86 percent in STAR+PLUS.

Quality Assessment and Performance Improvement (QAPI) Evaluation Summaries

- *Overall QAPI scores*. The average score for all MCOs was 92 percent. A majority of health plans scored above average, with the exception of five MCOs scoring below average. Delta Dental and Seton were the only two health plans that scored significantly lower than average.

Performance Improvement Projects (PIPs)

- *Overall PIP scores*. The average score of the year-end review of all the PIPs was 57 percent. Eight of the 15 MCOs scored above average. HealthSpring was the only health plan that scored below 50 percent, with a score of 14 percent. The "Real" Improvement Activity of the PIPs had the greatest opportunity for improvement, with only 15 percent of the PIPs resulting in a statistically significant improvement in the baseline rate.

Satisfaction with Timeliness of Care

- *CAHPS® Getting Care Quickly*. Scores for *Getting Care Quickly* among child members ranged from 83 percent in STAR to 90 percent in STAR Health, and were similar to those reported for children in Medicaid and CHIP nationally. Scores for this measure among adult members ranged from 71 percent in STAR to 80 percent among STAR+PLUS dual-eligible members, falling below the applicable national averages.
- *Good Access to Urgent Care*. Performance on this HHSC Dashboard indicator was fairly good for children, ranging from 86 percent in STAR to 96 percent in STAR Health. Among adults, performance ranged from 74 percent in STAR (below standard) to 81 percent among STAR+PLUS dual-eligible members (equal to standard).
- *Good Access to Routine Care*. Performance on this HHSC Dashboard indicator among children ranged from 78 percent in CHIP to 84 percent in STAR Health (above standard). Among adults, performance ranged from 67 percent in STAR (below standard) to 80 percent among STAR+PLUS dual-eligible members (equal to standard).
- *No Delays for Health Plan Approval*. Performance on this HHSC Dashboard indicator was below the standard for all programs, with the exception of STAR Health, which had a rate equal to its Dashboard standard. Scores ranged from 63 percent to 69 percent among children and from 38 percent to 50 percent among adults.
- *No Wait to be Taken to the Exam Room Greater than 15 Minutes*. Performance on this HHSC Dashboard indicator was considerably below the standard for all members, ranging from 24 percent to 30 percent among children and from 21 percent to 33 percent among adults.

Satisfaction with Primary and Specialist Care

- *CAHPS® Getting Needed Care*. Scores for *Getting Needed Care* among child members ranged from 72 percent in STAR to 80 percent in STAR Health, and were lower than those reported for children in Medicaid and SCHIP nationally. Scores for this measure among adult members ranged from 60 percent for STAR+PLUS Medicaid-only members to 74 percent for STAR+PLUS dual-eligible members, also below the national averages.
- *Good Access to Specialist Referral*. Performance on this HHSC Dashboard indicator among children ranged from 69 percent in STAR (below standard) to 84 percent in STAR Health (above standard). The rate in STAR Health increased notably between 2009 and 2012. Among adults, performance ranged from 61 percent for STAR+PLUS Medicaid-only members (below standard) to 78 percent for STAR+PLUS dual-eligible members (above standard).
- *Good Access to Special Therapies*. Performance on this HHSC Dashboard indicator among adults in STAR was 62 percent (above standard). Rates were lower in STAR+PLUS, for both Medicaid-only members (52 percent) and dual-eligible members (53 percent) – both below the HHSC Dashboard standard. Furthermore, rates of good access to special therapies in STAR+PLUS dropped notably over the period between 2009 and 2012 – particularly in Molina (by 20 percentage points) and Superior (by 15 percentage points).

Satisfaction with the Patient-Centered Medical Home

- The percentage of members who had a personal doctor ranged from 68 percent among adults in STAR to 93 percent among children in STAR Health. Member ratings of their personal doctor generally exceeded the national averages.
- *CAHPS® How Well Doctors Communicate*. Scores for *How Well Doctors Communicate* were high among child members, ranging from 88 percent in STAR to 94 percent in STAR Health. Scores among adult members were also high, ranging from 82 percent for STAR+PLUS Medicaid-only members to 90 percent for STAR+PLUS dual-eligible members.
- *Good Access to Service Coordination*. Performance on this HHSC Dashboard indicator for STAR+PLUS was slightly above standard for Medicaid-only members (67 percent). The rate among dual-eligible members was 64 percent.

Satisfaction with Customer Service

- *CAHPS® Health Plan Information and Customer Service*. Scores for *Health Plan Information and Customer Service* among child members ranged from 75 percent in STAR Health to 84 percent in STAR. The rate in STAR Health dropped from 85 percent in 2010 to 75 percent in 2012. Scores among adult members were slightly lower, ranging from 69 percent for STAR+PLUS Medicaid-only members to 78 percent for STAR members.

Acute Respiratory Care

- *Appropriate treatment for children with URI.* The percentage of children in STAR who received appropriate treatment for URI was 83 percent, which is lower than the national HEDIS® mean of 87 percent. In all eligible programs, performance on this measure showed slight increases from 2009 to 2011; however, rates for this measure are generally low and have changed little over the three-year period.
- *Appropriate testing for children with pharyngitis.* Rates of appropriate testing for pediatric pharyngitis were low for all eligible programs from 2009 to 2011. Furthermore, rates in STAR were lower than the HEDIS® mean across all three years. In 2011, the rate for STAR was 58 percent, compared to 65 percent of children in Medicaid nationally.
- *Avoidance of antibiotic treatment in adults with acute bronchitis.* In STAR+PLUS, the rate of members with bronchitis who were not dispensed an antibiotic increased slightly from 18 percent in 2010 to 20 percent in 2011.

Care for Chronic Conditions

- *Use of appropriate medications for people with asthma.* For members 5 to 11 years old, rates of appropriate asthma medication use in STAR exceeded the HEDIS® national mean of 92 percent. In addition, rates in all programs exceeded the HHSC Dashboard standard of 92 percent for this age group. For members 12 to 50 years old, the rate in STAR (93 percent) also exceeded the national HEDIS® mean of 86 percent. For this age group, STAR+PLUS was the only program that fell below the HHSC Dashboard standard of 86 percent. In addition, the rate among adults in STAR+PLUS has declined from 91 percent in 2009 to 80 percent in 2011.
- *Comprehensive diabetes care.* For adults with diabetes in STAR, CY 2011 results for all sub-measures were below their respective HEDIS® national means and HHSC Dashboard standards – suggesting a general need for improvement in diabetes care for this population. The rates for eye exams (36 percent), LDL-C control (18 percent), and HbA1c control (29 percent) were particularly low in comparison to the national means. For adults in STAR+PLUS, rates on all sub-measures were generally higher than in STAR, but also indicated need for improvement – particularly for eye exams (37 percent) and HbA1c control (26 percent). For both programs, three-year trends among sub-measures saw a net increase in rates from 2009 to 2011.
- *Controlling high blood pressure.* Rates of adequate blood pressure control for the STAR program (44 percent) and STAR+PLUS program (40 percent) were lower than the HHSC Dashboard standard of 54 percent for both programs. The rates for STAR and STAR+PLUS were also lower than the national HEDIS® mean of 56 percent.
- *Annual monitoring for patients on persistent medications.* The vast majority of eligible STAR+PLUS members received annual medication monitoring, with a rate of 88 percent for all medications combined.

Behavioral Health Care

- *Follow-up after hospitalization for mental illness.* STAR results were similar to the national HEDIS® means for 7-day and 30-day follow-up. It should be noted that this measure follows HEDIS® specifications with the exception of provider constraints; therefore, comparisons to the HEDIS® national means are approximate and for illustrative purposes only. All programs performed well in comparison to their respective HHSC Dashboard standards, STAR Health in particular. Rates for STAR+PLUS and STAR Health increased consistently from 2009 to 2011.
- *Follow-up for children prescribed ADHD medication.* Results among programs for the initiation phase ranged from 29 percent in NorthSTAR to 86 percent in STAR Health. Results among programs for the continuation and maintenance phase ranged from 42 percent in NorthSTAR to 90 percent in STAR Health. For the initiation phase, the STAR rate (50 percent) was higher than the HEDIS® mean of 38 percent. For the continuation and maintenance phase, the STAR rate (66 percent) was higher than the HEDIS® mean of 44 percent. It should be noted that this measure follows HEDIS® specifications with the exception of provider constraints; therefore, comparisons to the HEDIS® national means are approximate and for illustrative purposes only.
- *Antidepressant medication management.* In STAR+PLUS, the rate for the acute phase of treatment was 53 percent, which is higher than the HHSC Dashboard standard of 43 percent. The rate for the continuation phase of treatment was 36 percent, which is higher than the HHSC Dashboard standard of 24 percent. In NorthSTAR, the rate for the acute phase of treatment was 58 percent, and the rate for the continuation phase of treatment was 42 percent. Overall, rates for NorthSTAR decreased from 2010 to 2011.
- *Initiation and engagement of alcohol and other drug dependence treatment.* Results for treatment initiation ranged from 25 percent in NorthSTAR to 39 percent in STAR, and results for treatment engagement ranged from five percent in NorthSTAR to 11 percent in STAR. The STAR rates for treatment initiation and engagement were lower than their respective HEDIS® means (43 percent and 14 percent, respectively).

Preventive Care

- *Adult BMI assessment.* In 2011, 57 percent of STAR+PLUS members had their BMI documented. From 2010 to 2011, the rate of BMI assessment increased by 11 percentage points.
- *Weight assessment and counseling for nutrition and physical activity for children/adolescents.* Approximately one-third of STAR and CHIP members had their BMI percentile documented. Regarding counseling for children in STAR and CHIP, about half received counseling for nutrition, and about 42 percent received counseling for physical activity. STAR performed below the HEDIS® mean of 38 percent for the BMI percentile documentation sub-measure, above the HEDIS® mean of 46 percent for counseling for nutrition, and above the HEDIS® mean of 37 percent for counseling for physical activity. STAR performance across all three measures increased from 2010 to 2011.

EQRO Recommendations for FY 2011

This report concludes with a list of recommendations made by the EQRO in FY 2011 and FY 2012, compiled from quality of care reports and member survey reports to improve the quality of care delivered to Texas Medicaid and CHIP members. The list of recommendations focuses on those that address common issues in quality of care across programs, and HHSC's overarching goals for STAR, STAR+PLUS, CHIP, and STAR Health. Recommendations are reported in the following domains:

1) Effectiveness of outpatient/ambulatory care for chronic conditions;
2) Acute respiratory care for children;
3) Obesity screening and management; and
4) Service coordination in STAR+PLUS.

Moving forward, the EQRO, in consultation with HHSC, will be conducting more in-depth analyses on a subset of quality of care indicators, which will be the focus of the pay-for-quality initiatives in Texas.

Introduction

The delivery of affordable, high-quality health care is a challenge the U.S. health care system has faced for decades, and has become increasingly important in a political climate that seeks to address federal and state budget deficits while also improving access to health care. A recent study by the Commonwealth Fund found that the United States spends more on health care per capita than 12 other industrialized countries, yet at the same time performs poorly on many quality indicators, including cervical cancer survival rates, asthma-related deaths, and amputations resulting from diabetes.[1]

Much of the effort to improve the affordability and quality of healthcare focuses on services delivered through state public insurance programs, such as Medicaid and the Children's Health Insurance Program (CHIP), which will expand in some states in 2014 through the Patient Protection and Affordable Care Act.[2] Concerns about the efficiency of health services have led many states to turn to managed care as the predominant delivery model for these 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, including:[3]

1) Ensuring that members have a *medical home* – a primary care provider (PCP) or team of professionals that follows a person-based approach to provide comprehensive and continuous preventive and primary care.
2) Establishing a network of providers under contract with the managed care organization (MCO), which is obligated to maintain access standards established by the state.
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 66 percent of Medicaid beneficiaries receive services through managed care nationally.[4] This proportion is expected to rise as more states expand their Medicaid managed care programs. In 2012, all states except Alaska, New Hampshire, and Wyoming operated comprehensive Medicaid managed care programs, either through MCOs or Primary Care Case Management (PCCM) programs.[5] Many of these states also had risk-based PHP arrangements or other "limited benefit plans" for services such as behavioral health, dental care, or non-emergency medical transportation. Cost-containment continued to be a strong emphasis in state Medicaid programs, although small improvements in the economy allowed many states to implement targeted program improvements, such as continued expansion of community-based long-term care options. These program improvements are part of a larger initiative by many Medicaid programs to reform managed care practices and care coordination strategies.

The state of Texas conducted its first Medicaid managed care pilot programs in 1991, and passed legislation in 1995 to enact a comprehensive restructuring of the Medicaid program, incorporating a managed care delivery system.[6] In 2011, the number of Texas Medicaid

members enrolled in a managed care program had reached 71 percent.[7] During the summer of 2011 the Texas Legislature passed Senate Bill 7, mandating a statewide expansion of Medicaid managed care, which previously was limited to large urban areas. [8] 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.[9] Since this time, the following managed care expansions have occurred:

- February 2011: Due to the termination of operations of the Integrated Care Management (ICM) program in the Dallas and Tarrant service areas, the STAR+PLUS program expanded into these service areas in February 2011 to provide acute and long-term services to blind, aged, and disabled Medicaid members.
- September 2011: The STAR program expanded into 28 counties contiguous to six of the current Medicaid managed care service areas. The expansion of STAR included combining the Harris and Harris Expansion Service Areas into one service area, and forming the new Jefferson Service Area. The STAR+PLUS program expanded into 21 counties contiguous to six of the current Medicaid managed care service areas. The expansion of STAR+PLUS included combining the Harris and Harris Expansion Service Areas into one service area, expanding most of the existing service areas to cover new counties, and forming the Jefferson Service Area.
- March 2012: A major expansion of Medicaid managed care included the addition of one county to the El Paso service area and six counties to the Lubbock service area; creation of the new Hidalgo service area, which covers ten counties; and the expansion of STAR into 164 counties in the Rural Service Area (RSA), previously served by PCCM.[10] In addition, members in STAR, STAR+PLUS, and CHIP began receiving pharmacy benefits through managed care, and most children and young adults in Medicaid began receiving dental benefits through managed care. Previously only CHIP members received their dental services through managed care; Medicaid enrollees received fee-for-service (FFS) dental services.

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. The Institute of Medicine defines health care *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.”[11] 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 nationwide, evaluation research into the quality of care delivered to Medicaid members is of particular and timely importance.

Federal regulations require external quality review of Medicaid managed care programs to ensure compliance of state programs and their contracted MCOs with established standards.[12] States are required to validate MCO performance improvement projects (PIPs), 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 Services (CMS) provides guidance for these mandatory and optional activities through protocols for evaluating the state's quality assessment and improvement strategy.[13]

Through a contract with the Texas Health and Human Services Commission (HHSC), the Institute for Child Health Policy (ICHP) at the University of Florida has served as the Texas External Quality Review Organization (EQRO) since 2002. Following CMS protocols, ICHP measures access, utilization, and quality of care for members in Texas Medicaid and CHIP, and produces an annual summary of evaluation activities conducted during the prior year. This report summarizes the findings of EQRO activities conducted during fiscal year (FY) 2011 (September 1, 2010 to August 31, 2011), as well as activities using FY 2011 or calendar year (CY) 2011 data, providing an annual profile of Texas Medicaid and CHIP MCO performance.[14]

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 2009 through 2011. 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 FY 2011, showing each MCO's available FY/CY 2011 results on HHSC Performance Indicator Dashboard measures and presenting the MCO's three-year trends for selected performance measures.

A summary of the EQRO's recommendations to Texas HHSC in its FY 2011 activities is listed in **Appendix A**. The recommendations for Texas Medicaid and CHIP should be considered for future quality improvement initiatives in the coming year.

Managed Care Programs and Participating MCOs

In FY 2011, Texas Medicaid and CHIP benefits were administered through the following programs:

- **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 FY 2011, 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 combined elements of fee-for-service and managed care models, consisting of a non-capitated network of PCPs and hospitals under contract with HHSC. In FY 2011, services were provided to PCCM members in 202 Texas counties, primarily in rural areas. As part of the Texas Medicaid managed care expansion, PCCM was phased out in FY 2012, and members in these counties began receiving care through STAR and STAR+PLUS. In light of this change, the CY 2011 findings and trends presented for PCCM in this report provide

needed information for quality improvement in STAR and STAR+PLUS MCOs that have moved 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. The program also serves non-SSI adults who qualify for Medicaid because they receive home and community-based services. In FY 2011, services were provided to STAR+PLUS members through five MCOs operating in seven service areas (**Table 1)**. The HealthSpring MCO began operation in STAR+PLUS in May 2011. As many of the quality measures presented in this report require at least one full year of data, HealthSpring is not represented in all results.
- **STAR Health** – STAR Health is a managed care program for children in state conservatorship and young adults previously in state conservatorship. Implemented in April 2008, the program offers an integrated medical home where each member has access to PCPs, dentists, behavioral health clinicians, and other specialists. In FY 2011, the exclusive MCO for STAR Health was Superior HealthPlan Network.
- **NorthSTAR** – NorthSTAR is a carve-out program available to STAR and STAR+PLUS members living in the Dallas service area who need behavioral health services. These members receive behavioral health services through ValueOptions, which is contracted with the Texas Department of State Health Services (DSHS) as the exclusive behavioral health organization for NorthSTAR. This contract is separate from the direct contracts between HHSC and the STAR and STAR+PLUS health plans. 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).
- **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 FY 2011, services were provided to CHIP members through 15 health plans operating in nine service areas – including the CHIP Rural Service Area (RSA) (**Table 1**).
    - *CHIP Dental* – CHIP Dental provides dental services to members through a single, state-wide managed care plan. In FY 2011, 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 FY 2011[a]

Health Plan	STAR	STAR+PLUS	CHIP
Aetna	✓		✓
Amerigroup	✓	✓	✓
Community First	✓		✓
Community Health Choice (CHC)	✓		✓
Cook Children's	✓		✓
Driscoll	✓		✓
El Paso First	✓		✓
FirstCare	✓		✓
HealthSpring		✓	
Molina	✓	✓	✓
Parkland Community	✓		✓
Seton			✓
Superior	✓	✓	✓
Texas Children's	✓		✓
UniCare	✓		✓
UnitedHealthcare-Texas (UHC-TX) [b]	✓	✓	✓
Service Area	**STAR**	**STAR+PLUS**	**CHIP**
Bexar	✓	✓	✓
Dallas [c]	✓	✓	✓
El Paso	✓		✓
Harris	✓	✓	✓
Jefferson	✓	✓	
Lubbock	✓		✓
Nueces	✓	✓	✓
Rural service area (RSA)			✓
Tarrant [c]	✓	✓	✓
Travis	✓	✓	✓

[a] STAR Health was served by one MCO – Superior HealthPlan Network – and operated statewide. NorthSTAR was served by ValueOptions (a BHO), and operated in the Dallas service area. CHIP Dental was served by Delta Dental, and operated statewide.

[b] Throughout certain sections of the report, the UnitedHealthcare-Texas MCO is referred to as Evercare in the context of its performance in STAR+PLUS.

[c] STAR+PLUS expanded into the Dallas and Tarrant service areas in February 2011.

The listed service areas account for the merging of the Harris and Harris Expansion service areas, as well as the creation of the Jefferson service area in September 2011. As many of the quality measures discussed in this report require at least one full year of data, the Jefferson service area is not represented in all results.

EQRO Activities

The EQRO annually conducts the following activities to address the mandatory and optional external quality review functions for evaluating 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. Evaluation of MCO PIPs
    d. Provider Office Surveys
3. Quality of Care Assessment
    a. Member Satisfaction Surveys
    b. Calculation of Performance Measures
    c. Focus Studies
4. Health-Based Risk Analysis
5. Resources and Guidance for MCOs
    a. Training/Continuing Education Sessions
    b. Tools for Disseminating Quality of Care Results

EQRO survey projects are specific to particular populations, and their content can vary from year to year. Member satisfaction surveys conducted in FY 2012 for adults in STAR and STAR+PLUS and for children in STAR Health were completed prior to the publication of this report; therefore, results from these studies are available and summarized where appropriate. In FY 2011, the EQRO conducted member surveys with parents of children enrolled in CHIP, STAR, and PCCM, and with adults enrolled in STAR+PLUS. In addition, behavioral health surveys were conducted in FY 2012 with adults in STAR, and in FY 2011 with parents of

children in STAR and with adults in STAR+PLUS. Results are also available for dual-eligible members in STAR+PLUS from surveys conducted in FY 2011 and 2010. Changes in survey results were assessed across the four-year period from 2009 through 2012.

Results of administrative measures, such as the Healthcare Effectiveness Data and Information Set (HEDIS®), were reported using CY 2011 data for STAR, CHIP, STAR+PLUS, STAR Health, NorthSTAR, and CHIP Dental. The set of measures for each program varies, with measures being selected according to the demographic and health profile of the program's members. There are a number of measures specific to adults (e.g., HEDIS® Comprehensive Diabetes Care, HEDIS® Antidepressant Management, and others) that were not calculated for CHIP or STAR Health because the vast majority of members in these programs do not meet the age criteria for the adult measures. For CHIP Dental, the EQRO calculated a single administrative measure – HEDIS® Annual Dental Visit. In addition, the measure set for STAR Health was more limited than the measure sets for STAR and CHIP.[15] For more information, readers can consult the EQRO's Quality of Care reports for these programs.[16]

It is important to note that, while the STAR Health program includes young adults (up to age 23), only six percent of STAR Health members were 19 years or older in CY 2011 (n = 1,792). Due to the relatively small group of adult members in STAR Health, HEDIS® measures specific to adults were not run for STAR Health, and no adult surveys in STAR Health were conducted.

The EQRO conducted one focus study in FY 2011 (the STAR+PLUS Long-Term Care Focus Study), which used member survey data to assess the health and functional status of STAR+PLUS dual-eligible members who need long-term services and supports. Baseline data for this study were collected using the Medicare Health Outcomes Survey (MHOS), and will be compared with data to be collected from the same members in the coming year. The EQRO also conducts special quarterly studies on health care quality topics of importance to the state (the Quarterly Topic Reports). In FY 2011 and FY 2012, the EQRO's Quarterly Topic Reports used 3M Health Information Systems (HIS) measures to calculate rates and expenditures associated with potentially preventable events (PPEs), such as potentially preventable hospital admissions (PPAs) and readmissions (PPRs).

To promote continued improvements in quality of care for Texas Medicaid and CHIP members, the EQRO also provides resources and guidance for MCOs, such as training and continuing education sessions, and the development of tools to assist in the dissemination of quality of care results to health plans and members. In FY 2011, the EQRO held two MCO Quality Forums in Austin, Texas, which were attended by state and MCO stakeholders, including health plan quality improvement staff. In FY 2012, the EQRO began two initiatives to develop tools for disseminating quality of care information: (1) the Texas Healthcare Learning Collaborative web portal – an online resource for health plans to access and analyze their results on important quality of care measures, including PPE measures; and (2) the MCO Report Cards, which

summarize quality of care information in a way that is accessible to Medicaid members, allowing members to make informed decisions when selecting their health plans.

Detailed methodologies for the EQRO activities are available in previous reports approved by HHSC, many of which are available online through the HHSC publications website.[17]

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.[18,19] Within this framework, structure and process can affect outcomes of care independently, and measurement of one element can lead to quality improvements in another. To these three aspects are added individual-level factors (e.g., demographic characteristics) and environmental factors (e.g., neighborhood poverty) that are not part of the health care system, but which nevertheless have an important impact on outcomes of care.

Following the aims for quality improvement outlined by the Institute of Medicine, improvements in structure, process, and outcomes are realized through addressing six general characteristics of quality health care: (1) efficiency; (2) effectiveness; (3) equity; (4) patient-centeredness; (5) timeliness; and (6) safety.[20] Furthermore, in evaluating quality of care in Texas Medicaid and CHIP, the EQRO assesses a number of more specific dimensions of care, including access and utilization, member satisfaction, and health plan and provider compliance with evidence-based practices.

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 six sections:

> **Section 1** addresses the demographic and health characteristics of Texas Medicaid and CHIP members using data from MCO claims and encounters, as well as from member surveys.
>
> **Section 2** addresses access and utilization of care in Texas Medicaid and CHIP. Using administrative measures from the Healthcare Effectiveness Data and Information Set (HEDIS®) and the Agency for Healthcare Research and Quality (AHRQ), the EQRO assesses access to and utilization of pediatric and adult preventive care, ambulatory care, inpatient services, and mental health services.
>
> **Section 3** addresses the structure and process of Medicaid managed care in Texas. Using encounter data validation studies, administrative interviews with MCOs, data certification, and evaluation of MCO QAPI programs and PIPs, the EQRO assesses MCO data management capabilities and data quality, disease management programs, and quality improvement practices.

Section 4 addresses Texas Medicaid and CHIP member satisfaction with care. Findings include results from the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey and the Experience of Care and Health Outcomes (ECHO) behavioral health survey, assessing members' experiences and satisfaction with timeliness of care, access to primary and specialist care, the patient-centered medical home, customer service, and care coordination.

Section 5 addresses the effectiveness of care in Texas Medicaid and CHIP. Using a number of HEDIS® and HEDIS®-based administrative measures, the EQRO assesses provider compliance with evidence-based practices and member compliance with treatment regimens regarding acute respiratory care, care for chronic conditions, behavioral health care, and preventive care.

Section 6 summarizes special studies and projects conducted by the EQRO in FY 2011 or using FY/CY 2011 data, including the STAR+PLUS Long-Term Care Focus Study, development of the Texas Healthcare Learning Collaborative web portal, and development of MCO Report Cards.

Each of the sections presents CY 2011 results for all Texas programs for which the measures were calculated. Although the report shows results for these programs together, it is important to note that each program serves a different population with unique demographic and health status characteristics. Therefore, in many cases differences in process and outcome measures between the programs are to be expected. Readers should exercise caution when comparing results across the programs.

In addition, for many of the administrative HEDIS® measures, the 2011 HEDIS® national means for state Medicaid programs are available for comparison with results for the Texas STAR program. All other programs discussed in this report represent populations that are not directly comparable with the national HEDIS® means. For measures where HHSC Performance Indicator Dashboard standards are available, these standards are the preferred benchmarks for assessing performance, as they more closely reflect the Texas Medicaid and CHIP populations.

Percentages shown in most figures and tables in this report are rounded to the nearest whole number; therefore, percentages may not add up to 100 percent.

1 – The Texas Medicaid and CHIP Populations

1.1 – Demographic Characteristics

Assessing demographic characteristics of Medicaid and CHIP members is crucial for defining health service needs and targeting appropriate interventions that are population-specific.

Table 2 shows enrollment trends in Texas Medicaid and CHIP using MCO administrative data for the months of August 2009, August 2010, and December 2011. All programs increased in membership each year, with the exception of PCCM, which declined in membership from 2010 to 2011, following the Medicaid managed care expansion in September 2011. A slight decrease in STAR Health membership was also seen between 2010 and 2011.

Table 2. Enrollment Trends in Texas Medicaid and CHIP, 2009-2011

Number of Members	2009	2010	2011	3-year trend
STAR	1,264,763	1,477,897	1,746,595	+38.1%
PCCM	742,144	849,444	804,327	+8.4%
CHIP	490,646	522,769	562,647	+14.7%
STAR+PLUS (Medicaid-only)	78,245	80,259	137,372	+75.6%
STAR+PLUS (Dual-eligible)	NR	89,152	144,092	+61.6% [a]
STAR Health	30,251	32,523	32,242	+6.6%
NorthSTAR	372,434	421,202	454,565	+22.1%

[a] STAR+PLUS enrollment for dual-eligible members was not reported in 2009; therefore the reported trend represents the change in enrollment since 2010.

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

- STAR enrollment increased by more than one-third between 2009 and 2011 (38 percent), to 1,746,595 members in December 2011. Among the programs, STAR had the highest overall increase in enrollment, by more than 480,000 members.
- STAR+PLUS Medicaid-only enrollment increased by more than three-fourths between 2009 and 2011 (76 percent), to 137,372 members in December 2011. Among the programs, STAR+PLUS had the highest increase in relation to its 2009 membership; most of this increase occurred following the Medicaid managed care expansions in February and September 2011.
- STAR+PLUS dual-eligible enrollment increased by nearly two-thirds between 2010 and 2011 (62 percent), to 144,092 in December 2011. Most of this increase also occurred following the Medicaid managed care expansions in February and September 2011.
- NorthSTAR enrollment increased by more than one-fifth between 2009 and 2011 (22 percent), to 454,565 members in December 2011.

Table 3 shows the sex and age distribution of members for each program in December 2011. All programs exhibited a fairly even distribution of male and female members, with the exception of dual-eligible members in STAR+PLUS, among whom nearly two-thirds were female (65 percent).

Table 3. Sex and Age Distribution in Texas Medicaid and CHIP, December 2011

Distribution of Members	Mean Age (yrs.)	Male	Female
STAR	9 (SD=8.0)	47%	53%
PCCM	11 (SD=12.1)	47%	53%
CHIP	10 (SD=4.6)	51%	49%
STAR+PLUS (Medicaid-only)	43 (SD=15.5)	47%	53%
STAR+PLUS (Dual-eligible)	65 (SD=17.0)	35%	65%
STAR Health	8 (SD=6.1)	51%	49%
NorthSTAR	14 (SD=17.8)	48%	52%

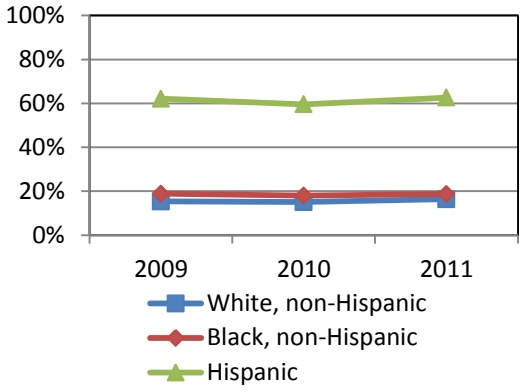
- The mean age in STAR was nine years old, with 36 percent of the population below four years of age and 27 percent of the population between five and nine years old.
- The mean age in PCCM was 11 years old, with 75 percent of the population below 15 years of age.
- The mean age in CHIP was ten years old, with 17 percent of the population below the age of five and 61 percent of the population between 6 and 14 years old.
- The mean age of STAR+PLUS Medicaid-only members, was 43 years old, with 53 percent of the population between 45 and 64 years old. Among dual-eligible members in STAR+PLUS, the mean age was 65 years old, with 53 percent of the population between 45 and 74 years old.
- The mean age in STAR Health was eight years old, with 37 percent of the population between one and five years old and 37 percent between 6 and 14 years old.
- The mean age in NorthSTAR was 14 years old, with 55 percent below the age of ten and 25 percent between 10 and 17 years old.

Figures 1 through **6** 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 Hispanic members (the three most populous groups). Hispanic members were the largest group in every program across all three years, with the exception of STAR+PLUS, where the Hispanic member population dropped below the White, non-Hispanic and Black, non-Hispanic populations following the Medicaid managed care expansion in September 2011. Asian and American Indian members accounted for less than five percent of members in all programs during the

three-year period and are not shown in the figures. Percentages exclude members listed as "unknown" race/ethnicity in the enrollment data.

In STAR, the distribution of members by race/ethnicity was constant from 2009 to 2011. In December 2011, Hispanic members represented 63 percent of the STAR population, followed by Black, non-Hispanic members (19 percent), and White, non-Hispanic members (16 percent). Asian members accounted for about two percent, and American Indian members accounted for less than one percent of the STAR population.

Figure 1. STAR Members by Race/Ethnicity, 2009-2011



In CHIP, the distribution of members by race/ethnicity changed slightly from 2009 to 2011. In December 2011, Hispanic members represented 61 percent of the CHIP population, which decreased from 65 percent in 2009. The next largest group was White, non-Hispanic members, who increased minimally from 20 percent in 2009 to 23 percent in 2011. The percentage of Black, non-Hispanic members remained at about 12 percent across the three-year period. Asian members accounted for about four percent, and American Indian members accounted for less than one percent of all CHIP members during the three-year period.

In STAR+PLUS, the distribution of Medicaid-only members by race/ethnicity changed considerably following the Medicaid managed care expansion in September 2011. In December 2011, Black, non-Hispanics represented 38 percent of the STAR+PLUS population, following an increase from 31 percent in 2010. The next largest group was White, non-Hispanic members, with an increase from 26 percent in 2010 to 33 percent in 2011. The proportion of Hispanic members decreased from 33 percent in 2010 to 26 percent in 2011. Asian members accounted for about three percent, and American Indian members accounted for less than one percent of all STAR+PLUS Medicaid-only members during the three-year period.

Figure 2. CHIP Members by Race/Ethnicity, 2009-2011

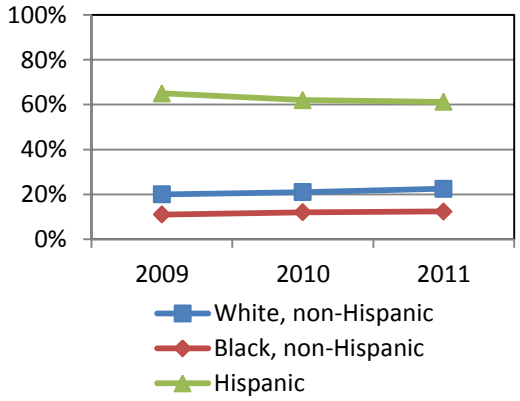


Figure 3. STAR+PLUS Medicaid-only Members by Race/Ethnicity, 2009-2011

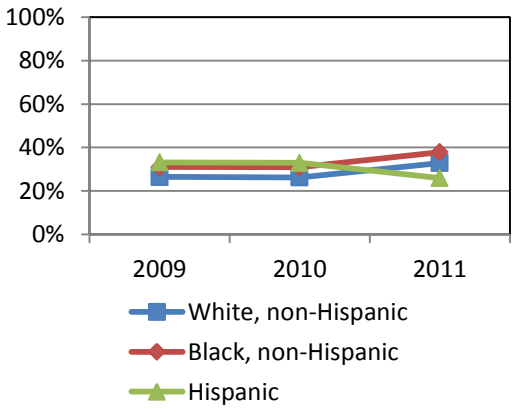
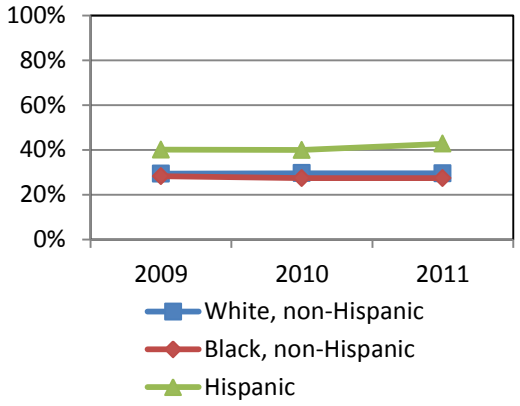


Figure 4. STAR Health Members by Race/Ethnicity, 2009-2011



In STAR Health, the distribution of members by race/ethnicity was primarily constant from 2009 to 2011, with Hispanic membership increasing slightly from 40 percent to 43 percent during the three-year period. The next largest group was White, non-Hispanic members (29 percent), followed by Black, non-Hispanic members (27 percent). Asian and American Indian members together accounted for less than one percent of all STAR Health members.

In NorthSTAR, the distribution of members by race/ethnicity remained constant from 2009 to 2011. In December 2011, Hispanic members accounted for 51 percent of the NorthSTAR population, following a slight increase from 48 percent in 2009. The next largest group was Black, non-Hispanic members (29 percent), followed by White, non-Hispanic members (16 percent). Asian members accounted for about three percent, and American Indian members accounted for less than one percent of all NorthSTAR members.

Figure 5. NorthSTAR Members by Race/Ethnicity, 2009-2011

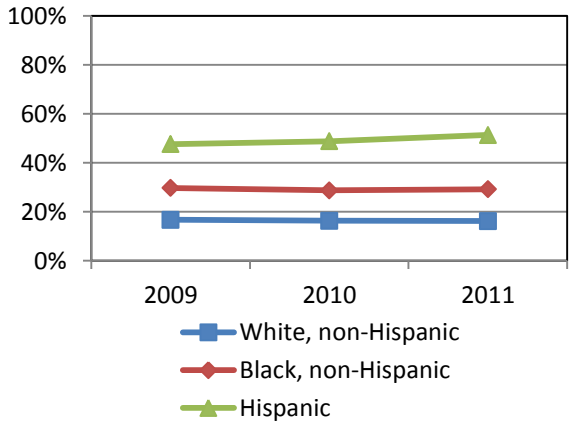
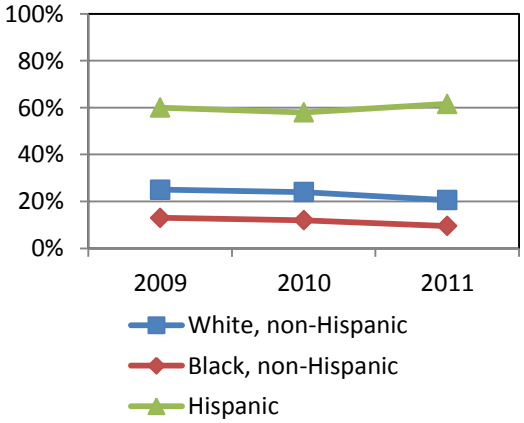


Figure 6. PCCM Members by Race/Ethnicity, 2009-2011



In PCCM, the distribution of members by race/ethnicity changed slightly for all groups following the Medicaid managed care expansion in September 2011. In December 2011, Hispanic members represented 62 percent of the PCCM population, following a slight increase from 58 percent in 2010. The next largest group was White, non-Hispanic members, who decreased from 24 percent in 2010 to 21 percent in 2011, followed by Black, non-Hispanic members, who also decreased slightly from 12 percent in 2010 to 10 percent in 2011. Asian and American Indian members together accounted for less than one percent of all PCCM members during the three-year period.

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; methods used to assess health can draw from administrative data on health care claims and encounters 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 effects of interventions on the health outcomes of its members.

This section examines member health status in STAR, CHIP, STAR+PLUS, and PCCM using administrative and survey data collected between SFY 2009 and 2011, and in STAR Health using survey data collected in 2012. Specifically, this section presents findings on: (1) the percentage of child members with special health care needs (MSHCN) in STAR, CHIP, and PCCM, using both Clinical Risk Groups (CRGs) and surveys, and the most common types of special needs among child MSHCN in STAR, CHIP, PCCM, and STAR Health (using surveys); (2) caregiver-reported health status of child members in STAR, CHIP, PCCM, and STAR Health; (3) self-reported health status and activities of daily living (ADL) of adult members in STAR+PLUS; and (4) obesity rates among children in STAR, CHIP, PCCM, and STAR Health, and adults in STAR+PLUS.

Child Member Health Status

To ensure quality of care for children in Medicaid and CHIP, it is important to identify children with special health care needs (CSHCN) in programs and health plans.

The Federal Maternal and Child Health Bureau defines *CSHCN* as:[21]

- 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.

In this report, CSHCN are referred to as child "MSHCN" – "members with special health care needs" – to be consistent with terminology used in the Texas Medicaid program.

The EQRO uses two methods for identifying child MSHCN: (1) CRG classification using International Classification of Diseases, 9th Revision (ICD-9-CM) and Current Procedural Terminology (CPT) codes from health care claims and encounter data;[22,23] and (2) survey-based classification using the CSHCN Screener®.[24]

Clinical Risk Group (CRG) categories

1) Healthy
2) Significant Acute Conditions
3) Minor Chronic Conditions
4) Moderate Chronic Conditions
5) Major Chronic Conditions

This report presents findings on the percentage of child MSHCN in STAR, CHIP, and PCCM using the CRG classification system. Five CRG categories are reported, 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 MSHCN.

Percentage of Child MSHCN

Table 4 presents the percentage of child MSHCN in the STAR, CHIP, and PCCM populations in 2011 (assessed using both CRGs and surveys), and in STAR Health in 2012 (assessed by survey only). STAR Health had a considerably higher percentage of child MSHCN than the other programs (48 percent), at more than double the rates observed in STAR (18 percent) or CHIP (20 percent) using the survey.

- When CRGs were used to classify children, the PCCM program showed an increase in the percentage of child MSHCN from 23 percent in 2010 to 27 percent in 2011. Both STAR and CHIP members had similar rates of child MSHCN in 2011 (16 percent and 15 percent, respectively). Rates have remained constant for STAR and increased nominally for CHIP during the three-year period.
- Use of the survey-based CSHCN Screener produced slightly higher rates than CRG-based rates in STAR and CHIP, and a lower rate in PCCM. The proportion of child MSHCN in STAR and CHIP was slightly above the national average of 14 percent for the general population, estimated by the 2009/2010 National Survey of CSHCN.[25]

Table 4. Percentage of Child Members with Special Health Care Needs, by Program

Program	Year of study	% MSHCN (CRG)	% MSHCN (survey)
STAR	2011	16%	18%
PCCM	2011	27%	23%
CHIP	2011	15%	20%
STAR Health	2012	-	48%

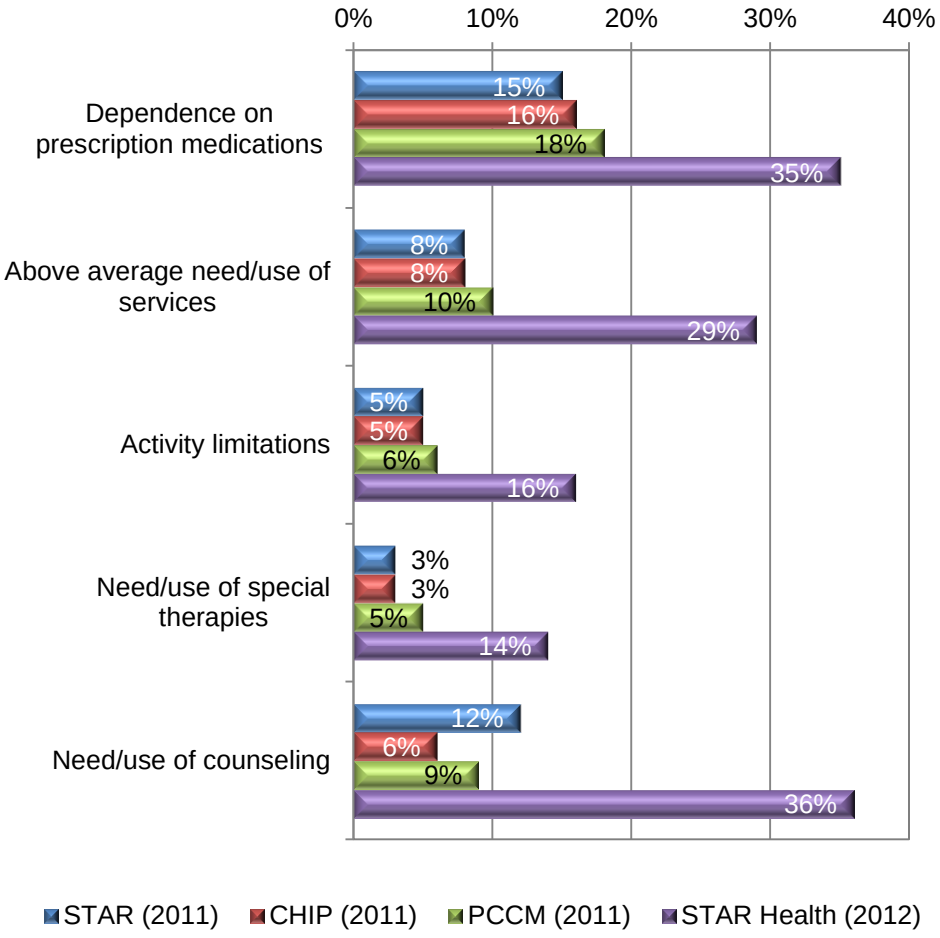
Child MSHCN Characteristics

Caregiver surveys administered by the EQRO include questions regarding five types of special needs among child MSHCN: (1) Dependence on medication; (2) Greater than routine use of health and educational services; (3) Functional/ability limitations (compared with other children their age); (4) Need for/use of special therapies; and (5) Need for/use of mental health treatment or counseling.

Figure 7 provides the percentage of members in STAR, CHIP, and PCCM who met the criteria for each of the five child MSHCN categories in FY 2011, and the percentage of members in STAR Health who met these criteria in FY 2012.[26] In STAR, CHIP, and PCCM, the most common special health care need was dependence on prescription medications (15 percent for STAR, 16 percent for CHIP, 18 percent for PCCM). The second most common special health care need varied across the programs. In STAR, need for/use of mental health treatment or counseling was the second-most common special health care need (12 percent). In CHIP and PCCM the second-most common special need was use of more medical care, mental health, or education services than is usual for most children (8 percent and 10 percent, respectively). Across the three-year period, the distribution of special needs among child MSHCN was relatively constant in STAR and CHIP, with STAR reporting an increase in need for counseling from seven percent in 2009 to 12 percent in 2011.

The prevalence of special needs was considerably higher in STAR Health, based on the FY 2012 STAR Health Caregiver Survey. In STAR Health, more than one-third of members were dependent on medications (35 percent) or had problems that required mental health treatment or counseling (36 percent). More than one-fourth of STAR Health members also had use of more medical care, mental health, or educational services than is usual for most children (29 percent). The percentage of STAR Health members who had functional/ability limitations or need/use of special therapies in 2012 was 16 percent and 14 percent, respectively. The higher rates of special needs in STAR Health are expected, as this program serves the population of children in foster care.

Figure 7. Characteristics of Child MSHCN in STAR, CHIP, PCCM, and STAR Health



Caregiver-Reported Child Member Health Status

Figure 8 shows parent-reported child member health status in STAR, CHIP, and PCCM for 2011, and in STAR Health in 2012. Both STAR and CHIP had an increase in child member health status from previous years. In STAR, parent-reported child health status (“excellent” or “very good”) increased from 65 percent in 2009 to 71 percent in 2011. In CHIP, this rate increased from 68 percent in 2010 to 73 percent in 2011.

Childhood Obesity Rate

BMI values were calculated using caregiver-reported height and weight data for children enrolled in STAR, CHIP, PCCM, and STAR Health. 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.[27] **Figure 9** displays the reported obesity rate in STAR, CHIP and PCCM. PCCM had the highest rate of child/adolescent obesity, with 31 percent of members classified as obese. STAR showed a decrease in the rate of child/adolescent obesity from 33 percent in 2009 to 28 percent in 2011. CHIP had the lowest child/adolescent obesity rate among the programs, and also showed a decrease over two years, from 28 percent in 2010 to 25 percent in 2011.

Figure 8. Percent of Caregivers who Reported Their Child's Health was "Excellent" or "Very Good" in STAR, CHIP, PCCM, and STAR Health

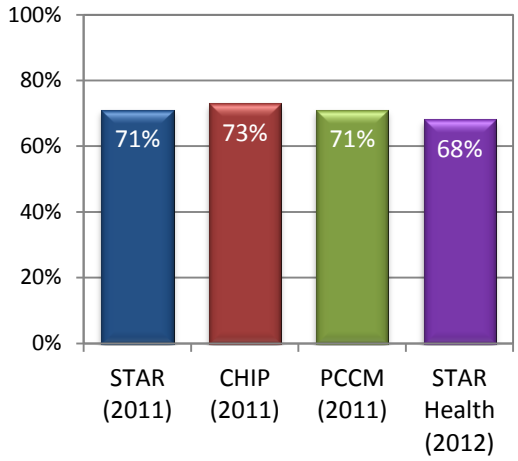
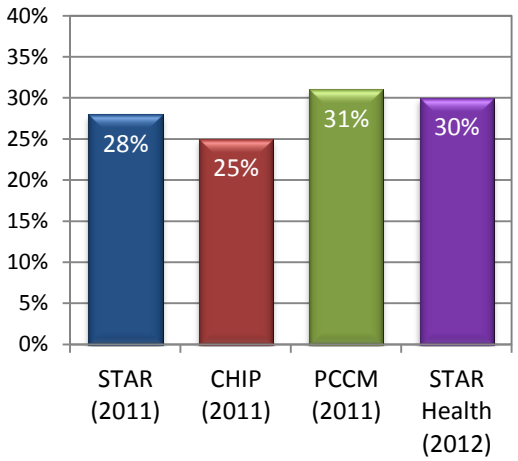


Figure 9. Reported Child/Adolescent Obesity Rates in STAR, CHIP, PCCM, and STAR Health



STAR+PLUS Member Health Status

Each year, STAR+PLUS members are asked a series of questions about their health status, ranging from general health to specific domains such as mental health and role and activity limitations due to physical or emotional problems. Rating health status is important for two major reasons. First, this information forms a baseline to track changes in health status over time. Second, such information can assist in program planning and financing. Assessing the percentage of members who are in poor health or who have chronic conditions is important to ensure adequate provider access, appropriate range of services, and financing for health services.

Member-Reported Health Status

Overall, STAR+PLUS member self-rated health status was low, with over 60 percent of Medicaid-only and dual-eligible members reporting “fair” or “poor” health across the three-year period. In 2009 and 2011, only 14 percent of Medicaid-only STAR+PLUS members rated their health as “excellent” or “very good”. This rate increased negligibly to 15 percent in 2012. Among STAR+PLUS dual-eligible members, 16 percent reported being in “excellent” or “very good” health in both 2010 and 2011. Low health status rates are generally expected for the STAR+PLUS population due to higher rates of chronic illness and disability in this program.

STAR+PLUS Member Self-Reported Health Status

	STAR+PLUS Medicaid-only 2012	STAR+PLUS Dual-eligible 2011
Overall health		
“Excellent” or “Very Good”	15%	16%
“Good”	22%	23%
“Fair or Poor”	64%	62%
Mental health		
“Excellent” or “Very Good”	26%	27%
“Good”	24%	29%
“Fair or Poor”	50%	44%

Note: Percentages shown in most figures and tables are rounded to the nearest whole number; therefore, percentages may not add up to 100 percent.

Self-reported mental health status among STAR+PLUS members was generally higher, with more than one-fourth of Medicaid-only members in 2012 and dual-eligible members in 2011 reporting their mental health as “excellent” or “very good” (26 percent and 27 percent, respectively).

Activities of Daily Living

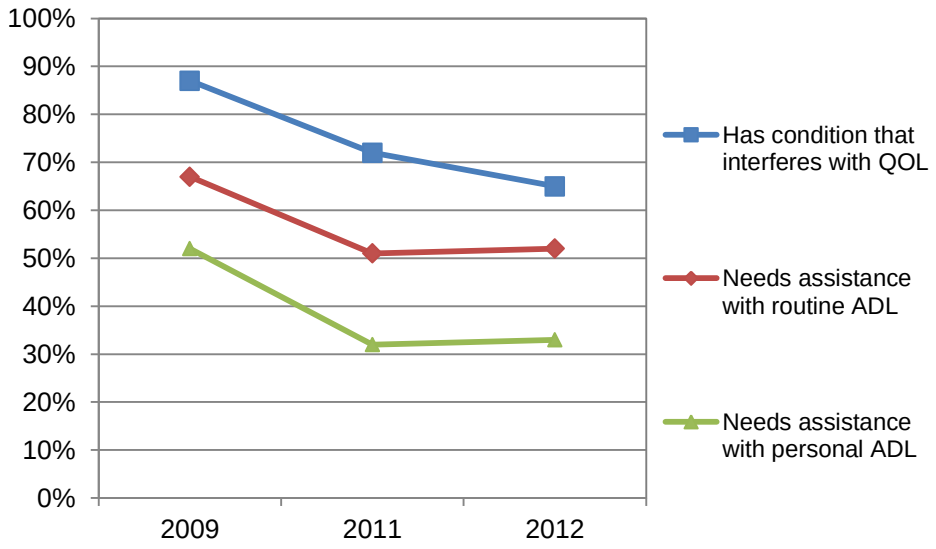
An important component of health status involves a person’s independence and ability to perform specific tasks of daily living, in which low levels of functioning indicate disability and dependence on others.

Medicaid-only and dual-eligible STAR+PLUS members generally had high levels of need for assistance with their activities of daily living (ADLs). Approximately two-thirds of members in both eligibility groups reported having a condition that interferes with their quality of life (QOL) – at 65 percent for Medicaid-only members in 2012, and 68 percent for dual-eligible members in

2011. During these same reporting years, 52 percent of Medicaid-only members and 53 percent of dual-eligible members reported needing assistance with *routine needs*, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes. Approximately one-third of members in both eligibility groups reported needing assistance with *personal* needs, such as eating, dressing, or getting around the house (33 percent and 37 percent, respectively).

In the STAR+PLUS Medicaid-only population, some changes were observed in the percentage of members needing assistance with ADLs following the Medicaid managed care expansion in September 2011. **Figure 10** displays the percentage of Medicaid-only members who had a condition that interfered with their QOL, needed assistance with routine ADL, and needed assistance with personal ADL in 2009, 2011, and 2012. For all three rates, a considerable decrease occurred between the 2009 and 2011 reporting periods, suggesting that the expansion that occurred in 2011 added members with higher functional status. It should be noted, however, that similar increases were not observed in self-reported overall or mental health status.

Figure 10. Activities of Daily Living for STAR+PLUS Medicaid-Only Members in 2009, 2011, and 2012



Obesity Rate

BMI values were calculated using self-reported height and weight data for members enrolled in STAR+PLUS. Men and women 18 years of age and older are grouped into one of four clinically relevant BMI categories, which are recognized by the Centers for Disease Control and Prevention (CDC): (1) Underweight (below 18.5); (2) Healthy weight (18.5 to 24.9); (3) Overweight (25.0 to 29.9); and Obese (30.0 and above).[28] For the STAR+PLUS Medicaid-only and dual-eligible populations, nearly one-half of all members were considered obese across the three years.

STAR+PLUS Member BMI Classification		
	STAR+PLUS Medicaid-only 2012	**STAR+PLUS Dual-eligible 2011**
Underweight	3%	4%
Healthy weight	23%	26%
Overweight	25%	25%
Obese	50%	45%

These findings show a notably high rate of obesity among members in the STAR+PLUS program, suggesting that STAR+PLUS MCOs should continue efforts to monitor, document, and implement interventions for healthy weight.

2 – Access and Utilization 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."[29] Many quality of care metrics evaluate quality only for individuals who actually 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 it is being delivered quickly enough to meet their health care needs. Similarly, monitoring the utilization of health services by program can reveal whether members are receiving appropriate levels of care.

2.1 – Preventive Care

Preventive services are crucial for both detecting early signs of disease and for addressing modifiable risk factors of disease. Without timely diagnosis and treatment, risk factors such as obesity, high blood pressure, and high blood glucose levels can lead to chronic diseases.[30] Lifestyle choices can also contribute to chronic disease; at least one-third of annual mortality in the United States can be linked to preventable factors such as poor diet, physical inactivity, and cigarette smoking.[31,32] Regular and effective implementation of preventive efforts for these factors can limit the development of chronic diseases[33] and, in turn, reduce the incidence of preventable deaths.[34] Preventive services include screening patients for risk factors and counseling them on healthy lifestyle decisions.

Pediatric Preventive Care

The EQRO uses several measures that assess pediatric preventive care in Texas Medicaid and CHIP, including: (1) *Children and Adolescents' Access to Primary Care Practitioners*; (2) *Well-Child Visits in the First 15 Months of Life*; (3) *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*; (4) *Adolescent Well-Care Visits*; (5) HEDIS® *Childhood Immunization Status*; and (6) HEDIS® *Annual Dental Visit*.

<u>Access to Primary Care Practitioners</u>

Children and adolescents need access to primary care practitioners (PCPs) in order to receive the care that is necessary for their health and well-being.[35] However, at the national level many children do not have access to a PCP.[36,37] (In Texas, Medicaid MCOs are required to provide a PCP to each of their members.) It is important to identify the children and adolescents who experience barriers to primary care to ensure that they receive the health care services they need.

The EQRO examines PCP accessibility in Texas Medicaid and CHIP using the HEDIS®-based measure: *Children and Adolescents' Access to Primary Care Practitioners*. This measure reflects the percentage of members 12 months to 19 years of age who had a PCP visit during the measurement period (defined as one year for children up to six years old and two years for children and adolescents older than six). The EQRO calculates this measure for STAR, CHIP, and STAR Health. At HHSC's request, the EQRO lifted provider constraints for this measure,

which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications.

Children and Adolescents' Access to Primary Care Practitioners				
	CY 2011 results 12 to 24 mo.	**CY 2011 results 25 mo. to 6 yrs.**	**CY 2011 results 7 to 11 years**	**CY 2011 results 12 to 19 years**
STAR	98 percent	93 percent	96 percent	95 percent
CHIP	95 percent	90 percent	93 percent	91 percent
STAR Health	99 percent	96 percent	98 percent	98 percent

For each of the three programs, members in all age cohorts generally had good access to primary care in CY 2011. Access to PCPs is slightly lower among children 25 months to 6 years old than among members in other age groups. However, all rates were 90 percent or greater.

Well-Child Care

Pediatric well-child visits play an essential role in monitoring a child's health and development.[38] Well-child visits facilitate the identification of childhood illnesses and developmental delays, and provide the opportunity for early intervention at a crucial point in the child's life.[39] Standards regarding the frequency of such visits vary depending upon the age of the child. The American Academy of Pediatrics recommends six well-child visits in the first year of life, and an annual well-child visit for children three to six years of age.[40] The EQRO uses items that track well-care at three unique stages of development.

To assess whether infants received the recommended level of well-child care, the EQRO uses the HEDIS®-based measure: *Well-Child Visits in the First 15 Months of Life*. This measure reveals the percentage of members who turned 15 months old during the measurement year and who had at least six well-child visits during their first 15 months of life. At HHSC's request, the EQRO lifted provider constraints for this measure, which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications. In both STAR and STAR Health, performance on this measure improved from 2009 to 2011.

Figure 11. *Well-Child Visits in the First 15 Months of Life* in STAR, 2009-2011

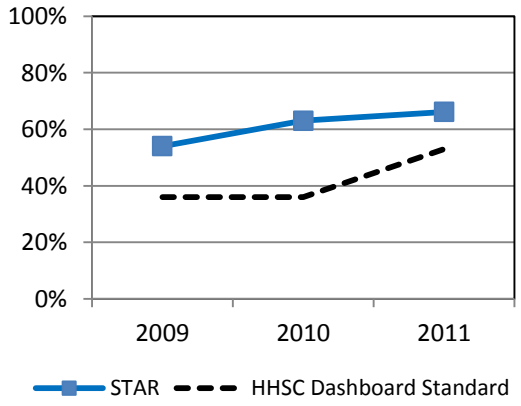
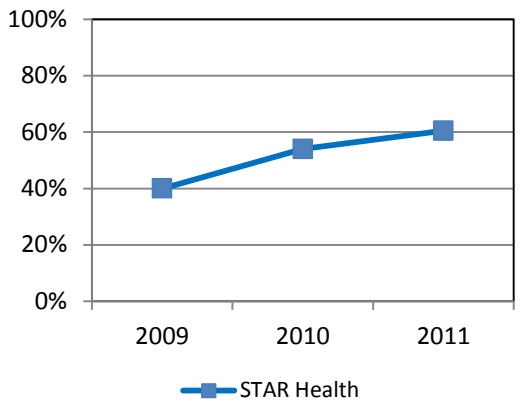


Figure 11 displays rates for this measure in STAR from 2009 to 2011, along with the corresponding HHSC Dashboard standards. The percentage of infants in the STAR program receiving the appropriate number of well-child visits surpassed the HHSC Dashboard standard during all three years. In 2011, two-thirds of eligible STAR members had six or more well-child visits within the first 15 months of life (66

percent), exceeding the HHSC Dashboard standard of 53 percent.

Figure 12 shows rates in STAR Health over the same three-year period. In 2011, 60 percent of eligible children received at least six well-child visits in the first 15 months of life, exceeding the HHSC Dashboard standard of 53 percent. (Note that STAR Health Dashboard standards for this measure were first established in 2011.) Between 2009 and 2011, the rate of well-child visits for infants in STAR Health increased by 20 percentage points.

Figure 12. *Well-Child Visits in the First 15 Months of Life in STAR Health*, 2009-2011



To measure access and utilization of well-child care among young children, the EQRO uses the HEDIS®-based measure: *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*. This measure provides the percentage of members three to six years of age who received one or more well-child visits with a PCP during the measurement year. At HHSC's request, the EQRO lifted provider constraints for this measure, which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications.

Figure 13. *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* in STAR, CHIP, STAR+PLUS, and STAR Health, 2009-2011

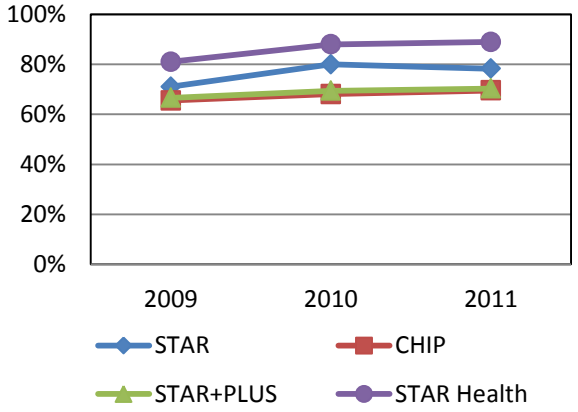


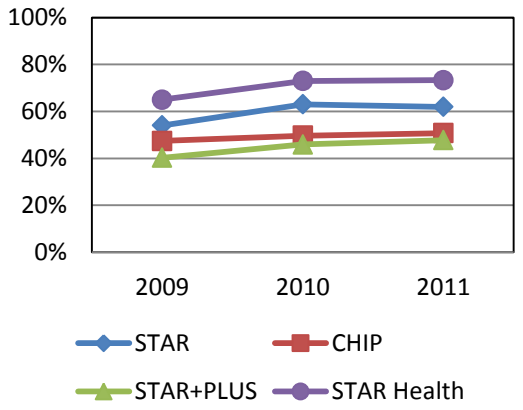
Figure 13 displays program-level results for this measure from 2009 to 2011 for STAR, CHIP, STAR+PLUS, and STAR Health. In general, all four programs demonstrated slight improvements over the three year period.

In 2011, 78 percent of STAR members in this age group had one or more well-child visits within the measurement year. This percentage exceeded both the national HEDIS® mean and HHSC Dashboard standard (72 percent and 71 percent, respectively). In addition, CHIP, STAR+PLUS, and STAR Health all outperformed the HHSC Dashboard standards associated with their programs by five percentage points each.

Well-care visits are also important for adolescents, whose health-related issues are often associated with lifestyle factors such as risky sexual behaviors, unhealthy diet, and use of

alcohol, tobacco, or recreational drugs.[41] The American Medical Association recommends that adolescents have at least one well-care visit annually.[42]

Figure 14. *Adolescent Well-Care Visits* in STAR, CHIP, STAR+PLUS, and STAR Health, 2009-2011



The EQRO uses the HEDIS®-based measure *Adolescent Well-Care Visits*, which assesses the percentage of members 12 to 21 years of age who had at least one comprehensive well-care visit with either a PCP or an OB/GYN practitioner during the measurement year. At HHSC's request, the EQRO lifted provider constraints for this measure, which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications. **Figure 14** shows program-level trends in adolescent well-care from 2009 to 2011. Results for all four programs slightly improved over this time frame.

In 2011, 62 percent of adolescents in STAR had at least one comprehensive well-care visit within the measurement year. This percentage surpasses both the HHSC Dashboard standard of 51 percent and the national HEDIS® mean of 48 percent. Rates in CHIP (51 percent), STAR+PLUS (48 percent), and STAR Health (73 percent) also exceeded the HHSC Dashboard standards for these programs (42 percent, 42 percent, and 45 percent, respectively).

Childhood Immunization

Childhood vaccination is a basic method of disease prevention. Immunizations prevent the spreading of dangerous diseases and ultimately save billions of dollars in direct and societal costs.[43] Certain vaccine-preventable illnesses, such as hepatitis, measles, and pertussis, can lead to severe complications, including death.[44] Infants are especially vulnerable and often have a more severe reaction to infections because their immune systems are still developing.[45]

The Centers for Disease Control and Prevention (CDC) recommends an immunization schedule in a child's first two years of life against chickenpox, diphtheria, hepatitis (A and B), influenza, measles, mumps, pertussis, polio, pneumococcus, rotavirus, rubella, and tetanus.[46]

HEDIS® *Childhood Immunization Status*	
CY 2011 results	
STAR	45 percent
CHIP	39 percent

The EQRO uses the HEDIS® *Childhood Immunization Status* measure to assess whether children in Medicaid and CHIP are receiving these vaccines. This measure represents the percent of two-year-old children who received the recommended series of vaccinations by their second birthday.[47] In both STAR and CHIP, less than one-half of eligible members had been given the recommended series of vaccinations by their second birthday in CY 2011. However, the STAR program rate for

Childhood Immunization Status exceeded the national HEDIS® mean of 32 percent. Among CHIP members, 39 percent of eligible two-year olds received the appropriate immunizations, an improvement of four percent over the previous year's rate.

Access to Dental Care

Good oral health is integral to a child's overall physical well-being. Inadequate dental care during childhood can have negative impacts on speech, growth and social development, nutrition, and quality of life.[48,49] Yet, millions of children in the United States have insufficient access to needed dental treatment and preventive oral health care.[50] Children from impoverished families are particularly vulnerable to experiencing problems related to poor dental health, including oral disease and untreated tooth decay.[51, 52] However, compared to the general population, children from low-income households receive fewer dental services[53, 54] and are less likely to have routine dental checkups.[55]

HEDIS® *Annual Dental Visit*	
CHIP Dental CY 2011 results	
2 to 3 years old	60 percent
4 to 6 years old	71 percent
7 to 10 years old	73 percent
11 to 14 years old	66 percent
15 to 18 years old	56 percent
19 to 21 years old	48 percent
All members	66 percent

The EQRO evaluates access to dental care and services among members enrolled in CHIP Dental using the HEDIS® *Annual Dental Visit* measure. This measure calculates the percentage of members 2 to 21 years of age who had at least one dental visit during the measurement year. Specifications for this measure allow for the calculation of separate rates across six age cohorts, as well as an overall rate. Overall, the rate of annual dental visits in CHIP Dental rose from 59 percent in SFY 2009 to 66 percent in CY 2011, greatly exceeding the 2011 HEDIS® national average of 48 percent.

Adult Preventive Care

The EQRO uses six measures to assess adult preventive care in Texas Medicaid: (1) HEDIS® *Adults' Access to Preventative/Ambulatory Health Services*; (2) *Prenatal and Postpartum Care*; (3) *Frequency of Ongoing Prenatal Care*; (4) HEDIS® *Breast Cancer Screening*; (5) HEDIS® *Cervical Cancer Screening*; and (6) HEDIS® *Chlamydia Screening in Women*.

Adults' Access to Preventive/Ambulatory Health Services

HEDIS® *Adults' Access to Preventive/Ambulatory Health Services*
STAR+PLUS CY 2011 results

The HEDIS® *Adults' Access to Preventive/Ambulatory Health Services* measure examines the percentage of members who had an ambulatory or preventive care visit during the measurement year. In CY 2011, rates in STAR+PLUS were calculated separately for three age groups: 20 to 44 years old, 45 to 64 years old, and 65 years and older.

20 to 44 years old	72 percent
45 to 64 years old	87 percent
65 years and older	87 percent

In the STAR+PLUS program, members 45 years of age and older generally had good access to preventive care. Eighty-seven percent of members in both older age cohorts (45 to 64 years and 65 years and older) had an ambulatory or preventive care visit in CY 2011. Preventive care was lower among 20- to 44-year-old STAR+PLUS members than among older members. Seventy-two percent of members 20 to 44 years of age had an ambulatory or preventive care visit in CY 2011.

Prenatal and Postpartum Care

Timely prenatal and postpartum care provides the opportunity to screen for health conditions that affect mother and child during and after pregnancy. Depression, diabetes, and anemia are all prenatal and postpartum conditions that can lead to adverse consequences if they are not detected early.[56,57] The American College of Obstetricians and Gynecologists recommends a prenatal evaluation within the first trimester and a postpartum evaluation on or between 21 days and 56 days after delivery.[58]

Prenatal and Postpartum Care

CY 2011 results	Prenatal Care	Postpartum Care
STAR	83 percent	59 percent
STAR+PLUS	68 percent	38 percent
STAR Health	72 percent	45 percent

The EQRO uses the *Prenatal and Postpartum Care* measure to analyze two aspects of perinatal care for live births that occurred during the measurement period: (1) *Timeliness of Prenatal Care*: the percentage of deliveries that received a prenatal care visit in the first trimester or within 42 days of enrollment; and (2) *Postpartum Care*: the percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery. This measure follows HEDIS® specifications with the exception of provider constraints for Prenatal Care; this should be taken under consideration when making comparisons to HEDIS® national means.

Eighty-three percent of STAR program deliveries received a prenatal visit, and 59 percent of deliveries received a postpartum visit within the specified time periods. These percentages fell slightly short of their corresponding national HEDIS® means (84 percent and 64 percent, respectively), but met their HHSC Dashboard standards (83 percent and 59 percent, respectively).

Figures 15 and **16** show results for the *Prenatal and Postpartum* Care measure from 2009 to 2011 in the STAR+PLUS program. Sixty-eight percent of STAR+PLUS deliveries received a prenatal visit in 2011. Although this rate represented an increase over previous years' performances, STAR+PLUS failed to meet the HHSC Dashboard standard for the third consecutive year.

A similar trend was observed in STAR+PLUS for the *Postpartum Care* sub-measure. The percentage of deliveries receiving a postpartum visit in STAR+PLUS increased slightly across the three-year period (from 31 percent in 2009 to 38 percent in 2011), but failed to meet the HHSC Dashboard standard during all three years.

Figure 15. *Timeliness of Prenatal Care* in STAR+PLUS, 2009-2011

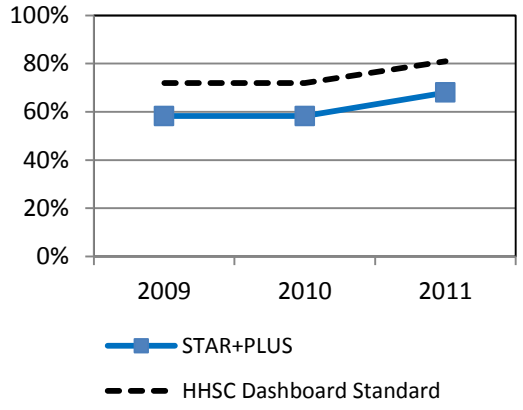


Figure 16. *Postpartum Care* in STAR+PLUS, 2009-2011

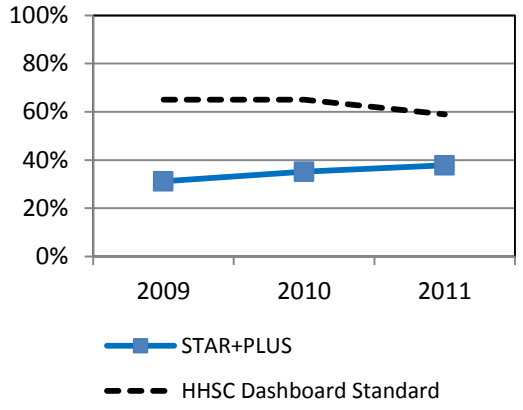


Figure 17. *Timeliness of Prenatal Care* in STAR Health, 2009-2011

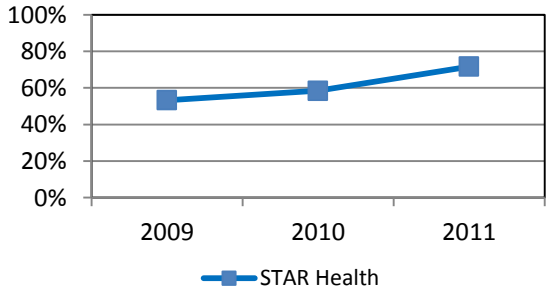


Figure 17 shows results for the *Timeliness of Prenatal Care* sub-measure from 2009 to 2011 in STAR Health. Seventy-two percent of deliveries in STAR Health received a prenatal visit in 2011, which was approximately a 20 percent increase over the 2009 outcome of 53 percent for this measure. Forty-five percent of STAR Health deliveries received a postpartum visit.

Frequency of Ongoing Prenatal Care

The EQRO uses the HEDIS®-based measure *Frequency of Ongoing Prenatal Care* to examine women's use of prenatal care services relative to the recommended guidelines of the American College of Obstetricians and Gynecologists for frequency/scheduling of prenatal care. This

measure represents the percentage of deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that had the following number of prenatal visits (in reference to the recommended number of visits): (1) <21 percent of expected visits; (2) 21-40 percent of expected visits; (3) 41-60 percent of expected visits; (4) 61-80 percent of expected visits; and (5) ≥81 percent of expected visits. At HHSC's request, the EQRO lifted provider constraints for this measure, which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications.

Figure 18. *Frequency of Ongoing Prenatal Care* in STAR and STAR Health, 2009-2011

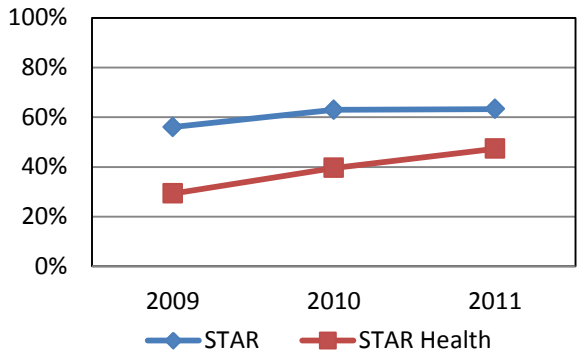


Figure 18 shows the percentage of deliveries in STAR and STAR Health that had greater than 80 percent of the expected prenatal care visits in CY 2011. Sixty-three percent of STAR deliveries had ≥81 percent of expected visits (representing good performance), which exceeded the HEDIS® mean of 61 percent. Forty-seven percent of STAR Health deliveries had ≥81 percent of expected visits, while 40 percent of CHIP deliveries had ≥81 percent of expected visits.

Breast Cancer Screening

Nearly one of every eight women in the U.S. will develop breast cancer during her lifetime.[59] Screening for breast cancer can reduce the risk for breast cancer mortality by about 20 percent,[60] and the American Academy of Family Physicians (AAFP) recommends that women between the ages of 50 and 74 get a mammogram every two years.[61]

HEDIS® *Breast Cancer Screening*	
CY 2011 results	
STAR+PLUS	46 percent

The EQRO examines breast cancer screening rates in STAR+PLUS using the HEDIS® *Breast Cancer Screening* measure, which assesses the percentage of women who received a mammogram during the measurement period.

In CY 2011, 46 percent of eligible women in STAR+PLUS had a mammogram to screen for breast cancer during the measurement period. This rate falls below the HEDIS® mean of 51 percent, but is six percentage points higher than the program-level results from 2009.

Cervical Cancer Screening

Pap tests are an effective way to detect cervical cancer, and have helped to reduce the prevalence of cervical cancer by 67 percent in the past 30 years.[62] Women who receive Pap tests and detect cancer early have a survival rate of nearly 100 percent. Despite the effectiveness of screening for cervical cancer, approximately three out of four women with advanced cervical cancers have not had a Pap test in the past five years.[63]

HEDIS® *Cervical Cancer Screening*	
CY 2011 results	
STAR	59 percent
STAR+PLUS	40 percent

The EQRO assesses rates of cervical cancer screening in STAR and STAR+PLUS using the HEDIS® *Cervical Cancer Screening* measure, which provides the percentage of women between 21 and 64 years of age who had at least one Pap test to screen for cervical cancer during the measurement year. In the STAR program, 59 percent of women eligible for this measure had a Pap test to screen for cervical cancer during the CY 2011 measurement period. Of the women eligible for this measure in STAR+PLUS, 40 percent had a Pap test to screen for cervical cancer. The results in both programs fell short of both the HEDIS® mean of 67 percent and the HHSC Dashboard standard of 65 percent.

Chlamydia Screening in Women

Over one million Americans are diagnosed with Chlamydia each year,[64] and an estimated two million additional cases go undiagnosed and untreated. Chlamydia can lead to a number of serious health problems if not treated properly, often causing irreversible damage to women's reproductive organs.[65,66] The CDC recommends annual screening for Chlamydia in all women under the age of 25 who are sexually active.[67]

The EQRO uses the HEDIS® *Chlamydia Screening in Women* measure for young women in STAR, CHIP, and STAR Health. This measure provides the percentage of sexually active female members between ages 16 and 24 who had at least one test for Chlamydia during the measurement period.

HEDIS® *Chlamydia Screening in Women*	
CY 2011 results	
STAR	51 percent
CHIP	31 percent
STAR Health	58 percent

In 2011, the percentage of eligible women in the STAR program who received Chlamydia screening during the measurement period (51 percent) was lower than the national HEDIS® mean of 58 percent. When STAR results were broken down by age group, program-level performance on this measure fell below the HEDIS® mean for members 16 to 20 years of age (49 percent, compared to the HEDIS® mean of 55 percent), while exceeding the HEDIS® mean for members 21 to 24 years of age (66 percent, compared to the HEDIS® mean of 62 percent).

In 2011, 58 percent of all eligible women in STAR Health received at least one test for Chlamydia during the measurement period, which was six percentage points higher than the

STAR Health rate reported in 2009. The rate among eligible members 16 to 20 years of age was also 58 percent. By contrast, the rate among eligible STAR Health members 21 to 24 years of age was 53 percent, which falls short of the HEDIS® mean of 62 percent for this age group.

Results for the CHIP program were reported only for the younger age cohort (16- to 20-year olds) because the older age cohort is not applicable to the CHIP population. In CY 2011, fewer than one in three eligible women in CHIP received Chlamydia screening (31 percent).

2.2 – Ambulatory Care and Inpatient Utilization

The HEDIS® *Ambulatory Care* measure summarizes utilization of two types of ambulatory care: (1) outpatient care, showing the rate of outpatient visits per 1,000 member months; and (2) emergency department (ED) visits, showing the rate of ED visits per 1,000 member months.

HEDIS® *Ambulatory Care*

CY 2011 results	Outpatient visits per 1,000 member months	Emergency department visits per 1,000 member months
STAR	387	54
CHIP	231	21
STAR+PLUS	565	114
STAR Health	466	51

Potentially Avoidable Inpatient Use

Potentially avoidable health care events are costly and represent a particularly important challenge for the effective delivery of health services in state Medicaid programs. One way to evaluate the occurrence of potentially avoidable health care events is to analyze inpatient admissions for various ambulatory care sensitive conditions (ACSCs), which the Agency for Healthcare Research and Quality (AHRQ) defines 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."[68]

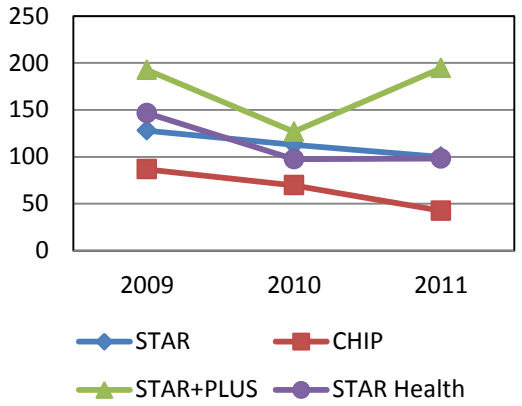
Emergency department visits and hospital admissions for ACSCs function as indicators of access to and quality of outpatient care. These healthcare events and their associated expenditures potentially could have been avoided with accessible, effective outpatient care. Thus, unlike most other performance measures referenced throughout this report, higher values represent poorer performance.

To assess potentially avoidable inpatient use, the EQRO uses the AHRQ Pediatric Quality Indicators (PDIs) and Prevention Quality Indicators (PQIs), as well as measures of potentially preventable readmissions (PPRs) developed by 3M.

Pediatric Quality Indicators (children)

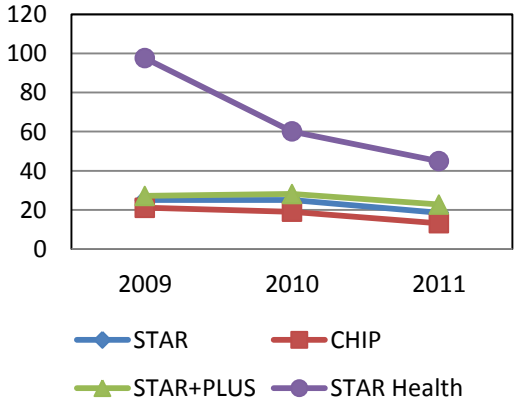
The EQRO uses the Pediatric Quality Indicators (PDIs) to analyze pediatric admissions for five ambulatory care sensitive conditions among members 17 years of age and younger: (1) *Asthma*; (2) *Diabetes Short-Term Complications*; (3) *Gastroenteritis*; (4) *Perforated Appendix*; and (5) *Urinary Tract Infection*. **Figures 19** to **22** show trends in AHRQ PDIs for asthma, diabetes short-term complications, gastroenteritis, and urinary tract infection among children in STAR, CHIP, STAR+PLUS, and STAR Health, from 2009 to 2011. Rates are expressed per 100,000 eligible members. It should be noted that in smaller programs, such as STAR Health and STAR+PLUS, the number of pediatric admissions for a particular indicator is very small. For measures where the number of admissions in these programs was less than 20, observed year-to-year changes may not reflect true differences in quality of care. Changes in PDI rates in these cases should be interpreted with caution. Measures where the number of admissions were below 20 have been noted with footnotes (e.g., "†") in the narrative of this section.

Figure 19. AHRQ *Asthma PDI* Rates in STAR, CHIP, STAR+PLUS, and STAR Health, 2009-2011



Asthma: Pediatric inpatient admissions for asthma showed a slight decline in STAR, CHIP, and STAR Health between 2009 and 2011. In 2011, *Asthma PDI* rates in STAR (100 per 100,000) were below both the HHSC Dashboard standard of 181 per 100,000 and the AHRQ national average of 147 per 100,000. As shown in **Figure 19** rates in STAR+PLUS fluctuated over the three-year period, decreasing from 193 to 127 per 100,000 between 2009 and 2010, and then returning to 194 per 100,000 in 2011.†

Figure 20. AHRQ *Diabetes Short-Term Complications PDI* Rates in STAR, CHIP, STAR+PLUS, and STAR Health, 2009-2011

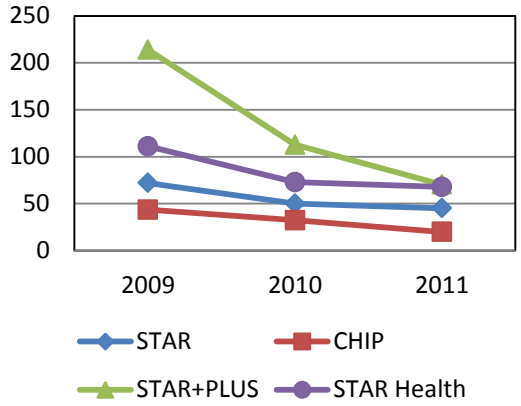


Diabetes: Inpatient admissions for diabetes short-term complications remained fairly consistent from 2009 to 2011 in STAR, CHIP, and STAR+PLUS. PDI rates for diabetes short-term complications declined in STAR Health during the three-year period, dropping from 98

asthma was 16 in 2009, 10 in 2010, and 19 in 2011. This
e and should be interpreted with caution.

per 100,000 in 2009 to 45 per 100,000 in 2011, as depicted in **Figure 20**.[‡]

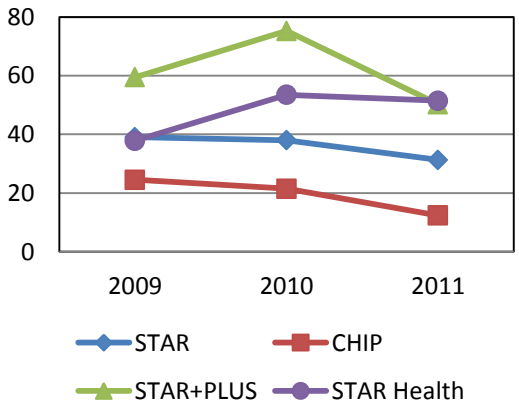
Figure 21. AHRQ *Gastroenteritis PDI* Rates in STAR, CHIP, STAR+PLUS, and STAR Health, 2009-2011



Gastroenteritis: Pediatric inpatient admissions for gastroenteritis declined in all programs over the three-year period, particularly in STAR+PLUS (**Figure 21**). In 2011, PDI rates in STAR (45 per 100,000) and CHIP (20 per 100,000) were considerably lower than the HHSC Dashboard standards (146 and 42 per 100,000, respectively).[§]

Urinary tract infection: Pediatric inpatient admissions for urinary tract infection showed a slight decline in STAR and CHIP from 2009 to 2011, while fluctuating considerably in STAR+PLUS and increasing considerably in STAR Health (**Figure 22**).[†] Rates were lower than the HHSC Dashboard standard of 53 per 100,000 in STAR. In CHIP and STAR Health, rates were lower than the HHSC Dashboard

Figure 22. AHRQ *Urinary Tract Infection PDI* Rates in STAR, CHIP, STAR+PLUS, and STAR Health, 2009-2011



[‡] In STAR Health, the number of admissions for diabetes sho) in 2011. In STAR+PLUS, there were only two admissions for years. These estimates may not represent true changes in q

[§] In STAR+PLUS, the number of admissions for gastroenterit decreased from 18 in 2009 to 7 in 2011. This change may not represent true changes in quality of care and should be interpreted with caution.

[†] In STAR Health, the number of admissions for UTI increased from 15 in 2009 to 22 in 2011. In STAR+PLUS the number of admissions for UTI was 5 in 2009, 6 in 2010, and 5 in 2011, Due to the small numbers of admissions, these changes may not represent true changes in quality of care and should be interpreted with caution.

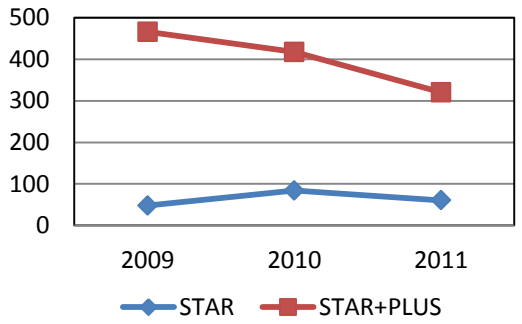
standards of 26 per 100,000 and 53 per 100,000, respectively.

Perforated appendix: PDI rates for perforated appendix were higher than the HHSC Dashboard standard of 31 per 100 admissions for appendicitis in STAR (43 per 100), CHIP (35 per 100), and STAR Health (59 per 100).

Prevention Quality Indicators (adults)

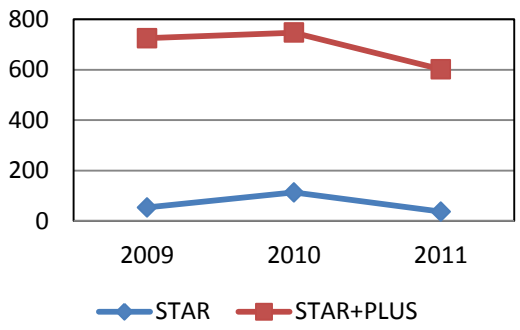
The EQRO uses the Prevention Quality Indicators (PQIs) to assess adult admissions for the following ambulatory care sensitive conditions: (1) *Diabetes Short-Term Complications*, (2) *Perforated Appendix*, (3) *Diabetes Long-Term Complications*, (4) *Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults*, (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) *Asthma in Younger Adults*, and (14) *Rate of Lower Extremity Amputation among Patients with Diabetes*. Members ages 18 or older are eligible for these measures.

Figure 23. AHRQ *Diabetes Short-Term Complications PQI* Rates in STAR and STAR+PLUS, 2009-2011



The PQIs are calculated for adults in STAR and STAR+PLUS, with three-year trends available for most indicators.[69] **Figures 23** to **26** depict trends in AHRQ PQIs for diabetes short-term complications, diabetes long-term complications, bacterial pneumonia, and urinary tract infections among adults in STAR and STAR+PLUS, for 2009, 2010, and 2011. While other PQIs also exhibited dramatic shifts in rates over this time, some of these changes may have resulted from modifications to the methodological specifications that occurred with the release of version 4.3 of the AHRQ PQIs. This report focuses on PQIs for which measurement specifications remained consistent over the three-year period. Rates are per 100,000 eligible members. While none of the rates presented here involved numerators less than 20 members (as for certain PDIs), these trends should still be interpreted with caution. In future reports, the EQRO will conduct statistical significance testing for the time trends.

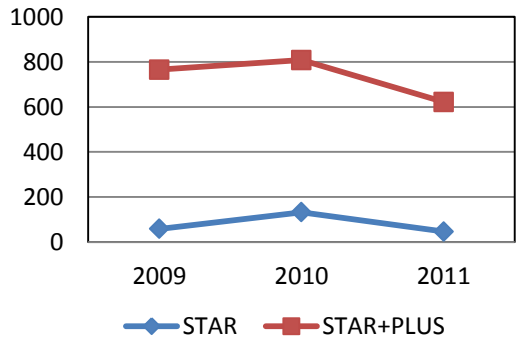
Figure 24. AHRQ *Diabetes Long-Term Complications PQI* Rates in STAR and STAR+PLUS, 2009-2011



Diabetes short-term complications: Adult inpatient admissions for diabetes short-term complications dropped considerably from 2009 to 2011 in STAR+PLUS (**Figure 23**). During this period, PQI rates for diabetes short-term complications showed a very slight net increase in the STAR program, rising from 48 per 100,000 in 2009 to 61 per 100,000 in 2011, which was roughly equivalent to both the AHRQ national average of 62 per 100,000 and the HHSC Dashboard standard of 56 per 100,000.

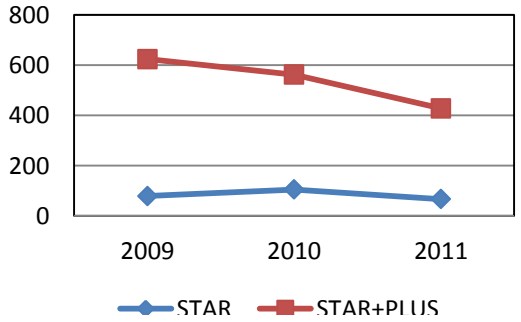
Diabetes long-term complications: Adult inpatient admissions for diabetes long-term complications dropped considerably from 2009 to 2011 in STAR+PLUS (**Figure 24**). Rates in STAR fluctuated over the three-year period, increasing from 53 to 113 per 100,000 between 2009 and 2010, before dropping back down to 36 per 100,000. In 2011, rates in STAR were noticeably better than the HHSC Dashboard standard of 64 per 100,000, and all MCOs had rates lower than the AHRQ national average of 122 per 100,000.

Figure 25. AHRQ *Bacterial Pneumonia PQI* Rates in STAR and STAR+PLUS, 2009-2011



Bacterial pneumonia: Adult inpatient admissions for bacterial pneumonia showed a net decline from 2009 to 2011 in both programs analyzed for this measure. *Bacterial Pneumonia PQI* rates in STAR+PLUS fell from 765 per 100,000 in 2009 to 622 per 100,000 in 2011, while STAR rates decreased from 58 to 46 per 100,000 (**Figure 25**). The STAR rates were also substantially lower than the HHSC Dashboard standard for this measure (174 per 100,000).

Figure 26. AHRQ *Urinary Tract Infection PQI* Rates in STAR and STAR+PLUS, 2009-2011



Urinary tract infection: Adult inpatient admissions for urinary tract infection showed a steady decline in STAR+PLUS from 2009 to 2011, while fluctuating somewhat in the STAR program during that timeframe where rates peaked in 2010 (**Figure 26**). In 2011, the STAR PQI rate of 67 per 100,000 for UTIs was far

below the HHSC Dashboard standard of 177 per 100,000 for the STAR program.

Potentially Preventable Readmissions (PPRs)

Potentially preventable readmissions (PPRs) are return hospitalizations that may arise from factors such as poor coordination of services at the time of discharge and during follow-up (such as incomplete discharge planning or inadequate access to care after discharge), or deficiencies in the process of care and treatment, including actions taken or omitted during the initial hospital stay.[70] Patient-level factors associated with readmissions include poor health status, co-morbidities, and increasing severity of illness.[71] Some studies have also found associations between various health care structure and process factors and readmissions. As with other forms of avoidable health care events, potentially preventable readmissions tend to be more common among patients insured by Medicaid or self-pay.[72] Possible reasons for these associations include greater financial barriers to medications and access barriers to primary care, as well as reliance on hospitals as the most convenient or preferred source of primary care by Medicaid and self-pay patients.[73,74]

3M *Potentially Preventable Readmissions*

CY 2011 results	Candidate admissions	Admissions that resulted in a PPR	PPR rate	PPR cost per 1,000 member-months
STAR	139,381	2,979	2.1%	$1,127.32
CHIP	7,680	388	5.1%	$494.67
STAR+PLUS	30,086	3,876	12.9%	$26,661.17
STAR Health	4,536	703	15.5%	$11,195.93

The EQRO calculated PPR rates and expenditures using the 3M Health Information Systems (HIS) software. The 3M measure for PPRs uses hospital inpatient discharge data to calculate rates of readmissions that could have been prevented with better outpatient care. PPRs are produced using a combination of All Patient Refined Diagnosis Related Groupings (APR-DRGs) and severity of illness categories within each APR-DRG. The 3M HIS software assigns APR-DRGs to every initial hospital admission and then compares APR-DRGs for all subsequent admissions for the same person within the measurement period to identify potentially preventable readmissions.

2.3 – Behavioral Health Service Utilization

Mental Health Service Utilization

Each year nearly 60 million people in the United States are diagnosed with mental disorders.[75] Patients with mental disorders utilize health care services less efficiently than those without mental health disorders. For example, patients with mental disorders visit the emergency department more frequently than those without mental disorders, which can lead to lower quality of care for those in need of urgent medical attention. Inappropriate health care utilization may indicate deficiencies in the health care system, including lack of care coordination.[76] Information on what types of services patients utilize can help identify areas of behavioral health care delivery that need improvement.[77]

The EQRO uses a modified version of the HEDIS® *Mental Health Utilization* measure to assess utilization of mental health services in STAR, STAR+PLUS, NorthSTAR, and STAR Health.[78] 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. At HHSC's request, the EQRO lifted provider constraints for this measure, which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications. For all programs in CY 2011, the vast majority of services utilized by members were outpatient mental health services.

Mental Health Utilization

CY 2011 results	Inpatient services	Intensive outpatient or partial hospitalization services	Outpatient or ED services
STAR	0.3 percent	0.1 percent	8.7 percent
STAR+PLUS	3.9 percent	0.7 percent	32.3 percent
STAR Health	7.0 percent	1.6 percent	78.1 percent
NorthSTAR	0.5 percent	0.0 percent	9.4 percent

Utilization of Drug and Alcohol Services

In the United States, over 22 million people are classified as having a drug or alcohol disorder.[79] Each year nearly five million ED visits are drug- and alcohol-related visits that may be associated with decreased quality of care and indicate deficiencies in the health care system.[80]

The HEDIS® *Identification of Alcohol and Other Drug (AOD) Services* measure represents the percentage of members receiving one of the following AOD-related services during the measurement period: (1) inpatient services; (2) intensive outpatient or partial hospitalization services; and (3) ambulatory services. The EQRO calculates this measure for STAR, STAR+PLUS, and NorthSTAR.[81] In all three programs in CY 2011, the chemical dependency

services most utilized by members were ambulatory services, while intensive outpatient or partial hospitalization services were very rare.

Identification of Alcohol and Other Drug Services

CY 2011 results	Inpatient services	Intensive outpatient or partial hospitalization services	Ambulatory services
STAR	0.2 percent	0.0 percent	0.7 percent
STAR+PLUS	3.0 percent	0.2 percent	11.0 percent
NorthSTAR	0.3 percent	0.0 percent	1.6 percent

3 – Managed Care Organization Structure and Process

3.1 – Health Plan Information

Producing and maintaining valid, complete, and up-to-date health care claims and encounter data is critical 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 (IOM) in 2001, MCOs have worked toward implementing electronic health records (EHRs), permitting the automation of clinical, financial, and administrative information, and the electronic sharing of this information.[82] 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.[83,84]

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[85]
- 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
- Studies of MCO disease management (DM) programs, evaluating the elements of the DM programs using the annual MCO Administrative Interviews
- Evaluations of MCO Quality Improvement Programs through review of the annual MCO Quality Assessment and Performance Improvement (QAPI) Evaluation Summaries
- Evaluations of MCO Performance Improvement Projects (PIPs)

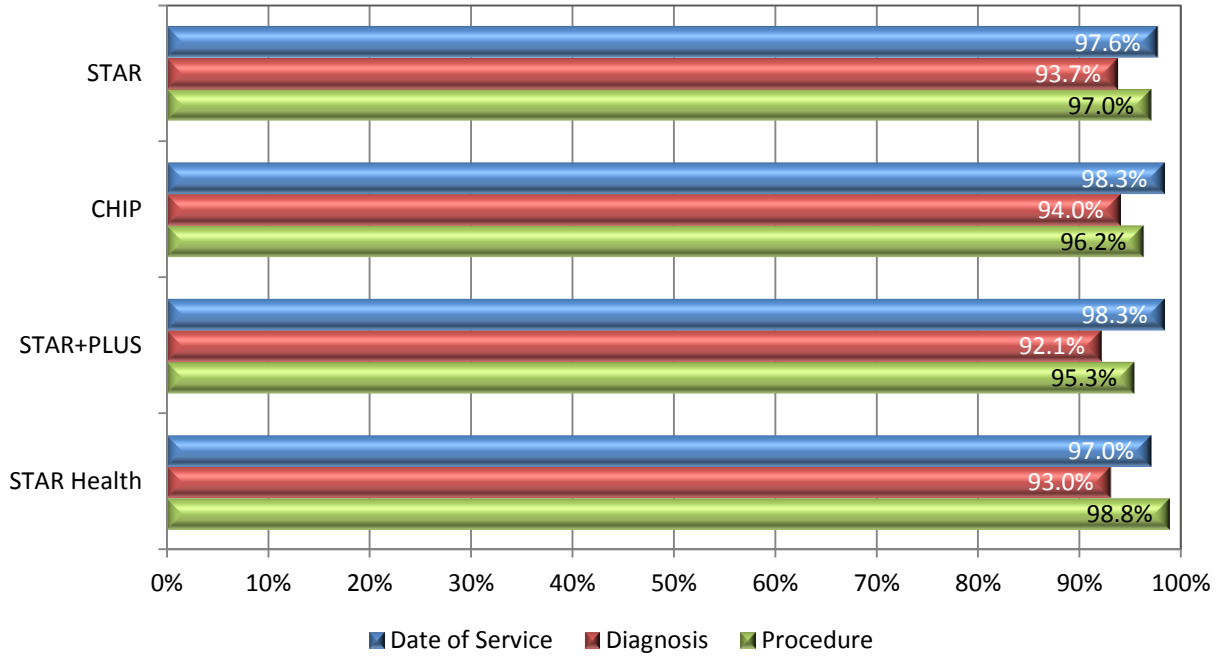
This section presents trends in EDV results, electronic claims submissions, and data certification findings at the program level from 2009 to 2011. In addition, the section provides a summary of the MCO DM programs, QAPIs, and PIPs for the FY 2011 measurement period.

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 and information found in the members' health records.[86] A match rate of 95 percent or greater between the two data sources is desired, and states are encouraged to work toward that goal. To determine Texas Medicaid and CHIP MCO compliance with standards for encounter data completeness and quality, the EQRO conducts biannual EDV studies 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.

Figure 27 provides match rates for date of service, diagnosis, and procedure data elements in STAR, CHIP, STAR+PLUS, and STAR Health for CY 2011, with match rates for all programs and data elements exceeding 90 percent.

Figure 27. Encounter Data Validation Match Rates for CY 2011



Match rates in STAR, CHIP, STAR+PLUS, and STAR Health exceeded the desired rate of 95 percent for both the date of service and procedure data elements. The match rates for the diagnosis data element for all programs were below the desired 95 percent rate, but exceeded 90 percent.

Provider response rates for the EDV study ranged from 57 percent in the El Paso SA to 65 percent in the Travis SA. It is possible that various provider characteristics contributed to these differences in response rates. Therefore, results of the EDV study should be interpreted with the understanding that non-response bias may have occurred.

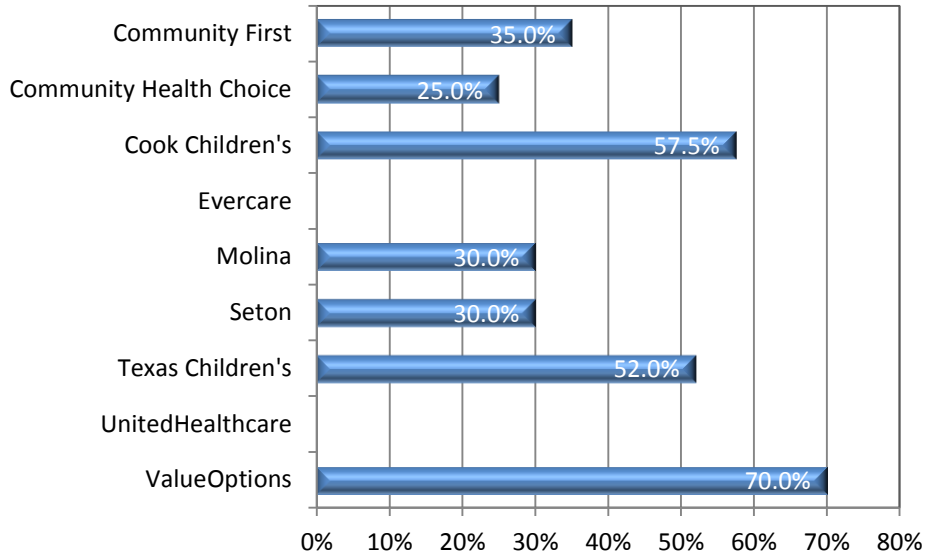
Electronic Health Records

Electronic health records are becoming more widespread in the United States. Changes in health care are requiring a shift in the medical record system from paper records to electronic health records (EHRs). The widespread use of EHRs will result in more accessible records for providers and improved outcomes for patients. In 2009, to overcome barriers to implementing an EHR system, Congress passed the Health Information Technology for Economic and Clinical Health Act (HITECH), which endorses incentive payments for the private and secure use of EHRs by Medicare and Medicaid providers and hospitals.[87] Efforts by the Centers for Medicare & Medicaid Services (CMS) to employ the concept of "meaningful use" of EHRs are based on improving health outcomes and the quality of care while engaging patients and their families in a secure, protected manner.

The CMS initiative to encourage utilization of certified EHRs is a three-phased approach: (1) data capture and sharing by 2011; (2) advanced clinical practices by 2013; and (3) improved health outcomes by 2015. Participation in the program is incentivized and voluntary. Eligible providers and hospitals, however, will receive negative adjustments in their Medicare/Medicaid payments if they do not adopt the initiative by 2015.[88]

Only half of the MCOs monitored the percentage of their providers who implemented EHRs during FY 2011. **Figure 28** presents the percentage of providers who implemented EHRs during FY 2011 by health plan (for health plans that reported this information). ValueOptions had the highest percentage of providers who implemented EHR (70 percent). Evercare and UnitedHealthCare-Texas reported that none of their providers implemented EHRs. The remaining six health plans varied in the percentage of providers who implemented EHRs, ranging from 25 percent to 58 percent. None of the MCOs offered incentives to providers for implementing EHRs during FY 2011.[89]

Figure 28. Percentage of Providers who Implemented EHRs during FY 2011



Data Certification

The EQRO annually certifies key data elements in claims and encounter data that the Texas Medicaid and CHIP MCOs maintain, and provides separate data certification reports for each Texas Medicaid program and CHIP. Annual data certification includes four types of analysis: (1) Volume analysis based on service category; (2) Data validity and completeness analysis; (3) Consistency analysis between encounter data and financial summary reports (FSRs); and (4) Validity and completeness analysis of provider information.

Key data elements assessed during data certification include those that are critical for proper care coordination and quality of care measurement, such as:

- 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

For FY 2011 data certification, the EQRO's analysis was guided by: (1) Texas Government Code § 533.0131, Use of Encounter Data in Determining Premium Payment Rates; and (2) Department of Health and Human Services, CMS – *Validating Encounter Data: A Protocol for Use in Conducting External Quality Review Activities*.[90,91] The EQRO used these documents to develop procedures for certifying the Texas STAR, STAR+PLUS, STAR Health, CHIP, CHIP Dental, CHIP Perinate, and NorthSTAR encounter data. For managed care programs served by multiple MCOs (e.g., STAR, CHIP, and STAR+PLUS), analyses were conducted at the plan code level (MCO and service area combined).

Volume analysis based on service category: For each plan code within each program, the EQRO determined the number of records for facility, physician, dental (where present), and total services for each month of FY 2011. The EQRO examined the monthly totals to determine whether the number of records for each of the service categories and the total number of records varied significantly from month to month. The results were found to be consistent for all plan codes based on overall volumes.

Data validity and completeness analysis: For each plan code, the EQRO examined the presence and validity of critical data elements in the claims extracts submitted by the MCOs. The EQRO derived data validity standards from accepted lists of valid information taken from a variety of sources, including data dictionaries supplied by HHSC, CPT manuals, and ICD-9-CM manuals.[92,93] The EQRO performed the analysis on the final image of all FY 2011 claims it received from Texas Medicaid and Healthcare Partnership (TMHP) through December 2011. All critical fields were present in the data as specified in the CMS Data Validation Protocol.

Consistency analysis between encounter data and FSRs provided by the MCOs: The EQRO compared payment dollars documented in the claims data to payment dollars in the MCOs' self-reported FSRs, which HHSC provided to the EQRO for FY 2011. According to the standard set by HHSC, the claims data and the FSR must agree within three percent for the data to be certifiable.

Validity and completeness analysis of provider information: Adequate provider identification is critical to the EQRO's efforts to calculate HEDIS® measures, to conduct provider surveys, and to obtain medical records for the purposes of validating encounter data and calculating hybrid HEDIS® measures. When provider identification numbers and/or taxonomy (provider specialty) codes are missing in the encounter data, the EQRO is hindered in its ability

to provide HHSC with accurate and complete information about Texas Medicaid and CHIP. Overall, the results of these analyses are positive and suggest an improvement in the completeness of MCO administrative data.

3.2 – 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.[94] 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, CHIP, and STAR Health provide DM services covering asthma and diabetes.[95,96] 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 each MCO's membership.[97]

This section presents findings from the FY 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. Four STAR MCOs delegated asthma and diabetes DM functions fully or in part to a DM organization in 2011.[98] In STAR+PLUS, only Superior delegated DM functions to a DM organization, while Amerigroup, Evercare, and Molina administered DM programs in-house. Across Medicaid and CHIP, Parkland and UnitedHealthcare-Texas consistently delegated all DM functions, and FirstCare, Seton, and Superior used a combination of in-house and delegated programs. Community Health Choice and Cook Children's delegated behavioral health DM functions. Behavioral health DM programs were the most common type of DM program to be delegated to a DM organization, with 7 out of the 13 MCOs delegating behavioral health DM programs.

Fourteen of 16 MCOs operating in Texas Medicaid and CHIP in FY 2011 assigned members participating in their DM programs to risk groups, which allowed for more appropriate care according to the members' health status, disease severity, and special needs.[99] **Table 5** shows details on asthma and diabetes DM program participation in STAR, CHIP, and STAR+PLUS. For asthma DM, STAR had both the highest number of eligible members (92,211) and the highest number of participating members (54,539). However, the resulting participation rate of 59 percent was the lowest among the programs. STAR also had the lowest participation rate for

diabetes DM (43 percent). In CHIP, more than two-thirds of eligible members were enrolled in asthma DM (69 percent) and three-fourths were enrolled in diabetes DM (74 percent). For diabetes DM, STAR+PLUS had the highest number of eligible members (30,852), the highest number of participating members (26,456), and the highest participation rate (86 percent).

Table 5. Member Participation in Asthma and Diabetes DM Programs in FY 2011

	Asthma DM			Diabetes DM		
	Members eligible	Members enrolled	Participation rate	Members eligible	Members enrolled	Participation rate
STAR	92,211	54,539	59.1%	5,355	2,295	42.9%
CHIP	21,602	14,833	68.7%	1,319	974	73.8%
STAR+PLUS	8,048	7,212	89.6%	30,852	26,456	85.8%

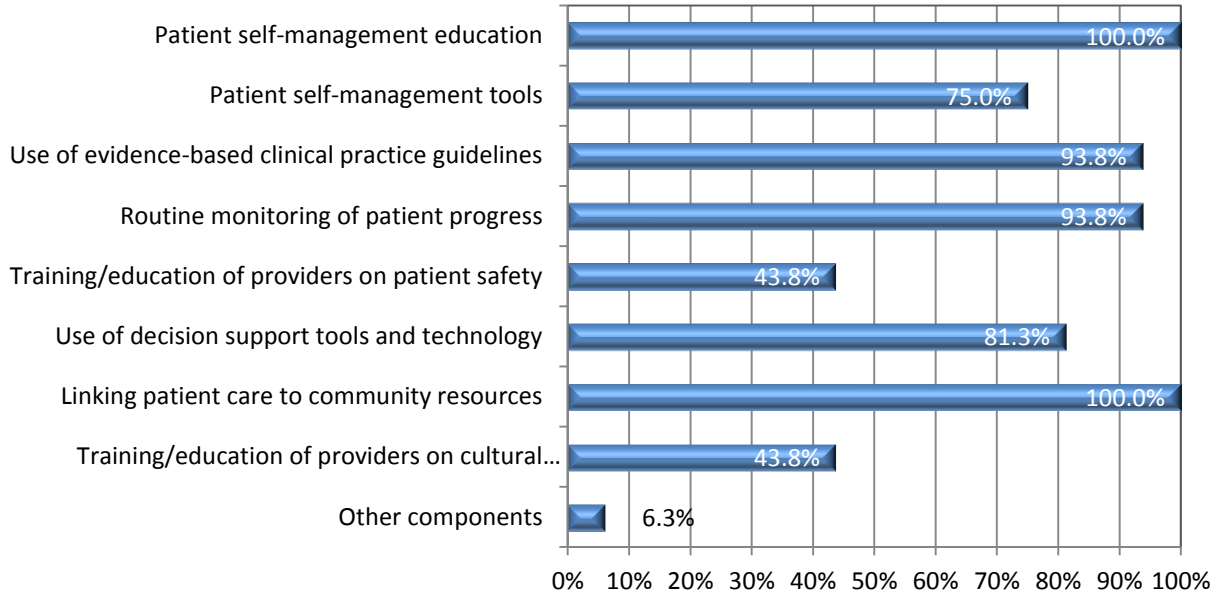
In STAR+PLUS, DM participation rates were high for CAD (89 percent), COPD (94 percent) and CHF (90 percent). It should be noted that these rates are calculated from MCO Administrative Interview responses from Amerigroup, Evercare, HealthSpring, Molina, and Superior.

Definitions for "participation" in DM programs vary among the MCOs, which limits interpretations that can be made when comparing participation rates. Four out of 15 health plans have 'opt-in' DM programs, where eligible members must agree to participate in the program to be considered enrolled.[100,101] El Paso First and HealthSpring have 'opt-out' DM programs, although El Paso First requires a completed assessment for enrollment and HealthSpring does not enroll members who cannot be reached.

ICHP identifies specific components of the health plans' DM programs using the Administrative Interview tool. **Figure 29** presents the percentage of health plans that have incorporated the following as formal components of their DM programs: (1) Patient self-management education; (2) Patient self-management tools (e.g., glucose meter); (3) Use of evidence-based clinical practice guidelines; (4) Routine monitoring of patient progress; (5) Training/education of providers on patient safety; (6) Use of decision support tools and technology; (7) Linking patient care to community resources; (8) Training/education of providers on cultural competency; and (9) Other components.

All of the MCOs offer patient self-management education to members and link patient care to community resources as formal components of their DM programs. Only 44 percent, however, offer provider training/education on patient safety and cultural competency. Cook Children's was the only MCO that indicated 'other' formal components are included in the DM programs. The additional components offered by Cook Children's are geared toward improving health literacy.

Figure 29. Percentage of MCOs Incorporating Selected Formal Components of DM programs in FY 2011



3.3 – Quality Improvement

The EQRO annually reviews the Texas Medicaid MCO Quality Improvement Programs (QIPs) to evaluate aspects of structure and process that contribute to the success of these programs. This section discusses the EQRO's evaluation of FY 2011 MCO QAPI and PIP submissions.

Quality Assessment and Performance Improvement Evaluations

The QAPI evaluations follow CMS guidelines to evaluate both Quality Assurance and Quality Improvement practices of the Texas Medicaid MCOs. According to CMS, there are five essential elements to a QAPI program: (1) Design and Scope; (2) Governance and Leadership; (3) Feedback, Data Systems, and Monitoring; (4) Performance Improvement Projects (PIPs); and (5) Systematic Analysis.[102] The EQRO QAPI evaluation reviews the first three elements and partially reviews the fifth element. The EQRO reviews the fourth and fifth elements as part of its annual PIP evaluation, which is discussed in the next section. The fifth element is reviewed in both the QAPI and PIP evaluations when determining whether a root cause analysis was conducted.

Using documentation submitted by the MCOs, the QAPI evaluation reviews the health plans' performance improvement structure and their assessment of the effectiveness of their QAPI program.

This evaluation captures the structure and process of the QIP and MCO quality activities through review of the following sections:

- **Documentation** (maximum 12 points) of the MCO's Work Plan, QI Organizational Chart, PIPs, and completed QAPI evaluation.
- **Assessment of QAPI Effectiveness** (maximum 16 points), including the MCO's statement of purpose, scope, goals and objectives, methodology (whether or not the MCO utilizes the Plan-Do-Study-Act model or something similar), the method by which MCOs identify and address barriers to implementation, and program effectiveness.
- **Global Quality Goals** (maximum 2 points), including the MCO's goals and objectives for FY 2011.
- **Role of the Governing Body** (maximum 8 points), covering the level and type of governance and leadership within the organization.
- **Structure of Quality Improvement Committee(s)** (maximum 14 points)**,** including the role, structure, and function of the QI Committee(s), and level of provider and member representative involvement.
- **Identification of Adequate Resources** (maximum 4 points), including human and material resources available for the implementation of the QAPI program.
- **Provider Credentialing** (maximum 2 points), including the processes of credentialing and re-credentialing health plan providers.
- **Identification of Improvement Opportunities** (maximum 8 points), including actions taken to effect improvement at the system, process, and outcome levels.
- **Clinical Practice Guidelines** (maximum 12 points), including a review of current clinical practice guidelines to ensure they are evidence-based, relevant to member needs, and support care of members and services for members.
- **Availability and Accessibility** (maximum 12 points), including results of MCO monitoring of member access to care indicators, goals for all indicators, the MCO's actions to improve rates of accessibility and availability of care for members, and the effectiveness of actions taken.
- **QI Activities and Quality Indicators** (maximum 12 points), including results of MCO monitoring of clinical and service indicators, goals for all indicators, the MCO's actions to improve rates of clinical and service indicators, and the effectiveness of actions taken.
- **Credentialing** (maximum 16 points), summarizing the number of providers and facilities credentialed/re-credentialed, the number who requested or were denied credentialing, reasons for denials, the number of providers/facilities that were reduced, suspended, or had privileges terminated during FY 2011, and the reasons for these reductions, suspensions, or terminations.
- **Delegation** (maximum 10 points) of QAPI activities, including procedures for monitoring and evaluating delegated functions, results of evaluation of delegated activities, and how the results are incorporated into quality improvement.

- **Corrective Action Plans** (maximum 10 points), including any corrective actions required following a Texas Department of Insurance (DOI) audit and the MCO actions taken.

Each section includes different components that target key elements of quality improvement, as described above. The overall evaluation of health plan responses focuses on whether the MCO satisfied the requirements of a strong, comprehensive QIP and complied with specific Code of Federal Regulations (CFR) policies.[103,104] Full credit is awarded when all components for each section are met, with a maximum achievable score of 138 points. The scoring system also allows for partial credit.

Figure 30 provides the overall score for each MCO, calculated as the percentage of maximum achievable points earned. The average score of all MCOs was 92 percent. Most health plans scored above average, with only five MCOs scoring below the average score. Delta Dental and Seton had scores that were significantly lower than the average (64 percent and 80 percent, respectively).[105] Scores were lower for both health plans due to the absence of necessary documentation needed for a thorough review of their QIPs.

The EQRO also evaluated the MCO QAPIs by section to identify areas of high performance and opportunities for improvement across all the health plans combined. **Figure 31** presents the average health plan score by QAPI section, calculated as the percentage of maximum achievable points earned. Overall, the health plans scored highest in the Documentation and Corrective Action Plan sections, at approximately 100 percent. The section with the greatest opportunity for improvement was the Assessment of QAPI Effectiveness, with an average score of 85 percent.

Figure 30. Overall QAPI Score by Health Plan in FY 2011

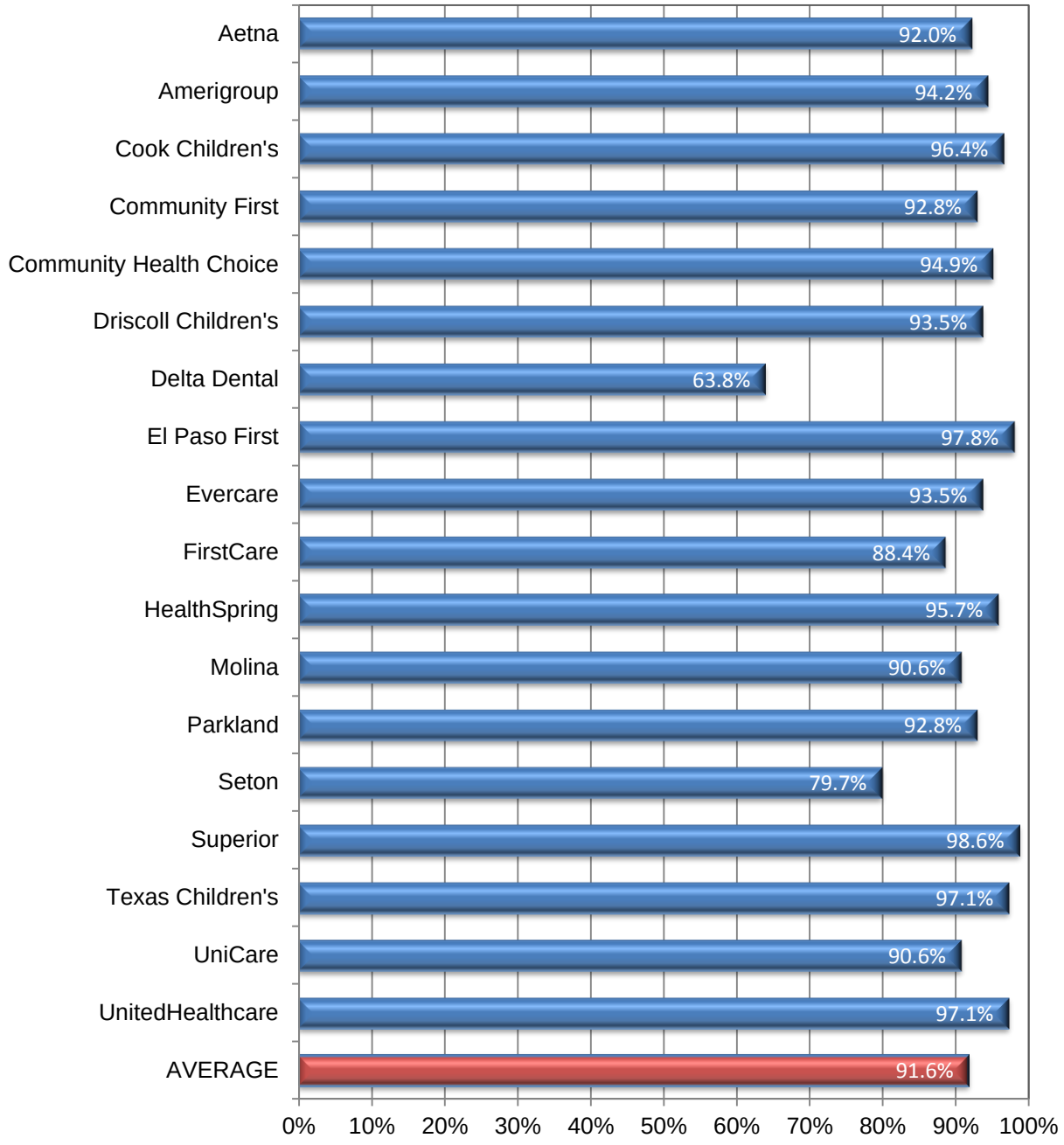
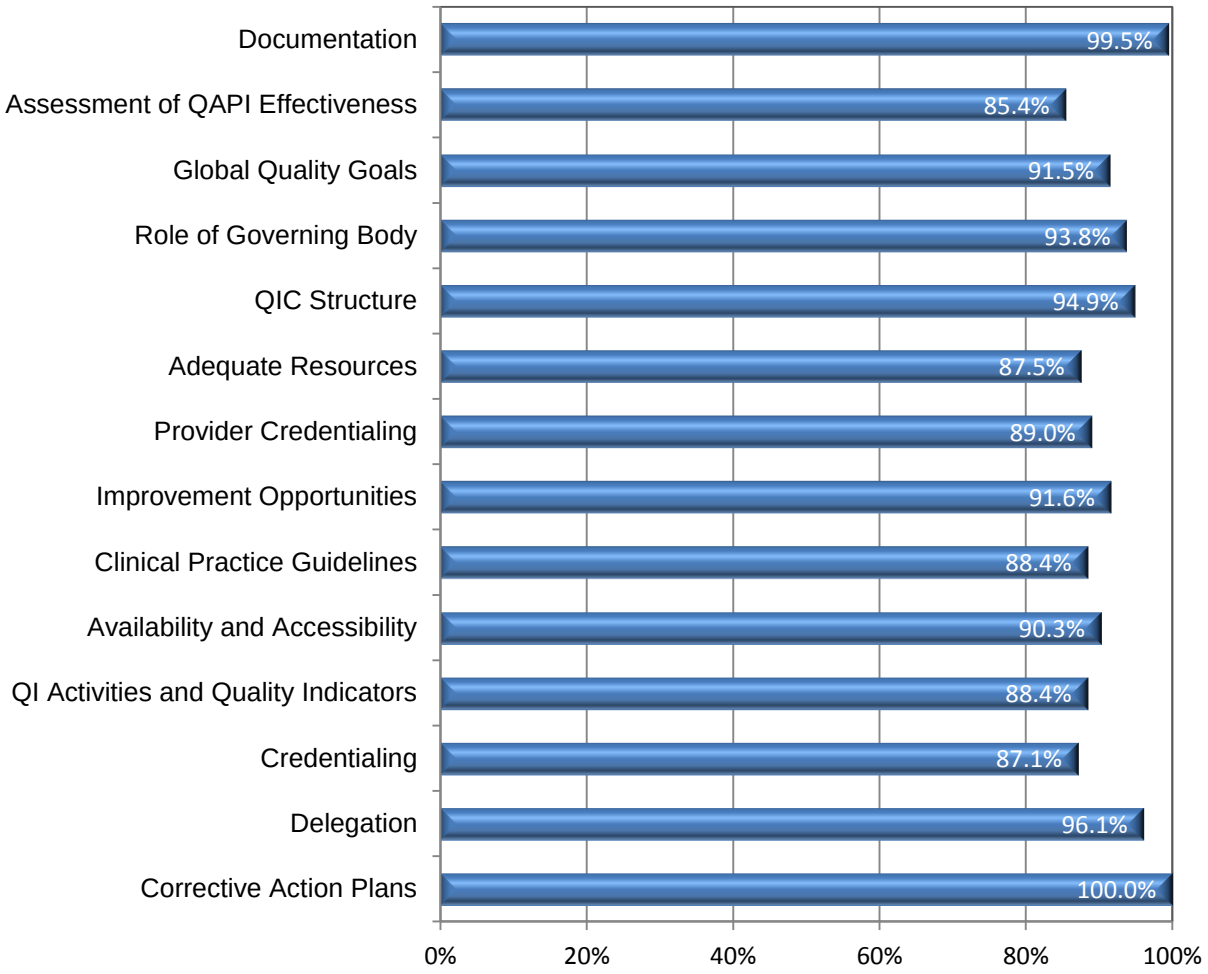


Figure 31. Overall QAPI Score by Section in FY 2011



Performance Improvement Projects

Performance Improvement Projects (PIPs) are the fourth essential element of a Quality Improvement Program. The purpose of a PIP is to develop a project with interventions that target a specific problem with the aim of improving quality of care and health outcomes.[106] Key components of a PIP include the topic, study indicators, and interventions. Topic selection should be based on the results of monitoring and evaluating clinical and service indicators. Once an opportunity for improvement is identified, health plans should conduct a root cause analysis in order to identify the underlying cause of the problem, and appropriate study indicators should be selected. Interventions should be developed to target the root cause of the problem at the member, provider, and system levels.

The EQRO's PIP evaluation addresses these three components and evaluates the following ten activities:

1. **Study Topic(s)** – In this section, health plans report the topic of the PIP and provide supporting evidence for why the topic was selected.
2. **Study Question(s)** – The MCOs pose the question they would like to answer with the PIP. For example, "does X result in Y?"
3. **Study Indicator(s)** – This section should include the measures or study indicators the health plan will use to measure change. Many health plans use HEDIS® measures with standardized numerators and denominators.
4. **Study Population** – This section should describe the population the PIP is targeting. For example, all STAR members, or only STAR members age 3 to 6 years. The study population should be representative and generalizable.
5. **Sampling Techniques (if sampling is used)** – This section describes the frequency of occurrence of the problem in the study population and the number of members needed in the sample in order to produce valid and reliable results. If HEDIS® measures are used, sampling is not required. (This does not apply to hybrid HEDIS® measures, which do require sampling.)
6. **Data Collection** – The data to be collected should be included in this section, in addition to identification of data sources, instruments used to collect data, and who will collect the data.
7. **Interventions and Improvement Strategies** – The MCO should describe the interventions and improvement strategies that will be taken to improve the measures indicated in Activity 3.
8. **Data Analysis and Interpretation of Results** – Baseline and follow-up measurements should be presented in this section. All data analyses should be summarized and supported by a test of statistical significance. The MCO should discuss factors that affect the comparability of baseline and follow-up measures and factors that threaten internal and external validity of the findings.
9. **"Real" Improvement** – This section summarizes whether or not the PIP resulted in a statistically significant improvement. The MCO should address how the interventions resulted in a statistically significant improvement.
10. **Sustained Improvement** – If there was a statistically significant improvement, this section should report whether the improvement was sustained over time.

The EQRO conducted a qualitative evaluation of PIP Activities 1-6 in July of 2011, and reported recommendations to the MCOs for strengthening study topics and designs. Following a full year of implementation, in November 2012 the EQRO conducted a quantitative analysis to score MCO performance on PIP Activities 7-10. This summary presents the results of the year-end review of the FY 2011 PIPs, focusing on Activities 7-10. Each section includes different

components that target key elements of a PIP, as described above. The overall evaluation of health plan responses focuses on whether the MCO: (1) described the interventions in detail; (2) developed and implemented interventions that were based on a root cause analysis; (3) implemented interventions that had adequate reach; (4) clearly presented baseline and follow-up measurements; (5) provided the level of statistical significance in the change in rates from baseline to follow-up; (6) accurately interpreted the results; (7) achieved statistically significant improvement; and (8) described sustained improvement and future plans, if applicable. Full credit is awarded when all components for each section are met, with a maximum achievable score of 14 points for Activities 7-10. The scoring system also allows for partial credit.

A variety of topics were selected by the health plans for the FY 2011 PIPs, based on state-specified Overarching Goals and goals specific to the MCOs. A total of 100 PIPs were reported by 15 health plans. **Figure 32** presents the percentage of PIPs conducted within each of seven common categories. PIPs that addressed issues related to access and utilization of care, such as preventive care, prenatal and postpartum care, and well-child visits were most common (35 percent). PIPs targeting the rate of emergency department (ED) visits were the second most common (29 percent). Among PIPs focused on the general category of ED visits, the most common topic was reduction of the rate of ED visits for ambulatory care sensitive conditions (ACSCs), such as otitis media, rash, and upper respiratory infections, comprising 18 percent of all topics in the FY 2011 PIPs.

Figure 32. FY 2011 PIPs, by Specific Topic Categories

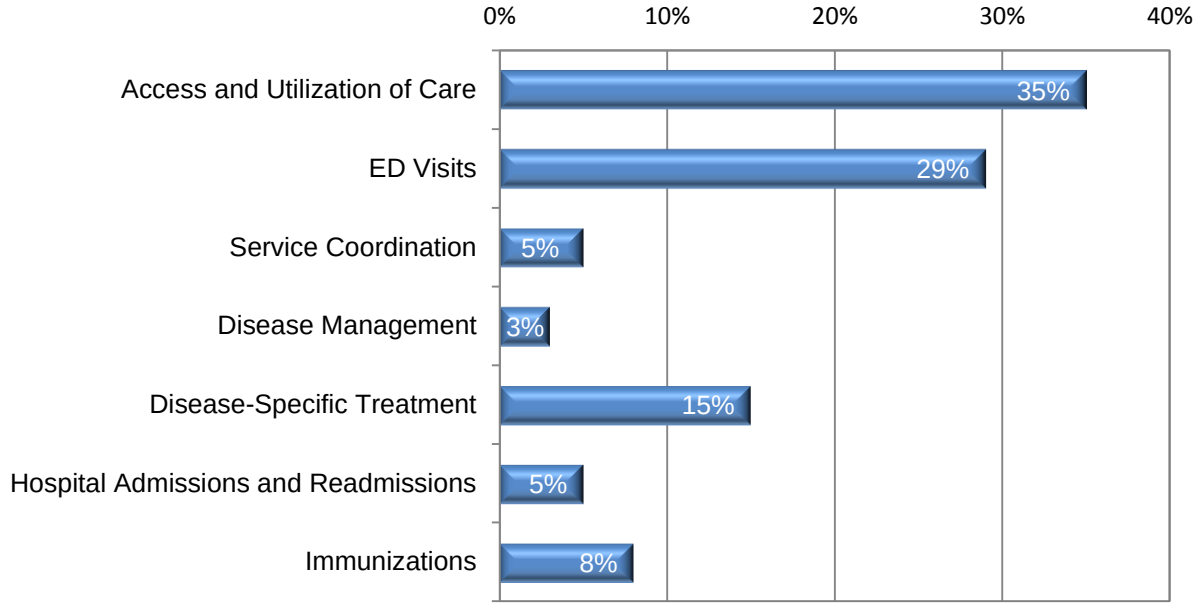
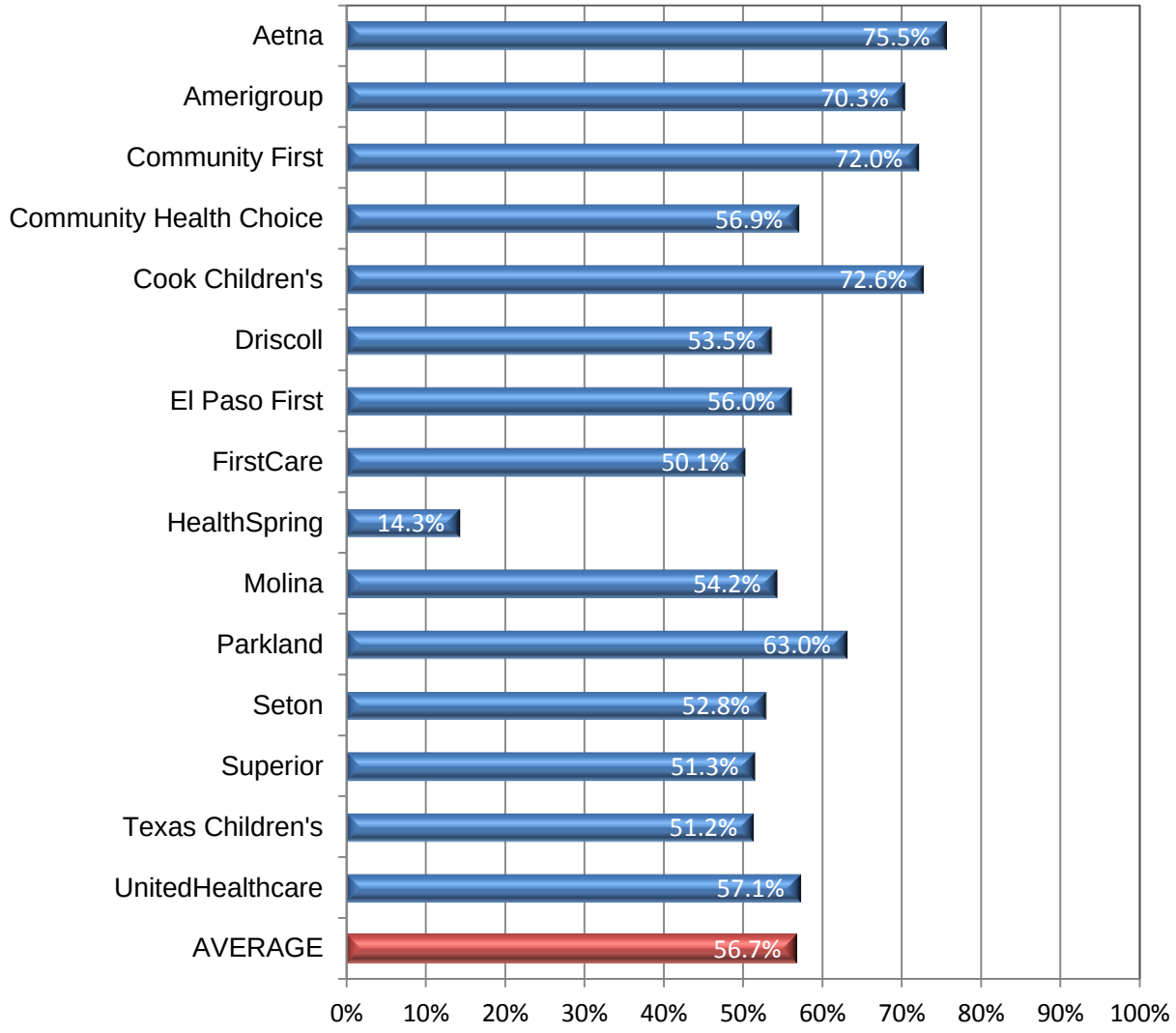


Figure 33 presents the overall year-end review scores for the FY 2011 PIPs, showing the percentage of maximum achievable points earned by each health plan across the different managed care programs. Aetna had the highest overall score (76 percent), and HealthSpring had the lowest score (14 percent). HealthSpring's score was low because the MCO reported only baseline data, which affected the scores for Activities 8-10 (analyzing and interpreting results, improvement and sustained improvement); furthermore, the MCO's interventions mostly consisted of mail-outs, which historically reach a small percentage of members and when used alone are not robust enough to effect change. The average score was 57 percent, with only 8 out of the 15 health plans scoring at or above the average. Aetna, Amerigroup, Community First, and Cook Children's scored over 70 percent. Factors that contributed to higher scores included strong interventions that were described in detail and results of data analysis that were clearly presented.

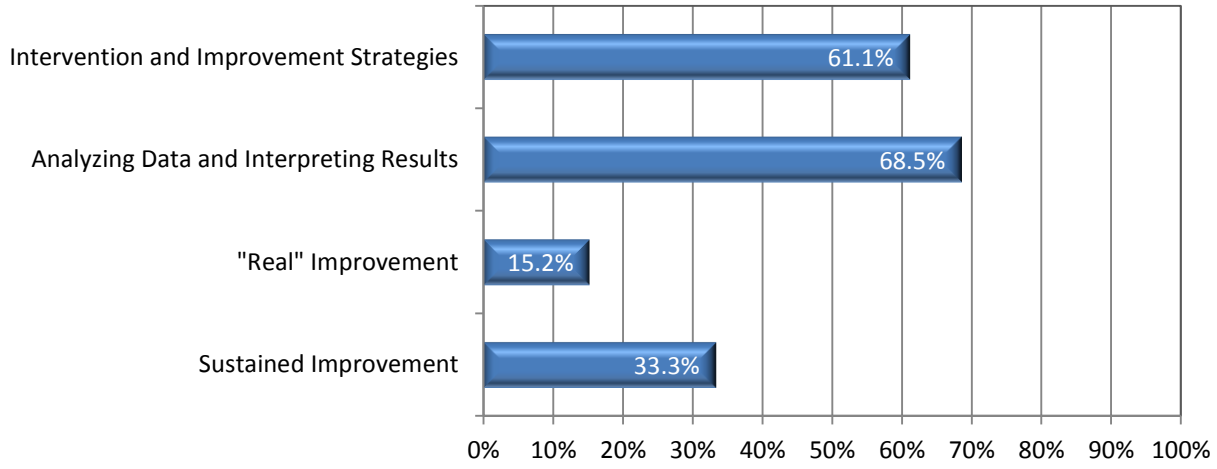
Figure 33. FY 2011 Performance Improvement Projects - Overall Score by MCO



Several health plans lost points on the evaluation for not describing how the cultural and linguistic needs of the members were addressed – a component included in the evaluation of PIP interventions. Points were also deducted for not reporting the level of statistical significance of the results. **Figure 34** presents the overall score for each activity (7-10) for all of the PIPs. The activity with the overall lowest score was the "Real" Improvement activity, with only 15 percent of the PIPs resulting in a statistically significant improvement in the baseline rate. Because the FY 2011 PIPs were the first in which MCOs fully implemented Activities 1-10, the evaluations were based on interventions that had been in place for only one year. Greater time is often needed for a new intervention to become fully implemented and show improvement in selected outcomes. The sustained improvement activity, which had the second-lowest overall score (33 percent), was not applicable to PIPs for which statistically significant improvement was not observed. Many of these cases involve longer-term PIPs that require greater than one year of implementation.

In cases where improvement is not observed, or where results on selected indicators demonstrate a reduction in quality, MCOs should conduct root cause analyses as part of their PIP assessment. For future PIP evaluations, the EQRO has modified reporting forms to assist the MCOs in measuring and reporting results of their interventions, including a section for reporting results of root cause analyses and instructions on the level of detail necessary for describing interventions.

Figure 34. FY 2011 Performance Improvement Projects - Overall Activity Scores



4 – Member Satisfaction with Care

Measuring patients' satisfaction with the health care they receive has long been an important component of health care quality evaluation. Positive patient satisfaction ratings have been associated with positive health outcomes and positive health behaviors, such as adherence to treatment plans and appropriate use of preventive health care services.[107,108] Surveys with parents about the health care their children receive can also reveal deficiencies in access and utilization that may not otherwise be detected, as low parental satisfaction has been associated with shorter length of well-child visits and missed or delayed care.[109] Satisfaction measures provide implicit ratings of patients' judgments about the delivery of health services, and have been found to reflect parents' expectations of their children's health care.[110,111,112,113]

The practice of assessing patient satisfaction has become even more relevant in recent years, with the increasing policy emphasis on patient-reported outcomes.[114] There is evidence that individuals are more likely to have better health outcomes, higher satisfaction and well-being, and better treatment adherence when they are able to help define what is important to them.[115] Therefore, decisions on the comparative effectiveness of treatment options should take into account the patient's perspective, reflecting the outcomes that patients care about.[116]

This section presents findings from the EQRO's telephone surveys with adult members and parents of child members in Texas Medicaid and CHIP, focusing on the most recent results from FY 2011 and FY 2012 surveys, and presenting trends in cases where satisfaction ratings have changed notably over the years.

4.1 – Timeliness of Care

One of the most important determinants of positive member satisfaction is timeliness of care. Long waits to receive care result in emotional distress for patients, and can increase the risk for physical harm when delays in diagnosis or treatment result in preventable complications.[117] The EQRO assesses member-reported timeliness of care using items from the CAHPS® Health Plan Survey, which include the CAHPS® *Getting Care Quickly* composite, as well as questions regarding the timeliness of urgent care, routine care, health plan approval, and exam room visits that have been incorporated into the HHSC Performance Indicator Dashboard.

CAHPS® *Getting Care Quickly*

The CAHPS® *Getting Care Quickly* composite combines members' responses to questions about the timeliness of: (1) care needed right away for an illness, injury, or condition (urgent care); and (2) appointments for health care at a doctor's office (routine care). This core composite is calculated for adult members and parents of child members. Following AHRQ specifications, the score represents the percentage of members who "usually" or "always" had positive experiences with timeliness of care, which can be compared to national estimates for the Medicaid and CHIP populations reported by AHRQ.[118] In addition, the EQRO follows a modified NCQA scoring methodology to calculate *Getting Care Quickly* scores on a 1- to 3-point scale, which allows for statistical comparisons between population sub-groups and reporting years.

Scores for *Getting Care Quickly* among child members are similar to those reported for children in Medicaid and SCHIP nationally. Scores for children on this composite were:

- 83 percent for children in STAR (in 2011), which is slightly lower than the Medicaid national average of 87 percent.
- 84 percent for children in CHIP (in 2011), which is slightly lower than the SCHIP national average of 86 percent.
- 90 percent for children in STAR Health (in 2012), which is higher than scores in STAR or CHIP.

CAHPS® *Getting Care Quickly*	
Child – 2011/2012	
STAR [a]	83%
CHIP [a]	84%
STAR Health [b]	90%
Adult – 2011/2012	
STAR [b]	71%
STAR+PLUS Medicaid-only [b]	75%
STAR+PLUS Dual-eligible [a]	80%

[a] 2011, [b] 2012

Scores for *Getting Care Quickly* among adult members were generally lower than for children, and fell below the applicable national averages. Adult scores for this composite were:

- 71 percent for adults in STAR (in 2012), which is notably lower than the Medicaid national average of 81 percent.
- 75 percent for STAR+PLUS Medicaid-only members (in 2012).
- 80 percent for STAR+PLUS dual-eligible members (in 2011), which is higher than that reported for Medicaid-only adults in STAR+PLUS.

Since 2009, few observable trends were seen in scores for this composite. Children in CHIP had a moderate increase in *Getting Care Quickly*, from 79 percent in 2010 to 84 percent in 2011. Over the four-year period, STAR+PLUS Medicaid-only members had a moderate decrease for this measure, from 79 percent in 2009 to 75 percent in 2012.

HHSC Performance Indicator Dashboard – Survey-based Timeliness Measures

The HHSC Performance Indicator Dashboard includes the following four survey-based measures of timeliness of care, each with standards set by the state for Texas Medicaid and CHIP MCO performance:

1) *Good Access to Urgent Care* – based on responses to a CAHPS® 4.0 item assessing how often the member (or their child) received urgent care as soon as it was needed. Members who answer “usually” or “always” to this question are considered to have good access to urgent care.
2) *Good Access to Routine Care* – based on responses to a CAHPS® 4.0 item assessing how often the member (or their child) received an appointment for routine care as soon as it was needed. Members who answer “usually” or “always” to this question are considered to have good access to routine care.

3) *No Delays for Health Plan Approval* – based on responses to a modified CAHPS® 3.0 item assessing how often the member (or their child) experienced delays in their health care while waiting for approval from their health plan. Members who answer "never" to this question are considered to have no delays for health plan approval.

4) *No Wait to be Taken to the Exam Room Greater than 15 Minutes* – based on responses to a CAHPS® 3.0 item assessing how often the member (or their child) was taken to the exam room within 15 minutes of their appointment. Members who answer "always" to this question are considered to have no wait greater than 15 minutes.

HHSC Performance Dashboard Indicators – Timeliness of Care for Children

	STAR 2011		CHIP 2011		STAR Health 2012	
	Rate	**Dashboard standard**	**Rate**	**Dashboard standard**	**Rate**	**Dashboard standard**
Good Access to Urgent Care	86%	88%	89%	89%	96%	88%
Good Access to Routine care	79%	84%	78%	86%	84%	76%
No Delays for Health Plan Approval	63%	65%	67%	91%	69%	69%
No Wait to be Taken to Exam Room > 15 min.	24%	35%	24%	68%	30%	50%

Program-level rates on timeliness indicators were generally below state-specified standards for children in STAR and CHIP, and met or exceeded standards for children in STAR Health (with the exception of waiting to be taken to the exam room):

- In 2011, children in STAR had rates slightly below the HHSC Dashboard standards for *Good Access to Urgent Care* (standard = 88 percent), *Good Access to Routine Care* (standard = 84 percent), and *No Delays for Health Plan Approval* (standard = 65 percent). The rate for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* was more than 10 percentage points below the HHSC Dashboard standard of 35 percent.
- In 2011, children in CHIP had rates equal to the HHSC Dashboard standard for *Good Access to Urgent Care* (standard = 89 percent), slightly below the standard for *Good Access to Routine Care* (standard = 86 percent), and considerably below the standards for *No Delays for Health Plan Approval* (standard = 91 percent) and *No Wait to be Taken to the Exam Room Greater than 15 Minutes* (standard = 68 percent).
- In 2012, children in STAR Health had rates that exceeded the HHSC Dashboard standards for *Good Access to Urgent Care* (standard = 88 percent) and *Good Access to Routine Care* (standard = 76 percent). The STAR Health rate for *No Delays for Health Plan Approval* was equal to the HHSC Dashboard standard of 69 percent, while the rate for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* was 20 percentage points below the standard of 50 percent.

HHSC Performance Dashboard Indicators – Timeliness of Care for Adults					
	STAR		STAR+PLUS		
	2012	Dashboard standard	Medicaid 2012	Dual 2011	Dashboard standard
Good Access to Urgent Care	74%	81%	77%	81%	81%
Good Access to Routine care	67%	80%	73%	80%	80%
No Delays for Health Plan Approval	50%	57%	38%	49%	57%
No Wait to be Taken to the Exam Room > 15 Min.	21%	42%	28%	33%	42%

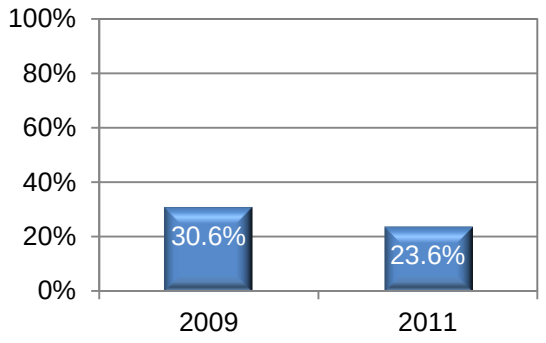
Program-level rates on timeliness indicators were below 2012 state-specified standards for adults in STAR and STAR+PLUS Medicaid-only members – particularly for delays in health plan approval and waiting to be taken to the exam room. STAR+PLUS dual-eligible members had rates equal to 2011 standards for timeliness of urgent and routine care, and rates below the standards for delays in health plan approval and waiting to be taken to the exam room:

- In 2012, adults in STAR had rates below the HHSC Dashboard standard for *Good Access to Urgent Care* (standard = 81 percent), and 13 percentage points below the standard for *Good Access to Routine Care* (standard = 80 percent). The rate for *No Delays for Health Plan Approval* was seven percentage points below the standard of 57 percent, while the rate for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* was more than 20 percentage points below the HHSC Dashboard standard of 42 percent.
- In 2012, STAR+PLUS Medicaid-only members had rates slightly below the HHSC Dashboard standard for *Good Access to Urgent Care* (standard = 81 percent) and seven percentage points below the standard for *Good Access to Routine Care* (standard = 80 percent). The rate for *No Delays for Health Plan Approval* was 19 percentage points below the standard of 57 percent, while the rate for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* was 14 percentage points below the standard of 42 percent.
- In 2011, STAR+PLUS dual-eligible members had rates that were equal to the HHSC Dashboard standards for *Good Access to Urgent Care* (standard = 81 percent) and *Good Access to Routine Care* (standard = 80 percent). The STAR+PLUS dual-eligible rate for *No Delays for Health Plan Approval* was eight percentage points below the standard of 57 percent, while the rate for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* was 9 percentage points below the standard of 42 percent.

Overall, the most recent survey findings on timeliness of care show that improvements in timeliness are warranted for health plan approval and waiting times at doctors' offices for both children and adults.

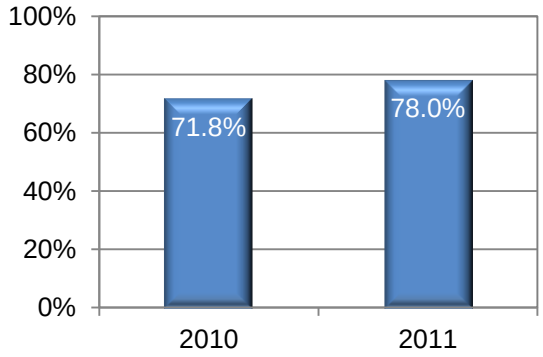
Few observable trends were seen for any of the HHSC Dashboard timeliness indicators. As shown in **Figure 35,** children in STAR had a notable decrease in performance for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* between 2009 (31 percent) and 2011 (24 percent) – a change that was statistically significant.[119] Most STAR MCOs saw a decrease in performance on this indicator between 2009 and 2011, with the greatest decreases observed for Amerigroup (-12 percent), Molina (-12 percent), and Unicare (-11 percent).[120] Based on this finding, STAR MCOs should explore possible reasons for this decline and implement focused efforts to improve the timeliness of care in clinical settings.

Figure 35. *No Wait to be Taken to the Exam Room > 15 Minutes* for Children in STAR, 2009-2011



As shown in **Figure 36**, children in CHIP had a notable increase in performance for *Good Access to Routine Care* between 2010 (72 percent) and 2011 (78 percent) – a change that was statistically significant.[121] Most CHIP MCOs saw an increase in performance on this indicator over the two-year period, with the greatest increases observed in Molina (+20 percent), Parkland Community (+18 percent), and Aetna (+15 percent).[122] Although this finding suggests that efficiencies may have been successfully implemented in CHIP provider offices during the one-year period, continued monitoring of this indicator is important to ensure that rates will continue to improve.

Figure 36. *Good Access to Routine Care* for Children in CHIP, 2010-2011



4.2 – Primary and Specialist Care

The EQRO uses a number of questions from the CAHPS® Health Plan Survey to assess member-reported access to primary and specialist care. These include: (1) three composite measures – *Getting Needed Care* (which is a core composite for adults and children), *Getting Specialized Services* and *Prescription Medicines* (which are composites specifically for children); and (2) three items dealing with access to specialist referrals, behavioral health treatment and counseling, and special therapies that have been incorporated into the HHSC Performance Indicator Dashboard.

Scores for the three CAHPS® composites follow AHRQ specifications, which represent the percentage of members who “usually” or “always” had positive experiences with access to care.

In addition, the EQRO follows a modified NCQA scoring methodology to calculate these scores on a 1- to 3-point scale, which allows for statistical comparisons between population sub-groups and reporting years.

Getting Needed Care

The CAHPS® *Getting Needed Care* composite combines responses to questions about how often it was easy for members to get: (1) appointments with specialists; and (2) care, tests, or treatment they needed through their health plan. For both adults and children, scores for *Getting Needed Care* can be compared to national estimates for the Medicaid and SCHIP populations reported by AHRQ.[123]

CAHPS® *Getting Needed Care*	
Child – 2011/2012	
STAR [a]	72%
CHIP [a]	72%
STAR Health [b]	80%
Adult – 2011/2012	
STAR [b]	67%
STAR+PLUS Medicaid-only [b]	60%
STAR+PLUS Dual-eligible [a]	74%

[a] 2011, [b] 2012

Getting Needed Care scores for both child and adult members are below those reported for Medicaid and SCHIP nationally. Scores on this composite were:

- 72 percent for children in STAR (in 2011), which is lower than the Medicaid national average of 79 percent.
- 72 percent for children in CHIP (in 2011), which is lower than the SCHIP national average of 80 percent.
- 67 percent for adults in STAR (in 2012), which is notably lower than the Medicaid national average of 78 percent.

The score for *Getting Needed Care* among members in STAR Health (80 percent) was greater than among child members in STAR or CHIP. STAR+PLUS Medicaid-only members had the lowest score for this composite (60 percent), although the score among STAR+PLUS dual-eligible members was notably higher (74 percent).

Since 2009, a negative trend was observed for this composite in STAR+PLUS (Medicaid-only), and a positive trend was observed in STAR Health. As shown in **Figure 37**, scores for *Getting Needed Care* in STAR+PLUS declined by almost nine percentage points over the four-year period, from 69 percent in 2009 to 60 percent in 2012. While scores in all STAR+PLUS MCOs declined during this period, these decreases were statistically significant in Molina and Superior.[124,125] Furthermore, the program mean for this composite decreased with the addition of the HealthSpring MCO in 2012, which had a low NCQA-scaled score for *Getting Needed Care* (1.91). These findings suggest the need for improved access to primary and specialist care in STAR+PLUS, particularly for Medicaid-only members and those in the Molina and Superior health plans.

Figure 37. CAHPS® *Getting Needed Care* in STAR+PLUS, 2009-2012

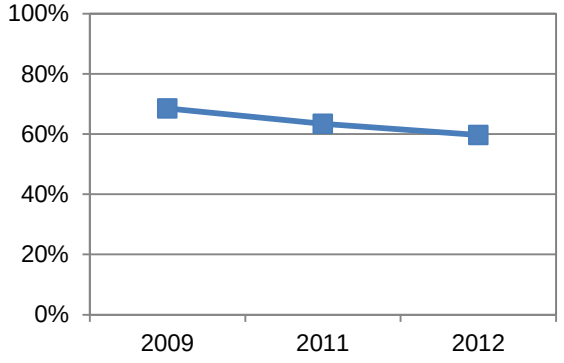
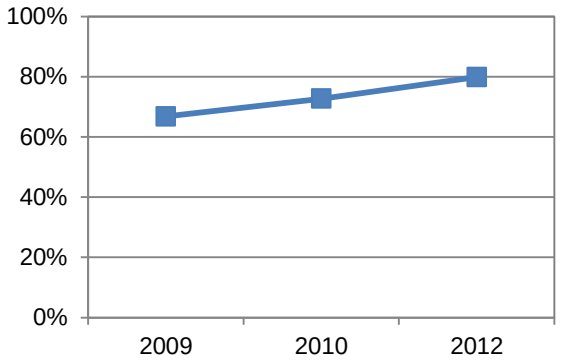


Figure 38. CAHPS® *Getting Needed Care* in STAR Health, 2009-2012



As shown in **Figure 38**, scores for *Getting Needed Care* in STAR Health increased by over 13 percentage points over the four-year period, from 67 percent in 2009 to 80 percent in 2012. Much of this increase may be explained by improvements in access to network providers in STAR Health since its implementation in 2008.

Getting Specialized Services

The CAHPS® *Getting Specialized Services* composite, which is calculated for children in Medicaid and CHIP, combines responses to questions about access to: (1) special medical equipment or devices; (2) special therapies such as physical, occupational, or speech therapy; and (3) treatment or counseling for emotional, developmental, or behavioral problems.

CAHPS® *Getting Specialized Services*	
Child – 2011/2012	
STAR [a]	66%
CHIP [a]	64%
STAR Health [b]	72%

[a] 2011, [b] 2012

In 2011, approximately two-thirds of parents in STAR (66 percent) and CHIP (64 percent) usually or always had positive experiences getting specialized services for their child. Although no national standards are available for comparison, these scores are considered low, and suggest the need to improve access to specialized services for children in STAR and CHIP.

Among the three items in this composite, the lowest rates of access were observed for behavioral health treatment or counseling, with 61 percent of parents in STAR and 59 percent of parents in CHIP saying it was “usually” or “always” easy to get treatment or counseling for their child. When NCQA-scaled means were compared across the MCOs, the lowest rates in CHIP were seen in Aetna (1.87) and Texas Children’s (1.85), while the lowest rates in STAR were seen in Molina (1.86) and UnitedHealthcare-Texas (1.92).[126,127]

No observable trends were seen in scores for *Getting Specialized Services* between 2009 and 2012.

Prescription Medicines

The CAHPS® *Prescription Medicines* measure is based on a single item that assesses how often it was easy for parents to get prescription medicines through their child's health plan. Although no national comparisons are available for this measure, scores in STAR (88 percent), CHIP (88 percent), and STAR Health (93 percent) are considered high, indicative of good access to prescription medication for children. No observable trends were seen for this measure between 2009 and 2012

CAHPS® *Prescription Medicines*	
Child – 2011/2012	
STAR [a]	88%
CHIP [a]	88%
STAR Health [b]	93%

[a] 2011, [b] 2012

HHSC Performance Indicator Dashboard – Survey-based Access Measures

The HHSC Performance Indicator Dashboard includes the following three survey-based measures of access to primary and specialist care, each with standards set by the state for Texas Medicaid and CHIP MCO performance:

1) *Good Access to Specialist Referral* – based on responses to a CAHPS® 4.0 item assessing how often it was easy for the member (or their child) to get a specialist referral. Members who answer "usually" or "always" to this question are considered to have good access to specialist referrals.
2) *Good Access to Behavioral Health Treatment or Counseling* – based on responses to a CAHPS® 4.0 item assessing how often it was easy for the parent of a child member to get treatment or counseling for their child for a behavioral health problem. Parents who answer "usually" or "always" to this question are considered to have good access to behavioral health treatment or counseling for their child. This indicator is used only in child surveys.
3) *Good Access to Special Therapies* – based on responses to a CAHPS® 4.0 item assessing how often it was easy for the member to get special therapies, such as physical, speech, or occupational therapy. Members who answer "usually" or "always" to this question are considered to have good access to special therapies. This indicator is only used in adult surveys.

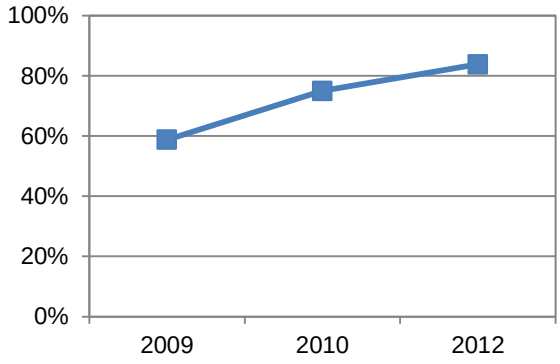
HHSC Performance Dashboard Indicators – Access to Care for Children

	STAR 2011		CHIP 2011		STAR Health 2012	
	Rate	**Dashboard standard**	**Rate**	**Dashboard standard**	**Rate**	**Dashboard standard**
Good Access to Specialist Referral	69%	74%	73%	77%	84%	75%
Good Access to BH Treatment/Counseling	61%	76%	59%	76%	78%	79%

Program-level rates for *Good Access to Specialist Referral* were lower than 2011 HHSC Dashboard standards for children in STAR (standard = 74 percent) and CHIP (standard = 77 percent). Rates for *Good Access to Behavioral Treatment or Counseling* were notably lower than 2011 HHSC Dashboard standards for children in STAR (standard = 76 percent) and CHIP (standard = 76 percent). Denominators at the MCO-level for this measure were not sufficient for statistically comparing results among the health plans in STAR or CHIP.

The rate for *Good Access to Specialist Referral* in STAR Health notably exceeded the HHSC Dashboard standard of 75 percent, while the rate for *Good Access to Behavioral Treatment or Counseling* in STAR Health was approximately equal to the standard of 79 percent. Between 2009 and 2012, a considerable increase was observed in access to specialist referrals for members in STAR Health (**Figure 39**). The rate for this indicator increased by 25 percentage points over the four-year period, from 59 percent in 2009 to 84 percent in 2012 – potentially as a result of improvements in access to specialist network providers since the implementation of STAR Health in 2008.

Figure 39. *Good Access to Specialist Referral* in STAR Health, 2009-2012



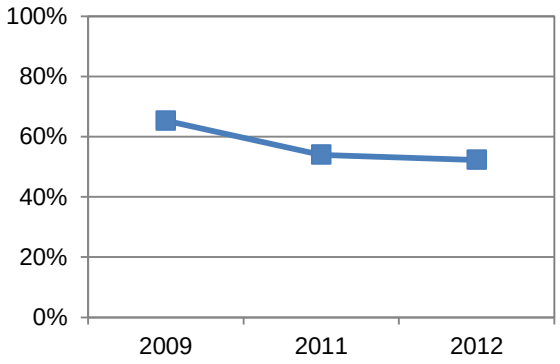
HHSC Performance Dashboard Indicators – Access to Care for Adults					
	STAR		STAR+PLUS		
	2012	Dashboard standard	Medicaid 2012	Dual 2011	Dashboard standard
Good Access to Specialist Referral	64%	73%	61%	78%	73%
Good Access to Special Therapies	62%	58%	52%	53%	66%

Program-level rates for *Good Access to Specialist Referral* were lower than 2012 HHSC Dashboard standards for adults in STAR and STAR+PLUS Medicaid-only members (standard = 73 percent for both programs). Among the STAR MCOs, the lowest rates for this indicator were observed in Parkland Community (48 percent) and Aetna (57 percent). Among the STAR+PLUS MCOs, the lowest rates were seen in Molina and HealthSpring (both at 57 percent). However, differences among the MCOs were not statistically significant in either program.

Among dual-eligibles in STAR+PLUS, access to specialist referrals was considerably better, having increased from 71 percent in 2010 to 78 percent in 2011, and exceeding the 2011 standard for this indicator by five percentage points.

The rate for *Good Access to Special Therapies* among adults in STAR exceeded the 2012 HHSC Dashboard standard of 58 percent. However, in STAR+PLUS, the rate for this indicator was considerably below the standard of 66 percent for both Medicaid-only members (by 14 percentage points) and dual-eligible members (by 13 percentage points).

Figure 40. *Good Access to Special Therapies* in STAR+PLUS (Medicaid-only), 2009-2012



Furthermore, both groups in STAR+PLUS saw considerable declines in access to special therapies. As shown in **Figure 40**, the rate among STAR+PLUS Medicaid-only members dropped from 65 percent in 2009 to 52 percent in 2012.[128] Most of this decrease occurred between 2009 and 2011, suggesting that the negative trend in access to special therapies is not explained by the Medicaid managed care expansion that occurred in September 2011. Rates in all STAR+PLUS MCOs declined during this period, particularly in Molina (by 20 percentage points) and Superior (by 15 percentage points).[129,130] The program mean for this indicator also decreased with the addition of the HealthSpring MCO in 2012, which had a rate of 49 percent. A similar decline in access to special therapies was seen for STAR+PLUS dual-eligible members, from 66 percent in 2010 to 53 percent in 2011. To understand and correct these trends, STAR+PLUS MCOs should examine changes that may have occurred in their specialist provider networks during the period between 2009 and 2011.

4.3 – Patient-Centered Medical Home

The American Academy of Family Physicians defines the patient-centered medical home (PCMH) as a "system of comprehensive coordinated primary care for children, youth and adults."[131] In the PCMH model, patients have a personal physician who coordinates care within a team, ensures that patients' needs are being met, and respects patients' preferences. In a joint statement released in 2007, the American Academy of Pediatrics, the American Academy of Family Physicians, the American College of Physicians, and the American Osteopathic Association identified seven principles of the patient-centered medical home model:[132]

- Personal physician
- Physician-directed medical practice
- Whole person orientation
- Care that is coordinated and/or integrated across settings and providers
- Quality and safety
- Enhanced access (e.g., open scheduling, extended hours)
- Payment structure that promotes coordination, health information technology, and quality incentives

The PCMH may improve not only outcomes of care and patient satisfaction, but also utilization and costs of care. A demonstration project in Washington State found that after one year of implementation, use of the PCMH model in a health care system resulted in higher patient experience ratings, lower emotional exhaustion among staff, increased use of e-mail, phone, and specialist visits, and decreased emergency department visits.[133]

The EQRO member satisfaction surveys include a number of CAHPS® core and supplemental items that address the presence and quality of the PCMH for members in Texas Medicaid and CHIP, including: (1) the percentage of members with a personal doctor; (2) member ratings of their personal doctor (on a scale of 0 to 10); and (3) CAHPS® composite scores for *How Well Doctors Communicate*; *Shared Decision-Making*; *Personal Doctor; Getting Needed Information;* and *Care Coordination*. In addition, STAR+PLUS members' experiences with care coordination are assessed using the HHSC Performance Dashboard indicator, *Good Access to Service Coordination*.

Presence of a Usual Source of Care

The majority of Texas Medicaid and CHIP members report having a personal doctor whom they see when they need a checkup, want advice about a health problem, or get sick or hurt (**Table 6)**. Among children, rates of having a personal doctor were higher in the STAR Health program (93 percent) than in STAR (84 percent) or CHIP (85 percent). Among adults, rates were higher for STAR+PLUS Medicaid-only (82 percent) and dual-eligible members (85 percent) than for STAR members (68 percent). No observable trends were seen in the percent of members with a personal doctor over the four-year period.

Table 6. Percent of Members with a Personal Doctor in Texas Medicaid and CHIP

STAR Child 2011	CHIP 2011	STAR Health 2012	STAR Adult 2012	STAR+PLUS	
				Medicaid 2012	Dual-eligible 2011
84%	85%	93%	68%	82%	85%

Member Ratings of their Personal Doctor

For members who report having a personal doctor, the CAHPS® Health Plan Survey also asks them to rate their personal doctor on a scale from 0 to 10. **Figure 41** shows the percentage of parents of child members who gave their child's personal doctor a rating of "9" or "10", along with the corresponding national averages for 2011. Three-quarters of parents of children in STAR rated their child's personal doctor a "9" or "10" (75 percent), which is greater than the Medicaid national average of 70 percent. The rate for children in CHIP (72 percent) was also greater than the SCHIP national average of 69 percent, while the rate for children in STAR Health (74 percent) was comparable. Overall, these findings show that parents of children in Texas Medicaid and CHIP are satisfied with their children's personal doctors.

Between 2009 and 2012, a positive trend was observed in personal doctor ratings for caregivers of children in STAR Health. The percent of caregivers who gave their child's personal doctor a rating of "9" or "10" increased by over ten percentage points, from 63 percent in 2009 to 74 percent in 2012.

Figure 41. Percent of Parents Rating their Child's Personal Doctor a "9" or "10"

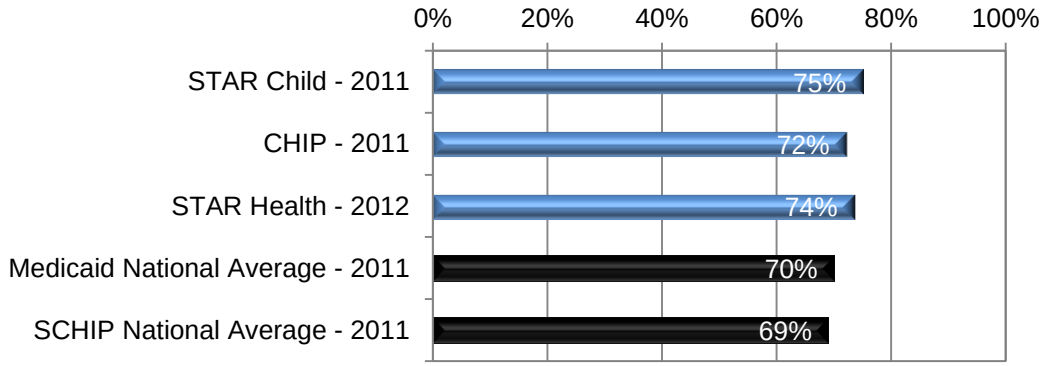
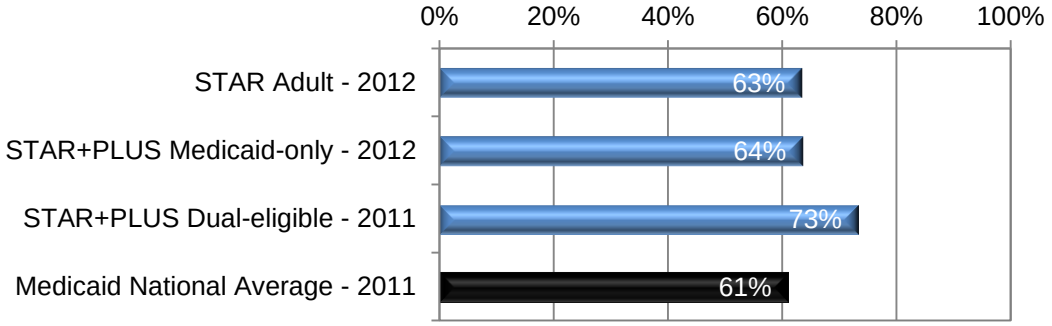


Figure 42 shows the percentage of adult members who rated their own personal doctor a "9" or "10", along with the corresponding national averages for 2011. Although ratings for personal doctors among adult members were slightly lower than among parents of child members (with the exception of STAR+PLUS dual-eligible members), they generally exceeded the Medicaid national average of 63 percent. The percent of STAR+PLUS members who rated their personal doctor a "9" or "10" was considerably higher among dual-eligibles (73 percent) than among Medicaid-only members (64 percent).

Figure 42. Percent of Members Rating their Personal Doctor a "9" or "10"



How Well Doctors Communicate

Good doctor-patient communication is an important determinant of patient satisfaction and outcomes of care. Patients who report good communication with their doctors are more likely to be satisfied with their care, to share information for accurate diagnosis of their problems, and to adhere to prescribed treatment.[134] The EQRO uses the CAHPS® composite *How Well Doctors Communicate* to assess member- and parent-reported experiences and satisfaction communicating with their personal doctors. This composite combines responses to questions about how often personal doctors: (1) explained things in a way that was easy for members to

understand; (2) listened carefully to members; (3) showed respect for what members had to say; and (4) spent enough time with members. *How Well Doctors Communicate* is a core CAHPS® composite for both adults and children. Scores follow AHRQ specifications, representing the percentage of members who "usually" or "always" had positive experiences communicating with personal doctors.

The most recent EQRO surveys found that members and parents of child members are generally satisfied with communication with their personal doctors. The score for *How Well Doctors Communicate* among children in STAR (88 percent) was slightly lower than the Medicaid national average of 92 percent, while the score for children in CHIP (91 percent) was comparable to the SCHIP national average of 92 percent.

CAHPS® *How Well Doctors Communicate*	
Child – 2011/2012	
STAR [a]	88%
CHIP [a]	91%
STAR Health [b]	94%
Adult – 2011/2012	
STAR [b]	89%
STAR+PLUS Medicaid-only [b]	82%
STAR+PLUS Dual-eligible [a]	90%

[a] 2011, [b] 2012

Eighty-nine percent of adults in STAR had positive experiences communicating with their personal doctors, which is equal to the Medicaid national average for 2011. In STAR+PLUS, *How Well Doctors Communicate* was lower among Medicaid-only members (82 percent) and higher among dual-eligible members (90 percent). No observable trends were seen in scores for this composite over the four-year period.

Shared Decision-Making

An important component of the patient-centered medical home is the involvement of patients in decisions about their health care. The process of shared decision-making, in which doctors inform patients of available options and elicit patients' treatment preferences, is particularly suited for long-term decisions, such as those made in the context of chronic illness.[135]

CAHPS® *Shared Decision-Making*	
Child – 2011/2012	
STAR [a]	88%
CHIP [a]	91%
STAR Health [b]	89%

[a] 2011, [b] 2012

To assess parents' experiences with this process for their children in Texas Medicaid and CHIP, the EQRO uses the CAHPS® composite *Shared Decision-Making*. This composite combines responses to questions about whether the child's doctor or other health providers: (1) talked with the parent about the pros and cons for each choice for their child's health care; and (2) asked the parent which choice they thought was best for their child.

Overall, parents reported positive experiences with shared decision-making for their child's care. Although no national averages are available for comparison, the scores in STAR (88 percent), CHIP (91 percent), and STAR Health (89 percent) are considered high, and indicative of effective shared decision-making practices in the clinical setting. No observable trends were seen in scores for this composite over the four-year period.

Personal Doctor

The CAHPS® composite *Personal Doctor*, which is calculated for children in Medicaid and CHIP, combines responses to questions about whether the child's personal doctor: (1) talked with the parent about how their child was feeling, growing, or behaving; and (2) understood how the child's medical, behavioral, or other health conditions affected the child's and family's day-to-day life.

CAHPS® *Personal Doctor*	
Child – 2011/2012	
STAR [a]	86%
CHIP [a]	87%
STAR Health [b]	90%

[a] 2011, [b] 2012

Overall, parents reported positive experiences with these aspects of their interactions with their child's personal doctor. Although no national averages are available for comparison, the scores in STAR (86 percent), CHIP (87 percent), and STAR Health (90 percent) are considered high, and indicate that personal doctors in Medicaid and CHIP are attentive to the broader impacts associated with children's physical and emotional development. No observable trends were seen in scores for this composite over the four-year period.

Getting Needed Information

CAHPS® *Getting Needed Information*	
Child – 2011/2012	
STAR [a]	92%
CHIP [a]	92%
STAR Health [b]	90%

[a] 2011, [b] 2012

The CAHPS® composite *Getting Needed Information*, which the EQRO also calculates for children in Medicaid and CHIP, is based on a single item about how often parents had their questions answered by their child's doctors or other health providers.

Although no national averages are available for comparison, scores for this composite in STAR (92 percent), CHIP (92 percent), and STAR Health (90 percent) are considered high, and indicate that parents are adequately having their questions answered by providers. A slight increase in the score for this measure was observed for children in STAR, from 86 percent in 2009 to 92 percent in 2011.

Care Coordination

To assess parents' experiences with care coordination for their children in Texas Medicaid and CHIP, the EQRO uses the CAHPS® composite *Care Coordination*. This composite combines responses to questions asking: (1) whether the child's doctors or other health providers helped the parent in contacting their child's school or daycare; and (2) whether anyone from the child's health plan, doctor's office, or clinic helped the parent coordinate their child's care among different providers and health care services.

CAHPS® *Care Coordination*	
Child – 2011/2012	
STAR [a]	71%
CHIP [a]	71%
STAR Health [b]	74%

[a] 2011, [b] 2012

Although no national averages are available for comparison, scores for this composite in STAR (71 percent), CHIP (71 percent), and STAR Health (74 percent) suggest that there is room for improvement in care coordination practices for children in these programs. It should be noted that the *Care Coordination* score in STAR Health increased by approximately six percentage points, from 68 percent in 2010 to 74 percent in 2012.

HHSC Dashboard Indicator *Good Access to Service Coordination*	
STAR+PLUS – 2010/2012	
Medicaid-only [b]	67%
Dual-eligible [a]	64%
Dashboard standard [b]	63%

[a] 2010, [b] 2012

Members in STAR+PLUS have the option to receive assistance from a service coordinator through their health plan, who helps to arrange their care and find the services that they need. For these members, the HHSC Dashboard indicator, *Good Access to Service Coordination*, represents the percentage of members who "usually" or "always" received service coordination help as soon as they needed it.

Results for this indicator are available for Medicaid-only members in 2012 and dual-eligible members in 2010.[136] Among Medicaid-only members who had a service coordinator, 67 percent had good access to service coordination, which exceeds the 2012 HHSC Dashboard standard of 63 percent. The result for this indicator among dual-eligible members was slightly lower (64 percent), although no 2010 HHSC Dashboard standard is available for comparison. No observable trends were seen for this indicator during the four-year period.

4.4 – 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. 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.

To assess member satisfaction with health plan customer service in Texas Medicaid and CHIP, the EQRO uses the CAHPS® composite *Health Plan Information and Customer Service*. This is a core composite for both adults and children, and combines responses to questions regarding how often health plan customer service staff: (1) gave members the information or help they needed; and (2) treated members with courtesy and respect. Scores follow AHRQ specifications, which represent the percentage of members who "usually" or "always" had positive experiences with health plan customer service. In addition, the EQRO follows a modified NCQA scoring methodology to calculate these scores on a 1- to 3-point scale, which allows for statistical comparisons between population sub-groups and reporting years.

CAHPS® *Health Plan Information and Customer Service*	
Child – 2011/2012	
STAR [a]	84%
CHIP [a]	82%
STAR Health [b]	75%
Adult – 2011/2012	
STAR [b]	78%
STAR+PLUS Medicaid-only [b]	69%
STAR+PLUS Dual-eligible [a]	74%

[a] 2011, [b] 2012

Results for this composite reveal that Texas Medicaid and CHIP members have generally positive experiences with health plan customer service. The score for children in STAR (84 percent) was higher than the Medicaid national average of 80 percent, while the score for children in CHIP (82 percent) was comparable to the CHIP national average of 81 percent.

Among adults in STAR, the score for this composite (78 percent) was slightly below the Medicaid national average of 80 percent. Scores were generally lower in STAR+PLUS, for both Medicaid-only members (69 percent) and dual-eligible members (74 percent).

Among caregivers of children in STAR Health, 75 percent usually or always had positive experiences with health plan customer service. This score is lower than that reported for children in the other programs, and represents a considerable decline from 85 percent in 2010. This finding suggests that the STAR Health MCO (Superior Health Plan) should explore possible reasons for the lower ratings in customer service among caregivers of children in foster care.

4.5 – Behavioral Health Care

In response to recommendations made by the Texas Legislative Budget Board Staff, the EQRO began conducting behavioral health satisfaction surveys for Texas Medicaid members in FY 2010.[137] These surveys use the CAHPS® Experience of Care and Health Outcomes (ECHO) tool, which assesses members' experiences and satisfaction with the behavioral health services they receive through their managed care organization or behavioral health organization. The EQRO has conducted this survey twice for children in STAR (in 2010 and 2011), twice for adults in STAR (in 2010 and 2012), and once for adults in STAR+PLUS (in 2011).

The ECHO behavioral health survey includes four reporting composites that combine responses to closely related survey items: [138]

1) *Getting Treatment Quickly*, which assesses how often members got professional counseling over the phone, urgent counseling and treatment, and routine counseling appointments. Scores are calculated on a scale ranging from 1.00 to 3.00.

2) *How Well Clinicians Communicate*, which assesses how often clinicians listened carefully to members, explained things in a way members could understand, showed respect for what members had to say, spent enough time with members, made members feel safe, and involved members as much as they wanted. Scores are calculated on a scale ranging from 1.00 to 3.00.

3) *Information About Treatment Options,* which assesses whether members were told about self-help or support groups, and whether they were given information about different kinds of counseling options available to them. Scores are calculated on a scale ranging from 0.00 to 1.00.

4) *Perceived Improvement*, which assesses how members would rate their ability to deal with daily problems, ability to deal with social situations, ability to accomplish things they want to, and their problems or symptoms compared to six months prior to the survey. Scores are calculated on a scale ranging from 1.00 to 4.00.

ECHO Behavioral Health Survey Composites [a]

	STAR Child 2011		**STAR Adult 2012**		**STAR+PLUS 2011**	
	Mean	95% CI	Mean	95% CI	Mean	95% CI
Getting Treatment Quickly (1.00 – 3.00)	2.15	2.05-2.24	1.96	1.86-2.07	2.15	2.06-2.23
How Well Clinicians Communicate (1.00 – 3.00)	2.52	2.47-2.56	2.26	2.18-2.29	2.47	2.43-2.51
Information About Treatment Options (0.00 – 1.00)	NR	NR	0.50	0.46-0.53	0.60	0.57-0.63
Perceived Improvement (1.00 – 4.00)	3.09	3.02-3.13	2.78	2.73-2.86	2.60	2.55-2.65

[a] 95% CI = 95% Confidence Interval

Findings from the EQRO's most recent behavioral health surveys in STAR and STAR+PLUS showed adequate scores for *Getting Treatment Quickly* and *Perceived Improvement*, and good scores for *How Well Clinicians Communicate*. Scores for *Information About Treatment Options* among adults in STAR (0.50) and STAR+PLUS (0.60) suggest there is room for improvement in the quality of information that behavioral health providers give to members.

5 – Effectiveness of Care

The Institute of Medicine (IOM) defines *effectiveness* as a quality of care that uses "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."[139] Ensuring that care is effective is one of six aims outlined by the IOM for improving the 21st-century health care system, and requires that services based on scientific knowledge are provided to all who could benefit.

To evaluate effectiveness of care in Texas Medicaid and CHIP, the EQRO uses HEDIS® process measures that assess: (1) provider compliance with evidence-based practices; and (2) patient compliance with follow-up and treatment regimens. These measures address the appropriate and effective management of a number of acute and chronic conditions, including pediatric upper respiratory tract infection and pharyngitis; bronchitis in adults; asthma; diabetes; hypertension; and behavioral conditions such as attention deficit-hyperactivity disorder (ADHD), depression, and alcohol or drug dependence. This section also presents preventive care measures related to the promotion of healthy weight and diet in children and adults. Many of these measures are also HHSC Dashboard indicators for STAR, CHIP, STAR Health, or STAR+PLUS.

5.1 – Acute Respiratory Care

Acute respiratory conditions, such as upper respiratory infections (URIs) in children and acute bronchitis in adults, account for a large proportion of outpatient visits in the United States. Children typically experience six to eight URIs each year, with common infections including laryngitis, pharyngitis, otitis media, and the common cold.[140,141] Pharyngitis, in particular, results in more than seven million pediatric outpatient visits each year – approximately one-third of which are due to a bacterial infection caused by group A streptococcus, which can be treated with antibiotics.[142,143] However, antibiotics are prescribed as a treatment in 68 percent of respiratory infection cases, which may lead to an increase in drug-resistant bacteria.[144,145]

Acute bronchitis is a common reason for ambulatory care visits among adults in the United States, although its diagnostic requirements and treatment vary widely in clinical practices.[146] As with pediatric URIs, most cases of acute bronchitis in adults are caused by viruses; however, prescription of antibiotics is a frequent practice and has contributed to the emergence of antibiotic-resistant bacteria.[147]

The Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics (AAP) recommend against antibiotic prescriptions for most types of pediatric URIs, including otitis media, rhinitis, viral pharyngitis, cough, and bronchitis.[148] Evidence-based practice guidelines by the CDC also recommend against the routine use of antibiotics for cases of acute bronchitis in adults.[149] The EQRO uses three HEDIS® measures to assess the compliance of Texas Medicaid and CHIP providers with treatment guidelines for acute respiratory infections:

- HEDIS® *Appropriate Treatment for Children with Upper Respiratory Infection*
- HEDIS® *Appropriate Testing for Children with Pharyngitis*
- HEDIS® *Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis*

Appropriate Treatment for Children with Upper Respiratory Infection

The HEDIS® *Appropriate Treatment for Children with Upper Respiratory Infection* measure assesses the percentage of children three months to 18 years old who received a diagnosis of upper respiratory infection (URI) and who *were not* dispensed an antibiotic prescription. As pediatric clinical guidelines do not recommend antibiotic treatment for most URIs, high percentages on this measure indicate good performance. The EQRO calculates this measure annually for STAR, CHIP, and STAR Health.

HEDIS® *Appropriate Treatment for Children with URI*	
CY 2011 results	
STAR	83 percent
CHIP	76 percent
STAR Health	79 percent

In CY 2011, the percentage of children who received appropriate treatment for URI was 83 percent in STAR, which was lower than the national HEDIS® mean of 87 percent. Rates for this measure were lower in CHIP (76 percent) and STAR Health (79 percent).

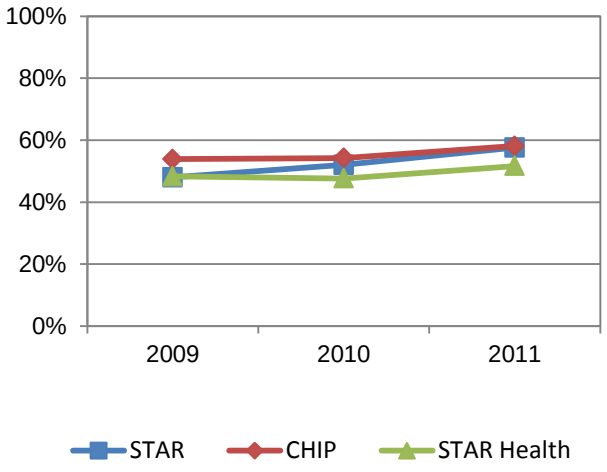
Trends in performance on this measure showed very slight increases since 2009, with a net increase of 2.6 percent in STAR, 1.0 percent in CHIP, and 0.7 percent in STAR Health. Overall, rates of appropriate treatment for pediatric URI in Texas Medicaid and CHIP were generally low and changed little over the three-year period, highlighting the need for efforts to improve MCO network provider compliance with practice guidelines.

Appropriate Testing for Children with Pharyngitis

The HEDIS® *Appropriate Testing for Children with Pharyngitis* measure assesses the percentage of children 2 to 18 years of age who were diagnosed with pharyngitis and dispensed an antibiotic, and who also received a group A streptococcus test for the episode. Because an antibiotic prescription for pharyngitis *without* a positive test for group A streptococcus is not recommended, high percentages on this measure indicate good performance. The EQRO calculates this measure annually for STAR, CHIP, and STAR Health.

Figure 43 shows trends in HEDIS® *Appropriate Testing for Children with Pharyngitis* in STAR, CHIP, and STAR Health from 2009 to 2011. Rates of appropriate testing for pediatric pharyngitis were low for all three programs, ranging from approximately 50 to 60 percent during the three-year period. Rates in STAR were lower than the HEDIS® national means in all three years.

Figure 43. HEDIS® *Appropriate Testing for Children with Pharyngitis* in STAR, CHIP, and STAR Health, 2009-2011



In 2011, 58 percent of children in STAR received appropriate testing for pharyngitis, compared to 65 percent of children in Medicaid nationally. Rates for this measure were approximately the same in CHIP (58 percent), and slightly lower in STAR Health (52 percent). However, rates of appropriate testing for pharyngitis did increase for all three programs over the three-year period, particularly for children in STAR (from 48 percent in 2009 to 58 percent in 2011). These findings suggest that performance on this measure has seen improvement in Texas Medicaid and CHIP. Health plans should continue efforts to encourage MCO network providers to follow the most up-to-date guidelines for the appropriate prescription of antibiotics in children.

Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis

The HEDIS® *Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis* measure assesses the percentage of adults 18 to 64 years of age with a diagnosis of acute bronchitis who were *not* dispensed an antibiotic prescription. As with other measures in this section, high percentages represent good performance. The EQRO calculates this measure annually for STAR+PLUS.

HEDIS® *Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis* in STAR+PLUS	
2010	18 percent
2011	20 percent

Results for this measure in STAR+PLUS are available for 2010 (18 percent) and 2011 (20 percent), showing a slight increase by two percentage points over the two-year period. Findings show low performance on this measure at the program level. Continued monitoring of this measure is important for adults in STAR+PLUS, who are more vulnerable to adverse outcomes related to antibiotic-resistant bacterial infections.

5.2 – Care for Chronic Conditions

Use of Appropriate Medications for People with Asthma

Asthma is one of the most common conditions that affect children and adults in Texas Medicaid and CHIP. When improperly managed, the condition can lead to asthma attacks that contribute to potentially avoidable emergency department and hospital admissions, missed school days for children, and missed work days for adults.[150] The National Asthma Education and Prevention Program (NAEPP) recommends that patients with persistent asthma be prescribed long-term control medications for daily use to maintain control of their symptoms and reduce the occurrence of adverse events due to asthma attacks.[151]

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, which is also an HHSC Performance Dashboard indicator. This measure assesses the percentage of members who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement period.

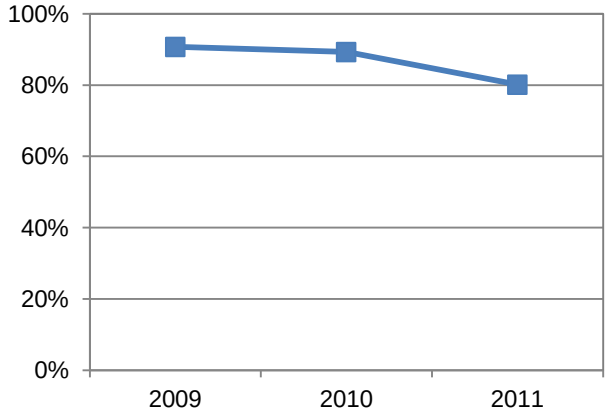
The 2012 HEDIS® specifications for this measure provide rates for four age cohorts: 5 to 11 years, 12 to 18 years, 19 to 50 years, and 51 to 64 years. Following the age cohorts specified in the 2011 HEDIS® specifications and the HHSC Performance Indicator Dashboard, this report

shows results for the 5- to 11-year age group in STAR, CHIP, and STAR Health; and for members 12 to 50 years old in STAR, STAR+PLUS, CHIP, and STAR Health (representing the 12- to 18-year and 19- to 50-year age groups combined).[152]

HEDIS® *Use of Appropriate Medications for People with Asthma*					
Age 5 to 11 years			**Age 12 to 50 years**		
	CY 2011 results	Dashboard standard		CY 2011 results	Dashboard standard
STAR	95%	92%	STAR	93%	86%
CHIP	96%	92%	CHIP	93%	86%
STAR+PLUS	95%	None	STAR+PLUS	80%	86%
STAR Health	94%	92%	STAR Health	91%	86%

For members 5 to 11 years old, rates of appropriate asthma medication use exceeded the HHSC Dashboard standard of 92 percent for all programs, suggesting a high level of compliance on this measure for children in Texas Medicaid and CHIP.[153] The rate in STAR (95 percent) also exceeded the HEDIS® national mean of 92 percent. Although findings show good performance at the program level, continued monitoring of this measure for children is warranted, given the high prevalence of asthma in these populations and its association with potentially preventable hospital admissions and ED visits.

Figure 44. HEDIS® *Use of Appropriate Medication for People with Asthma* in STAR+PLUS, 2009-2011



For members 12 to 50 years old, rates exceeded the HHSC Dashboard standard of 86 percent in STAR, CHIP, and STAR Health. The rate in STAR (93 percent) also exceeded the national HEDIS® mean of 86 percent. In STAR+PLUS, 80 percent of eligible members in this age group had appropriate asthma medication, which is lower than the HHSC Dashboard standard. Furthermore, the rate of appropriate asthma medication use for adults in STAR+PLUS declined by over 10 percentage points over the three-year period, from 91 percent in 2009 to 80 percent in 2011 (**Figure 44**).[154]

Among the five STAR+PLUS health plans, Superior had the highest rate (86 percent) – performing equal to the HHSC Dashboard standard. Rates were below the HHSC Dashboard standard in Evercare (72 percent), Molina (74 percent) and Amerigroup (82 percent). As this measure requires two years of continuous enrollment, a rate was not calculated for HealthSpring (for which only eight months of data were available in CY 2011).

Comprehensive Diabetes Care

Diabetes is a very prevalent chronic condition among adults in Texas Medicaid. Inappropriate management of diabetes can lead to serious complications, including blindness, kidney damage, and lower extremity amputation resulting from neuropathy. Diabetes also makes it difficult to control blood pressure and cholesterol, which can lead to heart attacks or strokes.[155] Complications resulting from the improper treatment of diabetes frequently result in potentially preventable emergency department and hospital admissions.

To prevent the development of these serious complications, the American Diabetes Association (ADA) recommends that people with diabetes receive: (1) an annual eye examination; (2) routine testing of their hemoglobin levels (HbA1c); (3) routine screening of low-density lipoprotein (LDL) cholesterol levels; and (4) routine screening and medical attention for kidney disease (nephropathy).[156] In addition, the ADA recommends that diabetes patients have adequate control of HbA1c levels and LDL-C levels. The monitoring and treatment of diabetes-related complications can reduce the adverse effects that arise from this disease.[157]

To assess the effectiveness of diabetes care for adults in STAR and STAR+PLUS, the EQRO uses the HEDIS® *Comprehensive Diabetes Care* measure, which is also an HHSC Dashboard indicator for these programs. This measure provides the percentage of members 18 to 75 years of age with diabetes (type 1 or 2) who had HbA1c testing, eye exams, LDL-C screening, medical attention for diabetic nephropathy, adequate HbA1c control, and adequate LDL-C control during the measurement period. HEDIS® technical specifications for the *Comprehensive Diabetes Care* measures include the use of both administrative and medical record review data. The measures for adequate hemoglobin control and adequate cholesterol control are hybrid measures, assessed through medical record reviews.

HEDIS® *Comprehensive Diabetes Care*				
	STAR		**STAR+PLUS**	
	CY 2011 Results	Dashboard standard	CY 2011 Results	Dashboard standard
HbA1c Testing	73%	77%	78%	77%
Eye Exam	36%	50%	37%	50%
LDL-C Screening	70%	71%	76%	71%
Medical Attention for Nephropathy	73%	74%	81%	81%
LDL-C Control < 100 mg/dL	18%	37%	26%	37%
HbA1c Control < 8%	29%	48%	26%	48%

STAR: For adults with diabetes in STAR, CY 2011 results for all sub-measures were below their respective HEDIS® national means and HHSC Dashboard standards – suggesting a general need for improvement in diabetes care for this population. The rates for *Eye Exam* (36 percent), *LDL-C Control* (18 percent), and *HbA1c Control* (29 percent) were particularly low in comparison to the national means.

Specific comparisons of HEDIS® *Comprehensive Diabetes Care* results in STAR with the national HEDIS® means and HHSC Dashboard standards are shown below:

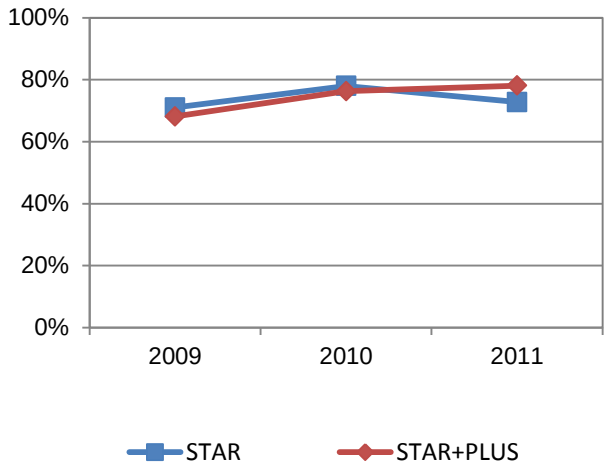
- For *HbA1c Testing*, STAR performed 9 percentage points below the national HEDIS® mean of 82 percent, and 4 percentage points below the HHSC Dashboard standard of 77 percent.
- For the diabetic *Eye Exam* measure, STAR performed 17 percentage points below the national HEDIS® mean of 53 percent, and 14 percentage points below the HHSC Dashboard standard of 50 percent.
- For *LDL-C Screening*, STAR performed 5 percentage points below the national HEDIS® mean of 75 percent, and 1 percentage point below the HHSC Dashboard standard of 71 percent.
- For *Medical Attention for Nephropathy*, STAR performed 5 percentage points below the national HEDIS® mean of 78 percent, and 1 percentage point below the HHSC Dashboard standard of 74 percent.
- For *LDL-C Control*, STAR performed 17 percentage points below the national HEDIS® mean of 35 percent, and 19 percentage points below the HHSC Dashboard standard of 37 percent.
- For *HbA1c Control*, STAR performed 18 percentage points below the national HEDIS® mean of 47 percent, and 19 percentage points below the HHSC Dashboard standard of 48 percent.

STAR+PLUS: For adults with diabetes in STAR+PLUS, rates on all sub-measures were generally higher, but also indicated need for improvement – particularly for *Eye Exam* (37 percent) and *HbA1c Control* (26 percent). Specific comparisons of HEDIS® *Comprehensive Diabetes Care* results in STAR+PLUS with the HHSC Dashboard standards are shown below:

- For *HbA1c Testing*, STAR+PLUS performed 1 percentage point above the HHSC Dashboard standard of 77 percent.
- For the diabetic *Eye Exam* measure, STAR+PLUS performed 13 percentage points below the HHSC Dashboard standard of 50 percent.
- For *LDL-C Screening*, STAR+PLUS performed 5 percentage points above the HHSC Dashboard standard of 71 percent.
- For *Medical Attention for Nephropathy*, performance in STAR+PLUS was equal to the HHSC Dashboard standard of 81 percent.
- For *LDL-C Control*, STAR+PLUS performed 11 percentage points below the HHSC Dashboard standard of 37 percent.
- For *HbA1c Control*, STAR+PLUS performed 22 percentage points below the HHSC Dashboard standard of 48 percent.

Three-year trends could be assessed for the four administrative sub-measures in both STAR and STAR+PLUS. For all four administrative sub-measures, both programs saw a net increase in rates between 2009 and 2011. These increases were most pronounced for *HbA1c Testing* (**Figure 45**) and *LDL-C Screening* (**Figure 46**).

Figure 45. HEDIS® *Comprehensive Diabetes Care – HbA1c Testing* in STAR and STAR+PLUS, 2009-2011

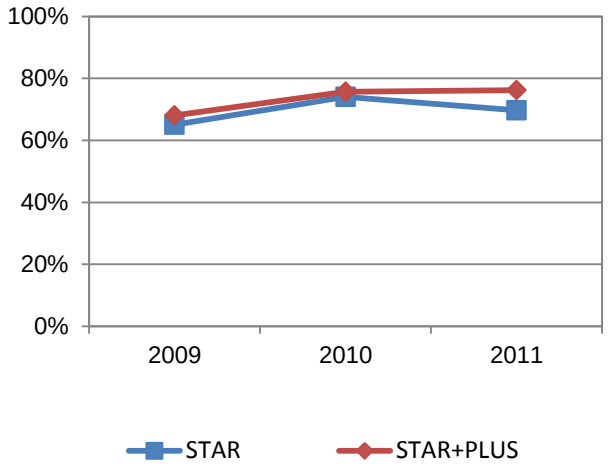


For *HbA1c Testing*, the rate in STAR+PLUS increased by 10.0 percentage points over the three-year period. In STAR, the rate increased notably in 2010 (by 7.0 percentage points), then dropped back to prior levels in 2011, for a net increase of only 1.8 percentage points.

For *LDL-C Screening*, the rate in STAR+PLUS increased by 8.2 percentage points over the three-year period. In STAR, the rate increased notably in 2010 (by 9.0 percentage points), then dropped back in 2011, for a net increase of 4.7 percentage points.

Based on these findings, the EQRO recommends that any MCO interventions to improve diabetes care implemented during this time frame be continued in the coming year, and improved upon using established quality improvement methodologies. Furthermore, STAR+PLUS MCOs should identify factors that contributed to success in increasing rates of *HbA1c Testing* and *LDL-C Screening* in particular, and increase the scope of their implementation to encourage further improvement.

Figure 46. HEDIS® *Comprehensive Diabetes Care – LDL-C Screening* in STAR and STAR+PLUS, 2009-2011



Controlling High Blood Pressure

The Mayo Clinic states that uncontrolled high blood pressure can result in disabilities and lower quality of life, as well as more life-threatening complications.[158] Consequently, uncontrolled hypertension could ultimately result in higher rates of potentially preventable events and health care costs for the community as a whole. The rate of controlled hypertension serves as an important indicator of quality of care and can reveal member or health plan sub-populations with room for improvement in this area.

The HEDIS® *Controlling High Blood Pressure* measure assesses the percentage of members 18 to 85 years old who had a diagnosis of hypertension and whose blood pressure (BP) was adequately controlled (<140/90) during the measurement year. This measure is used by the EQRO to assess blood pressure control in the STAR and STAR+PLUS populations and is also an HHSC Dashboard indicator. Adequate control is defined as having both a representative systolic BP <140 mm Hg and a representative diastolic BP <90 mm Hg (BP in the normal or high-normal range), with the representative BP being the most recent reading during the measurement year. HEDIS® technical specifications for the *Controlling High Blood Pressure* measure allows for the use of both administrative and medical record review data. Results presented in this report are based on hybrid studies using medical record review. Results for the hybrid studies are not available at the service area level.

HEDIS® *Controlling High Blood Pressure*	
CY 2011 results	
STAR	44 percent
STAR+PLUS	40 percent
Dashboard standard	54 percent

In CY 2011, rates of adequate blood pressure control for the STAR program (44 percent) and STAR+PLUS program (40 percent) were lower than the HHSC Dashboard standard of 54 percent for both programs. In addition, STAR fell below the national HEDIS® mean of 56 percent.

In STAR+PLUS, the rate for Superior (62 percent) was substantially higher than that of the other MCOs; furthermore, Superior was the only MCO to meet the HHSC Dashboard standard for this measure.

A hybrid study for this measure was also conducted in 2009 for STAR+PLUS, with a rate of 37 percent for the program.. The increase from 2009 to 2011 was only 3.0 percentage points. However, at the MCO-level, the rate for Superior increased substantially, with a net increase of 18.2 percentage points.

Annual Monitoring for Patients on Persistent Medications

Long-term medication use is common among patients with chronic conditions, such as hypertension, congestive heart failure, kidney disease, and epilepsy. Patients who take persistent medications for these conditions are at increased risk of adverse drug events, requiring monitoring and follow-up by prescribing physicians to assess side-effects and modify pharmaceutical treatment decisions accordingly.[159]

The HEDIS® *Annual Monitoring for Patients on Persistent Medications* measure assesses the percentage of members 18 years of age and older with at least 180 treatment days of ambulatory medication therapy who received at least one therapeutic monitoring event during the measurement year. The measure includes four rates, depending on the type of persistent medication, providing the percentage of members who received annual monitoring for:

1) *Angiotensin Converting Enzyme (ACE) Inhibitors or Angiotensin Receptor Blockers (ARBs)*
2) *Digoxin*
3) *Diuretics*
4) *Anticonvulsants*

The EQRO calculates this measure for STAR+PLUS members because long-term medication use is common in this population. Overall, results for STAR+PLUS were good — 88 percent for all medications combined – indicating that the vast majority of eligible STAR+PLUS members received annual medication monitoring.

STAR+PLUS MCOs performed equally well on this measure. In addition, rates varied little among STAR+PLUS service areas.

HEDIS® *Annual Monitoring for Patients on Persistent Medications*	
STAR+PLUS - CY 2011 results	
ACE or ARB	92 percent
Anticonvulsants	67 percent
Digoxin	92 percent
Diuretics	92 percent
Combined Rate	88 percent

5.3 – Behavioral Health Care

Follow-up After Hospitalization for Mental Illness

Annually, approximately 600,000 youths and two million adults are hospitalized for mental health disorders.[160] Follow-up after hospitalization for mental illness is an important component of ongoing post-discharge care. Patients have a lower probability of being readmitted to the hospital if they are in contact with a mental health provider after being discharged from the hospital.[161] However, one study found that only 16 percent of patients hospitalized for mental health disorders receive follow-up care, and 13 percent of patients are readmitted within six months of discharge.[162]

The EQRO uses the *Follow-Up after Hospitalization for Mental Illness* measure to assess follow-up care in Texas STAR, CHIP, STAR+PLUS, STAR Health, and NorthSTAR. This measure provides the percentage of members six years of age or older who were hospitalized for treatment of mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or a partial hospitalization with a provider during the measurement period. This measure follows HEDIS® specifications with the exception of provider constraints; therefore, comparisons to the national HEDIS® means are approximate and are for illustrative purposes only. Two sub-measures comprise this modified HEDIS® measure: (1) The percentage of members who received follow-up care within 7 days of discharge; and (2) The percentage of members who received follow-up care within 30 days of discharge. This measure is also an HHSC Performance Indicator for the Texas Medicaid and CHIP programs.

Follow-up After Hospitalization for Mental Illness					
7-Day Follow-Up			***30-Day Follow-Up***		
	CY 2011 results	Dashboard standard		CY 2011 results	Dashboard standard
STAR	43 percent	43 percent	STAR	71 percent	66 percent
CHIP	44 percent	43 percent	CHIP	71 percent	71 percent
STAR+PLUS	48 percent	43 percent	STAR+PLUS	74 percent	64 percent
STAR Health	69 percent	55 percent	STAR Health	91 percent	63 percent
NorthSTAR*	24 percent	---	NorthSTAR*	51 percent	---

*This measure is not an HHSC Performance Indicator for NorthSTAR.

Results among programs for *7-Day Follow-Up* ranged from 24 percent in NorthSTAR to 69 percent in STAR Health. Results among programs for *30-Day Follow-Up* ranged from 51 percent in NorthSTAR to 91 percent in STAR Health.

STAR results were similar to the national HEDIS® means for the sub-measures. For follow-up care within seven days, the STAR rate was two percentage points below the HEDIS® mean of 45 percent. For follow-up care within 30 days, the STAR rate was seven percentage points above the HEDIS® mean of 64 percent.

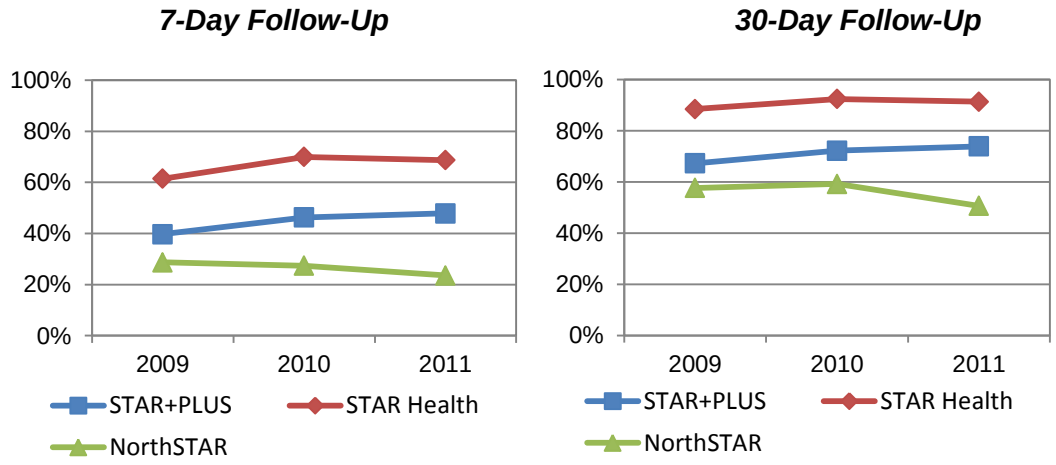
All programs performed well in comparison to their respective HHSC Dashboard standards. STAR Health performed exceptionally well in comparison to its respective Dashboard standards.

In general, trends in performance on this measure changed little between 2009 to 2011 for STAR and CHIP. Specifically, for *7-Day Follow-Up*, STAR had a net increase of 2.8 percent and CHIP had a net increase of 0.6 percent. For *30-Day Follow-Up*, STAR had a net increase of 1.7 percent and CHIP had a net decrease of 0.6 percent. **Figure 47** shows trends in *Follow-up After Hospitalization for Mental Illness* in STAR+PLUS, STAR Health, and NorthSTAR from 2009 to 2011.

STAR+PLUS: Rates for STAR+PLUS increased consistently over the three-year period. For *7-Day Follow-Up*, the net increase from 2009 to 2011 was 8.1 percent. For *30-Day Follow-Up*, the net increase was 6.7 percent.

Among STAR+PLUS MCOs, Evercare had the greatest increase in rates across the three-year period, with a net increase of 19.3 percentage points for *7-Day Follow-Up* and 16.3 percentage points for *30-Day Follow-Up*. Evercare also had the highest rates among STAR+PLUS MCOs for 2011 across both sub-measures. Conversely, rates for Molina decreased across the three-year period, with a net decrease of 23.7 percentage points for *7-Day Follow-Up* and 12.5 percentage points for *30-Day Follow-Up*.

Figure 47. *Follow-up After Hospitalization for Mental Illness* – Results for STAR+PLUS, STAR Health, and NorthSTAR, 2009-2011



Among the STAR+PLUS service areas, Harris had the greatest increase across the three-year period, with a net increase of 14.5 percentage points for *7-Day Follow-Up*, and a net increase of 12.0 percentage points for *30-Day Follow-Up*. The Travis service area had the highest rates across the three-year period; however, performance in Harris has increased such that both service areas had similar rates in 2011.

STAR Health: Rates for STAR Health also increased from 2009 to 2011. For *7-Day Follow-Up*, the net increase over the three-year period was 7.3 percent, with a peak of 70 percent in 2010. For *30-Day Follow-Up*, rates followed a similar trend, with a net increase of 2.9 percent, and a peak of 92 percent in 2010.

NorthSTAR: Rates for NorthSTAR generally decreased from 2009 to 2011. For *7-Day Follow-Up*, rates decreased from 29 percent in 2009 to 24 percent in 2011, with a net decrease of 5.2 percentage points. For *30-Day Follow-Up*, rates decreased from 58 percent to 51 percent in 2011, with a net decrease of 7.0 percentage points.

Overall, performance on this measure has improved in STAR+PLUS and STAR Health, but has steadily declined for NorthSTAR across the three-year period.

Follow-up Care for Children Prescribed ADHD Medication

Over five million children in the United States have Attention Deficit Hyperactivity Disorder (ADHD), which is a problem with inattentiveness or impulsivity that can affect a child's functioning.[163,164] Children with this disorder often have trouble socializing with other children, experience difficulties with school work, and are more prone to injuries due to impulsive behavior.[165,166] Medication is an effective primary treatment for ADHD. However, children prescribed medication should be monitored to ensure that they are receiving the care they need. Specifically, the AAP recommends follow-up visits at regular intervals to assess the

effectiveness of pharmacological treatment and to adjust the treatment plan accordingly.[167] Children who attend follow-up visits and adhere to medication treatment show improvement in symptoms and are less likely to experience adverse events such as emergency department visits.[168,169]

The *Follow-up for Children Prescribed ADHD Medication* measure provides the percentage of children who were newly prescribed ADHD medication and who had at least three follow-up care visits within a 10-month period. Two sub-measures comprise this modified HEDIS® measure:

- *Initiation Phase*: The percentage of members 6 to 12 years of age with an ambulatory prescription dispensed for ADHD medication who had one follow-up visit with a practitioner within the first 30 days.
- *Continuation and Maintenance (C&M) Phase*: The percentage of members 6 to 12 years of age with an ambulatory prescription dispensed for ADHD medication, who remained on the medication for at least 210 days, and who, in addition to the visit in the *Initiation Phase*, had at least two follow-up visits with a practitioner within 270 days (9 months) after the *Initiation Phase* ended.

At HHSC's request, the EQRO lifted provider constraints for this measure, which may result in inflation of rates. The name "HEDIS®" was removed from discussion of this measure, as it does not conform precisely to NCQA specifications. The EQRO calculates this measure annually for STAR, CHIP, STAR Health, and NorthSTAR.[170] This measure is also an HHSC Performance Indicator for these programs, with the exception of NorthSTAR.

Results among programs for the *Initiation Phase* ranged from 29 percent in NorthSTAR to 86 percent in STAR Health. Results among programs for the *Continuation and Maintenance Phase* ranged from 42 percent in NorthSTAR to 90 percent in STAR Health.

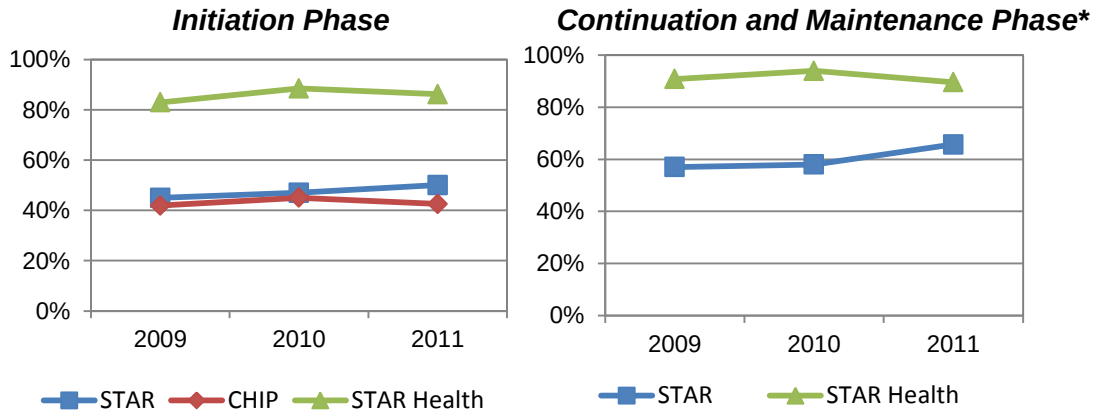
Follow-up Care for Children Prescribed ADHD Medication					
Initiation Phase			***Continuation and Maintenance Phase***		
	CY 2011 results	Dashboard standard		CY 2011 results	Dashboard standard
STAR	50 percent	41 percent	STAR	66 percent	50 percent
CHIP	43 percent	40 percent	CHIP	58 percent	46 percent
STAR Health	86 percent	35 percent	STAR Health	90 percent	42 percent
*NorthSTAR	29 percent	---	*NorthSTAR	42 percent	---

*This measure is not an HHSC Performance Indicator for NorthSTAR.

STAR results were higher than national HEDIS® means for both sub-measures. For the *Initiation Phase*, the STAR rate was 12 percentage points above the HEDIS® mean of 38 percent. For the *Continuation and Maintenance Phase*, the STAR rate was 22 percentage points above the HEDIS® mean of 44 percent. All programs performed well in comparison to their respective HHSC Dashboard standards. STAR Health performed exceptionally well in comparison to its respective HHSC Dashboard standards.

Figure 48 shows trends in *Follow-up for Children Prescribed ADHD Medication* in STAR, CHIP and STAR Health from 2009 to 2011. NorthSTAR results were only reported for CY 2011; therefore, results for this program are not included in this figure. CHIP results for the *Continuation and Maintenance Phase* are not included due to denominators less than 30 (low denominators) for 2009 and 2010.

Figure 48. *Follow-up for Children Prescribed ADHD Medication* – Results for STAR and STAR Health 2009-2011



*Results for CHIP are not included in this graph due to denominators less than 30 (low denominators).

In general, trends in performance on this measure changed little between 2009 to 2011 for CHIP and STAR Health. For the *Initiation Phase*, CHIP had a net increase of 0.7 percentage points and STAR Health had a net increase of 3.2 percentage points. For the *Continuation and Maintenance Phase*, STAR Health had a net decrease of 1.3 percentage points.

Rates for STAR across the three-year period increased. Specifically, for the *Initiation Phase*, STAR had a net increase of 5.1 percentage points, and for the *Continuation and Maintenance Phase*, STAR had a net increase of 8.7 percentage points.

Among STAR MCOs, Amerigroup and Parkland had a large increase in rates for both sub-measures. From 2009 to 2011, Amerigroup had a net increase of 9.3 percentage points for the *Initiation Phase*, and a net increase of 21.0 percentage points for the *Continuation and Maintenance Phase*. Parkland had a net increase of 15.9 percentage points for the *Initiation Phase*, and a net increase of 30.5 percentage points for the *Continuation and Maintenance Phase*.

Among STAR service areas, Dallas had the largest increase in rates for both sub-measures. From 2009 to 2011, the rate for the *Initiation Phase* increased by 19.1 percentage points, and the rate for the *Continuation and Maintenance Phase* increased by 37.7 percentage points.

Antidepressant Medication Management

Approximately 15 million adults in the United States suffer from depression.[171] Depression impairs an individual's quality of life and is a leading cause of disability. In addition, people who have depression are at an increased risk of suicide if they do not undergo treatment.[172] Medication is recognized as an effective treatment for depression.[173] Medication is administered during the acute and continuation phases of treatment, which are meant to cause remission of the disease and prevent relapse. It is often necessary to stay on medication to maintain its therapeutic effect. Because half of patients stop medication prematurely, it is necessary to assess the percentage of patients who stay on antidepressant medication for the duration of the treatment period.[174]

The HEDIS® *Antidepressant Medication Management* measure assesses the percentage of members 18 years or older who were diagnosed with a new episode of major depression and were treated with antidepressant medication.

This measure is comprised of two sub-measures that address both the acute and continuation phases of treatment:

- The *Effective Acute-Phase Treatment* sub-measure shows the percentage of adults newly diagnosed with major depression who were treated with an antidepressant medication and remained on the medication for at least 84 days (12 weeks).
- The *Effective Continuation-Phase Treatment* sub-measure shows the percentage of adults newly diagnosed with major depression who were treated with an antidepressant medication and remained on the medication for at least 180 days (6 months).

The EQRO calculated this measure for 2010 and 2011 for STAR, STAR+PLUS, and NorthSTAR.[175] This measure is also an HHSC Performance Indicator for these programs, with the exception of NorthSTAR. The CY 2011 STAR results are not presented due to denominators less than 30 (low denominators).

HEDIS® *Antidepressant Medication Management*					
Effective Acute-Phase Treatment			***Effective Continuation-Phase Treatment***		
	CY 2011 results	Dashboard standard		CY 2011 results	Dashboard standard
STAR+PLUS	53 percent	43 percent	STAR+PLUS	36 percent	24 percent
*NorthSTAR	58 percent	---	*NorthSTAR	42 percent	---

*This measure is not an HHSC Performance Indicator for NorthSTAR.

In STAR+PLUS, the rate for *Effective Acute -Phase Treatment* was 10 percentage points higher than the HHSC Dashboard standard of 43 percent, and the rate for *Effective Continuation-Phase Treatment* was 12 percentage points higher than the HHSC Dashboard standard of 24 percent.

In NorthSTAR, the rate for *Effective Acute-Phase Treatment* was 58 percent, and the rate for *Effective Continuation-Phase Treatment* was 42 percent.

From 2010 to 2011, performance on this measure in STAR+PLUS changed little. The rate for the acute phase increased by 3.2 percentage points and the rate for the continuation phase decreased by 0.2 percentage points. However, rates for NorthSTAR increased considerably across the two-year period – by 12.5 percentage points for the acute phase and 11.7 percentage points for the continuation phase.

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Approximately 21 million people in the United States have a substance use disorder, which includes dependence on or abuse of alcohol, illicit drugs, and prescription drugs (used for non-medical purposes).[176] Individuals who have substance use disorders have an increased risk of experiencing negative health consequences, legal problems, homelessness, and interpersonal violence.[177] Despite the negative impact of substance use disorders, only 10 percent of Americans who need treatment receive it each year.[178] Among individuals receiving treatment, research suggests that as many as one-half may leave treatment prematurely.[179] Treatment engagement, defined as the period between an individual's initiation and completion of substance abuse treatment, is an important indicator of access to alcohol or other drug (AOD) treatment.

The HEDIS® *Initiation and Engagement of Alcohol and Other Drug Dependence Treatment* measure assesses the percentage of adolescent and adult members newly diagnosed with AOD dependence who received the following:

1) *Initiation of AOD Dependence Treatment* – the percentage of members who received inpatient or outpatient treatment within 14 days. Specifically, inpatient or outpatient treatment includes an AOD dependence admission, outpatient visit, intensive outpatient encounter, or partial hospitalization.

2) *Engagement of AOD Dependence Treatment* – the percentage of members who initiated treatment and received two or more additional services within 30 days of the initiation visit.

HEDIS® *Initiation and Engagement of Alcohol and Other Drug Dependence Treatment*

CY 2011 results

	Initiation	Engagement
STAR	39 percent	11 percent
STAR+PLUS	35 percent	6 percent
NorthSTAR	25 percent	5 percent

The EQRO calculated this measure for CY 2011 for the STAR, STAR+PLUS, and NorthSTAR programs.[180] Results for treatment initiation ranged from 25 percent in NorthSTAR to 39 percent in STAR, and results for treatment engagement ranged from 5 percent in NorthSTAR to 11 percent in STAR.

STAR results were similar to the national HEDIS® means for this measure. Specifically, the rate for treatment initiation was four percentage points lower than the HEDIS® mean of 43 percent, and the rate for treatment engagement was three percentage points lower than the HEDIS® mean of 14 percent.

5.4 – Preventive Care

Approximately 17 percent of the pediatric population and 36 percent of the adult population in the United States are classified as obese.[181,182] Obesity substantially increases the risk of morbidity from several conditions, including coronary artery disease, type 2 diabetes, cancer, and stroke.[183, 184] In addition, obese individuals are at an increased risk of developing conditions such as asthma, sleep apnea, and arthritis.[185] A person's body mass index (BMI) is calculated from measurements of height and weight, and can be used in conjunction with other diagnostic criteria to identify risk factors for adverse health consequences.[186,187] Screening for BMI provides the opportunity to implement treatment plans for individuals who are overweight or obese. In the pediatric population, screening for BMI also provides the opportunity to counsel at-risk children and their parents about nutrition and physical activity. Counseling for nutrition and physical activity is important for early intervention in this population, lessening the negative impact of obesity and its complications in adulthood.[188,189]

Adult BMI Assessment

The HEDIS® *Adult BMI Assessment* measure represents the percentage of members age 18 to 74 who had an outpatient visit and whose BMI was documented during the measurement year or one year prior. The EQRO calculated this measure for CY 2010 and CY 2011 for STAR+PLUS. This is a hybrid measure, with results based on medical record review. Results for hybrid studies are not available at the service area level.

HEDIS® *Adult BMI Assessment* in STAR+PLUS	
2010	46 percent
2011	57 percent

In CY 2011, 57 percent of STAR+PLUS members had their BMI documented. From 2010 to 2011, the rate of BMI assessment increased by 11 percentage points.

Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents

The HEDIS® *Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents* measure represents the percentage of members 3 to 17 years of age who had an outpatient visit with a primary care provider (PCP) or obstetrics/gynecology provider (OB/GYN) and who had the following during the measurement year: (1) *BMI Percentile Documentation*; (2) *Counseling for Nutrition*; and (3) *Counseling for Physical Activity*. Each sub-measure is reported separately, for all age groups combined. This is a hybrid measure that was conducted in CY 2011 for STAR and CHIP, with results based on medical record review. Results for hybrid studies are not available at the service area level.

Approximately one-third of STAR and CHIP members had their BMI percentile documented (36 and 33 percent, respectively). For both programs, the rate of counseling for nutrition was higher than the rate of counseling for physical activity. Specifically, in STAR, 56 percent of members received counseling for nutrition, while 42 percent of members received counseling for physical activity. In CHIP, 46 percent of members received counseling for nutrition, while 36 percent of members received counseling for physical activity.

HEDIS® *Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents* in CY 2011

	BMI Percentile Documentation	*Counseling for Nutrition*	*Counseling for Physical Activity*
STAR	36 percent	56 percent	42 percent
CHIP	33 percent	46 percent	36 percent

STAR performance was similar to the HEDIS® mean for the *BMI Percentile Documentation* sub-measure and above the HEDIS® mean for both counseling sub-measures. Specifically:

- The STAR rate for *BMI Percentile Documentation* was 1 percentage point below the HEDIS® mean of 37 percent.
- The STAR rate for *Counseling for Nutrition* was 10 percentage points above the HEDIS® mean of 46 percent.
- The STAR rate for *Counseling for Physical Activity* was 5 percentage points above the HEDIS® mean of 37 percent.

A hybrid study for this measure was also conducted in 2010 for STAR. In comparison to 2010, STAR performance improved across all three sub-measures. Specifically, STAR had a net increase of 9.2 percentage points for *BMI Percentile Documentation*, 3.4 percentage points for *Counseling for Nutrition*, and 3.7 percentage points for *Counseling for Physical Activity*.

Among the STAR MCOs, FirstCare had the greatest improvement from 2010 to 2011, with a net increase of 16.8 percentage points for *BMI Percentile Documentation*, 27.5 percentage points for *Counseling for Nutrition*, and 26.3 percentage points for *Counseling for Physical Activity*. Although FirstCare did not have the highest rates among MCOs for this measure in 2011, its level of improvement across the two-year period is notable.

6 – Focus Studies and Special Projects

6.1 – STAR+PLUS Long-Term Care Focus Study

With the passage of the Patient Protection and Affordable Care Act, there has been increased national policy attention focused on dual-eligible beneficiaries – low-income seniors and adults with disabilities – enrolled in both the Medicare and Medicaid programs. Nationwide, there are approximately 9 million dual-eligible beneficiaries, who are among the most chronically ill and costly individuals in these programs.[190] To address the complexity of care for this high-cost, high-need population, the Affordable Care Act established the Federal Coordinated Health Care Office within the CMS (Duals Office) to improve care coordination for dual-eligible beneficiaries.[191] The Duals Office and the CMS Innovations Center are currently providing funding to states to design person-centered service delivery models that fully integrate primary, acute, mental health, and long-term services for dual-eligible beneficiaries.

Texas is one of the states that submitted a proposal to implement a Dual-Eligibles Care Demonstration Project.[192] As Texas moves toward an integrated care model for dual-eligible beneficiaries, a greater understanding of health needs in this population will provide the foundation for improved integration and care management to improve members' health and quality of life, and reduce costs associated with preventable inpatient and nursing home admissions.

In FY 2011, the EQRO began a longitudinal focus study of STAR+PLUS dual-eligible members using the Medicare Health Outcomes Survey (M-HOS), which provides a comprehensive description of the health characteristics and needs of dual-eligible populations.[193] Survey participants were selected from a stratified random sample of dual-eligible members enrolled in STAR+PLUS for 12 months or longer between November 2010 and October 2011. The EQRO set a target sample of 4,800 completed telephone interviews with members, representing 1,200 respondents for each MCO participating in STAR+PLUS in FY 2011 -- Amerigroup, Molina, Superior, and UnitedHealthcare-Texas.

The Survey Research Center (SRC) at the University of Florida conducted the survey using computer-assisted telephone interviewing (CATI) between November 2011 and June 2012. The targeted number of surveys was met for all four quotas. Twenty-eight percent of surveys were completed by a proxy respondent (e.g., family members, caregivers) because the member was physically or mentally unable to participate in the telephone survey. The response rate for the survey was 53 percent (calculated out of all verified, eligible households that could be contacted) and the cooperation rate was 67 percent (calculated out of only those members who either participated or refused).

A summary of results from the baseline survey is provided below:

- ***Body mass index***. Forty-one percent of dual-eligible members were classified as obese.
- ***Smoking***. Eighteen percent of members reported smoking cigarettes or using tobacco.

- ***Self-reported health and functional status***. Using the Veterans RAND-12 items, two-thirds of members reported their health as “fair” or “poor” (66 percent). The majority of members had problems with their work or activities as a result of their physical health (79 percent to 82 percent) or emotional problems (53 percent to 60 percent). One-third of members said their health problems interfered with their social life most or all of the time (35 percent).
- ***General and comparative health***. Nearly two-thirds of members said their health was “fair” or “poor” compared to people their own age (64 percent). Compared to one year ago, 42 percent reported their physical health was worse, and 29 percent reported their emotional health was worse.
- ***Chronic medical conditions***. The five most prevalent chronic medical conditions observed in the dual-eligible population were hypertension (72 percent), arthritis of the hip or knee (51 percent), arthritis of the hand or wrist (41 percent), diabetes (39 percent), and osteoporosis (31 percent). There was also a high prevalence of comorbidities, with nearly two-thirds of members having three or more medical conditions (64 percent).
- ***Activities of daily living.*** The most common daily activity impairments reported by members were related to walking (52 percent) and bathing (48 percent).
- ***Healthy days measures.*** Members reported that their physical health was “not good” an average of 14 days in the past month, and that their emotional health was “not good” an average of 11 days in the past month. Members reported that poor health prevented them from doing their usual activities an average of 13 days in the past month.
- ***Depression.*** Three-quarters of members had a positive screen for depression and were considered at-risk for a depressive disorder (74 percent).
- ***Arthritis and back pain.*** Approximately half of members reported experiencing moderate or severe arthritis pain in the past month (53 percent). Thirty-nine percent of members reported that back pain interfered with their daily activities most or all of the time.
- ***HEDIS® Physical Activity in Older Adults.*** Fifty-five percent of members discussed their level of exercise or physical activity with their doctor, and 58 percent were advised by their doctor to start, increase, or maintain their level of exercise or physical activity.
- ***HEDIS® Fall Risk Management.*** Fifty-seven percent of members reported problems with balance and walking, and 37 percent had fallen to the ground in the past year. Among these members, 50 percent discussed these issues with their doctor, and 72 percent reported their doctor provided an intervention (e.g., cane or walker, exercise program) to prevent future falls.
- ***HEDIS® Urinary Incontinence in Older Adults.*** Almost half of members had a urine leakage problem (48 percent), of whom 69 percent discussed the problem with their doctor, and 37 percent received treatment.

- ***HEDIS® Osteoporosis Testing.*** Fifty-six percent of women had a bone density test to check for osteoporosis, compared to 72 percent nationally.

The STAR+PLUS Dual-Eligible Long-Term Care baseline results are based on cross-sectional data and provide a snapshot of the physical and mental health status and functioning of dual-eligible members at a single point in time. This data can be used by STAR+PLUS MCOs to identify opportunities for quality improvement, specifically in regard to health promotion programs, screening and treatment for depression, effective treatment and management of pain, and improving functional status.

The EQRO will conduct a follow-up survey in 2013 to determine how health and functional status has changed among these members over the two-year period.

6.2 – Risk-Adjustment and Case-Mix Studies

The EQRO conducted a variety of case-mix analyses and risk-adjustment simulations in FY 2011 and 2012. Using the latest Chronic Illness Disability Payment System (CDPS), the EQRO calculated case-mix ratios and spending ratios for MCOs in the STAR and STAR+PLUS programs at the service area (SA) level and by eligibility group. Based on risk-adjustment workgroup meetings held with HHSC and the MCOs, several variables were added to represent diagnostic categories for low birth weight infants, improving the appropriateness of the risk-adjustment models for this important population. For STAR, the EQRO calculated Texas-specific risk-adjustment models to obtain regression weights based on actual Texas experience, which were then applied to member encounter data to estimate the case-mix and spending ratios for each MCO by SA and eligibility group.

In addition to CDPS updates, the EQRO also simulated numerous scenarios for the Texas At-Risk Recoupment and Quality Challenge (QC) programs. These simulations used different point assignments, recoupment strategies, and risk-adjustment approaches to estimate the likely impact of different design options for both the At-Risk and QC programs. Because no single risk-adjustment approach is necessarily correct for all quality measures, the EQRO conducted several meetings with MCOs to obtain their input on appropriate risk adjustors for the various measures comprising these QC programs. Results of different simulations were reported to HHSC continuously throughout the year, and revisions were made to the simulations based on their input.

The EQRO addressed a number of analytic concerns inherent in the quality measures used in these programs, including the imputation of missing values for HEDIS® measures with low denominators and the use of strict or relaxed provider constraints used for determining HEDIS® compliance. Numerous risk-adjustment simulations used the AHRQ PQIs and PDIs, as well as 3M measures of Potentially Preventable Events (PPEs), including Potentially Preventable Admissions (PPAs), Readmissions (PPRs), Emergency Department Visits (PPVs), and Complications (PPCs). This work involved close collaboration with 3M to ensure the correct calculation, application, and interpretation of these measures. The EQRO also applied varying definitions to estimate the excess expenditures associated with PPEs.

In addition to these activities, a number of economic analyses were performed at HHSC's request. The EQRO has undertaken literature reviews of various approaches to: (1) risk-adjustment of long-term care payments under Medicaid; and (2) pay-for-quality initiatives nationwide. Current projects include an analysis of FFS/PCCM and STAR expenditures to determine the relative contributions of health status, costs per member per month, and utilization to the observed cost differences between these programs for members transitioning into STAR. The EQRO is also in the process of calculating the NCQA Relative Resource Use (RRU) measures using Texas-specific risk-adjustment calculations, allowing for comparison of quality measures with resource use to determine the relative value provided by different MCOs.

6.3 – Texas Health Learning Collaborative (THLC)

In FY 2011, programming staff in the ICHP Information Services Group began developing several web-based applications for researchers and stakeholders to distribute, exchange, and discuss health care data. As part of this initiative, the EQRO developed the Texas Health Learning Collaborative (THLC) – a secure web portal that allows Texas HHSC and Medicaid provider organizations to access and share important and timely information on key quality of care metrics.

The THLC portal provides up-to-date, provider-level reporting on measures of potentially preventable events, access, and effectiveness using millions of Medicaid performance records. The interface includes interactive maps, charts, and figures, which allow users to customize views and reports by time period, service type, line of business, geographic area, and other factors. The portal also includes features that allow users to distribute videos and other multi-media resources, deliver webinars, participate in discussion forums, and exchange files. Web development by ICHP is fully HIPAA compliant, and utilizes a variety of application-appropriate platforms.

6.4 – STAR+PLUS Outcomes Study

Implementing home and community-based service (HCBS) alternatives to institutional care has been a priority for many state Medicaid programs over the last three decades. An increasing number of these programs provide care to older and disabled Medicaid members through managed care delivery systems and provider choice limits (1915(b) waivers) combined with provision of long-term care services in the home and community rather than institutional settings (1915(c) waivers). However, little is known about the quality of care associated with these programs. The current literature on outcomes associated with HCBS waiver programs is limited and primarily focuses on health care expenditures for adults 60 years and older and/or the dual-eligible population.[194,195,196] There is limited information about the quality of care provided within 1915(b) and (c) HCBS waiver programs, particularly for the disabled Medicaid population.[197]

As of 2009, there were 33 1915(c) waiver programs administered by 25 states. These programs provide care for approximately 1.4 million Medicaid members with annual expenditures of $8.9 billion.[198] In June 2012, the Department of Health and Human Services, Office of the Inspector

General (DHHS OIG) released a report noting that "the beneficiaries served by these programs (1915(c) HCBS waivers) are among Medicaid's most vulnerable, and the nature of these programs puts beneficiaries at risk for receiving inadequate care."[199] Moreover, the DHHS OIG found that quality of care in these programs was not consistently monitored.

The Texas STAR+PLUS program provides acute and long-term services and supports to beneficiaries meeting an institutional level of care (LOC) in the home or community through a 1915(c) waiver. The EQRO is in the process of conducting a comprehensive, longitudinal examination of the quality of care for Medicaid members with disabilities in STAR+PLUS. Enrollment in STAR+PLUS is mandatory for disabled Medicaid members 21 years and older who reside in counties where the program is offered and who qualify for Supplemental Security Income (SSI) benefits, for Medicaid because of low income, or for STAR+PLUS HCBS waiver services.

The STAR+PLUS program was phased into different service areas throughout Texas over more than a decade, beginning with Harris County in 1998. This phased approach provides a unique opportunity to longitudinally examine the effects of the STAR+PLUS program on the quality and outcomes of care for disabled Medicaid members.

In 2013, the EQRO will examine outcomes for Medicaid members over 21 years of age with disabilities in the Texas STAR+PLUS program.[200] The comparison group consists of disabled Medicaid members in either Medicaid fee-for-service (FFS) or primary care case management (PCCM) who met the criteria for enrollment in STAR+PLUS but lived in service areas where STAR+PLUS was not offered at the time. To accommodate the lag in receiving claims and encounter data, these analyses focus on the time period from 2006 through 2010.

Mixed models will be used to examine the effects of the STAR+PLUS program on quality of primary and chronic care, within racial and ethnic subgroups, and within areas of varying levels of socioeconomic disadvantage both before and after the STAR+PLUS program implementation.[201,202] In addition to race/ethnicity and socioeconomic status, the gender, age and health status of members are included as covariates, with age measured in years and health status measured using the Clinical Risk Groups (CRGs).

The outcome measures will consist of ten HEDIS® indicators: (1) HEDIS® *Adults' Access to Preventive/Ambulatory Health Services*; (2) HEDIS® *Initiation and Engagement of Alcohol and Other Drug Dependence Treatment*; (3) HEDIS® *Use of Appropriate Medication for People with Asthma*; (4) HEDIS® *Medication Management for People with Asthma*; (5) HEDIS® *Cholesterol Management for People with Cardiovascular Conditions* (testing only); (6) HEDIS® *Comprehensive Diabetes Care* (administrative data only); (7) HEDIS® *Antidepressant Medication Management*; (8) HEDIS® *Follow-Up After Hospitalization for Mental Illness*; (9) HEDIS® *Persistence of Beta-Blocker Treatment After a Heart Attack*; and (10) HEDIS® *Pharmacotherapy Management of COPD Exacerbation*.

6.5 – MCO Report Cards Study

With the implementation of the Patient Protection and Affordable Care Act in 2014, Medicaid beneficiaries will face an increasing number of choices – in particular, the choice of which health plan to join. New members in Texas Medicaid and CHIP could have up to five health plans to choose from, depending on their service area. In FY 2013, to assist new members in their selection of a health plan, HHSC developed MCO report cards showing how the health plans in each service area compare on areas of health care quality that are important to members. Report cards that compare physicians, physician groups, hospitals, and health plans are becoming increasingly more common as state agencies and health care institutions seek to increase the involvement of patients in more of their health care decisions.[203,204]

To support this initiative and ensure that development of MCO report cards follows a patient-centered approach, in FY 2012 the EQRO conducted a preliminary, qualitative study with adult Medicaid members and parents of child members. This study was comprised of two phases: (1) development of MCO report card mock-ups, including the selection of appropriate quality of care measures to be included on the cards, devising a scientifically valid method for scoring the health plans on selected measures, and designing the mock-ups using professional techniques and tools for layout and graphical content; and (2) focus groups to test the MCO report card mock-ups with members, collecting members' input regarding the content and design of the report cards.

Three versions of the MCO report cards were developed, focusing on quality of care for children in STAR and CHIP, adults in STAR, and adults in STAR+PLUS. The EQRO used three criteria in selecting appropriate quality of care measures for the report cards. Specifically, the measures must: (1) be appropriate to the population of Medicaid or CHIP members to which they pertain; (2) be high-impact, having relevance to the majority, if not all, members in the program; and (3) represent an adequate number of members and show a wide distribution of scores at the MCO level. **Table 7** shows the quality of care measures selected for each of the three MCO report card versions.

On each card, the measures were grouped into three domains – Preventive Care, Effectiveness of Care, and Patient Satisfaction. Ratings in the report card mock-ups were prepared using FY 2010 data for health plans in the Bexar service area, which has three health plans in STAR, CHIP, and STAR+PLUS. The health plans were scored on each measure using a five-star rating system, which reflected the health plan's performance on the measure in relation to the state average and allowed differences in performance across health plans to be more readily apparent. Stars were assigned to health plans following the statewide quintiles of distribution on each measure. For example, plan code performance in the 20th percentile or lower would assign one star to the health plan, while plan code performance in the 81st percentile or higher would assign five stars to the health plan.

Table 7. Quality of Care Measures Selected for MCO Report Cards [a]

Quality of Care Measure	Report Card Version		
	STAR/CHIP Child	STAR Adult	STAR+PLUS Adult
Preventive care measures (HEDIS®)			
Well-child Visits in the First 15 Months of Life	✓		
Well-child Visits in the 3rd, 4th, 5th, and 6th Years	✓		
Adolescent Well-care Visits	✓		
Prenatal Care		✓	
Postpartum Care		✓	
Adults' Access to Preventive/Ambulatory Services			✓
Breast Cancer Screening			✓
Effectiveness measures (HEDIS®)			
Follow-up for Children Prescribed ADHD Medication	✓		
Comprehensive Diabetes Care – HbA1c Testing			✓
Antidepressant Medication Management			✓
Effectiveness measures (AHRQ PDI/PQI)			
Asthma PDI	✓		
Asthma PQI		✓	✓
Diabetes PQI		✓	
Hypertension PQI			✓
Satisfaction with Care (CAHPS®)			
Getting Care Quickly composite	✓	✓	✓
How Well Doctors Communicate composite	✓	✓	✓
Health Plan Rating	✓	✓	✓

[a] This list represents measures that were tested in the focus groups; not all of these measures were chosen for the final report cards.

To ensure that this study included full representation of the diversity of members in Texas Medicaid and CHIP, the EQRO developed a quota sampling approach for the focus groups. Twenty-four focus groups were planned, stratified according to:

- Four program/eligibility categories: STAR/CHIP parent, STAR adult, STAR+PLUS Medicaid-only, and STAR+PLUS dual-eligible
- Three racial/ethnic groups: White, non-Hispanic; Black, non-Hispanic; and Hispanic
- Two geographic categories – urban and rural

One focus group was conducted for each unique set of characteristics. All urban focus groups took place in Houston. Rural focus groups were conducted in Lubbock, Longview, and McAllen. The focus groups were conducted with women in the selected programs by two experienced moderators during October 2012 and January 2013. The moderator's guide addressed the following topics: (a) participants' process of choosing a health plan, (b) definitions of good and bad quality health care, (c) impressions of the health care report cards, (d) understanding of the report cards, (e) usefulness of report cards, (f) helpfulness of the instruction sheet, (g) feelings on culturally tailored messaging, (h) preferred grading system for health plans, and (i) preferred way to receive the report card. The appropriate report card mock-ups and culturally tailored instruction sheets were distributed to focus group participants during the session.

Overall, women faulted the report card on two major themes: (1) they believed the report card should primarily serve as a conduit to a better doctor (or specialist) and disliked that the card contained no doctor ratings or contacts; and (2) they thought many of the items on the report card reflected the actions of patients rather than the quality of plans. Based on findings from the focus groups, the EQRO made the following recommendations for revising the MCO report cards:

- ***Only include relevant information from relevant sources.*** Women in the groups responded quickly to report card items that spoke directly to conditions they personally experienced. If participants saw a number of items that were not personally relevant, they had a tendency to dismiss the entire report card. The measures related to patient satisfaction were of greatest relevance to most participants, in large part because they addressed the timeliness of care, which was of great interest to most women in the groups.
- ***Define the measures clearly and meaningfully.*** Participants said many of the items were less about the health plans than about doctors or people covered by the plans. For example, the AHRQ *Asthma PQI* and *PDI* measures were listed as reflecting how many people avoided hospitalization for treatment. While this is accurate from the perspective of measure specifications, it was an inadequate description according to some participants because it had little to do with the health plan and more to do with people's dedication to their treatment.
- ***Duplication.*** In communities with a large number of people with reading difficulties, the duplication of information in visual and verbal forms is ideal. For example, participants were almost unanimous in their favorable evaluation of visuals that accompanied each item on the report card (e.g., a picture of a blood pressure cuff to indicate blood pressure, a picture of an inhaler to indicate asthma). When group members had weaker or no reading skills, they preferred health plan ratings depicted using visual scales with stars or faces. Thus, it would benefit these hard-to-reach audiences to offer both verbal and non-verbal scales whenever possible.

These strategies for improving the MCO report cards were used in their re-design in FY 2013, in preparation for final versions to be published and made publicly available to new members.

Appendix A. CY 2011 Recommendations

Domain: Effectiveness of outpatient/ambulatory care for chronic conditions		
Program/s	**Recommendation**	**Rationale**
STAR+PLUS	In order to improve the effectiveness of outpatient and ambulatory care for chronic conditions, health plans should implement or improve upon efforts to: • Utilize disease management programs that: ○ Incorporate components of the Chronic Care Management Model, including: (1) patient education and behavioral support; (2) advanced access to care and use of a health care team; (3) guideline-based therapy; and (4) a clinical registry system.[205] ○ Incorporate culturally competent self-management training and practices,[206] as well as the use of web-based applications to monitor symptoms.[207]	Potentially avoidable inpatient admissions for chronic conditions such as diabetes, COPD, asthma, and hypertension may reflect reduced effectiveness in outpatient/ambulatory care for these conditions.[208,209] In STAR+PLUS, the rates of inpatient admissions for diabetes short-term and long-term complications improved between 2009 and 2011, yet remained high. Furthermore, measures of effectiveness of diabetes care found deficiencies in numerous areas, including rates of eye exams, and adequate control of HbA1c and LDL-C levels. The rate of inpatient admissions for COPD or adult asthma in STAR+PLUS was also very high, and has doubled since the prior reporting period.
STAR Health	• Increase patient participation in shared decision-making and education to promote self-management, such as implementing group consultations and assistance with preparation for doctor visits.[210,211]	STAR Health also had high rates of admission for diabetes short-term complications.
STAR STAR+PLUS	• Emphasize the patient-centered medical home, which will improve the transmission of crucial patient information between patients with chronic conditions and their providers, and lead to fewer instances of preventable inpatient admissions.[212]	Several MCOs in STAR and STAR+PLUS had PPA rates that were significantly higher than expected given the case-mix of their members experiencing hospitalizations. Furthermore, in both programs, the average excess expenditures associated with PPAs were considerable.

STAR STAR+PLUS	• Use information from the Texas Health Learning Collaborative web portal (as it becomes available), to develop profiles of members at greatest risk of having a PPE that can be used in utilization management efforts, as well as in more focused interventions and performance improvement projects.	Health status and age are important individual factors predicting PPE expenditures and number of events. For all PPEs, members with chronic conditions had greater risk. The association with health status was greatest for PPRs.
STAR+PLUS	• Incorporate use of telehealth care (often as part of a more complex intervention). Telehealth care enables patients with chronic conditions to communicate with providers from home when symptoms arise.[213] • Incorporate use of walking interventions and other interventions involving pulmonary rehabilitation for patients with COPD.[214]	COPD is a prevalent condition among adults in STAR+PLUS, and was the most common condition leading to PPAs in STAR+PLUS – representing 14 percent of all PPAs.
NorthSTAR	• Consider innovative strategies to connect members with follow-up care, such as medication management coordinators,[215] trained patient navigators,[216] and home care visits for at-risk patients.[217]	Rates of follow-up after hospitalization for mental illness in NorthSTAR were below the HEDIS® national rates. Hospitalization for mental illness affects a large number of NorthSTAR members. Inadequate follow-up increases the risk of subsequent, potentially avoidable readmissions.

Domain: Acute respiratory care for children		
Program/s	**Recommendations**	**Rationale**
STAR CHIP STAR Health	To reduce inappropriate prescription of antibiotics for children with upper respiratory infections, health plans should implement or improve upon: • Interventions that direct educational efforts to parents and guardians through printed materials such as posters, brochures, and newsletters that take into account lower health literacy in this population.[218,219,220] • Physician-directed behavior change strategies, including guideline dissemination, small-group education, frequent updates, educational materials, and feedback about antibiotic prescribing by practice and provider.[221,222]	Almost all STAR MCOs and service areas failed to meet the national HEDIS® means for appropriate testing for pharyngitis and appropriate treatment for URI. In STAR Health and CHIP, the rates of appropriate testing/treatment for pharyngitis and URI were also lower than national HEDIS® means. These results suggest that STAR, STAR Health, and CHIP providers are inappropriately prescribing antibiotics, which can lead to the emergence of antibiotic-resistant strains, such as Streptococcus pneumonia.[223,224]

Domain: Obesity screening and management		
Program/s	**Recommendations**	**Rationale**
STAR CHIP STAR+PLUS STAR Health	Texas Medicaid MCOs/BHOs and CHIP should implement or improve upon efforts to measure and manage members' obesity. Potential strategies include: • Implementing/modifying an electronic health record (EHR) system with prompts that include: (1) Automatic BMI calculation based on height and weight recorded on patient intake forms; (2) Alerts of unhealthy BMI percentile; and (3) Interactive growth chart plotting for children.[225,226,227] Health plans should work with providers to consider the EHR Incentive Program for those without EHRs. • Initiating unobtrusive interventions such as keeping food and exercise diaries to increase awareness and accountability.[228] • Use of standardized programs of health risk monitoring for youths and adults with psychiatric conditions, such as those implemented by the New York State Office of Mental health, to monitor the weight of patients in outpatient settings.[229,230]	Half of STAR+PLUS members were obese, a percentage much higher than that of the Texas or national adult population. The STAR and CHIP programs fell short of the HEDIS® mean for *BMI Percentile Documentation*. EHR systems and similar methods have been shown to increase documentation of BMI, which is positively associated with obesity diagnosis and getting dieting counseling and treatment.[231,232,233] Nearly half of child, adolescent, and adult members in the STAR BH surveys were overweight or obese. Research has shown that adults with mental disorders die, on average, 25 years earlier than adults in the general population, and obesity is a likely contributor.[234]

Domain: Service coordination in STAR+PLUS		
Program	**Recommendations**	**Rationale**
STAR+PLUS	To improve service coordination in STAR+PLUS, health plans should adopt more stringent standards regarding the frequency and means of contact between service coordinators and members. New standards may include: • In-home visits by service coordinators • Proactive telephone contact with members by service coordinators on a regular schedule (quarterly or monthly) • Use of telehealth technology to ensure that service coordination is patient-centered and tailored to members' needs[235,236] • Protocols for improving communication that involve all stakeholders – service coordinators, nurses, providers, members, and their families To improve shared decision-making in service coordination, HHSC should encourage MCOs to ensure that members are involved more fully in the development of their service plans. Research has found that models which emphasize patients' agreement with their service plans are associated with lower rates of functional decline and higher satisfaction with services.[237]	Findings from the STAR+PLUS HCBS Waiver Study qualitative interviews show that STAR+PLUS members often do not know who to call to get help. Many do not have contact information for their service coordinators, and many cannot name someone at their health plan who coordinates their care. For STAR+PLUS members who do not have a nurse who visits them regularly (often those with less severe conditions), low levels of contact with service coordinators translate to unmet needs for care. In addition, only two-thirds of members in STAR+PLUS survey said that their service coordinator involved them in making decisions about their services (64 percent).

Appendix B. Positive Findings and Improvement Areas

Table B1. Positive Findings for Quality of Care in Texas Medicaid/CHIP

Pediatric preventive care	
Quality Indicator	**Findings**
Children and Adolescents' Access to Primary Care Practitioners	Across programs, child and adolescent members had good access to primary care practitioners, with over 90 percent of members visiting a PCP during the measurement period.
Well-Child Visits and *Adolescent Well-Care*	Rates of well-child and well-care visits increased slightly over the three-year period for all programs. Rates of increase were especially pronounced in STAR Health. All programs met HHSC Dashboard standards for well-child/well-care visits in all age groups across the three-year period.
HEDIS® *Annual Dental Visit*	Overall, the rate of annual dental visits in CHIP Dental increased from 59 percent in 2008 to 66 percent in 2010, exceeding the 2011 HEDIS® national average of 48 percent.
Pediatric Quality Indicators	
Asthma PDI	Over the three-year period, pediatric inpatient admissions for asthma decreased in STAR, CHIP, and STAR Health. In 2011, *Asthma PDI* rates in STAR (100 per 100,000) were below both the HHSC Dashboard standard of 181 per 100,000 and the AHRQ national average of 147 per 100,000.
Gastroenteritis PDI	Pediatric inpatient admissions for gastroenteritis decreased for all programs during the three-year period, particularly in STAR+PLUS.
Prevention Quality Indicators	
Diabetes Short-Term Complications PQI	Adult inpatient admissions for diabetes short-term complications dropped considerably from 2009 to 2011 in STAR+PLUS. The STAR rate for *Diabetes Short-Term cComplications PQI* was 61 per 100,000 in 2011, which was roughly equivalent to both the AHRQ national average of 62 per 100,000 and the HHSC Dashboard standard of 56 per 100,000.

Table B1 – Positive Findings (continued)

Prevention Quality Indicators	
Quality Indicator	**Findings**
Diabetes Long-Term Complications PQI	Adult inpatient admissions for diabetes long-term complications dropped considerably from 2009 to 2011 in STAR+PLUS. In 2011, rates in STAR were noticeably better than the HHSC Dashboard standard of 64 per 100,000, and all MCOs had rates lower than the AHRQ national average of 122 per 100,000.
Bacterial Pneumonia PQI	*Bacterial Pneumonia PQI* rates in STAR+PLUS fell from 765 per 100,000 in 2009 to 622 per 100,000 in 2011, while STAR rates decreased from 58 to 46 per 100,000 during that span. The STAR rates were also substantially lower than the HHSC Dashboard standard for this measure (174 per 100,000).
Urinary Tract Infection PQI	Adult inpatient admissions for urinary tract infection showed a steady decline in STAR+PLUS from 2009 to 2011. In 2011, the STAR *UTI PQI* rate of 67 per 100,000 was far below the HHSC Dashboard standard of 177 per 100,000 for the STAR program.
Health plan information	
Encounter data validation	Match rates for date of service and procedure were over the desired 95 percent target in all programs, while match rates for diagnosis were over 90 percent in all programs.
Disease management (DM) programs	
DM participation rates	In 2011, the rate of member participation in asthma and diabetes DM programs in STAR+PLUS was 90 percent and 86 percent, respectively.
Satisfaction with timeliness of care, primary, and specialist care	
Good Access to Urgent Care	The rate for STAR Health (96 percent) was higher than the HHSC Dashboard standard of 88 percent for *Good Access to Urgent Care*.
Good Access to Routine Care	The rate for STAR Health (84 percent) was higher than the HHSC Dashboard standard of 76 percent for *Good Access to Routine Care*.
Good Access to Specialist Referral	The rate for STAR Health (84 percent) was notably higher than the HHSC Dashboard standard of 75 percent for *Good Access to Specialist Referral*. The rate among dual-eligible STAR+PLUS members (78 percent) was also higher than the HHSC Dashboard standard of 73 percent.

Table B1 – Positive Findings (continued)

Satisfaction with the patient-centered medical home	
Quality Indicator	**Findings**
Percent of members with a personal doctor	Greater than 80 percent of Texas Medicaid and CHIP members reported having a personal doctor, with the exception of adult members in STAR (68 percent). Member ratings of their personal doctor generally exceeded the national averages.
CAHPS® *How Well Doctors Communicate*	Scores for *How Well Doctors Communicate* were high among parents of child members, ranging from 88 percent in STAR to 94 percent in STAR Health. Scores among adult members were also high, ranging from 82 percent for STAR+PLUS Medicaid-only members to 90 percent for STAR+PLUS dual-eligible members.
Care for chronic conditions	
HEDIS® *Use of Appropriate Medications for People with Asthma*	For members 5 to 11 years old, rates of appropriate asthma medication use in STAR exceeded the HEDIS® national mean of 92 percent. In addition, rates in all programs exceeded the HHSC Dashboard standard of 92 percent for this age group. For members 12 to 50 years old, the rate in STAR (93 percent) also exceeded the national HEDIS® mean of 86 percent.
HEDIS® *Annual Monitoring for Patients on Persistent Medications*	The vast majority of eligible STAR+PLUS members received annual medication monitoring, with a rate of 88 percent for all medications combined.
Behavioral health care	
Follow-up After Hospitalization for Mental Illness	STAR results were similar to the national HEDIS® means for 7-day and 30-day follow-up after hospitalization for mental illness. It should be noted that, at HHSC's request, the EQRO lifted provider constraints for this measure. Lifting provider constraints may result in inflation of rates. All programs performed well in comparison to their respective HHSC Dashboard standards, STAR Health in particular. Rates for STAR+PLUS and STAR Health increased consistently from 2009 to 2011.

Table B1 – Positive Findings (continued)

Behavioral health care	
Quality Indicator	**Findings**
Follow-up for Children Prescribed ADHD Medication	For the *Initiation Phase*, the STAR rate (50 percent) was higher than the HEDIS® mean of 38 percent. For the *Continuation and Maintenance Phase*, the STAR rate (66 percent) was higher than the HEDIS® mean of 44 percent. It should be noted that, at HHSC's request, the EQRO lifted provider constraints for this measure. Lifting provider constraints may result in inflation of rates.
HEDIS® *Antidepressant Medication Management*	In STAR+PLUS, the rate for *Effective Acute-Phase Treatment* was 53 percent, which is higher than the HHSC Dashboard standard of 43 percent. The rate for *Effective Continuation-Phase Treatment* was 36 percent, also higher than the HHSC Dashboard standard of 24 percent.

Table B2. Improvement Areas for Quality of Care in Texas Medicaid/CHIP

Health Status	
Quality Indicator	**Findings**
Childhood obesity	The PCCM program had a high reported obesity rate, with nearly one-third of members classified as obese (31 percent). This finding is relevant for STAR and STAR+PLUS MCOs that have moved into former PCCM counties.
Obesity in STAR+PLUS	For the STAR+PLUS Medicaid-only and dual-eligible populations, nearly one-half of all members were considered obese, and one-fourth of all members were considered overweight.
Adult preventive care	
Timeliness of Prenatal Care	Rates of timely prenatal care increased in STAR+PLUS between 2009 and 2011. Despite the increase in STAR+PLUS, the 2011 rate (68 percent) remained below the HHSC Dashboard standard of 81 percent.
Postpartum Care	The percentage of deliveries receiving a postpartum visit in STAR+PLUS increased slightly across the three-year period; however, the rate in 2011 (38 percent) was still considerably below the HHSC Dashboard standard of 59 percent.
HEDIS® *Cervical Cancer Screening*	The results for cervical cancer screening in STAR (59 percent) and STAR+PLUS (40 percent) fell short of both the HEDIS® mean of 67 percent and the HHSC Dashboard standard of 65 percent.

Table B2 – Improvement Areas (continued)

Adult preventive care	
Quality Indicator	**Findings**
HEDIS® *Chlamydia Screening in Women*	In 2011, the percentage of eligible women in the STAR program who received Chlamydia screening during the measurement period (51 percent) was lower than the national HEDIS® mean of 58 percent. In addition, the rate among eligible STAR Health members 21 to 24 years of age was 53 percent, which fell short of the HEDIS® mean of 62 percent for this age group.[238] In CHIP, less than one in three eligible women received Chlamydia screening (31 percent).
Disease management (DM) programs	
DM participation rates	In 2011, STAR rates for member participation in asthma and diabetes DM programs were the lowest among the programs, with rates of 59 percent and 43 percent, respectively.
Satisfaction with timeliness of care	
CAHPS® *Getting Care Quickly*	The adult rate in STAR (71 percent) fell below the national Medicaid average of 81 percent for *Getting Care Quickly*.
Good Access to Urgent Care	The adult rate in STAR (74 percent) fell below the HHSC Dashboard standard of 81 percent for *Good Access to Urgent Care*.
Good Access to Routine Care	Scores on *Good Access to Routine Care* for members in CHIP (78 percent), child and adult members in STAR (79 percent and 67 percent, respectively), and Medicaid-only adults in STAR+PLUS (73 percent) were below their respective HHSC Dashboard standards.
No Delays for Health Plan Approval	Performance on *No Delays for Health Plan Approval* was below the HHSC Dashboard standards for all members, with the exception of STAR Health, which had a rate equal to its HHSC Dashboard standard. Scores ranged from 63 percent to 69 percent among children and from 38 percent to 50 percent among adults.
No Wait to be Taken to the Exam Room Greater than 15 Minutes	Performance was considerably below the HHSC Dashboard standards for *No Wait to be Taken to the Exam Room Greater than 15 Minutes* for all members, ranging from 24 percent to 30 percent among children and from 21 percent to 33 percent among adults.

Table B2 – Improvement Areas (continued)

Satisfaction with primary and specialist care	
Quality Indicator	**Findings**
CAHPS® *Getting Needed Care*	Scores for *Getting Needed Care* among child members ranged from 72 percent in STAR and CHIP to 80 percent in STAR Health, and were lower than those reported for children in Medicaid and SCHIP nationally. Scores for this measure among adult members ranged from 60 percent for STAR+PLUS Medicaid-only members to 74 percent for STAR+PLUS dual-eligible members, also below the national averages.
Good Access to Specialist Referral	Program-level rates for *Good Access to Specialist Referral* for children in STAR (69 percent) and CHIP (73 percent) were below their respective HHSC Dashboard standards. Rates for adults in STAR and Medicaid-only STAR+PLUS members were also lower than their respective standards.
Good Access to Special Therapies	In STAR+PLUS, the rate for *Good Access to Special Therapies* was considerably below the HHSC Dashboard standard of 66 percent for both Medicaid-only members (52 percent) and dual-eligible members (53 percent).
Satisfaction with customer service	
CAHPS® *Health Plan Information and Customer Service*	Among caregivers of children in STAR Health, 75 percent usually or always had positive experiences with health plan customer service. This score is lower than that reported for children in the other programs, and represents a considerable decline from 85 percent in 2010.
Acute respiratory care	
HEDIS® *Appropriate Treatment for Children with URI*	The percentage of children in STAR who received appropriate treatment for URI was 83 percent, which is lower than the national HEDIS® mean of 87 percent. Rates for this measure are generally low and have changed little over the three-year period
HEDIS® *Appropriate Testing for Children with Pharyngitis*	Rates of appropriate testing for pediatric pharyngitis were low in all programs from 2009 to 2011. Furthermore, rates in STAR were lower than the HEDIS® mean across all three years. In 2011, the rate for STAR was 58 percent, compared to 65 percent of children in Medicaid nationally.

Table B2 – Improvement Areas (continued)

Care for chronic conditions	
Quality Indicator	**Findings**
HEDIS® *Use of Appropriate Medications for People with Asthma*	In STAR+PLUS, the rate of use of appropriate medications for members 12 to 50 years old with asthma (80 percent) fell below the HHSC Dashboard standard of 86 percent. In addition, the rate among adults in STAR+PLUS declined from 91 percent in 2009 to 80 percent in 2011.
HEDIS® *Comprehensive Diabetes Care*	For adults with diabetes in STAR, CY 2011 results for all sub-measures were below their respective HEDIS® national means and HHSC Dashboard standards – suggesting a general need for improvement in diabetes care for this population. The rates for *Eye Exam* (36 percent), *LDL-C Control* (18 percent), and *HbA1c Control* (29 percent) were particularly low in STAR in comparison to the national means. For adults in STAR+PLUS, rates on all sub-measures were generally higher, but also indicated need for improvement – particularly for the *Eye Exam* (37 percent) and *HbA1c Control* sub-measures (26 percent).
HEDIS® *Controlling High Blood Pressure*	Rates of adequate blood pressure control for the STAR program (44 percent) and STAR+PLUS program (40 percent) were lower than the HHSC Dashboard standard of 54 percent for both programs. The rate for STAR was also lower than the national HEDIS® mean of 56 percent.

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[118] At the time of this report, the most recent AHRQ national results available for CAHPS® composites in Medicaid and CHIP were from 2011.

[119] Significance tests are run on unweighted data. Chi-square = 34.108, $p < 0.001$.

[120] The result for this indicator increased in Community First, from 22 percent in 2009 to 29 percent in 2011.

[121] Significance tests are run on unweighted data. Chi-square = 30.209, $p < 0.001$.

[122] Driscoll and UnitedHealthcare-Texas saw no change in this indicator between 2010 and 2011; the El Paso First rate dropped by one percentage point.

[123] At the time of this report, the most recent AHRQ national results available for CAHPS® composites in Medicaid and CHIP were from 2011.

[124] The NCQA-scaled score for *Getting Needed Care* in Molina decreased from 2.19 to 1.95: $F = 10.828$, $p < 0.001$.

[125] The NCQA-scaled score for *Getting Needed Care* in Superior decreased from 2.26 to 2.04: $F = 9.782$, $p = 0.002$.

[126] The NCQA-scaled scores for *Getting Specialized Services* in the 2011 STAR Child Survey were significantly different among the STAR MCOs: $F = 3.113$, $p < 0.001$.

[127] The NCQA-scaled scores for *Getting Specialized Services* in the 2011 CHIP Survey were significantly different among the CHIP MCOs: $F = 1.708$, $p = 0.046$.

[128] Chi-square = 12.779, $p < 0.001$.

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[153] The 2011 HHSC Dashboard standard of 92 percent for HEDIS® *Use of Appropriate Medications for People with Asthma* in the 5- to 11-year age group applies to STAR, CHIP, and STAR Health. There is no HHSC Dashboard standard for this age group in STAR+PLUS.

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