

Texas Medicaid Managed Care and Children's Health Insurance Program External Quality Review Organization Summary of Activities and Trends in Healthcare Quality

Contract Year 2015

**Measurement Period:
2010 through 2015**

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

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

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Executive Summary

1.1. Introduction

This report summarizes the evaluation activities conducted by the Institute for Child Health Policy 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). The Institute for Child Health Policy has been the external quality review organization for the Texas Health and Human Services Commission (HHSC) since 2002. The findings discussed in this report are based on external quality review organization activities conducted during fiscal year 2015, including administrative quality-of-care measures calculated on calendar year 2014 claims and encounter data, studies of quality improvement activities conducted by managed care organizations in calendar year 2014, and member satisfaction surveys with varying measurement periods spanning all or part of calendar years 2014 and 2015.

This report shows performance trends for selected quality-of-care measures from 2010 through 2014 (where data are available), with a focus on the state's pay-for-quality program. A companion document to this report includes managed care organization profiles of health care quality for each of the managed care organizations participating in Texas Medicaid and CHIP, showing calendar year 2014 or 2015 results on HHSC Performance Indicator Dashboard measures, as well as time trends on selected measures. The HHSC Performance Indicator Dashboard is a compilation of performance indicators that assess many of the most important dimensions of managed care organization performance and includes measures that incentivize excellence. It provides minimum threshold standards as a means to gauge performance. The report concludes with a listing of the most relevant recommendations made by the external quality review organization in 2015 for improving care at the program and health plan levels.

This review is structured to comply with the Centers for Medicare & Medicaid Services (CMS) federal guidelines and protocols, and addresses care provided by managed care organizations participating in STAR, CHIP, STAR+PLUS, STAR Health, and Medicaid/CHIP Dental. The external quality review organization conducts ongoing evaluation of quality of care primarily using managed care organization administrative data, including claims and encounter data. The external quality review organization also reviews managed care organization documents and provider medical records, conducts interviews with managed care organization administrators, and conducts surveys of Texas Medicaid and CHIP members, caregivers of members, and providers.

1.2. Methods

The external quality review organization uses a comprehensive set of health care quality measures to evaluate performance in Texas Medicaid and CHIP. These include:

- Measures from the Healthcare Effectiveness Data and Information Set (HEDIS®).

- Measures of potentially avoidable hospitalizations from the Agency for Healthcare Research and Quality (AHRQ), including the Pediatric Quality Indicators (PDIs) for children and adolescents and Prevention Quality Indicators (PQIs) for adults.
- Measures of potentially preventable events developed by 3M, including potentially preventable admissions, readmissions, emergency department visits, and complications.
- Measures from member and caregiver surveys, including those from the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey and the Experience of Care and Health Outcomes (ECHO®) survey for behavioral health.

For many administrative HEDIS® measures, the 2015 HEDIS® national percentiles for Medicaid programs were available as benchmarks for performance in the Texas STAR program.

Comparisons with the national HEDIS® percentiles are made also for other programs discussed in this report. However, these comparisons are for reference only, as CHIP, STAR+PLUS, and STAR Health serve populations that are not directly comparable with the national means and percentiles. 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.

1.3. Summary of Findings

Structure of Health Services in Texas Medicaid and CHIP

To meet federal requirements for external quality review of Medicaid managed care, the external quality review organization annually collects information from Texas Medicaid and CHIP health plans for use in the evaluation of health plan structure, processes of care, quality assessment, and performance improvement programs and projects.

HHSC requires that all managed care organizations participating in STAR, STAR+PLUS, CHIP, and STAR Health provide disease management services covering asthma and diabetes. In addition to asthma and diabetes, managed care organizations participating in STAR+PLUS must offer disease management for chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and coronary artery disease (CAD). All STAR and CHIP managed care organizations had the required disease management programs, in addition to other disease management programs focused on the needs of their populations. Fewer than one in five eligible members participated in asthma disease management in STAR (17 percent) or CHIP (12 percent). Disease management participation rates were higher in STAR+PLUS, for both asthma (68 percent) and diabetes (69 percent).

STAR Member Characteristics, Utilization, and Performance Measures

STAR is a Medicaid managed care program that serves primarily children and families. In 2014, 18 managed care organizations participated in STAR, operating in 13 service areas, including the three Medicaid Rural Service Areas, with a total of 3,002,643 members as of December 2014. Membership was 53 percent female and 47 percent male, with a mean age of 9.5 years. More than half of members were Hispanic (58 percent), and one-quarter of child and adolescent STAR members had special health care needs (25 percent). The most common special health

care need among children and adolescents in STAR was dependence on prescription medications (18 percent). Almost three-quarters of child and adolescent STAR members were in “excellent” or “very good” overall health (73 percent) and mental health (72 percent). More than one-quarter of children and adolescents in STAR were obese (29 percent), as calculated using caregiver-reported height and weight.

Statewide performance on measures of access to well-care visits for children and adolescents and prenatal and postpartum care in STAR showed positive findings in 2014. Well-care measures for children and adolescents were above the 50th percentile on the HEDIS[®] national benchmark percentiles for Medicaid, representing a good standard of care compared to the national Medicaid population. Performance on prenatal and postpartum care access measures was above the 50th percentile on the HEDIS[®] national benchmark percentiles for Medicaid.

In STAR, potentially preventable admissions per 1,000 member-months dropped slightly from 0.61 in 2013 to 0.54 in 2014. The ratios of actual-to-expected potentially preventable admissions ranged from 0.70 (Cook Children’s Health Plan) to 1.38 (FirstCare and RightCare from Scott & White Health Plan). The most common reasons reported for potentially preventable admissions were asthma (16 percent), pneumonia (14 percent), and cellulitis and other bacterial skin infections (11 percent).

Measures of effectiveness of care for asthma showed that members in STAR were prescribed controller medications at a rate exceeding the HEDIS[®] 90th percentile. However, the percentage of members who remained on an asthma controller medication at least 75 percent of the treatment period was below the HEDIS[®] 10th percentile. Other key areas for improvement in STAR include appropriate testing for children and adolescents with pharyngitis, eye exams and medical attention for nephropathy as part of comprehensive diabetes care, and follow-up after hospitalization for mental illness.

The STAR program performed well on measures of caregiver satisfaction with care in 2014, exceeding national Medicaid rates for all four ratings measures. For all but two of the CAHPS[®] composite measures, the STAR program rates were within four percentage points of those in the national child and adolescent Medicaid population. The lower rate for CAHPS[®] *Getting Needed Care* suggests a need to improve access to specialist care for STAR members.

CHIP Member Characteristics, Utilization, and Performance Measures

CHIP is an expanded managed care program serving children and adolescents in families with income too high to qualify for traditional Medicaid but too low to afford private insurance. In 2014, 17 managed care organizations participated in CHIP, operating in 10 service areas; the program served 335,009 children and adolescents as of December 2014. Membership was 49 percent female and 51 percent male, with a mean age of 9.9 years. The population was relatively healthy, with caregivers reporting “excellent” or “very good” health status for 72 percent of children and adolescents for overall health and for 77 percent of children and adolescents for mental health. Special health care needs were reported for 20 percent of members, with the most common type being dependence on prescription medications

(16 percent of members). Caregiver reports of height and weight indicated that 28 percent of CHIP members were obese.

Statewide performance on measures of access to care in CHIP showed generally positive findings in 2014. Performance on the HEDIS[®] *Childhood Immunization Status (CIS)*, *Combination 4* measure was strong, with all managed care organizations exceeding the HEDIS[®] 50th percentile.

Potentially preventable admissions per 1,000 member-months increased slightly from 0.25 in 2013 to 0.28 in 2014. The ratios of actual-to-expected potentially preventable admissions ranged from 0.72 (Amerigroup) to 1.60 (Aetna Better Health). The most common reasons for potentially preventable admissions were asthma (20 percent), other pneumonia (11 percent), and major depressive disorders and other/unspecified psychoses (10 percent).

Effectiveness of care measures in 2014 in CHIP showed mixed performance. Statewide, the program performed well on HEDIS[®] *Use of Appropriate Medications for People with Asthma (ASM)*, *All Ages*, with an overall rate of 95 percent, which meets the HHSC Dashboard standard of 95 percent and exceeds the HEDIS[®] 90th percentile. However, as in STAR, the rate of HEDIS[®] *Medication Management for People with Asthma (MMA)* was below the HEDIS[®] 10th percentile.

Caregivers of children and adolescents in Texas CHIP generally reported positive experiences with care. Performance was better in Texas than in the national CHIP population for all four CAHPS[®] ratings. Performance on two of the four CAHPS[®] composite measures was higher in Texas than in the national CHIP population. The widest gap was observed for CAHPS[®] *Getting Needed Care*, with 55 percent of caregivers in CHIP reporting they “always” had positive experiences, compared to 62 percent in CHIP nationally.

STAR+PLUS Member Characteristics, Utilization, and Performance Measures

STAR+PLUS is a Medicaid managed care program coordinating acute care and long-term services and supports for members age 65 or older or who have a disability and who qualify for Supplemental Security Income (SSI) benefits or for Medicaid due to low income. STAR+PLUS includes Medicaid-only members and members who are dually eligible for both Medicaid and Medicare. In 2014, five managed care organizations participated in STAR+PLUS, operating in 10 service areas; three Medicaid Rural Service Areas were added to the program on September 1, 2014. The program served 522,527 members as of December 2014. STAR+PLUS members have more complex health conditions than members in STAR or in the general Medicaid population. Member-reported health status was generally low, with 62 percent reporting "fair" or "poor" overall health and 48 percent reporting "fair" or "poor" mental health. Over half (51 percent) of members were obese, as measured from member-reported height and weight, and 24 percent were overweight. Health-related limitations to quality of life were common, with 66 percent of Medicaid-only members and 68 percent of dual-eligible members reporting they have a condition that interferes with independence, participation in the community, or quality of life.

Utilization of care generally was high for STAR+PLUS Medicaid-only members, as expected for the more complex health conditions seen in the population. Statewide, the program had 581.1 outpatient visits per 1,000 member-months, ranging from 555.5 (Amerigroup) to 610.0 (Superior HealthPlan). Long-term complications for diabetes, as measured by the AHRQ PQI, were 59.8 per 100,000 member-months, ranging from 43.0 (Cigna-HealthSpring) to 64.6 (Amerigroup). Between 2013 and 2014, there were modest decreases in rates of potentially preventable admissions and readmissions within 30 days, while the rate of potentially preventable emergency department visits remained constant. The rate of potentially preventable emergency department visits was 24.0 per 1,000 member-months, with actual-to-expected ratios ranging from 0.96 (Cigna-HealthSpring) to 1.04 (Molina Healthcare of Texas, Inc.). The most common reasons for potentially preventable emergency department visits were chest or abdominal pain (14 percent), level II musculoskeletal system and connective tissue diagnoses (9 percent), and upper respiratory tract infections (8 percent).

Performance on effectiveness of care measures generally was low for STAR+PLUS Medicaid-only members compared to the national Medicaid population. The HEDIS® measures for appropriate medication for asthma, asthma medication ratio, avoidance of antibiotic therapy for adults with acute bronchitis, HbA1c control for individuals living with diabetes, eye exams for individuals with diabetes, controlling blood pressure for individuals with hypertension, and use of spirometry testing in the assessment and diagnosis of COPD all performed below the HEDIS® 33rd percentile. All four diabetes care measures showed improvement from 2013. The HEDIS® measure for management of asthma medications performed between the 66th and 89th percentiles, as did provision of bronchodilators following COPD Exacerbation.

Survey results suggested that members were in most ways satisfied with their experience of care in STAR+PLUS, with some room for improvement in access to care. Performance was better in Texas STAR+PLUS than in the national population for three out of four CAHPS® ratings. For CAHPS® composite measures, Texas rates were within four percentage points of national Medicaid rates for all but one indicator. The rate for CAHPS® *Getting Needed Care* was 66 percent for Medicaid-only members compared to the national Medicaid rate of 81 percent.

STAR Health Member Characteristics, Utilization, and Performance Measures

STAR Health is a Medicaid managed care program for children and adolescents in state conservatorship and young adults previously in state conservatorship. In calendar year 2014, STAR Health operated statewide and was administered by Superior HealthPlan; the program served 32,305 members as of December 2014. Membership was 48 percent female and 52 percent male, with a mean age of 8.0 years. According to the 2014 STAR Health Caregiver Survey, half of all STAR Health members have special health care needs (51 percent). The most common types of special health care needs among children and adolescents in STAR Health were problems that require counseling (36 percent) and dependence on medications (35 percent). Nearly one-third of children and adolescents in STAR Health were obese (30 percent), as measured from caregiver-reported height and weight.

In 2014, members in STAR Health utilized the emergency department at a rate of 62.1 visits per 1,000 member-months, and outpatient care at a rate of 485.8 visits per 1,000 member-months.

Performance on well-care measures for children (89 percent) and adolescents (70 percent) in STAR Health remained high in 2014, exceeding their respective HEDIS® 90th percentiles.

Potentially preventable inpatient admissions increased from 3.35 visits per 1,000 member-months in 2013 to 3.79 visits per 1,000 member-months in 2014. The most common reasons for these inpatient admissions were bipolar disorders (68 percent) and major depressive disorders and other psychoses (13 percent). Potentially preventable readmissions increased slightly from 1.43 readmissions per 1,000 member-months in 2013 to 1.62 readmissions per 1,000 member-months in 2014. The most common type of readmission was mental health or substance abuse readmission (90 percent). Emergency department visits that were potentially preventable remained steady between 2013 and 2014. The most common condition associated with these emergency department visits was upper respiratory tract infection (25 percent).

Caregivers of children and adolescents in STAR Health generally reported high satisfaction with care on the CAHPS® measures *Getting Needed Care* (72 percent), *Getting Care Quickly* (89 percent), and *How Well Doctors Communicate* (91 percent). However, all four CAHPS® ratings for STAR Health members performed below the national CAHPS® Child Medicaid rates for 2014. The widest gap in these ratings was observed for the CAHPS® specialist rating, with 61 percent of STAR Health caregivers rating their child and adolescent's specialist a "9" or "10", compared to 70 percent in the national Medicaid population.

Medicaid and CHIP Dental Programs – Access and Satisfaction

Most children and young adults ages 20 and younger with Medicaid receive dental services through a managed care dental plan. All children ages 18 or younger with CHIP coverage receive dental services through a managed care dental plan. The two dental plans providing services across Texas for all Medicaid and CHIP members who qualify for dental coverage are DentaQuest and MCNA.

The external quality review organization evaluated access to dental care and services among members enrolled in Medicaid Dental and CHIP Dental using the HEDIS® *Annual Dental Visit (ADV)* measure, Dental Quality Alliance measures, and dental prevention and treatment measures developed by the Institute for Child Health Policy in collaboration with HHSC. Medicaid Dental members had higher rates than CHIP Dental members on all measures of dental program access and utilization. Both Medicaid Dental and CHIP Dental members had rates of HEDIS® *Annual Dental Visit (ADV)* lower than HHSC Dashboard standards for most individual age bands. However, the rates for use of dental sealants among children and adolescents in Medicaid Dental and CHIP Dental were higher than the HHSC Dashboard standards for three of the four age groups.

Caregivers of child and adolescent members in Medicaid Dental and CHIP Dental generally reported positive experiences with receiving care from dentists and staff. Satisfaction tended to be higher in Medicaid Dental than in CHIP Dental.

1.4. Recommendations

This report concludes with a list of recommendations that the external quality review organization made in fiscal year 2015 to improve the quality of care delivered to Texas Medicaid and CHIP members (**Appendix A**). These recommendations are compiled from reports on quality of care, member surveys, and other studies. The list of recommendations includes those that address common issues in quality of care across programs, as well as HHSC's overarching goals for the STAR, STAR+PLUS, CHIP, STAR Health, Medicaid Dental, and CHIP Dental managed care organizations. **Table 1** shows the recommendation domains and the programs to which they apply.

Table 1. External Quality Review Organization Recommendations by Program, 2015

Domain	Program					
	STAR	CHIP	STAR+PLUS	STAR Health	Medicaid Dental	CHIP Dental
HHSC Performance Indicator Dashboard	✓	✓	✓	✓	✓	✓
Preventive Dental Care					✓	✓
Potentially Preventable Events	✓	✓	✓			
Behavioral Health Care	✓	✓	✓	✓		
Documentation and Database Management			✓			
Network Adequacy for Specific Areas or Domains	✓		✓	✓		
Care Coordination			✓	✓		
General Recommendations	✓	✓	✓	✓	✓	✓

Introduction

One in five Americans receives health insurance coverage through Medicaid, highlighting the significant role of this public program to the U.S. health care system.¹ Medicaid is evolving both due to changing national initiatives and to state-specific budgets and priorities. Enrollment increased by 14 percent on average in fiscal 2015, largely driven by Affordable Care Act (ACA) coverage expansions; however, even states that did not implement the ACA Medicaid expansion showed five percent growth in enrollment on average in fiscal 2015.² These trends highlight the importance of tracking the quality and efficiency of health care supported by public insurance programs in the United States. In particular, the Institute of Medicine outlined six

general characteristics of quality health care: (1) efficiency, (2) effectiveness, (3) equity, (4) patient-centeredness, (5) timeliness, and (6) safety.³

To promote both efficiency and high quality health care services, many states have adopted managed care as the predominant delivery model. In contrast to fee-for-service, managed care improves access to care and controls health care costs by:⁴ (1) ensuring that members have a *medical home*—a primary care provider or team of professionals that follows a person-based approach to preventive and primary care; (2) establishing a network of providers under contract with the health plan, which is obligated to maintain state access standards; (3) conducting utilization review and utilization management to monitor and evaluate the appropriateness, necessity, and efficacy of health services; and (4) implementing quality assessment and performance improvement programs, which evaluate performance using objective standards that may lead to improvements in the structure and functioning of health services. Managed care organizations (MCOs) are increasingly being used to deliver Medicaid services with 39 states currently contracting with health plans to serve Medicaid beneficiaries.⁵ Nationally, more than half of all Medicaid beneficiaries receive their care from risk-based health plans.⁶ Health plans also are increasingly being used to provide care for higher-need populations such as people with disabilities and people who are dually eligible for Medicaid and Medicare.⁷

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, which included incorporating a managed care delivery system.⁸ In 2015, the proportion of Texas Medicaid members enrolled in a managed care program reached 88 percent.⁹ The majority of Medicaid beneficiaries received care through a managed care organization participating in the STAR program; separate programs delivering managed care to special populations include: STAR+PLUS for members with chronic needs; STAR Health for children and adolescents in state conservatorship; NorthSTAR for delivery of behavioral health care in the Dallas area; and Medicaid Dental for dental care. All beneficiaries of the Children's Health Insurance Program (CHIP) were enrolled in a managed care organization through: CHIP; CHIP Dental for dental care; or CHIP Perinate for care before birth and in the first few months of life.

During the summer of 2011, the Texas Legislature passed Senate Bill 7 (82nd Legislature, First Called Session, 2011) mandating a statewide expansion of Medicaid managed care, which previously was limited to large urban areas.¹⁰ 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.¹¹ **Table 2** lists expansions and changes to the managed care program since that time.

Table 2. Managed Care Expansions Since SB 7 (82nd Legislature, First Called Session, 2011)

September 2011	STAR expanded into an additional 28 counties contiguous to six of the then current Medicaid managed care service areas. STAR+PLUS expanded into 21 counties contiguous to six of the then current Medicaid managed care service areas.
March 2012	STAR expanded to cover areas formerly served by the Primary Care Case Management (PCCM) program. STAR, STAR+PLUS, and CHIP began covering pharmacy benefits. Most children and young adults in Medicaid began receiving dental benefits through managed care.
March 2014	Cognitive rehabilitation therapy was added to the STAR+PLUS Home and Community-Based Services waiver service array.
September 2014	STAR+PLUS expanded statewide and began offering acute-care services for individuals with an intellectual disability or related condition. Adults with disabilities transferred from STAR to STAR+PLUS for basic medical services, long-term services and supports, and service coordination. Adults enrolled in Community-Based Alternatives, Primary Home Care, and Day Activity Health Services began receiving care through STAR+PLUS health plans.
March 2015	Nursing facility services were integrated into STAR+PLUS.
November 2016	STAR Kids is scheduled to provide acute and community-based medical assistance benefits to children and young adults with disabilities.
December 2016	NorthSTAR is scheduled to end. Members receiving behavioral health services in the Dallas service area will finish migrating to other programs.

2.1. External Quality Review in Texas Medicaid and CHIP

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.”¹² High quality-of-care requires that health care delivery be safe, effective, patient-centered, timely, efficient, and equitable. Given the cost-containment and managed care expansion strategies that continue to be implemented nationwide, evaluation research into the quality-of-care delivered to members of Medicaid and CHIP is of particular importance.

Federal regulations require external quality review of Medicaid managed care programs to ensure that state programs and their contracted managed care organizations are compliant with established standards.¹³ States are required to validate managed care organization performance improvement projects and performance measures and assess managed care

organization compliance with member access-to-care and quality-of-care standards. In addition, states also may validate member-level encounter data, conduct surveys and focus studies, and independently calculate performance measures. CMS provides guidance for these mandatory and optional activities through protocols for evaluating the state's quality assessment and improvement strategy.¹⁴

Through a contract with HHSC, the Institute for Child Health Policy at the University of Florida (IChP) has served as the Texas external quality review organization (EQRO) since 2002. Following CMS protocols, the Institute for Child Health Policy measures access, utilization, effectiveness, and satisfaction with care for members in Texas Medicaid and CHIP and produces an annual summary of evaluation activities conducted during the prior year. To provide an annual profile of Texas Medicaid and CHIP managed care organization performance, this report summarizes the findings of external quality review organization studies conducted during fiscal year 2015 (September 1, 2014, to August 31, 2015), which include administrative quality-of-care measures calculated on calendar year 2014 claims and encounter data, studies of quality improvement activities conducted by managed care organizations in calendar year 2014, and member satisfaction surveys with varying measurement periods spanning all or part of calendar year 2015.¹⁵

To further assist Texas HHSC and managed care organizations in developing and implementing quality improvement strategies, this report shows performance trends for selected quality-of-care measures from 2010 through 2014 (where data are available), with a focus on the state's pay-for-quality program. 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 managed care organization participating in Texas Medicaid and CHIP during calendar year 2014, showing each managed care organization's most currently available results on HHSC Performance Indicator Dashboard measures (calendar year 2014 for administrative measures; 2014 or 2015 for survey measures) and presenting the managed care organization's trends for selected quality measures.

A summary of the external quality review organization's recommendations to Texas HHSC made in fiscal year 2015 is presented in **Appendix A. Fiscal Year 2015 Recommendations**. The recommendations for Texas Medicaid and CHIP should be considered for future quality improvement initiatives in the coming year.

2.2. Managed Care Programs and Participating Managed Care Organizations

In 2014, Texas Medicaid and CHIP benefits were administered through the following programs:

- **STAR** – The State of Texas Access Reform (STAR) program provides managed care in coordination with 18 health plans to the majority of Texas Medicaid beneficiaries.
- **STAR+PLUS** – The STAR+PLUS program integrates acute health services with long-term services and support in coordination with five health plans.
- **STAR Health** – STAR Health is a managed care program for children and adolescents in state conservatorship and young adults previously in foster care and receiving Medicaid, up to age 20; members may elect to enroll in a STAR plan upon their eighteenth birthday, and

may continue to receive Medicaid benefits through the STAR plan of their choice up to age 26. In 2014, the sole managed care organization for STAR Health was Superior HealthPlan.

- **NorthSTAR** – NorthSTAR is a carve-out program for behavioral health services for STAR and STAR+PLUS members who live in the Dallas service area.
- **CHIP** – The Children's Health Insurance Program provides managed care through 17 health plans to children in families whose income is too high to qualify for Medicaid but too low to be able to afford private insurance for their children.
- **Medicaid Dental** – The Texas Medicaid Dental program provides dental services for children and young adults ages 20 and younger enrolled in Texas Medicaid through two dental health plans.
- **CHIP Dental** – The CHIP Dental program provides dental services for children and adolescents ages 18 and younger in CHIP.
- **CHIP Perinate** – The CHIP Perinate program expands CHIP services to unborn children and neonates, with a smooth transition of coverage to Medicaid or CHIP at birth or before a child's first birthday.

Currently, 22 health plans serve the Texas Medicaid and CHIP populations, including one managed behavioral health organization (MBHO), two dental maintenance organizations (DMOs), and 19 managed care organizations (MCOs). **Table 3** lists the programs served by each health plan.

Table 3. Texas Medicaid/CHIP Managed Care Organizations and Programs in 2014ⁱ

Managed Care Organization ⁱⁱ	STAR	CHIP	STAR+PLUS	STAR Health
Aetna Better Health	✓	✓		
Amerigroup	✓	✓	✓	
Blue Cross and Blue Shield of Texas	✓	✓		
CHRISTUS Health Plan	✓	✓		
Cigna-HealthSpring			✓	
Community First Health Plans	✓	✓		
Community Health Choice	✓	✓		
Cook Children's Health Plan	✓	✓		
Driscoll Health Plan	✓	✓		
El Paso First Health Plans, Inc.	✓	✓		
FirstCare	✓	✓		
Molina Healthcare of Texas, Inc.	✓	✓	✓	
Parkland Community Health Plan	✓	✓		
RightCare from Scott & White Health Plan	✓			
Sendero Health Plans	✓	✓		
Seton Health Plan	✓	✓		
Superior HealthPlan	✓	✓	✓	✓
Texas Children's Health Plan	✓	✓		
UnitedHealthcare Community Plan	✓	✓	✓	

2.3. External Quality Review Organization Activities

This report meets federal annual reporting requirements of external quality review of state Medicaid managed care programs. The external quality review organization annually conducts the following activities to address the mandatory and optional external quality review functions for evaluating Medicaid managed care and CHIP.

Mandatory activities:

1. Validation of managed care organization performance improvement projects
 - a. *Evaluation of managed care organization performance improvement projects:* process and outcomes validation for evidence-based projects targeting specific areas for quality improvement conducted by each health plan, including the manner in which the data from the validation of performance measures were aggregated and analyzed and conclusions were drawn as to the quality, timeliness, and access to care

ⁱ The NorthSTAR behavioral health carve-out operating in the Dallas service area was served by ValueOptions. Medicaid Dental and CHIP Dental were both served by DentaQuest and MCNA Dental statewide.

ⁱⁱ Managed care organization names have been abbreviated or acronyms used in some tables and charts.

2. Validation of performance measures
 - a. *Quality-of-care studies*: description of data collection, aggregation, and analysis and outcomes for each measure
3. Review of managed care organization compliance with state standards for access to care, structure and operations, and quality measurement and improvement
 - a. *Claims and encounter data quality certification*: assess key data elements, including those that are critical for proper care coordination and quality-of-care measurement
 - b. *Managed care organization administrative interviews*: structured and targeted interviews to assess health plan organizational structure and strengths and weaknesses with respect to quality, timeliness, and access to health care services
 - c. *Evaluation of managed care organization quality assessment and performance improvement programs*: clinical and nonclinical aspects of quality and performance improvement and the implementation of evidence-based clinical practice guidelines.

Optional activities:

1. Validation of encounter data reported by managed care organizations
 - a. *Encounter data validation studies (biennial)*: review records of service for accuracy and completeness and compare to a representative sample of medical or dental records
2. Administration or validation of consumer or provider surveys of quality-of-care
 - a. *Member and caregiver satisfaction surveys (biennial)*: collect member and caregiver perspectives about their satisfaction with and experience of care and communicate to stakeholders and the managed care organizations
3. Calculation of performance measures in addition to those reported by a managed care organizations and validated by the external quality review organization
 - a. *Quality-of-care studies*: the external quality review organization independently calculates a number of additional measures, and each year chooses several to analyze in depth. The MCO Profiles accompanying this report include selected performance measures for each health plan in each program.
4. Conduct of studies on quality that focus on a particular aspect of clinical or non-clinical services at a point in time
 - a. *Focus studies*: ad hoc reports on topics selected annually
 - b. *Health-based risk analysis*: in-depth reports of factors associated with health outcomes

The external quality review organization calculates results of administrative and hybrid measures from NCQA HEDIS®, the AHRQ PDIs and PQIs, and 3M™ Health Information Systems measures of potentially preventable events. Results for these measures were reported using calendar year 2014 data for STAR, CHIP, STAR+PLUS, STAR Health, NorthSTAR, and Medicaid/CHIP Dental. The set of measures for each program varies, with measures selected

according to the demographic and health profile of each program's members and to state health care quality priorities. A number of measures specific to adults (e.g., HEDIS® *Comprehensive Diabetes Care*, HEDIS® *Adults' Access to Preventive/Ambulatory Health Services*) were not calculated and adult member surveys were not fielded for CHIP or STAR Health because the vast majority of members in these programs do not meet the age criteria. In addition, the measure set for STAR Health was more limited than the measure sets for STAR and CHIP.¹⁶

The external quality review organization annually produces results on administrative measures at the managed care organization and service delivery area levels; these include in-depth analyses of selected performance measures, which are reported to HHSC and made available to the Medicaid and CHIP managed care organizations through the Texas Healthcare Learning Collaborative web portal.

In addition, the external quality review organization conducts certain optional activities on a biennial basis: member satisfaction surveys and encounter data validation studies. External quality review organization member survey projects are specific to particular populations and their content can vary from year to year. In the current report, the external quality review organization summarizes results from surveys of caregivers of children and adolescents in CHIP, STAR, CHIP Dental, and Medicaid Dental; a survey of caregivers of children and adolescents in STAR with behavioral health needs; short surveys of adult members in STAR and STAR+PLUS; and surveys of adult members in STAR and STAR+PLUS with behavioral health needs. Additionally, some survey results from the prior year are summarized where appropriate.

The external quality review organization conducted a number of special studies and projects in fiscal year 2015 to assist HHSC in quality-of-care evaluation activities and policy decisions, including:

- Appointment availability studies to assess provider compliance with contractual requirements for timeliness of appointments.
- A study of the STAR+PLUS expansion for individuals with intellectual and developmental disabilities.
- Assessment of data quality in individual service plans for members in the STAR+PLUS Home- and Community-Based Services Waiver program.
- Continued support in the design and implementation of Texas pay-for-quality programs.

To promote continued improvements in quality-of-care for Texas Medicaid and CHIP members, the external quality review organization also provides resources and guidance for managed care organizations, such as training and continuing education sessions, as well as the development of tools to assist in disseminating quality-of-care results to managed care organizations and members. In fiscal year 2015, the external quality review organization continued two initiatives to develop and maintain tools for disseminating quality-of-care information: the Texas Healthcare Learning Collaborative web portal, an online resource for managed care organizations to access and analyze their results on important quality-of-care measures; and the Managed Care Organization Report Cards, which summarize quality-of-care information in a way that is accessible to Medicaid members, allowing new Medicaid and CHIP enrollees to

make informed decisions when selecting their managed care organization. The Managed Care Organization Report Cards are mailed to new members along with their enrollment packet and are posted to the HHSC website.¹⁷ These tools were further refined and made accessible to stakeholders in fiscal year 2015.

2.4. 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} 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 have an important impact on outcomes of care. In evaluating quality-of-care in Texas Medicaid and CHIP, the external quality review organization also 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 next section, **Section 3**, addresses the demographic and health characteristics of Texas Medicaid and CHIP members using data from managed care organization claims and encounter data as well as member surveys.

Section 4 addresses the structure and process of Medicaid managed care in Texas. The external quality review organization assesses managed care organization data management capabilities and data quality, disease management programs, and quality improvement practices.ⁱ This is achieved by evaluating encounter data validation studies, conducting administrative interviews with managed care organizations, conducting data certification, and validating health plan quality assessment and performance improvement programs and projects.

Section 5 presents results on quality-of-care measures and performance indicators for each managed care program according to three general dimensions of care (as applicable) – access and utilization, effectiveness and prevention, and member satisfaction. **Table 4** details coverage of each domain in this report. Access and utilization of care in Texas Medicaid and CHIP are evaluated using HEDIS[®], AHRQ, and 3M[™] Health Information Systems measures, which assess access to and utilization of pediatric and adult preventive care, ambulatory care, inpatient services, and mental health services. Effectiveness of care is evaluated using a number of HEDIS[®] administrative and hybrid measures. These include measures that assess provider compliance with evidence-based practices and member compliance with treatment regimens for acute respiratory care, care for chronic conditions, behavioral health care, and preventive care. Member satisfaction with care is explored through surveys conducted by the

ⁱ Results of encounter data validation studies and evaluation of performance improvement projects will be provided in an addendum to this report.

external quality review organization, using the CAHPS® survey tool and the ECHO® behavioral health survey tool to assess members’ experiences and satisfaction with timeliness of care, access to primary and specialist care, the patient-centered medical home, customer service, and care coordination. These sections provide quality-of-care evaluation results for the following programs and dimensions of care:

Table 4: Coverage of Quality-of-care Report Sections by Program

	Access and Utilization	Effectiveness and Prevention	Member Satisfaction
Section 5.2 – STAR	✓	✓	✓
Section 5.3 – CHIP	✓	✓	✓
Section 5.4 – STAR+PLUS	✓	✓	✓
Section 5.5 – STAR Health	✓	✓	✓
Section 5.6 – Medicaid/CHIP Dental	✓	✓	✓

Section 6 summarizes special studies and projects conducted by the external quality review organization in fiscal year 2015, including the appointment availability study, evaluation of individuals with developmental disabilities, the home- and community-based waiver study, behavioral health study, pay-for-quality methodology, and the Managed Care Organization Report Cards.

Administrative and hybrid measures are calculated using claims and encounter data covering calendar year 2014. Survey measures use a six-month lookback period covering November 2014 to September 2015, depending on the individual survey. Each program serves a different population with different demographic and health status characteristics. Differences between programs are expected, and in most cases performance measures will not be directly comparable. The population of each program is not necessarily comparable to the national Medicaid population (e.g., members needing long term services and supports are concentrated in STAR+PLUS, and the observed higher rates of utilization are expected).

Percentages shown in most figures and tables in this report are rounded to the first decimal place, and therefore may not add up to 100 percent.

The Texas Medicaid and CHIP Populations

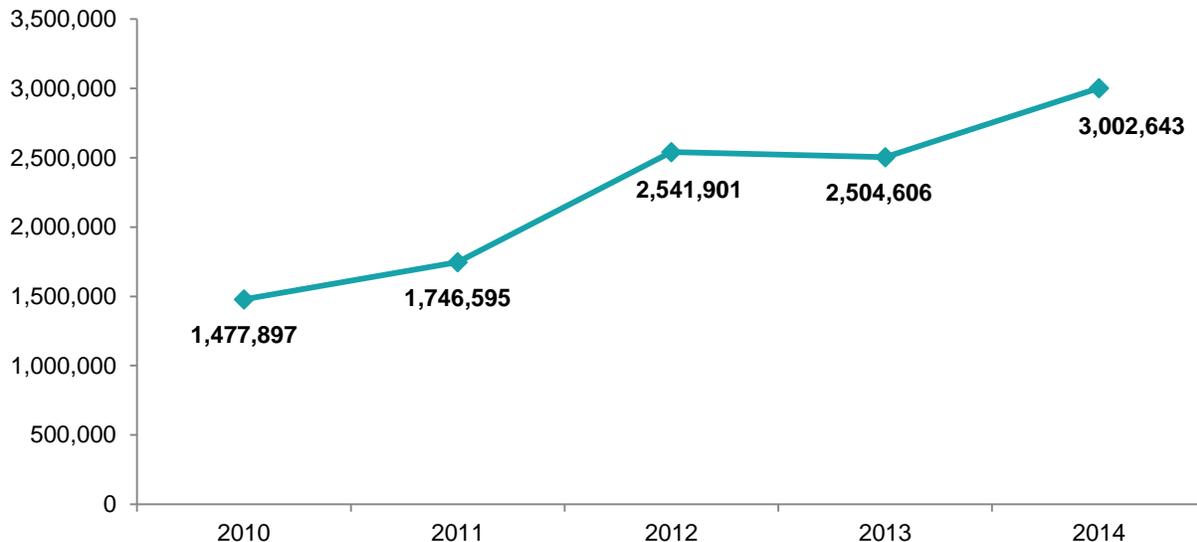
3.1. STAR Program

Enrollment in the STAR program has increased steadily since 2010, to 3,002,643 in December 2014 (**Figure 1**). Among members in December 2014:

- 53.2 percent were female and 46.8 percent were male.

- 14.5 percent were Black, non-Hispanic, 58.3 percent were Hispanic, and 15.9 percent were White, non-Hispanic.
- The mean age was 9.5 years (standard deviation 8.2 years).

Figure 1. STAR – Program Enrollment, 2010-2014



The external quality review organization collected the health status of child and adolescent STAR members through a caregiver survey in 2015. **Figures 2 through 4** show results for child and adolescent overall and mental health status, the percentage of children and adolescents with each of five different types of special health care needs, and body mass index (BMI) classification of children and adolescents.

- Almost three-quarters of child and adolescent STAR members are in “excellent” or “very good” overall health (72.6 percent) and mental health (71.8 percent).
- One-quarter of child and adolescent STAR members have a special health care need (24.9 percent) for a medical, behavioral, or other health condition that is expected to last for at least 12 months. The most common type of special need was dependence on prescription medications (17.8 percent).²⁰ The second most common type was need or use of more medical care, mental health services, or education services than usual for most people of the same age in the general population (11.2 percent). One out of ten child and adolescent STAR members had problems that required counseling (10.1 percent).
- Caregiver reports of height and weight indicated that almost half of children and adolescents in STAR were overweight or obese (46.6 percent), with over one-quarter qualifying as obese (28.5 percent).

Figure 2. STAR Child – Caregiver-Reported Health Status, 2015

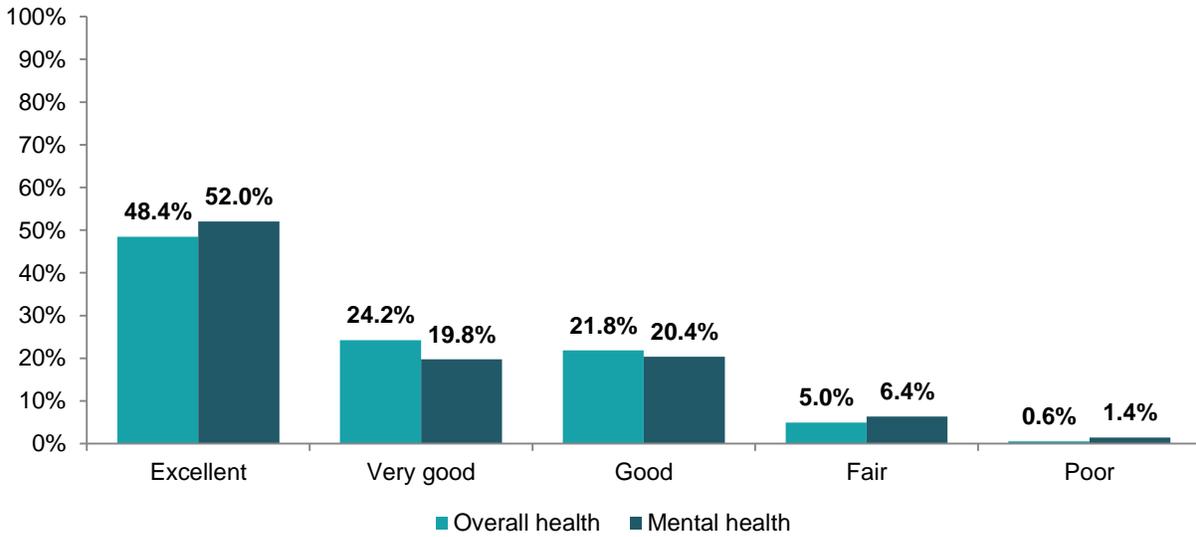


Figure 3. STAR Child – Caregiver-Reported Special Health Care Needs, 2015

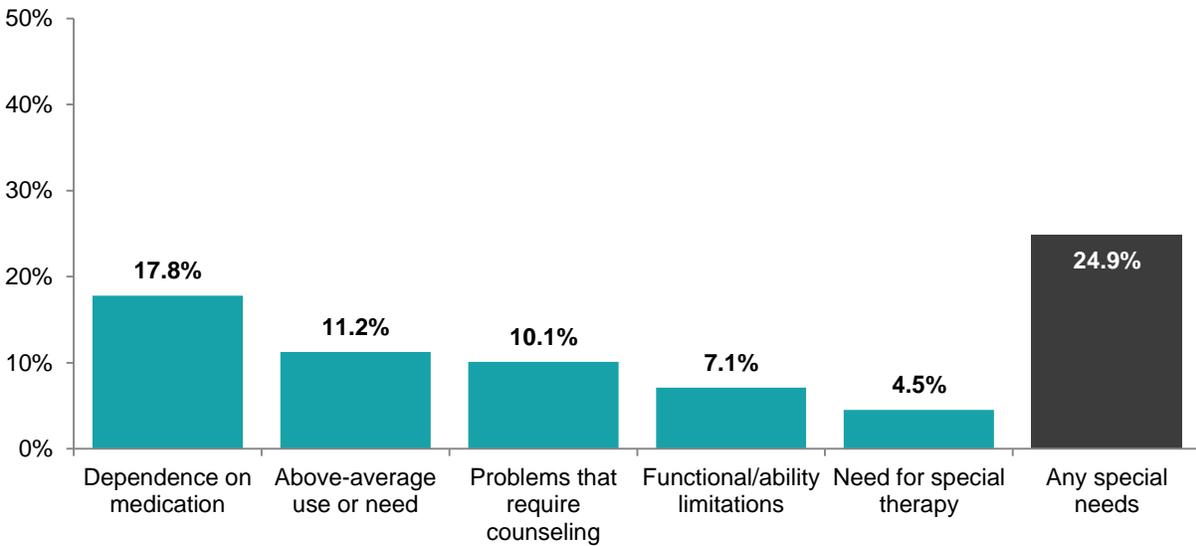
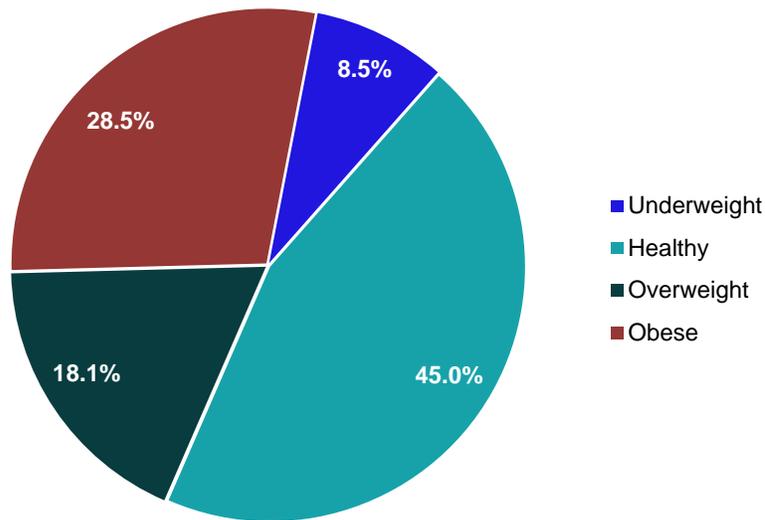


Figure 4. STAR Child – Body Mass Index Classification Based on Caregiver Report of Height and Weight, 2015



The external quality review organization collected health status of adult STAR members through a biennial member survey in 2014. **Figure 5** and **Figure 6** show overall health and mental health status and body mass index classification of adults. The member survey revealed:

- Slightly more than one-third of adult STAR members are in “excellent” or “very good” overall health (36.3 percent), and nearly half are in “excellent” or “very good” mental health (47.1 percent).
- More than two-thirds of adults in STAR are overweight (24.6 percent) or obese (43.2 percent).

Figure 5. STAR Adult – Member-Reported Health Status, 2014

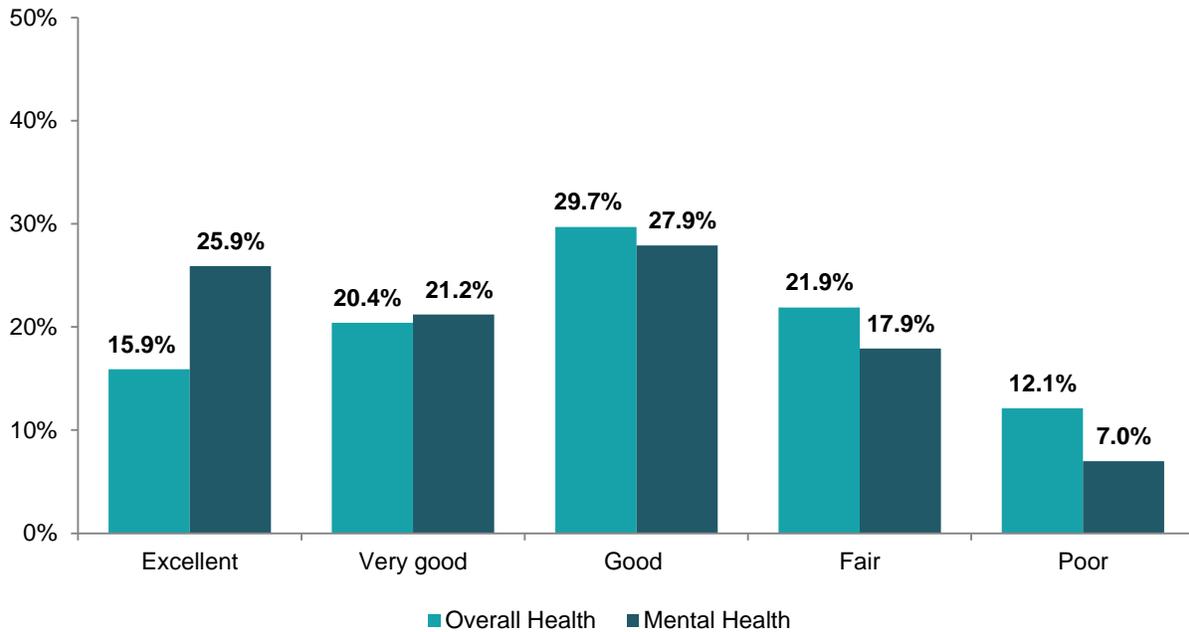
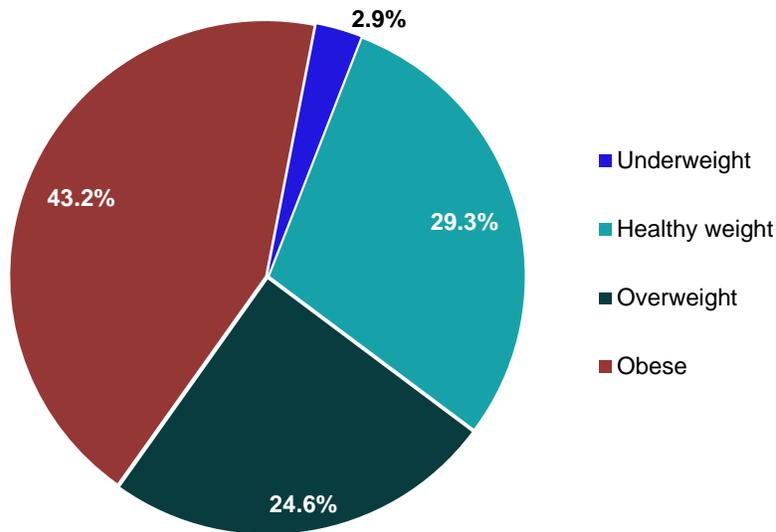


Figure 6. STAR Adult – Body Mass Index Classification Based on Member Report of Height and Weight, 2014



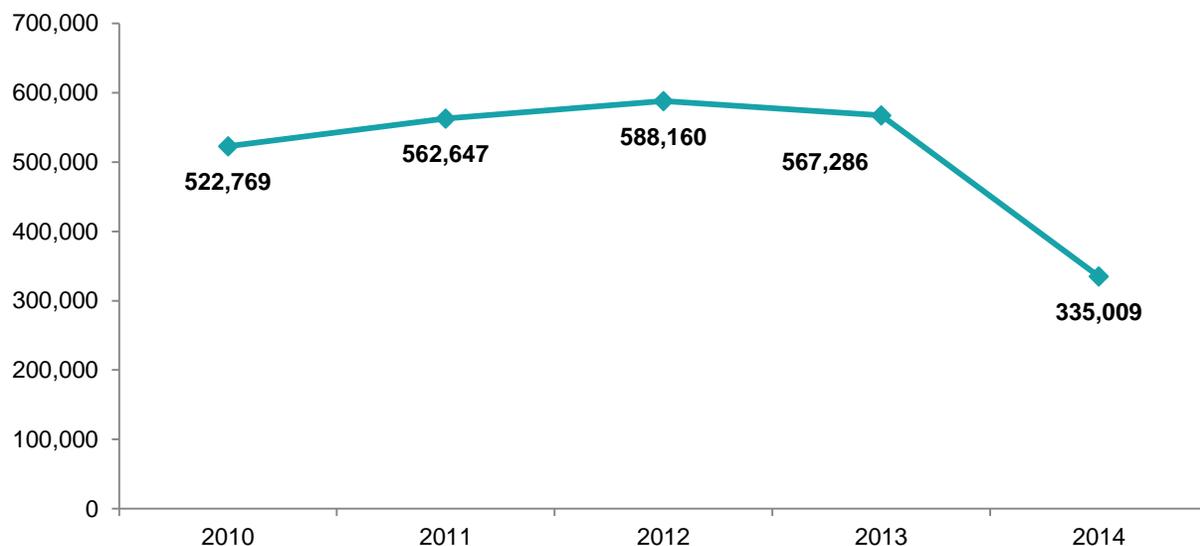
3.2. CHIP Program

Enrollment in the CHIP program very gradually increased between 2010 and 2012 and decreased slightly in 2013 (**Figure 7**). CHIP enrollment decreased sharply in 2014 to 335,009 members (a drop of 232,277 members) in December 2014. This drop in enrollment

may be explained in part by recent changes under the Patient Protection and Affordable Care Act to the minimum income threshold for Medicaid eligibility. Changes to income calculations also may have played a role. Since prospective members are assessed for Medicaid eligibility before being assessed for CHIP eligibility, many people who previously would have enrolled in CHIP will instead have enrolled in STAR under these changes; net enrollment between CHIP and STAR increased by 265,760 members from December 2013 to December 2014. Among CHIP members:

- 48.8 percent were female and 51.2 percent were male.
- 8.6 percent were Black, non-Hispanic, 47.0 percent were Hispanic, and 15.3 percent were White, non-Hispanic.
- The mean age was 9.9 years (standard deviation 4.8 years).

Figure 7. CHIP – Program Enrollment, 2010-2014



The external quality review organization collected health status of child and adolescent CHIP members through a survey of caregivers in 2015. **Figures 8** through **10** show results for child and adolescent overall and mental health status, the percentage of children and adolescents with each of five different types of special health care needs, and body mass index classification of children and adolescents. The caregiver survey revealed:

- Approximately three-quarters of child and adolescent CHIP members are in “excellent” or “very good” overall health (72.4 percent) and mental health (77.4 percent).
- One-fifth of child and adolescent CHIP members have a special health care need (20.3 percent) for a medical, behavioral, or other health condition that is expected to last for at least 12 months. The most common type of special health care need was dependence on prescription medications (16.3 percent). The second most common type was need or use of more medical care, mental health services, or educational services than is usual for most people of the same age (8.9 percent).

- More than one-quarter of children and adolescents in CHIP are obese (28.1 percent) and 18.4 percent are overweight.

Figure 8. CHIP – Caregiver-Reported Health Status, 2015

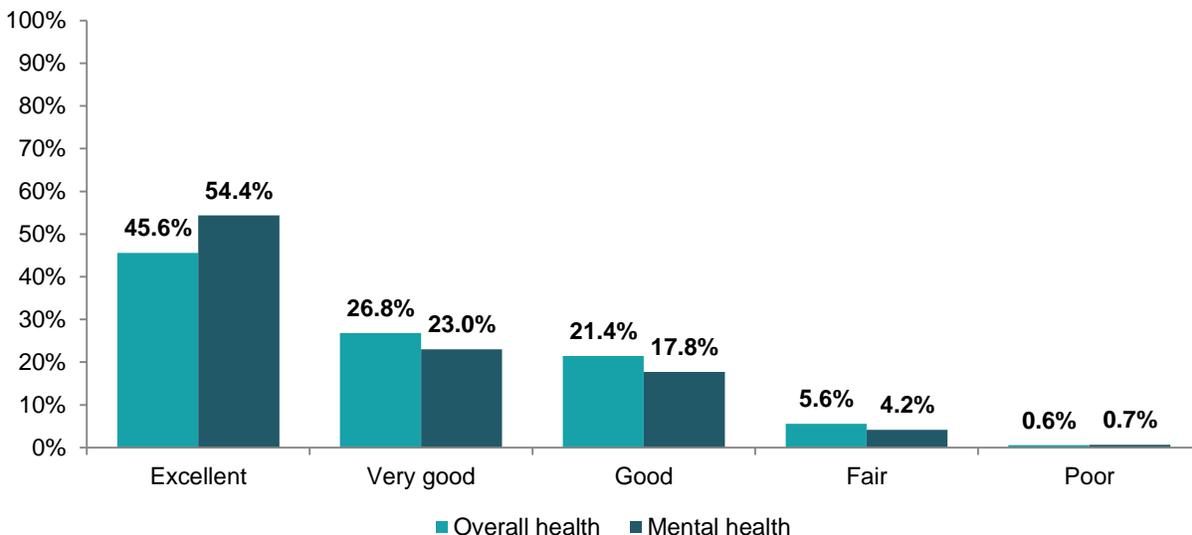


Figure 9. CHIP – Caregiver-Reported Special Health Care Needs, 2015

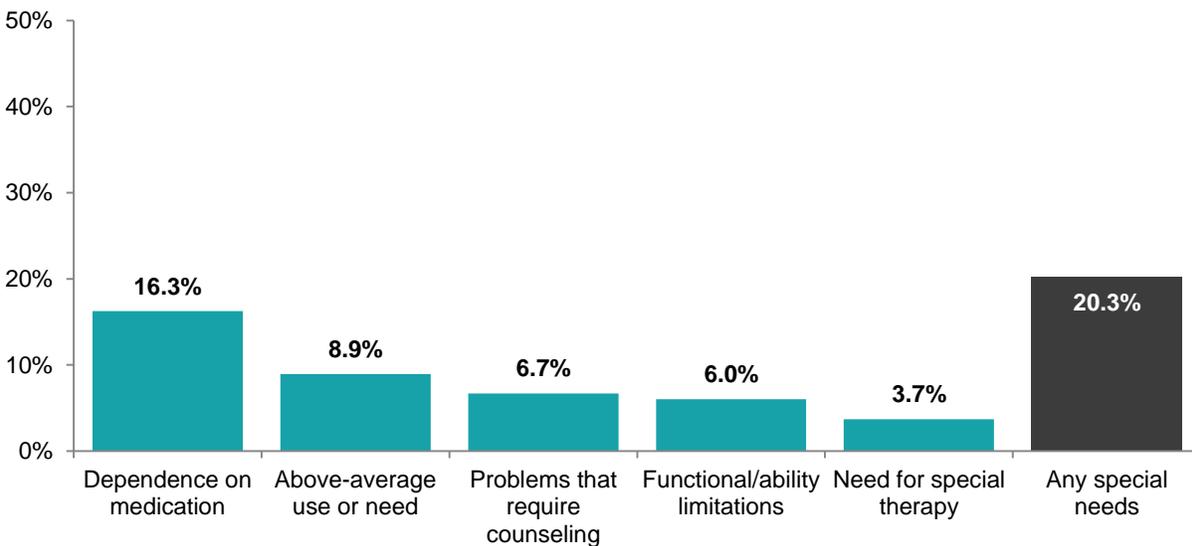
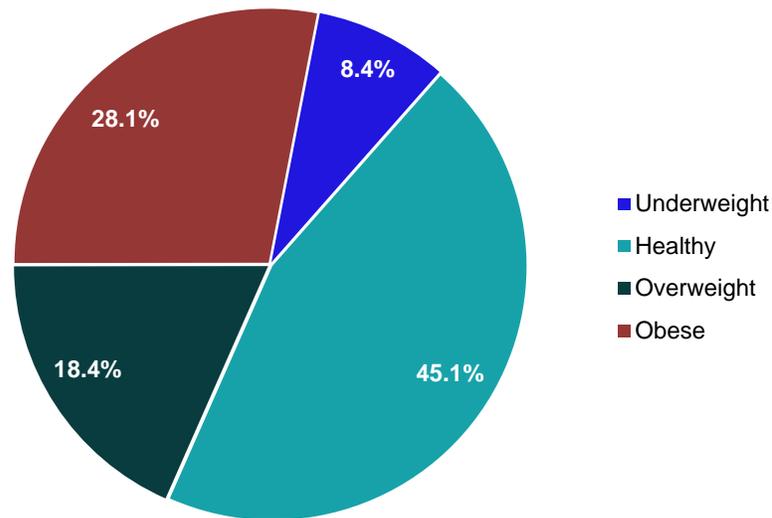


Figure 10. CHIP – Body Mass Index Classification Based on Caregiver Report of Height and Weight, 2015



3.3. STAR+PLUS Program

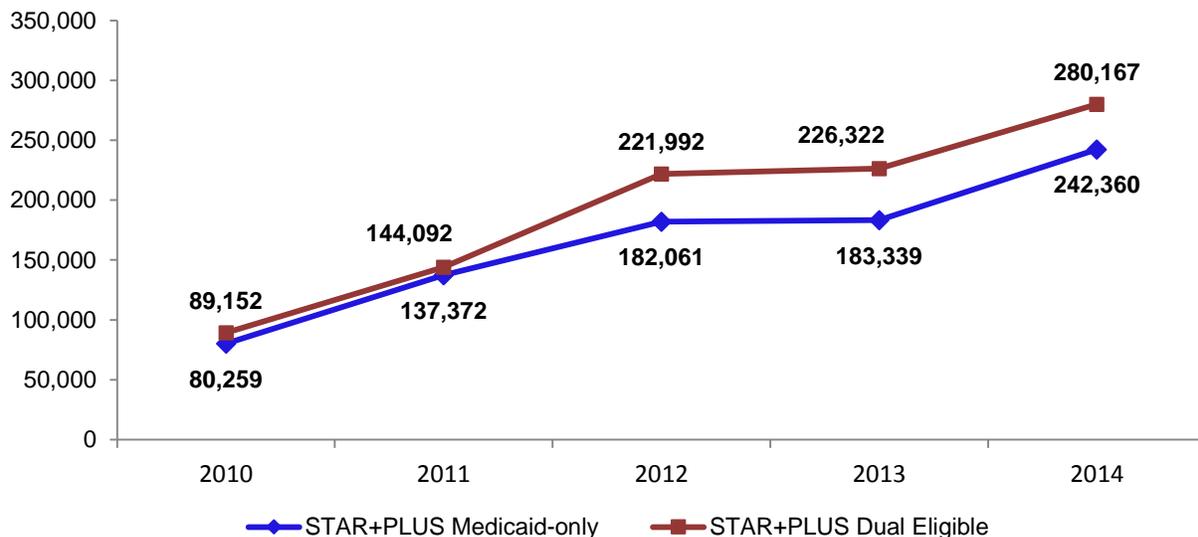
STAR+PLUS became a statewide program and added additional populations and services in 2014. This led to increased enrollment (by approximately 113,000 members) in the STAR+PLUS program (**Figure 11**) to 522,527 in December 2014. Slightly more than half of all STAR+PLUS members (53.6 percent) were dually eligible for both Medicaid and Medicare. Among members eligible for Medicaid alone:

- 51.0 percent were female and 49.0 percent were male.
- 22.3 percent were Black, non-Hispanic, 25.6 percent were Hispanic, and 26.2 percent were White, non-Hispanic.
- The mean age was 42.5 years (standard deviation 15.8 years).

Among members dually eligible for Medicaid and Medicare:

- 64.1 percent were female and 35.9 percent were male.
- The mean age was 66.0 years (standard deviation 16.5 years).

Figure 11. STAR+PLUS – Program Enrollment, 2010-2014



The external quality review organization collected health status of adult STAR+PLUS members through a member survey in 2014. **Figures 12** and **13** show results for overall and mental health status and body mass index classification among STAR+PLUS Medicaid-only members. The survey revealed:

- Nearly two-thirds of STAR+PLUS Medicaid-only members are in “fair” or “poor” overall health (62.0 percent) and nearly half are in “fair” or “poor” mental health (47.8 percent).
- Nearly three-quarters of STAR+PLUS Medicaid-only members are overweight (24.2 percent) or obese (50.5 percent).

Figure 12. STAR+PLUS (Medicaid-only) – Member-reported Health Status, 2014

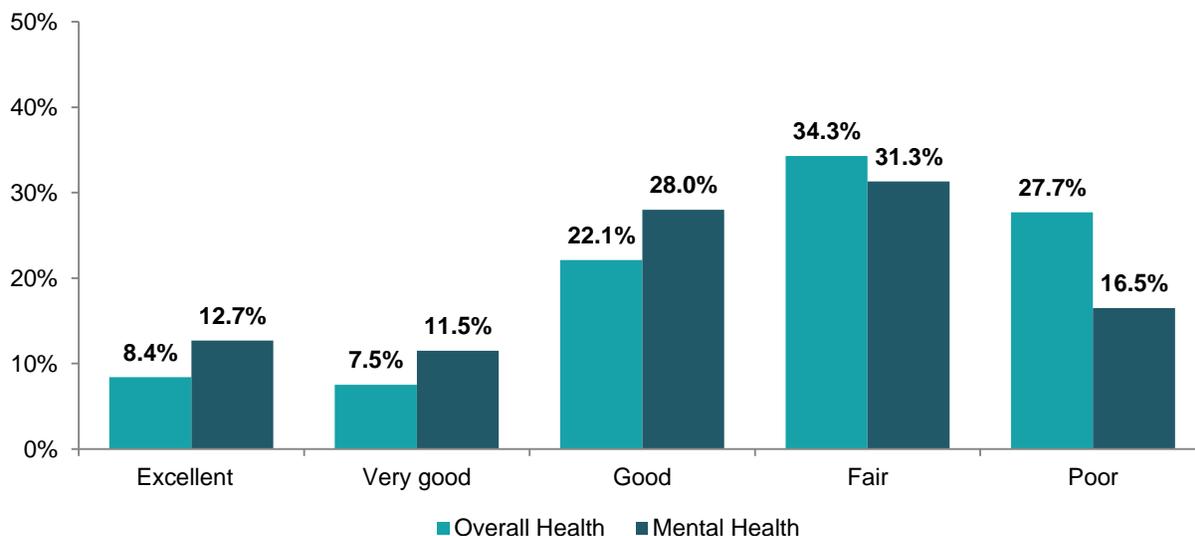


Figure 13. STAR+PLUS (Medicaid-only) – BMI Classification Based on Member Report of Height and Weight, 2014

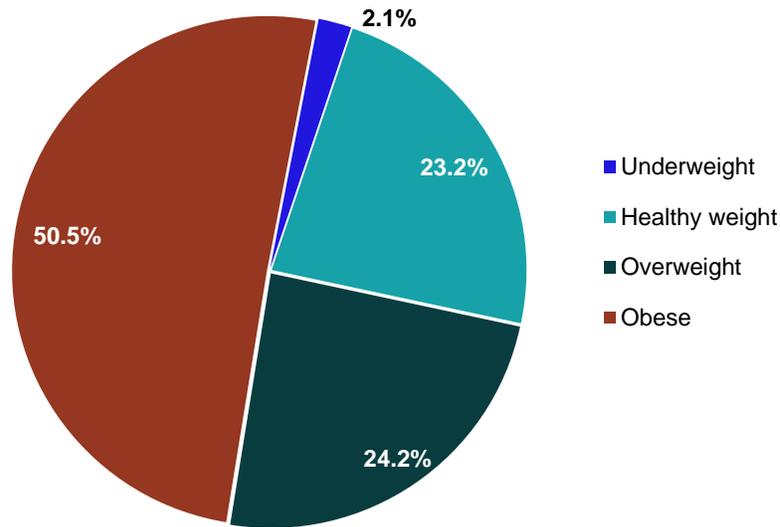
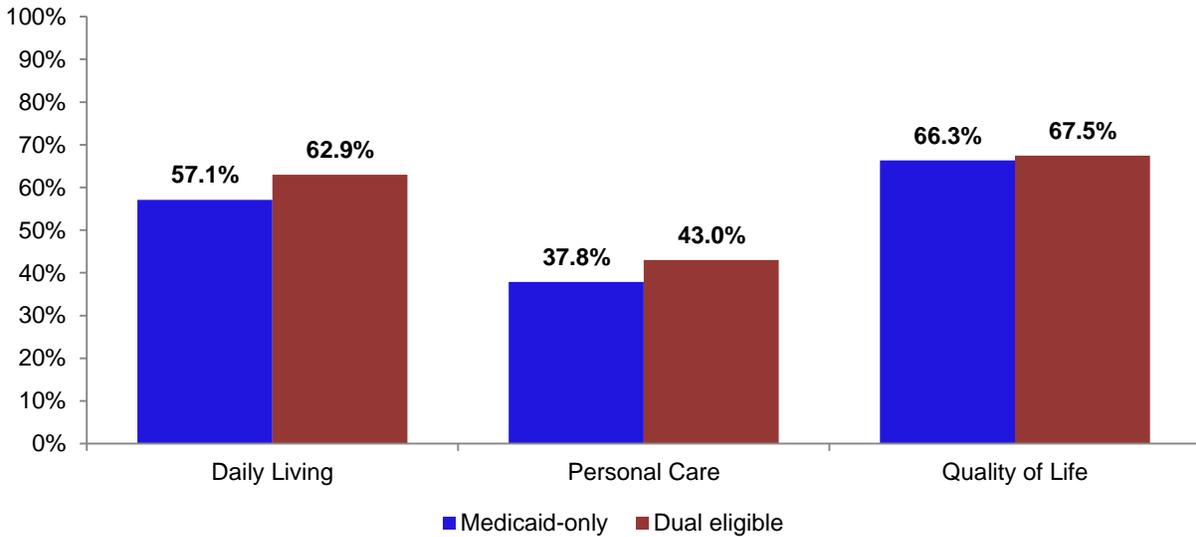


Figure 14 shows the percentages of members in STAR+PLUS who needed help with routine activities of daily living (such as household chores and shopping) and personal care needs (such as eating, dressing, and getting around the house), as well as the percentage who reported health-related limitations to quality of life (physical, functional, psychological, and social well-being²¹). The survey revealed:

- 57.1 percent of Medicaid-only and 62.9 percent of dual-eligible members need help with routine activities of daily living.
- 37.8 percent of Medicaid-only and 43.0 percent of dual-eligible members need help with personal care needs.
- 66.3 percent of Medicaid-only and 67.5 percent of dual-eligible members have a condition that interferes with their independence, participation in the community, or quality of life.

Figure 14. STAR+PLUS – Health-Related Needs and Quality of Life Impairment, 2014

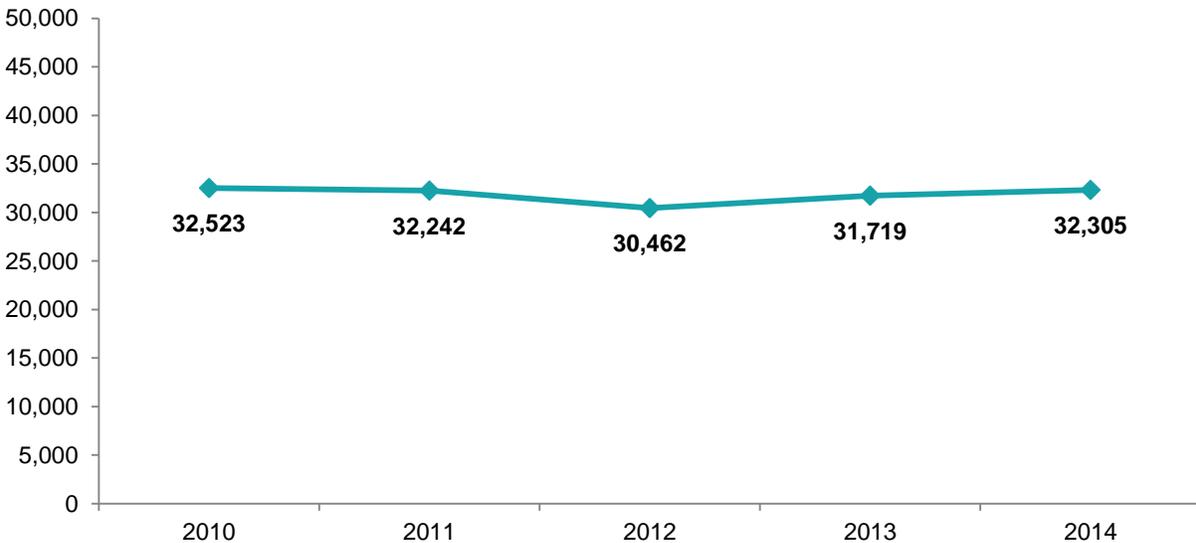


3.4. STAR Health

Enrollment in the Texas STAR Health program has remained fairly steady since its inception in 2008 (**Figure 15**). In December of 2014, STAR Health enrollment included a total of 32,305 children, adolescents, and young adults in foster care. Among these members:

- 48.3 percent were female and 51.7 percent were male.
- 23.3 percent were Black, non-Hispanic, 42.6 percent were Hispanic, and 30.7 percent were White, non-Hispanic.
- The mean age was 8.0 years (standard deviation 6.0 years).

Figure 15. STAR Health – Program Enrollment, 2010-2014



The external quality review organization collected information about the health status of child and adolescent STAR Health members through a caregiver survey in 2014. **Figures 16 through 18** show results for overall and mental health status, the percentage of children and adolescents with each of five different types of special health care needs, and body mass index classification. The caregiver survey revealed:

- Nearly three-quarters of child and adolescent STAR Health members are in “excellent” or “very good” overall health (74 percent), and slightly more than half are in “excellent” or “very good” mental health (52 percent).
- Half of child and adolescent STAR Health members have a special health care need (51 percent) for a medical, behavioral, or other health condition that is expected to last for at least 12 months. The most common types of special health care need were need for counseling (36 percent) and dependence on prescription medications (35 percent). Children in foster care are considered a vulnerable population due to their complex health needs usually resulting from abuse or neglect.^{22,23} Twenty-four percent of this population needed or used more medical care, mental health services, or education services than a typical child of the same age.
- Nearly one out of every three children and adolescents in STAR Health are obese (30.2 percent).

Figure 16. STAR Health – Caregiver-Reported Health Status, 2014

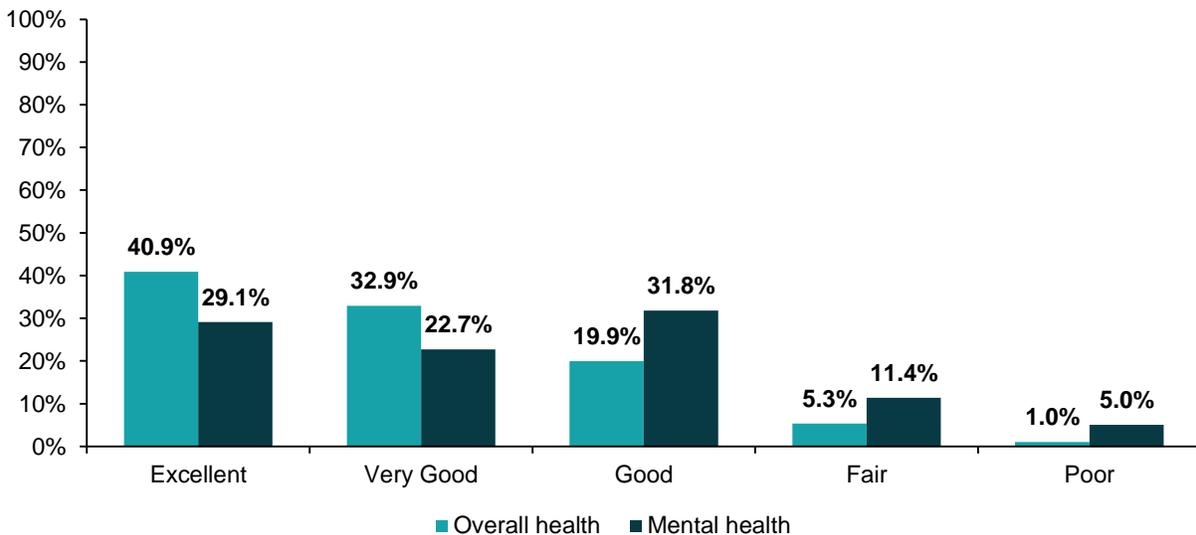


Figure 17. STAR Health – Caregiver-Reported Special Health Care Needs, 2014

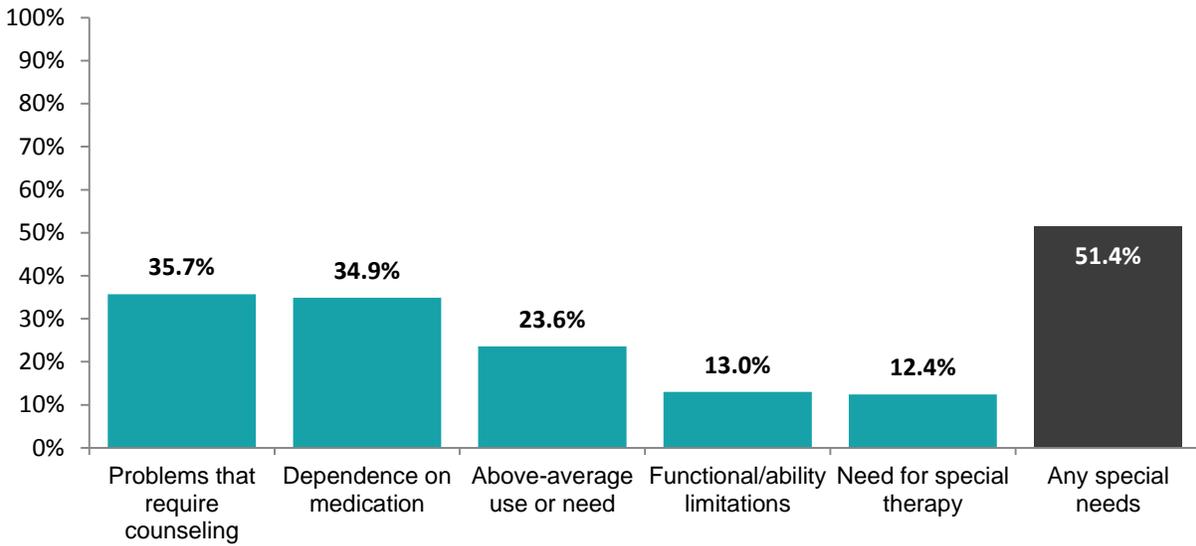
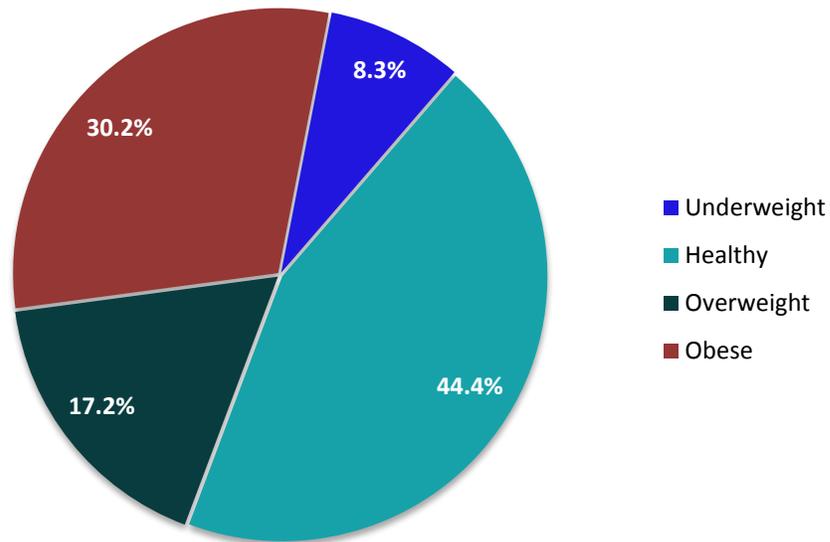


Figure 18. STAR Health – BMI Classification Based on Caregiver Report of Height and Weight, 2014



Managed Care Organization Structure and Process

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 managed care organizations. These data are necessary for: (1) implementing timely and comprehensive care coordination based on member diagnostic and healthcare use profiles; and (2) calculating and validating numerous quality-of-care measures derived from administrative data.

As part of its mandatory and optional review activities, the external quality review organization annually conducts:

- Administrative interviews to assess different components of managed care organization structure and process, including data systems capabilities and processes and disease management programs.
- Data certification to assess the completeness and validity of claims and encounter data maintained by Texas Medicaid and CHIP managed care organizations.
- Evaluations of managed care organization quality improvement programs.
- Evaluations of managed care organization performance improvement projects.

In addition, every two years the external quality review organization conducts encounter data validation studies, in which elements of managed care organization claims and encounter data are validated using provider health records.²⁴ An addendum to this report will include evaluations of performance improvement projects as well as encounter data validation studies for Medicaid Dental and CHIP Dental.

This section presents data certification findings on key data elements in claims and encounter data, select findings from administrative interviews with each health plan, disease management programs, and quality assessment and performance improvement program (QAPI) evaluations.

4.1. Data Certification

The external quality review organization annually certifies key data elements in claims and encounter data that the Texas Medicaid and CHIP managed care organizations maintain, and provides separate data certification reports for each Texas Medicaid program and CHIP. Annual data certification includes four types of analyses: (1) volume analysis based on service category; (2) data validity and completeness analysis; (3) consistency analysis between encounter data and financial summary reports; 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. These include place of service code, admission date, discharge status, discharge date, primary diagnosis code, National Provider Identifier, provider taxonomy code, procedure code, and present-on-admission code.

The external quality review organization used two documents to develop procedures for certifying the Texas Medicaid and CHIP encounter data: (1) Texas Government Code

§533.0131, *Use of Encounter Data in Determining Premium Payment Rates*; and (2) Department of Health and Human Services, CMS – *Validation of Encounter Data Reported by the MCO*.^{25,26} Data certification is conducted separately for STAR, STAR+PLUS, STAR Health, CHIP, CHIP Dental, Medicaid Dental, CHIP Perinate, and NorthSTAR. For managed care programs served by multiple managed care organizations (e.g., STAR, CHIP, and STAR+PLUS), analyses are conducted at the plan code level (managed care organization and service area combined).

Volume analysis based on service category

For each month of fiscal year 2014 (in each program and plan code), the analysis assessed the number of records for facility, physician, dental (where present), and total services. The monthly totals were examined to determine the extent to which the number of records for each of the service categories and the total number of records varied from month to month. The results were found to be consistent for all plan codes based on overall volumes.

Data validity and completeness analysis

The external quality review organization examined the presence and validity of critical data elements in the claims extracts submitted by the managed care organizations for fiscal year 2014. Data validity standards were derived from accepted lists of valid information taken from a variety of sources, including data dictionaries supplied by HHSC, Current Procedural Terminology (CPT) manuals, and *International Classification of Diseases*, 9th Revision (ICD-9-CM) manuals.^{27,28} The external quality review organization performed analysis on the final image of all fiscal year 2014 claims received from Texas Medicaid and Healthcare Partnership through December 2014. All critical fields were present in the data as specified in the CMS Data Validation Protocol.

Consistency analysis between encounter data and financial summary reports provided by the managed care organizations

The external quality review organization compared payment dollars documented in the fiscal year 2014 claims data to payment dollars in the managed care organizations' self-reported financial summary reports provided by HHSC. The analysis found that consistency between encounter data and financial summary reports met the standard set by HHSC, in which the claims data and the financial summary report 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 external quality review organization's efforts to calculate HEDIS[®] and other administrative measures and to obtain medical records for the purposes of validating encounter data and calculating hybrid HEDIS[®] measures. For fiscal year 2014, a valid National Provider Identifier (NPI) was found in almost all encounters. When locating records, and particularly for attributing services to providers with identified specialties (e.g., for HEDIS[®] measure calculation), it is important to have the individual service provider

identified on the encounter, with the taxonomy (specialty) code included. The external quality review organization assessed the quality of the provider identification information present in the encounter data in two ways: (1) presence of a primary NPI identified as an individual (not an organization) in the provider table; and (2) taxonomy for the primary NPI on professional encounter records. Primary NPI was the first filled NPI field among rendering, pay to, and billing NPI fields. Professional encounters had transaction type 'P' and included a CPT code for evaluation and management services, excluding non-office and non-hospital facilities, and non-face-to-face services.

Overall, the primary NPI on over 90 percent of these encounters was an individual. However, a few managed care organizations had organizational NPI codes as primary NPIs far more often than other health plans. In particular, primary NPI was not an individual in nearly three quarters of professional claims for CHRISTUS (75.1 percent in STAR and 70.1 percent in CHIP). For other health plans, the percent professional claims with individuals identified by NPI ranged from 80 percent to 99 percent. When the primary provider ID is for a group and not the individual providing the service, the taxonomy reported or associated with the ID may not reflect the qualifications required for calculating quality measures that are defined with provider constraints.

If taxonomy information was absent more than five percent of the time, the external quality review organization considered this an area of concern. Overall, 70 percent of professional encounters in STAR, 75 percent in CHIP, and 75 percent in STAR+PLUS were identified with an individual NPI and included the taxonomy.

4.2. Administrative Interviews

CMS protocols for external quality review of Medicaid and CHIP managed care include the use of administrative interviews to assess health plan compliance with relevant state and federal regulations, including 42 CFR §438 *Managed Care*, 42 CFR §457 *State Children's Health Insurance Programs (SCHIPs)*, Texas Administrative Code Title 28, and Texas Insurance Code Title 14. The external quality review organization utilizes a web-based tool that is completed by each health plan annually.

The external quality review organization conducted Managed Care Organization Administrative Interviews in 2015 addressing the following areas:

- Organizational structure
- Member enrollment and disenrollment
- Children's programs and preventive care
- Care coordination and disease management programs
- Member services
- Member complaints and appeals
- Provider network and reimbursement
- Authorizations and utilization management

- Quality assessment and performance improvement
- Delegated entities
- Information systems
- Data acquisition

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

After completion of the web-based administrative interview tool, the external quality review organization conducted follow-up teleconferences and site visits with the managed care organizations to address pertinent information related to quality and compliance. The external quality review organization conducted administrative interview (AI) teleconferences with sixteen of the health plans and site visits with the remaining six health plans. The external quality review organization, working with HHSC, selected health plans for site visits based on two criteria: (1) the health plan had not had a site visit in the previous two years, and (2) the health plan encountered some of the greatest barriers or successes identified in the planning of the 2014 collaborative performance improvement projects (PIP). The site visits and teleconferences supplement the administrative interview online tool that all plans complete in the spring. The site visits and teleconferences focused on three topic areas: best practices, provider incentives, and network adequacy.

4.2.1. Disease Management Programs

HHSC requires that all managed care organizations participating in STAR, STAR+PLUS, CHIP, and STAR Health provide disease management services covering asthma and diabetes.²⁹ In addition to asthma and diabetes, HHSC requires managed care organizations participating in STAR+PLUS to offer disease management for chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and coronary artery disease (CAD). Finally, all managed care organizations are required by HHSC to provide disease management programs for other chronic diseases based upon an evaluation of disease prevalence within each managed care organization's membership.³⁰ In calendar year 2014, these included programs for depression, ADHD, other mental and behavioral health, high-risk perinatal, HIV/AIDS, hypertension, oncology, obesity, and general disease management.

This section presents findings from the calendar year 2014 Managed Care Organization Administrative Interview on the structure and practice of disease management and health promotion programs operating in Texas Medicaid and CHIP managed care organizations, focusing on programs that are required by the state.

Tables 5, 6, and 7 show rates of member participation in select disease management programs in STAR, CHIP, and STAR+PLUS, respectively, in calendar year 2014. Active members are defined as members (or their representatives) who received one or more telephonic or face-to-face encounters with disease management staff. For disease management programs not active in all health plans in a program, eligible and active members include only members in participating health plans. Fewer than one in five eligible members participated in asthma

disease management in STAR (17.1 percent) or CHIP (12.1 percent). Disease management participation rates were higher in STAR+PLUS, for both asthma (68.0 percent) and diabetes (68.8 percent).

Table 5. STAR – Member Participation in Disease Management Programs, 2014

	Members Eligible	Active Members	Participation Rate
General Disease Management	30,975	25,641	82.8%
Depression	3,416	2,231	65.3%
High-Risk OB	22,578	7,862	34.8%
Asthma	338,871	57,824	17.1%
Mental and Behavioral Health	31,605	3,464	11.0%
Diabetes	230,156	6,437	2.8%

Table 6. CHIP – Member Participation in Disease Management Programs, 2014

	Members Eligible	Active Members	Participation Rate
General Disease Management	2,442	1,745	71.5%
Depression	639	170	26.6%
Asthma	43,745	5,284	12.1%
High-Risk OB	6,644	614	9.2%
Mental and Behavioral Health	28,930	2,000	6.9%
Diabetes	27,335	379	1.4%

Table 7. STAR+PLUS – Member Participation in Disease Management Programs, 2014

	Members Eligible	Active Members	Participation Rate
Chronic obstructive pulmonary disease	3,013	2,506	83.2%
Coronary Artery Disease	2,586	2,034	78.7%
Congestive Heart Failure	2,610	1,886	72.3%
Diabetes	21,227	14,613	68.8%
Asthma	6,617	4,500	68.0%
Depression	3,010	1,705	56.6%
HIV / AIDS	1,246	649	52.1%
Mental and Behavioral Health	10,214	4,871	47.7%
General Disease Management	16,679	3,726	22.3%

4.3. Quality Improvement

The external quality review organization annually reviews the Texas Medicaid managed care organization quality improvement programs to evaluate aspects of structure and process that contribute to the success of these programs, and to assess compliance with relevant policies specified in the Code of Federal Regulations (CFR). This section discusses the external quality review organization's evaluation of calendar year 2014 managed care organization quality assessment and performance improvement programs as they pertain to 42 CFR §438.358 *Activities Related to External Quality Review* and 42 CFR §438.364 *External Quality Review Results*.

4.3.1. Quality Assessment and Performance Improvement Program Evaluations

Evaluations

The Quality Assessment and Performance Improvement Program Evaluations follow CMS guidelines to evaluate both quality assurance and quality improvement practices of the Texas Medicaid managed care organizations. CMS specifies five essential elements of a quality assessment and performance improvement program: (1) design and scope, (2) governance and leadership, (3) feedback, data systems, and monitoring, (4) performance improvement projects, and (5) systematic analysis.³¹ The external quality review organization Quality Assessment and Performance Improvement Program Evaluation reviews the first three elements and partially reviews the fifth element. Results of the annual Performance Improvement Project Evaluation addressing the fourth and fifth elements will be reported in an addendum to this report.

Using documentation submitted by the managed care organizations, the Quality Assessment and Performance Improvement Program Evaluations review the managed care organizations' performance improvement structure and their assessment of the effectiveness of their quality assessment and performance improvement programs. This evaluation captures the structure and process of the quality improvement program through review and scoring of the following sections:

- *Documentation* of the managed care organization's work plan, quality improvement organizational chart, performance improvement projects, and completed quality assessment and performance improvement programs evaluation (maximum 3.75 points).
- *Role of the Governing Body*, covering the level and type of governance and leadership within the organization (maximum 10 points).
- *Structure of Quality Improvement Committee(s)*, including the role, structure, and function of the quality improvement committee(s), and level of provider and member representative involvement (maximum 3.75 points).
- *Identification of Adequate Resources*, including human and material resources available for the quality assessment and performance improvement program (maximum 10 points).
- *Identification of Improvement Opportunities*, including actions taken to effect improvement at the system, process, and outcome levels (maximum 10 points).

- *Program Description*, including the managed care organization's statement of purpose, scope, goals and objectives, organization-wide communication of results, methodology, and monitoring and evaluation of progress toward accomplishing goals and objectives (maximum 10 points).
- *Assessment of Overall Quality Assessment and Performance Improvement Program Effectiveness*, including the method by which managed care organizations address barriers to implementation, the factors of success, and program effectiveness (maximum 3.75 points).
- *Clinical Practice Guidelines*, including a review of current clinical practice guidelines to ensure they are evidence-based, relevant to member needs, and supportive of care of members and services for members (maximum 3.75 points).
- *Availability and Accessibility Indicators*, including results of managed care organization monitoring of member access to care indicators, goals for all indicators, the managed care organization's actions to improve rates of accessibility and availability of care for members, and the effectiveness of actions taken (maximum 10 points).
- *Clinical Quality Indicators*, including results of managed care organization monitoring of clinical indicators, goals for all indicators, the managed care organization's actions to improve rates of clinical indicators, and the effectiveness of actions taken (maximum 10 points).
- *Service Quality Indicators*, including results of managed care organization monitoring of service indicators, goals for all indicators, the managed care organization's actions to improve rates of service indicators, and the effectiveness of actions taken (maximum 10 points).
- *Credentialing/Re-credentialing*, summarizing the number of providers and facilities credentialed or re-credentialed, the number who requested or were denied credentialing, reasons for denials, the number who were reduced, suspended, or had privileges terminated during calendar year 2014, and the reasons for these reductions, suspensions, or terminations (maximum 3.75 points).
- *Delegation of Quality Assessment and Performance Improvement Program Activities*, including procedures for monitoring and evaluating delegated functions, results of evaluation of delegated activities, and use of the results for quality improvement (maximum 3.75 points).
- *Corrective Action Plans*, including any corrective actions required following a Texas Department of Insurance audit and the managed care organization actions taken (maximum 3.75 points).
- *Previous Year's Recommendations*, including a review of whether and how the managed care organization addressed the previous year's recommendations (maximum of 3.75 points).

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 or not the managed care organization satisfied the requirements of a strong, comprehensive quality improvement program and complied with specific CFR policies.^{32,33}

Scoring Methodology

The scoring system rates each managed care organization based on its Quality Assessment and Performance Improvement (QAPI) summary report on a scale of 0-100. The Quality Assessment and Performance Improvement Program Evaluation includes a total of 15 activities. After the external quality review organization calculated the scores for each activity, the scores were weighted to assign more weight to those activities that represent the five essential components of a successful quality improvement program, as described above. Excluding Element 4 (performance improvement projects), which is evaluated separately, the external quality review organization applied more weight toward the following activities, together representing 70 percent of the score; each of these activities contributed 10 percent of the final score.

- A1: Role of Governing Body (CMS Element 2)
- A3: Adequate Resources (CMS Element 2)
- A4: Improvement Opportunities (CMS Elements 3 and 5)
- B1: Program Description (CMS Elements 1 and 3)
- B4: Availability and Access to Care Monitoring and Results (CMS Elements 3 and 5)
- B5a: Clinical Indicator Monitoring (CMS Elements 3 and 5)
- B5b: Service Indicator Monitoring (CMS Elements 3 and 5)

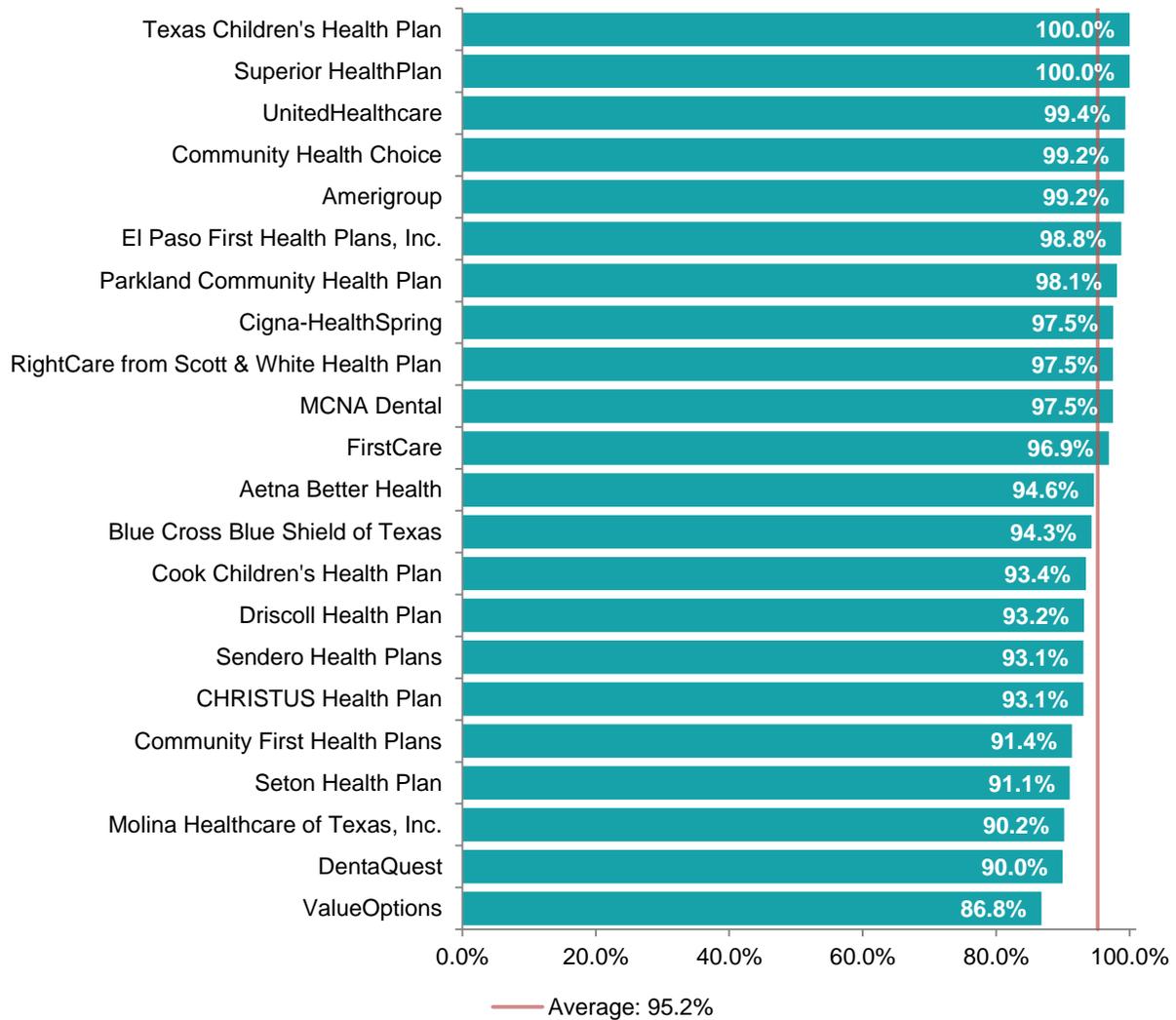
The remaining 8 activities accounting for 30 percent of the overall score are also important components of the quality improvement program. These activities capture the health plan's compliance with CFR policies or support the seven representative activities of the five essential elements. The remaining activities include:

- Required Documentation
- A2: Structure of Quality Improvement Committee(s)
- B2: Overall Effectiveness
- B3: Clinical Practice Guidelines
- B6: Credentialing and Re-credentialing
- B7: Delegation of Quality Assessment and Performance Improvement Program Activities
- B8: Corrective Action Plans
- B9: Previous Year's Recommendations

The 30 points allotted towards these activities are divided evenly among all applicable activities. For any activity that did not apply to a plan, the external quality review organization scored the activity as N/A and redistributed the points equally to all remaining activities. Overall, the final weighted scores allow for a more accurate analysis of the managed care organizations' quality

improvement programs. The results presented below are based on the Quality Assessment and Performance Improvement Program Evaluations reporting on data elements and occurrences during the measurement period of January 1, 2014, through December 31, 2014.

Figure 19. Overall 2015 Quality Assessment and Performance Improvement Scores by Health Plan, Measurement Year 2014ⁱ



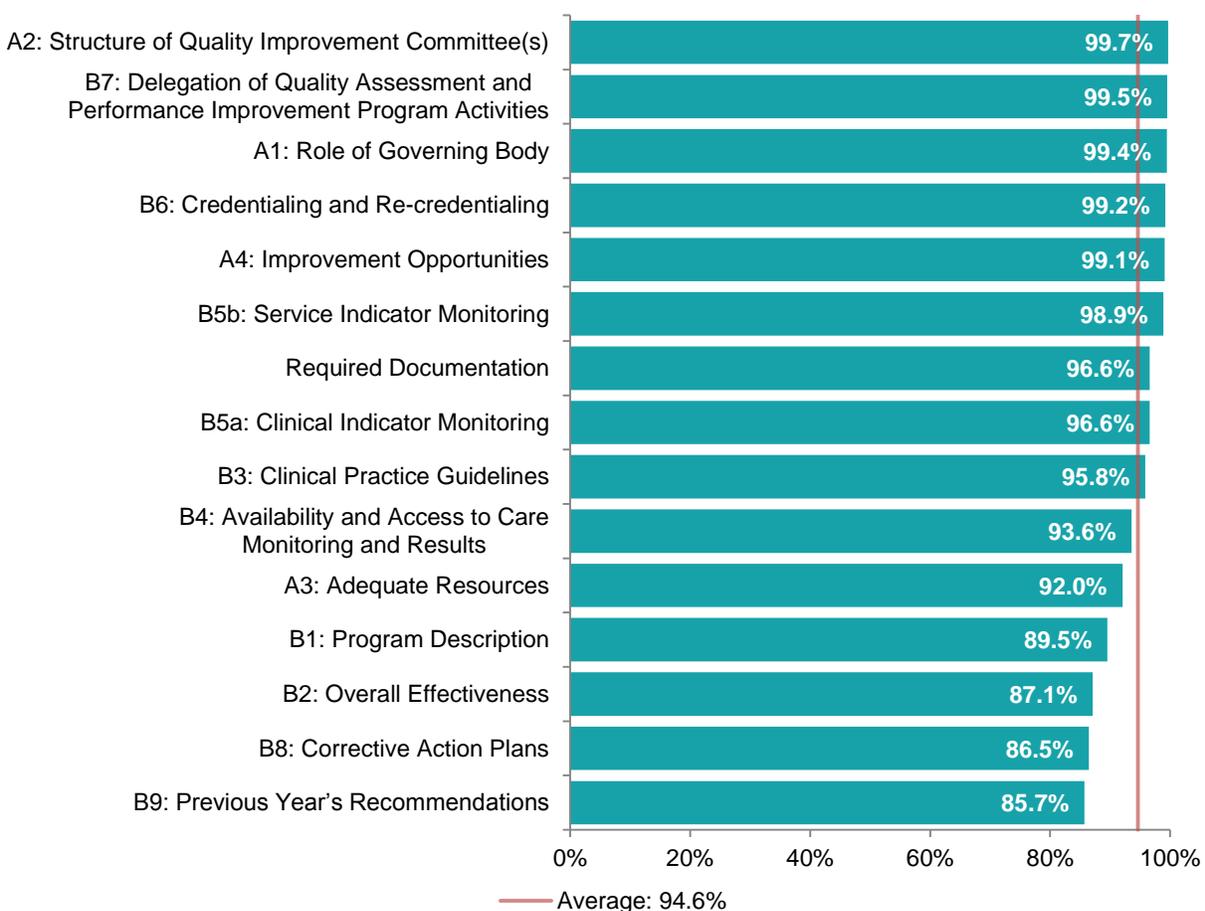
ⁱ Higher values indicate stronger performance.

Evaluation Results

Figure 19 shows the overall score for each health plan, calculated as the total weighted percentage of components for which the organization was compliant. The average score of all health plans was 95.2 percent. Eleven of 22 managed care organizations or dental plans scored above the average score. All plans, with the exception of ValueOptions, scored above 90 percent.

The external quality review organization also evaluated the health plans' Quality Assessment and Performance Improvement program summary reports by section to identify areas of high performance and opportunities for improvement for individual health plans and across all health plans combined.

Figure 20. Overall 2015 Quality Assessment and Performance Improvement Program Scores by Activity, Measurement Year 2014ⁱ



ⁱ Higher values indicate stronger performance.

Figure 20 presents the average Quality Assessment and Performance Improvement program summary report activity score, calculated as the average weighted score across all managed care organizations for each activity. Overall, the managed care organizations scored highest in activities related to *A2: Structure of Quality Improvement Committee(s)* and *B7: Delegation of Quality Assessment and Performance Improvement Program Activities*, with average scores of 99.7 percent and 99.5 percent, respectively. All average scores exceeded 85 percent, with *B8: Corrective Action Plans* and *B9: Previous Year's Recommendations* showing the most potential for improvement at 86.5 percent and 85.7 percent, respectively. The activity *B9: Previous Year's Recommendations* was not fully applied to the 2014 Quality Assessment and Performance Improvement programs due to limited time for implementation between assessments; these activities will be evaluated in calendar year 2016.

A1: Role of Governing Body

A clear chain of accountability is essential to fostering long-term strategic planning for continuous quality assessment and performance improvement. Performance was strong on governance and leadership activities. All health plans had a governing body that either itself provided direct oversight of the quality assessment and performance improvement program or formally delegated accountability). Each governing body regularly received and reviewed reports of quality, and all but one health plan were fully compliant with taking and documenting actions to modify quality improvement plans as needed. This activity contributes to governance and leadership (CMS essential element 2). The statewide average score on this activity was 99.4 percent.

A3: Adequate Resources

Targeted deployment of human and material resources is essential to take specific action on well-defined aspects or measures of quality, and documentation of available resources is critical to efficient deployment. All health plans were fully or partially compliant with documentation of adequate human and material resources). Six health plans did not provide sufficient detail to demonstrate adequate human resources to operate and oversee the quality improvement program, and the external quality review organization made recommendations for improvement. This activity contributes to governance and leadership (CMS essential element 2). The statewide average score on this activity was 92.0 percent.

A4: Improvement Opportunities

Systematic assessment and review of organizational structure and activities is necessary to identify opportunities for improvement and identify root causes of systemic issues. All health plans were fully or partially compliant on the components of improvement opportunities. All health plans described non-clinical organizational improvements and discussed measurements and results related to important systems, processes, and outcomes. All but one health plan described clinical performance improvement that affected patient care, treatment, or services and discussed internal and external summary measurements. This activity contributes to feedback, data systems, and monitoring (CMS essential element 3) and systematic analysis (CMS essential element 5). The statewide average score on this activity was 99.1 percent.

B1: Program Description

Evaluation of ongoing comprehensive quality assessment and performance improvement programs includes components addressing well-defined goals and objectives. These goals and objectives illustrate the health plans' actions to achieve the mission and philosophy of the quality improvement program. Goals should discuss long-term outcomes relating to the health plan's philosophy, purpose, or desired outcome. Objectives should be specific and action-oriented in describing how these goals will be accomplished, and written in measurable and observable terms. Program descriptions, including a statement of purpose and processes for monitoring progress toward quality goals, were largely adequate, with one exception. Six health plans had specific, action-oriented quality assessment and performance improvement objectives written in measurable and observable terms; 14 health plans were partially compliant on this component; two health plans provided objectives that were not specific and actionable. All health plans described the methodology utilized for actionable quality improvement (e.g., Plan-Do-Study-Act); the external quality review organization made recommendations to two health plans. This activity contributes to design and scope (CMS essential element 1) and feedback, data systems, and monitoring (CMS essential element 3). The statewide average score on this activity was 89.5 percent.

The governing body for the health plans' quality assessment and performance improvement programs sets goals to meet external benchmarks or internal targets for each indicator and implements interventions to achieve these targets. Regular monitoring and evaluation of specific indicators of access, outcomes, and service quality is essential to identify opportunities for improvement and to measure effectiveness of interventions. Future actions spread elements of interventions identified as effective and address opportunities for improvement. Continuous improvement requires regular review of indicator targets.

B4: Access to Care and Availability Indicator Monitoring

Access and availability indicators are measures of health plan ability to match need for care with provision of care, such as timeliness in receiving appropriate care, use of preventive services, and network adequacy. All health plans fully or partially met evaluation standards on the components of availability and access to care monitoring and results. Fifteen health plans provided goals that met evaluation standards for all access to care indicators, provided access indicator monitoring results, described actions or interventions taken for all access indicators, and evaluated the effectiveness of these actions. Twenty health plans described additional or future actions in detail, and the external quality review organization made recommendations to two health plans for planning and describing future actions. This activity contributes to feedback, data systems, and monitoring (CMS essential element 3) and systematic analysis (CMS essential element 5). The statewide average score on this activity was 93.6 percent.

B5a: Clinical Indicator Monitoring

Clinical indicator examples include measures of health care processes and outcomes and monitoring (e.g., HEDIS® measures or 3M™ Potentially Preventable Events) and measures of condition management and monitoring. All health plans were fully or partially compliant on the

components of clinical indicator monitoring. Eighteen health plans provided goals that met evaluation standards for all clinical indicators, provided clinical indicator monitoring results, described actions or interventions taken for all clinical indicators, and evaluated the effectiveness of these actions. Twenty-one health plans described additional or future actions in detail, and the external quality review organization recommended that one plan devise indicator-specific future actions accounting for individual performance. This activity contributes to feedback, data systems, and monitoring (CMS essential element 3) and systematic analysis (CMS essential element 5). The statewide average score on this activity was 96.6 percent.

B5b: Service Indicator Monitoring

Service indicators focus on tracking interactions between the health plan and members, caregivers, and providers, such as timely resolution of member and provider complaints and appeals, member and caregiver surveys, and provider surveys. All health plans were fully or partially compliant on the components of service indicator monitoring. Nineteen health plans provided goals that met evaluation standards for all service indicators, provided service indicator monitoring results, described actions or interventions taken for all service indicators, and evaluated the effectiveness of these actions. All twenty-two health plans described additional or future actions in detail. This activity contributes to feedback, data systems, and monitoring (CMS essential element 3) and systematic analysis (CMS essential element 5). The statewide average score on this activity was 98.9 percent.

Quality Assessment and Performance Improvement Recommendations

In the 2015 Quality Assessment and Performance Improvement Program Evaluations, the external quality review organization made a number of recommendations to each health plan to strengthen quality improvement practices based on activities in 2014. **Table 8** provides example recommendations for each activity. In particular, the external quality review organization recommended that health plans: develop long-term goals for their quality improvement programs; evaluate and report on the effectiveness of access to care, clinical indicator, and service indicator monitoring; and evaluate and report on the effectiveness of the overall program.

Table 8. Example Recommendations for Quality Assessment and Performance Improvement Programs in STAR, CHIP, STAR+PLUS, and STAR Health, 2015

Activity	Example Recommendation
Required Documentation	Complete all sections of the QAPI Evaluation tool
Role of Governing Body	Describe actions taken by the governing body to modify the quality improvement program. Indicate if no actions taken.
Structure of Quality Improvement Committee(s)	Specify which committee members have clinical and non-clinical voting rights.
Adequate Resources	Provide greater detail about human resources available to operate and oversee the quality improvement program.
Opportunities for Improvement	Describe the process of how non-clinical improvements were identified.
Program Description	Develop long-term goals for overall quality improvement as well as improvement for particular measures.
Overall Effectiveness	Include an evaluation of the overall effectiveness of the quality assessment and performance improvement program.
Clinical Practice Guidelines	Detail how guidelines are relevant to member needs.
Access to Care Monitoring and Results	Evaluate and report the effectiveness of actions and provide future actions for all indicators.
Clinical Indicator Monitoring and Results	Include an analysis of the effectiveness of actions such as the percentage change in measurement from the previous year.
Service Indicator Monitoring	Report change in rates from the previous year.
Credentialing and Re-credentialing	Report number of facilities credentialed during the measurement period. Indicate if none.
Delegation of Activities	Describe identified improvements or corrective actions for all delegated functions as needed.
Corrective Action Plans	Provide the completion date or targeted date for completion.
Previous Year's Recommendations	Address all previous year's recommendations, describe how each was incorporated into the QAPI program, and describe what was done to meet the recommendation.

Quality-of-care Evaluation by Program

This section presents results from the external quality review organization's evaluations of Texas STAR, CHIP, STAR+PLUS, STAR Health, Medicaid Dental, and CHIP Dental programs. The evaluation includes administrative and hybrid measures of access, utilization, and effectiveness of care calculated using claims and encounter data for calendar year 2014, and survey measures of member and caregiver satisfaction with and experience of care calculated using surveys administered in 2014 and 2015. Comparisons with national benchmarks for HEDIS® and CAHPS® measures are made where appropriate to the program population.

Most findings in this section are descriptive and presented at the state level. The external quality review organization prepares detailed comparisons of performance among the Medicaid and CHIP managed care organizations for potentially preventable events, including admissions, readmissions within 30 days, emergency department visits, and complications. More in-depth results on performance measures at the health plan level are presented in the Managed Care Organization Profiles that accompany this report.

Numerous administrative, hybrid, and survey measures also serve as HHSC Performance Indicator Dashboard measures; the Dashboard is used to monitor performance at the program, health plan, and service area levels. Each year based on recommendations by the external quality review organization HHSC publishes standards for the Performance Indicator Dashboard measures for each program. Tables in this section include comparisons of statewide performance with the Dashboard standards for the appropriate comparison year. These standards are intended as reasonable goals for the health plans participating in each program.

5.1. Quality-of-care Evaluation Methods

5.1.1. Administrative and Hybrid Measures

The external quality review organization used three data sources to calculate administrative quality-of-care indicators: (1) member-level enrollment information; (2) member-level health care claims and encounter data; and (3) member-level pharmacy data. Additionally, medical records provided data for the hybrid measures. The enrollment files contain information about each member's age, sex, the health plan in which the member is enrolled, and the number of months the member has been enrolled. The member-level claims and encounter data contain CPT codes, ICD-9-CM codes, place-of-service codes, and other information necessary to calculate the quality-of-care indicators. The member-level pharmacy data contain information about filled prescriptions, including drug name, dose, date filled, number of days prescribed, and refill information.

Administrative and hybrid quality-of-care indicators in this report include: (1) HEDIS® 2015 measures, (2) AHRQ Pediatric Quality Indicators and Prevention Quality Indicators, and (3) 3M™ Health Information Systems measures of potentially preventable hospital admissions, readmissions within 30 days, emergency department visits, and complications.

HEDIS® 2015

The external quality review organization calculated rates for HEDIS® measures using NCQA-certified software. Results are based on administrative data only, with the exception of the hybrid HEDIS® measures, for which audited rates were provided by individual Medicaid and CHIP health plans. The statewide (program-level) rates reflect the total population in the program eligible for the administrative measures. The statewide rates for the hybrid measures are weighted averages based on the eligible population for each measure. Statewide rates are not available for certain hybrid measures where managed care organizations rotated measures (i.e., used prior-year results, following NCQA specifications).

Table 9 lists the HEDIS® hybrid measures calculated using calendar year 2014 data.

Table 9. HEDIS® Hybrid Measures, 2014

Measure	STAR	STAR+PLUS	CHIP
<i>Adult BMI Assessment</i>		✓	
<i>Adolescent Well-Care</i>	✓		✓
<i>Controlling High Blood Pressure (<140/90)</i>		✓	
<i>Comprehensive Diabetes Care, HbA1c Testing</i>	✓	✓	
<i>Comprehensive Diabetes Care, HbA1c Control (<8%)</i>	✓	✓	
<i>Childhood Immunization Status (Combination 4)</i>	✓		✓
<i>Prenatal and Postpartum Care, Timeliness of Prenatal Care</i>	✓		
<i>Prenatal and Postpartum Care, Postpartum Care</i>	✓		
<i>Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life</i>	✓		✓
<i>Weight Assessment and Counseling in Children</i>	✓		✓

Results for the HEDIS® measures calculated by the external quality review organization are compared to benchmark percentiles gathered and compiled by NCQA from Medicaid managed care plans nationally. These reported rates combine administrative and hybrid results, reflecting a mix of different methodologies. Limited information is available about the health and sociodemographic characteristics of members enrolled in Medicaid plans nationally. Submission of HEDIS® data to NCQA is a voluntary process; therefore, managed care organizations that submit HEDIS® data may not be fully representative of the industry. Health plans participating in NCQA HEDIS® reporting tend to be older, are more likely to be federally qualified, and are more likely to be affiliated with a national managed care company than the overall population of managed care organizations in the United States. NCQA calculates national means and percentiles for HEDIS® measures and licenses the resulting benchmark thresholds through the Quality Compass® database.ⁱ The NCQA Quality Compass database is a proprietary database and as such the benchmark threshold values cannot be publicly reported. The Quality Compass

ⁱ Quality Compass is a registered trademark of NCQA.

database includes benchmark thresholds for the 5th, 10th, 25th, 33rd, 50th, 66th, 75th, 90th, and 95th percentiles, but the number of benchmark thresholds used in this report has been reduced for clarity. Tables in this report presenting results on HEDIS[®] measures include a percentile rating comparing calendar year 2014 program-level rates with the NCQA national HEDIS[®] 2015 Medicaid percentiles. The rating system is as follows:

★★★★★ = 90th percentile and above

★★★★ = 66th to 89th percentile

★★★ = 33rd to 65th percentile

★★ = 10th to 32nd percentile

★ = Below 10th percentile

The percentile bands of this ratings system differ from previous annual reports; a change in star rating does not necessarily indicate a change in performance. This approach follows the scoring set forth by NCQA in their Health Insurance Plan Ratings Methodology, revised in July of 2015.³⁴ This ratings system was also used as the basis for the MCO Report Cards and the Executive Dashboard in 2015, aligning all measure summary reporting.

AHRQ Pediatric Quality Indicators and Prevention Quality Indicators

The external quality review organization used Pediatric Quality Indicators and Adult Prevention Quality Indicators, developed by AHRQ, to evaluate performance related to inpatient admissions for ambulatory care-sensitive conditions (ACSCs). The AHRQ considers ACSCs 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."³⁵ The specifications used to calculate rates for these measures come from AHRQ's Pediatric Quality Indicators (PDI) and Prevention Quality Indicators (PQI) versions 5.0. Area-based rates are calculated using the number of hospital discharges divided by the number of people in the area. For most conditions, rates are calculated out of 100,000 member-months. Rates of admissions for perforated appendix are calculated out of 100 admissions for appendicitis. Rates of admissions for low birth weight are calculated out of 100 live births. Unlike most other measures provided in this report, lower rates suggest a better quality health care system outside the hospital setting.

The external quality review organization assessed pediatric admissions for the following ACSCs: asthma, diabetes short-term complications, gastroenteritis, perforated appendix, and urinary tract infection. The age eligibility for the PDIs is up to age 17.

The full set of adult (age 18 or older) PQIs includes rates of inpatient admissions for:

- Diabetes short-term complications
- Perforated appendix
- Diabetes long-term complications
- Chronic obstructive pulmonary disease or asthma in older adults
- Hypertension
- Heart failure
- Low birth weight
- Dehydration
- Bacterial pneumonia
- Urinary tract infection
- Angina without procedure
- Uncontrolled diabetes
- Asthma in younger adults
- Lower extremity amputation among patients with diabetes

3M™ Health Information Systems measures

The 3M measures of potentially preventable events measure health outcomes, safety, efficiency, and utilization rates, and the costs associated with potentially avoidable care. Potentially preventable admissions (PPA), potentially preventable emergency department visits (PPV), and potentially preventable ancillary services (PPS) focus on events caused by inadequate access to care or poor coordination of ambulatory care. Potentially preventable readmissions (PPR) and potentially preventable complications (PPC) focus on events caused by deficiencies or errors in care or treatment provided during a hospital stay or from inadequate post-hospital discharge follow-up.

- Potentially preventable admissions (PPA) involve ambulatory-sensitive conditions, including a more comprehensive definition than the list maintained by AHRQ. They are identified primarily from the reason for admission as documented using the assigned All Patient Refined Diagnosis-Related Groups (APR-DRGs). Results are risk-adjusted based on the health status of members in the population as defined by Clinical Risk Group.
- Potentially preventable readmissions (PPR) are return hospitalizations caused by deficiencies in the care during the initial hospital stay or poor coordination of services at the time of discharge and during follow-up. The readmission must be clinically related to the initial admission (based on APR-DRG), and occur during the defined readmission period. For quality-of-care reporting, the external quality review organization used a 30-day readmission interval. Because not all admissions have the same risk of readmission, results are risk-adjusted based on the APR-DRG of the initial admission.
- Potentially preventable emergency department visits (PPV) account for conditions that could be treated effectively with adequate patient monitoring and follow-up. They are identified using the Enhanced Ambulatory Patient Grouping assigned by the 3M software to the emergency department encounter. Results are risk-adjusted based on the health status of members in the population as defined by Clinical Risk Group.
- Potentially preventable complications (PPC) are harmful events that occur after a patient is admitted. These include Medicare hospital-acquired conditions,ⁱ Medicaid healthcare-acquired conditions,ⁱⁱ and other patient safety indicators. They are assigned based on secondary diagnoses that were not present on admission, and determined to be preventable based on the initial condition and procedures. The results are risk-adjusted based on the APR-DRG assigned to the admission.
- Potentially preventable ancillary services (PPS) are services to supplement or support patient treatment or evaluation that are unlikely to provide useful information and therefore will not influence patient care regardless of the result. They are identified using the Enhanced Ambulatory Patient Grouping assigned by the 3M software to individual outpatient

ⁱ A list of hospital-acquired conditions can be found at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Hospital-Acquired_Conditions.html

ⁱⁱ A list of healthcare-acquired conditions can be found at: <http://www.medicaid.gov/medicaid-chip-program-information/by-topics/financing-and-reimbursement/provider-preventable-conditions.html>

service items, not including codes related to emergency department visits. Results are risk-adjusted based on the health status of members in the population as defined by Clinical Risk Group. The external quality review organization began collecting this measure in 2014. Since this measure is new for Texas Health and Human Services Commission and it is unclear yet how this measure should be interpreted, it is not being used in any agency quality initiatives like the pay-for-quality program, and the findings from this measure are not included in this report.

While any particular event identified as potentially preventable may or may not in actuality have been preventable, high numbers of potentially preventable events can indicate deficiencies in quality of care. Resource use related to these events is also important, and includes consideration of the relative weight of different events. For this reason, the external quality review organization calculates all five types of measures using relative weights, which are based on standardized costs associated with the APR-DRG for potentially preventable admissions and readmissions, the Enhanced Ambulatory Patient Grouping for potentially preventable emergency department visits and potentially preventable ancillary services, and the assigned category for potentially preventable complications.

Assessment of performance on these measures at the health plan level uses the actual-to-expected ratio, which represents the number of actual visits relative to the number of visits that would be expected based on the case-mix of the health plan membership. An actual-to-expected ratio less than 1 means there were fewer than expected preventable events, while a ratio greater than 1 means there were more events than expected.

5.1.2. Survey Measures

The external quality review organization conducts biennial surveys to measure experiences and satisfaction of adult members and caregivers of child and adolescent members in Texas Medicaid and CHIP. In 2014 two types of surveys were conducted: (1) CAHPS® surveys with adult members in STAR and STAR+PLUS; and (2) a CAHPS® survey with caregivers of children and adolescents enrolled in STAR Health. In 2015 three types of surveys were conducted: (1) CAHPS® surveys with caregivers of children and adolescents enrolled in STAR and CHIP; (2) CAHPS® ECHO® surveys with adult STAR and STAR+PLUS members and caregivers of child and adolescent STAR members needing behavioral health care; and (3) a caregiver survey of children and adolescents enrolled in Medicaid Dental and CHIP Dental, using a modified version of the CAHPS® Dental Plan Survey.³⁶ The CAHPS® ECHO® behavioral health surveys included a sampling quota for members in the Dallas service area; these members received behavioral health services through the NorthSTAR program, which is being phased out.

Survey sampling

The external quality review organization selected survey participants for the CAHPS® surveys from stratified random samples of child members (17 years or younger) or adult members (18 years or older) who were continuously enrolled in the same health plan for six months. The

research team stratified the samples to include representation from each managed care organization operating in the program for which the survey was conducted, with a target of 250 completed surveys per health plan.³⁷

For the ECHO® behavioral health surveys, the external quality review organization selected participants from stratified random samples of members with 12-month continuous enrollment in the same managed care organization who had a record of having received ambulatory or inpatient behavioral health care services during the evaluation period as determined from qualifying 2015 HEDIS® indicators (**Table 10**).

Table 10. Sample Criteria for ECHO® Behavioral Health Surveys, 2015

2015 HEDIS® Measures	Qualifying Components
Mental Health Utilization (MPT)	Intensive Outpatient/Partial Hospitalization Outpatient or Emergency Department
Identification of Alcohol and Other Drug Services (IAD)	Ambulatory Services Intensive Outpatient/Partial Hospitalization
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)	Initiation of Alcohol and Other Drug Dependence Treatment at 13-17 years old and 18+ years old

The external quality review organization stratified the 2015 STAR Child Behavioral Health Survey among four quotas; (1) STAR children, 12 years of age or younger, (2) STAR adolescents, 13 to 17 years of age, (3) NorthSTAR children, 12 years of age or younger, and (4) NorthSTAR Adolescents, 13 to 17 years of age. The research team stratified the 2015 STAR Adult Behavioral Health Survey according to three delivery models: (1) managed care organization (“in-house” behavioral health care); (2) behavioral health organization (“carve out” behavioral health care); and (3) NorthSTAR. The external quality review organization stratified the 2015 STAR+PLUS Behavioral Health Survey by managed care organization, with separate quotas for NorthSTAR and for dual-eligible members.

Survey participants for the Medicaid/CHIP Managed Care Dental Caregiver Survey were selected from a stratified random sample of children age 17 years and younger who were enrolled in Medicaid Dental or CHIP Dental for six months. The sample was stratified by program and dental plan, resulting in four sampling groups: (1) Medicaid DentaQuest; (2) Medicaid MCNA Dental; (3) CHIP DentaQuest; and (4) CHIP MCNA Dental.

For all survey samples, members with no more than one 30-day gap during the sampling enrollment period were eligible for inclusion. The external quality review organization determined member age based on the last day of the enrollment period. **Table 11** lists the member surveys conducted by the external quality review organization in 2014 and 2015, and their enrollment and fielding periods.

Table 11. Member and Caregiver Survey Enrollment and Fielding Periods, 2014-2015

Year	Survey	Enrollment period	Fielding period
2014	STAR Adult Member Survey	November 2013 – April 2014	June 2014 – August 2014
	STAR+PLUS Adult Member Survey	November 2013 – April 2014	June 2014 – August 2014
	STAR Health Caregiver Survey	February 2014 – September 2014	August 2014 – December 2014
2015	STAR Child Caregiver Survey	September 2014 – February 2015	April 2015 – August 2015
	CHIP Child Caregiver Survey	September 2014 – February 2015	May 2015 – August 2015
	Medicaid/CHIP Dental Caregiver Survey	December 2014 – May 2015	August 2015 – September 2015
	STAR Adult Behavioral Health Survey	April 2014 – March 2015	June 2015 – September 2015
	STAR Child Behavioral Health Survey	April 2014 – March 2015	June 2015 – September 2015
	STAR+PLUS Behavioral Health Survey	April 2014 – March 2015	July 2015 – September 2015

Survey data collection

The external quality review organization contracted with the Bureau of Economic and Business Research at the University of Florida (UFSRC), the National Opinion Research Center at the University of Chicago (NORC), and ICF International, Incorporated to conduct the 2014 and 2015 member and caregiver satisfaction surveys using computer-assisted telephone interviewing. For all satisfaction surveys, the external quality review organization sent advance notification letters written in English and Spanish to members or their caregivers requesting their participation in the survey. Calling began on the surveys approximately four days following each advance notification mailing.

The CAHPS® Health Plan Survey is a widely used instrument for measuring and reporting consumer experiences with their own or their child or adolescent's health plan and providers. The survey includes several questions that function as indicators of health plan performance (such as personal doctor and health plan ratings), and also permits the calculation and reporting of composite measures combining results for closely related survey items. This report presents the most current CAHPS® ratings for personal doctors, specialists, health plans, and overall health care in each program assessed, as well as composite measures that address the following domains: (1) *Getting Needed Care*; (2) *Getting Care Quickly*; (3) *How Well Doctors Communicate*; and (4) *Health Plan Information and Customer Service*.

The ECHO[®] Survey is part of the CAHPS[®] family of surveys and has four versions determined by the member's age group (child or adult) and behavioral health service delivery model (managed care organization or behavioral health organization). The survey allows for calculation and reporting of behavioral health care ratings and composites. This report presents the most current ECHO[®] ratings for behavioral health treatment and behavioral health plans, as well as composite measure results in the following domains: (1) *Getting Treatment Quickly*, (2) *How Well Clinicians Communicate*, (3) *Getting Treatment and Information from the Plan or Managed Behavioral Healthcare Organization*, (4) *Information About Treatment Options*, and (5) *Perceived Improvement*.

All member surveys included items developed by the external quality review organization pertaining to caregiver and member demographic and household characteristics, which have been included in surveys given to more than 100,000 Medicaid and CHIP members in Texas and Florida. The questions were adapted from the National Health Interview Survey, the Current Population Survey, and the National Survey of America's Families.^{38,39,40} Respondents were also asked to report their or their child or adolescent's height and weight in order to calculate body mass index, a common population-level indicator of overweight and obesity.

Survey data analysis

The external quality review organization generally follows both AHRQ and NCQA specifications for scoring the CAHPS[®] ratings and composites. Results in this report follow AHRQ specifications, which produce scores that represent the percentage of members who rated their health care a "9" or "10" (on a scale from 0 to 10 with higher scores indicating greater satisfaction), and who "always" had positive experiences in a given composite domain. Surveys administered in 2014 follow a combined "usually and always" reporting format. These scores are compared with Medicaid and CHIP national data available for the appropriate year and population through the AHRQ CAHPS[®] Online Reporting System.

This report provides means and standard deviations for ECHO[®] survey ratings of behavioral health treatment and behavioral health plan ratings on a scale from 0 to 10, with higher scores indicating greater satisfaction. Scoring of the ECHO[®] composites follows the NCQA approach, which produces scaled scores generally ranging from 1 to 3 (or 0 to 1 for *Information About Treatment Options* and 0 to 4 for *Perceived Improvement*), with higher scores indicating greater satisfaction. National comparisons are not available for the ECHO[®] survey measures.

For all survey projects, the external quality review organization calculated descriptive statistics and conducted statistical tests using the statistical software package SPSS 23.0 (Chicago, IL: SPSS, Inc.).

5.2. STAR Program

5.2.1. Access to and Utilization of Care in STAR

Table 12 presents statewide performance in 2014 across all managed care organizations participating in the STAR program on measures of well-care visits for children and adolescents, prevention and screening, and prenatal and postpartum care. HHSC annually publishes

benchmarks in the form of Performance Indicator Dashboard standards; these are derived from prior year performance among all health plans participating in STAR. The 2014 standard provides a reference comparison for 2014 performance. The HEDIS® 2015 percentile ratings are based on national health plan performance in 2014. The external quality review organization calculated HEDIS® *Childhood Immunization Status, Combination 4 (CIS)* using the hybrid method; seven of 18 health plans chose to rotate the measure, as allowed by NCQA specifications, and no statewide rating is available. The external quality review organization calculated all three components of HEDIS® *Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents (WCC)* using the hybrid method; seven of 18 health plans chose to rotate the measure, as allowed by NCQA specifications, and no statewide rating is available. More than half of health plans in STAR — 16 of 18 — individually had low denominators (less than 30) for HEDIS® *Breast Cancer Screening (BCS)*, and no HHSC Performance Indicator Dashboard standard is set. CHIPRA® *Developmental Screening in the First Three Years of Life (DVS)* is not a HEDIS® measure, but is part of the CHIPRA® Child Core Set of measures.

Adolescents in STAR received an excellent standard of well care compared to the national Medicaid population, and the program rate exceeded the HHSC Performance Indicator Dashboard standard. The rates for well-care visits for children in the first 15 months of life and ages three to six were lower than the HHSC Performance Indicator Dashboard standards. Cervical cancer screenings were slightly lower than the HHSC Dashboard Performance Indicator standard but were between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid. Performance on prenatal and postpartum care access measures was above the 50th percentile on the HEDIS® national benchmark percentiles for Medicaid.

Table 12. STAR – HEDIS® Access and Preventive Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating
HEDIS® Well-Child Visits in the First 15 Months of Life (W15), Six or More Visits	58.5%	69%	★★★
HEDIS® Well-Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life (W34)	78.9%	83%	★★★★
HEDIS® Adolescent Well-Care Visits (AWC)	68.7%	64%	★★★★★
HEDIS® Childhood Immunization Status (CIS), Combination 4	No state rate	74%	N/A
HEDIS® Breast Cancer Screening (BCS)	56.3%	N/A	★★★
HEDIS® Cervical Cancer Screening (CCS)	68.8%	70%	★★★★
HEDIS® Chlamydia Screening in Women (CHL)	50.2%	58%	★★
HEDIS® Prenatal and Postpartum Care (PPC), Timeliness of Prenatal Care	90.1%	84%	★★★★
HEDIS® Prenatal and Postpartum Care (PPC), Postpartum Care	65.0%	66%	★★★
HEDIS® Weight Assessment & Counseling for Nutrition & Physical Activity for Children & Adolescents (WCC), BMI Percentile	No state rate	50%	N/A
HEDIS® Weight Assessment & Counseling for Nutrition & Physical Activity for Children & Adolescents (WCC), Counseling for Nutrition	No state rate	65%	N/A
HEDIS® Weight Assessment & Counseling for Nutrition & Physical Activity for Children & Adolescents (WCC), Counseling for Physical Activity	No state rate	48%	N/A
CHIPRA® Developmental Screening in the First Three Years of Life (DVS)	52.0%	N/A	N/A

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 21 shows the percentage of children in STAR who received six or more well-child visits in the first 15 months of life between 2010 and 2014. Performance statewide in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with 11 health plans also performing in this band. One health plan, Driscoll Health Plan, performed between the 66th and 89th percentiles; one health plan, FirstCare, performed below the tenth percentile.

Figure 21. STAR – HEDIS® Well-Child Visits in the First 15 Months of Life (W15), Six or More Visits, 2010-2014

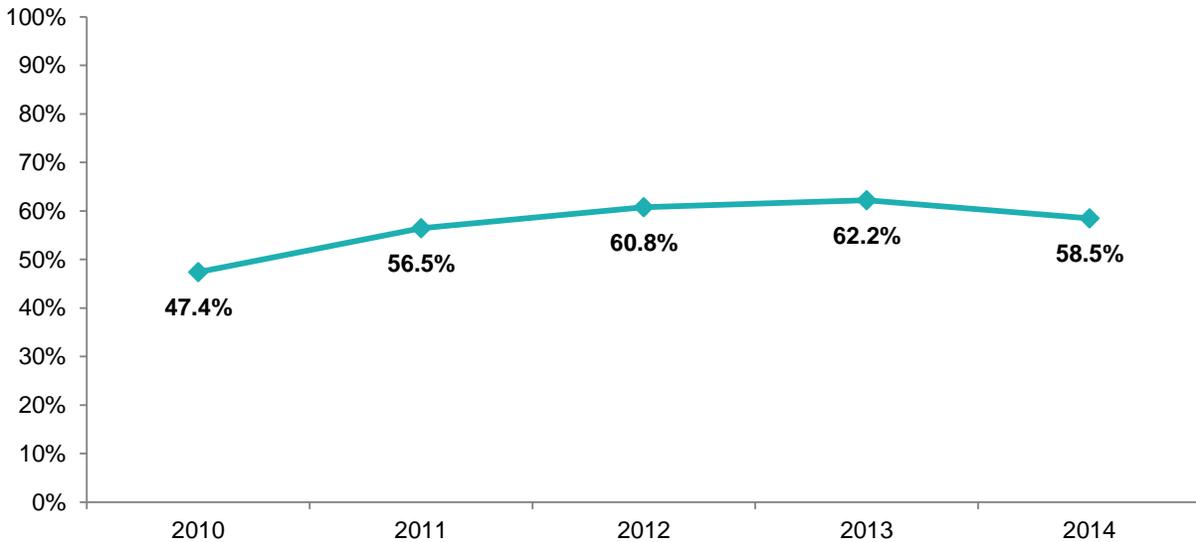


Figure 22. STAR – HEDIS® Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34), 2010-2014

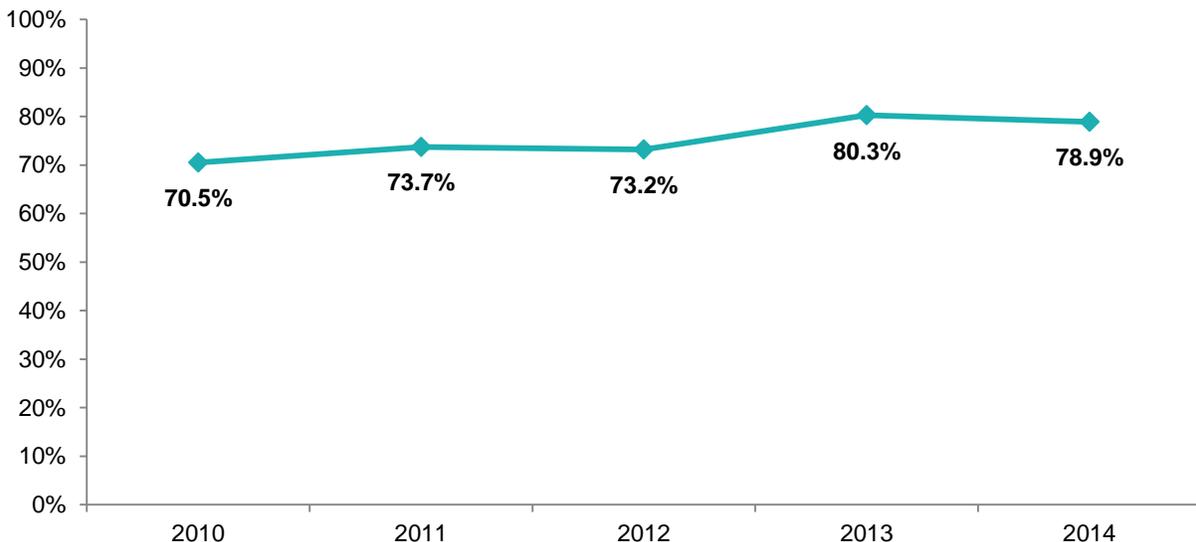


Figure 22 shows the percentage of children in STAR ages three to six who received at least one well-child visit in the measurement year between 2010 and 2014. Starting with

measurement year 2013, HEDIS® *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34)*, has been reported using hybrid methodology; as this method captures more events in the numerator, this change may in part explain improvement seen in that year. Performance in 2014 was between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid, with eight health plans also performing in this band. Three health plans, El Paso First Health Plans, Molina Healthcare of Texas, and UnitedHealthcare, performed in the top decile; one health plan, CHRISTUS Health Plan, performed in the bottom decile.

Figure 23 shows the percentage of adolescents in STAR ages 12 to 21 who received at least one well-care visit in the measurement year between 2010 and 2014. Starting with measurement year 2013, HEDIS® *Adolescent Well-Care Visits (AWC)* has been reported using hybrid methodology; as this method captures more events in the numerator, this change may in part explain improvement seen in that year. Performance in 2014 was in the top decile on the HEDIS® national benchmark percentiles for Medicaid, with nine health plans also performing in this band. One health plan, Blue Cross Blue Shield of Texas, performed in the middle tertile; one health plan, CHRISTUS Health Plan, performed between the 10th and 32nd percentiles. Driscoll Health Plan performed in the top tertile on all three well-care measures, *Well-Child Visits in the First 15 Months of Life (Six or More Visits)*, *Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life*, and *Adolescent Well-Care Visits*.

Figure 23. STAR – HEDIS® Adolescent Well-Care Visits (AWC), 2010-2014

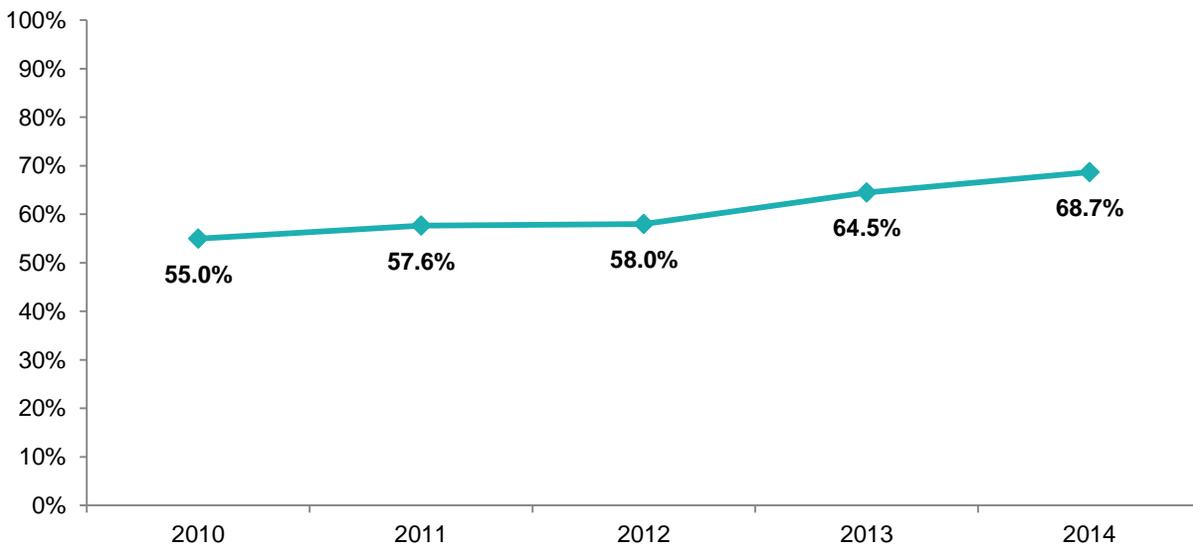


Figure 24. STAR – HEDIS® Breast Cancer Screening (BCS), 2010-2014

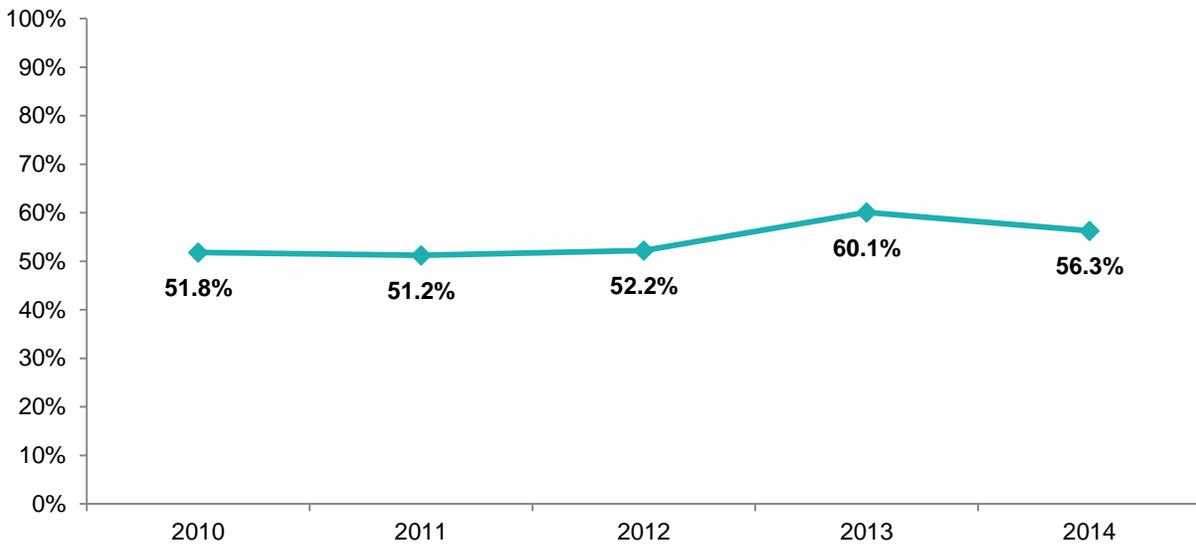


Figure 24 provides the percentage of women in STAR ages 50 to 74 who were screened for breast cancer within the past two measurement years, showing trends from 2010 through 2014. Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with one health plan, Amerigroup, also performing in this band. One health plan, Superior HealthPlan, performed between the 66th and 89th percentiles. The remaining 16 health plans had too few events to report (fewer than 30).

Figure 25 provides the percentage of women in STAR ages 21 to 64 who were screened for cervical cancer within the past three or five years, depending on age and method of screening, showing trends from 2010 through 2014. The STAR program had an increase in rates of cervical cancer screening from 2010 (39 percent) to 2014 (69 percent). Performance in 2014 was between the 66th and 89th percentiles nationally, with ten health plans also performing in this band. Two health plans, Driscoll Health Plan and El Paso First Health Plan, performed in the top decile; two health plans, CHRISTUS Health Plan and Seton Health Plan, performed between the 10th and 32nd percentiles.

Figure 25. STAR – HEDIS® Cervical Cancer Screening (CCS), 2010-2014

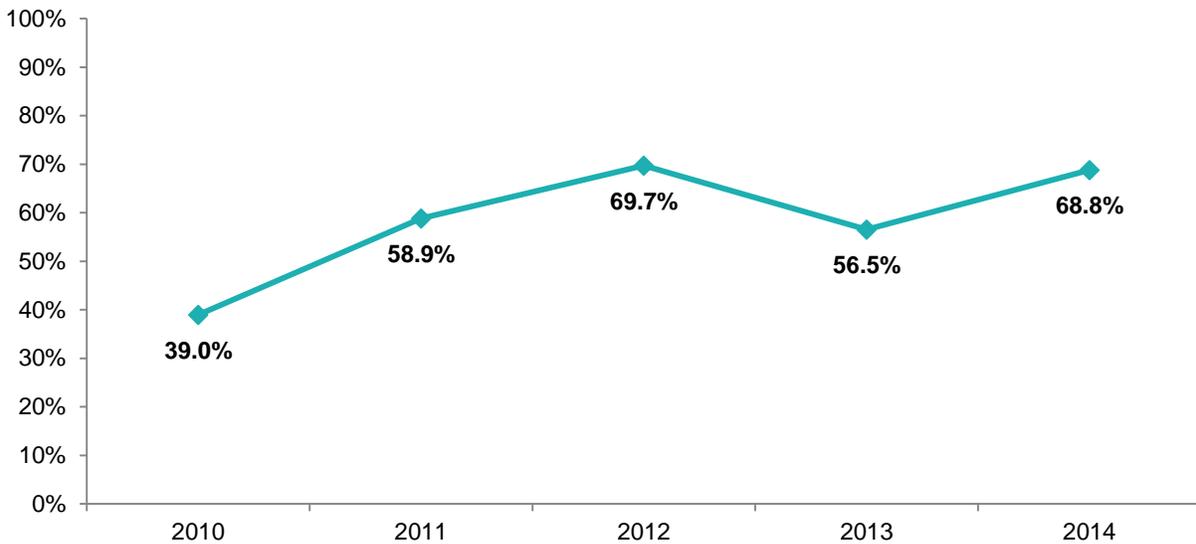


Figure 26. STAR – HEDIS® Chlamydia Screening in Women (CHL), 2010-2014

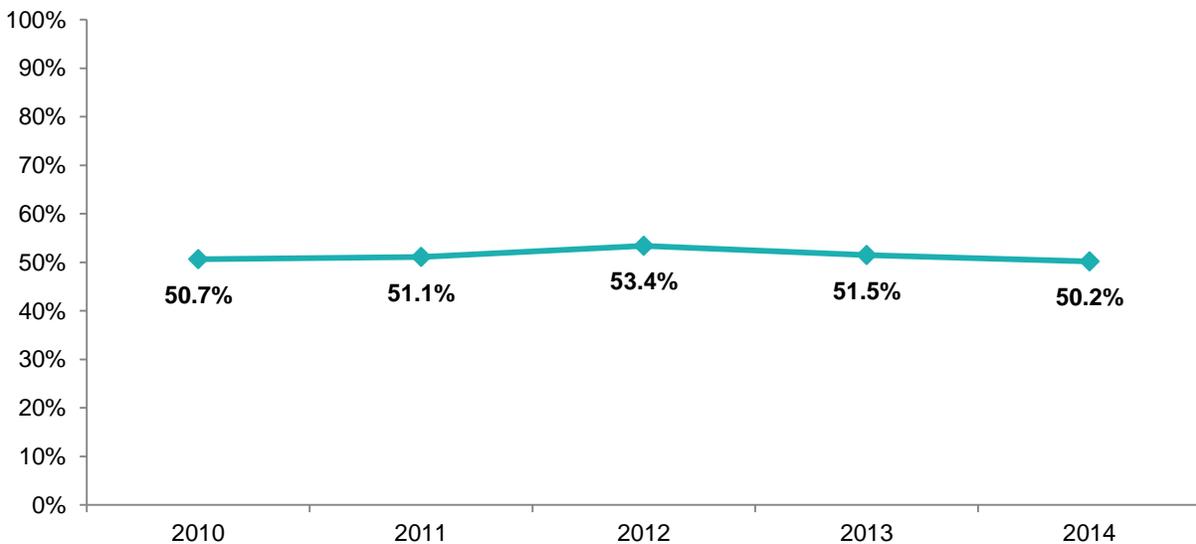


Figure 26 shows the percentage of sexually active women in STAR ages 16 to 24 who received at least one test for chlamydia in the measurement year from 2010 to 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid, with 10 health plans also performing in this band. Seven health plans performed in the middle tertile.

**Figure 27. STAR – HEDIS® Prenatal and Postpartum Care (PPC),
Timeliness of Prenatal Care, 2010-2014**

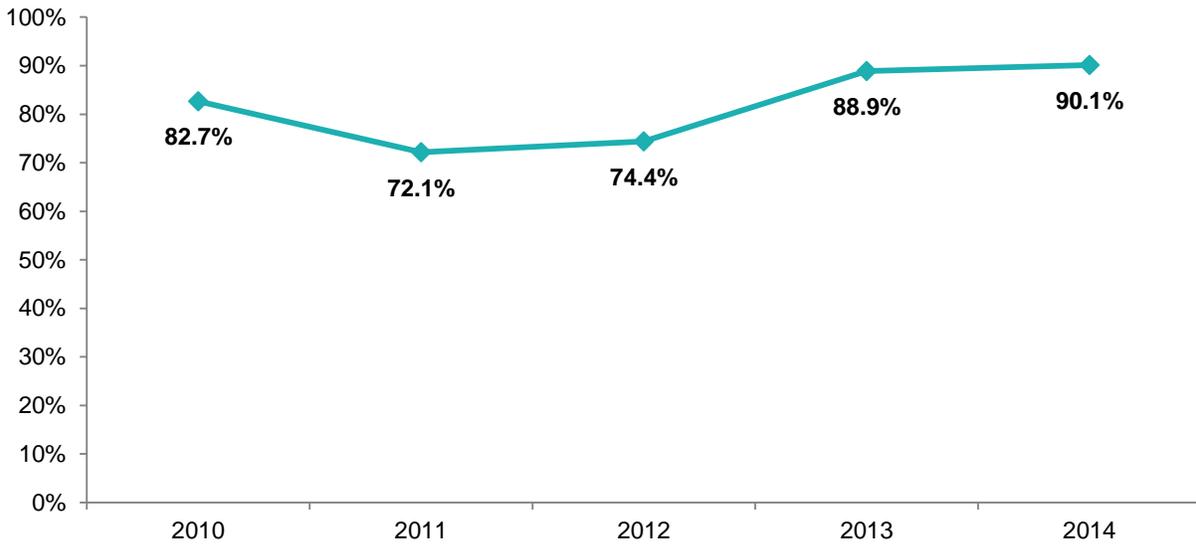


Figure 27 provides the percentage of deliveries in STAR that received a prenatal care visit in the first trimester or within six weeks of enrollment, showing trends from 2010 through 2014. Starting with measurement year 2013, HEDIS® *Prenatal and Postpartum Care (PPC)* has been reported using hybrid methodology; as this method captures more events in the numerator, this change may in part explain improvement seen in that year. Performance in 2014 was between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid, with nine health plans also performing in this band. Three health plans, Community Health Choice, Driscoll Health Plan, and El Paso First Health Plans, performed in the top decile. One health plan, CHRISTUS Health Plan, performed in the bottom decile.

Figure 28 provides the percentage of deliveries in STAR that had a postpartum visit between three and eight weeks after delivery, showing trends from 2010 through 2014. Starting with measurement year 2013, HEDIS® *Prenatal and Postpartum Care (PPC)* has been reported using hybrid methodology. Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with five health plans also performing in this band. Ten health plans performed between the 66th and 89th percentiles. Two health plans, CHRISTUS Health Plan and Sendero Health Plans, performed in the bottom decile. Eight health plans performed in the top tertile on both measures of prenatal and postpartum care.

Figure 28. STAR – HEDIS® Prenatal and Postpartum Care (PPC), Postpartum Care, 2010-2014

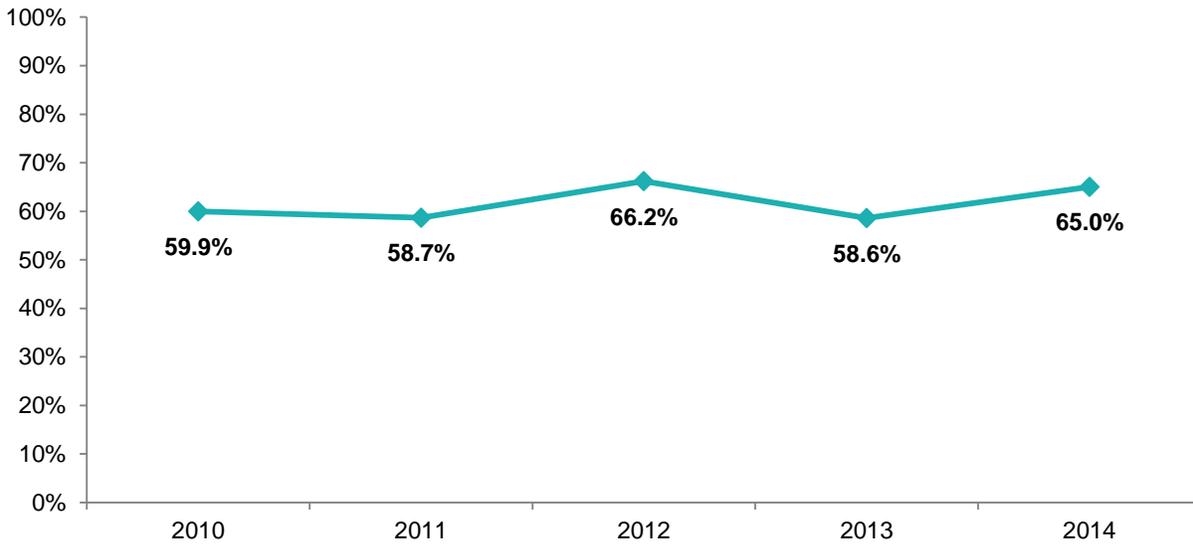


Table 13. STAR – HEDIS® Utilization of Care Measures, 2014

Measure	2014 Rate ⁱ	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Ambulatory Care (AMB), Outpatient Visits (per 1,000 member-months)	389.0	★★★★
HEDIS® Ambulatory Care (AMB), Emergency Department Visits (per 1,000 member-months)	56.8	★★★
HEDIS® Inpatient Utilization (IPU), Total Inpatient Discharges (per 1,000 member-months)	7.4	★★★
HEDIS® Mental Health Utilization (MPT), Any Services (per 100 member-years)	13.8	★★★★

Table 13 shows utilization rates in 2014 across all managed care organizations participating in the STAR program. Higher rates of utilization do not necessarily indicate stronger performance. The two components of HEDIS® *Ambulatory Care (AMB)* presented summarize utilization of two types of ambulatory care: outpatient visits per 1,000 member-months; and emergency department visits per 1,000 member-months. HEDIS® *Inpatient Utilization (IPU)* measures acute

ⁱ Higher or lower values do not necessarily indicate better quality of care.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★ = 90th percentiles and above

★★★ = 66th to 89th percentiles

★★ = 33rd to 65th percentiles

★ = 10th to 32nd percentiles

★ = Below 10th percentiles

inpatient care and services per 1,000 member-months in the following four categories: total inpatient, maternity, surgery, and medicine. HEDIS® *Mental Health Utilization (MPT)* identifies mental health services per 100 member-years during the one-year measurement period in the following categories: inpatient services, intensive outpatient or partial hospitalization services, and outpatient or emergency department services. The rates reported here reflect all service categories combined for each measure.

Rates of utilization varied among health plans:

- Outpatient visits per 1,000 member-months ranged from 305.6 for Seton Health Plan to 531.3 for Driscoll Health Plan.
- Emergency department visits per 1,000 member-months ranged from 41.6 for Texas Children's Health Plan to 79.8 for RightCare from Scott & White Health Plan.
- Acute inpatient discharges per 1,000 member-months ranged from 4.7 for Texas Children's Health Plan to 12.2 for FirstCare.
- Mental health services per 100 member-years ranged from 5.7 for Cook Children's Health Plan to 27.5 for RightCare from Scott & White Health Plan.

Table 14 shows five AHRQ Pediatric Quality Indicators (PDI) across all managed care organizations participating in the STAR program. These measures are derived from hospital inpatient discharge data and can identify areas of potential concern, such as unexpectedly high rates of complications or health care needs that could be met in the community without hospitalization.

Table 14. STAR – AHRQ Pediatric Quality Indicators (PDI), 2014ⁱ

Measure	2014 Rate	Range
Asthma Admission Rate (PDI 14) (per 100,000 member-months)	11.48	4.50 – 29.57
Diabetes Short-Term Complications Admission Rate (PDI 15) (per 100,000 member-months)	2.54	0.88 – 6.23
Gastroenteritis Admission Rate (PDI 16) (per 100,000 member-months)	4.18	1.37 – 10.24
Perforated Appendix Admission Rate (PDI 17) (per 100 admissions for appendicitis)	57.95	22.22 – 81.82
Urinary Tract Infection Admission Rate (PDI 18) (per 100,000 member-months)	3.76	0.94 – 10.01

The external quality review organization calculated statewide performance across all managed care organizations participating in the STAR program on measures of potentially preventable events, including admissions, readmissions within 30 days, emergency department visits, and complications; the external quality review organization calculated these measures using 3M™ Health Information Systems software. The potentially preventable event measures assess the

ⁱ Lower values indicate stronger performance.

frequency and cost of visits that potentially could have been prevented with better primary and outpatient care; not all events classified as potentially preventable necessarily will have been preventable. Program-level rates are expressed as the weighted actual number of visits per 1,000 member-months, with lower rates indicating better performance. Weights are assigned based on resource utilization to account for different health system impact of different potentially preventable events – events requiring more health care resources (e.g., hospital bed-hours) are weighted more heavily in the measure; resource accounting is independent of actual cost in dollars. Actual-to-expected ratios are calculated so that a health plan that sees fewer weighted potentially preventable events than the STAR program as a whole will have a ratio of less than one, while a health plan that sees more weighted potentially preventable events than the STAR program as a whole will have a ratio greater than one. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. **Tables 15 through 18** Error! Reference source not found. present the ten most common reasons for each category of potentially preventable event; for categories with fewer than ten distinct reasons, all reasons are given. Trends in actual weighted number of events per 1,000 member-months are shown for measures calculated by the external quality review organization for three or more years (since 2012 and earlier).

Figure 29. STAR – 3M™ Potentially Preventable Admissions (PPA), Weighted Admissions per 1,000 Member-months, 2011-2014ⁱ

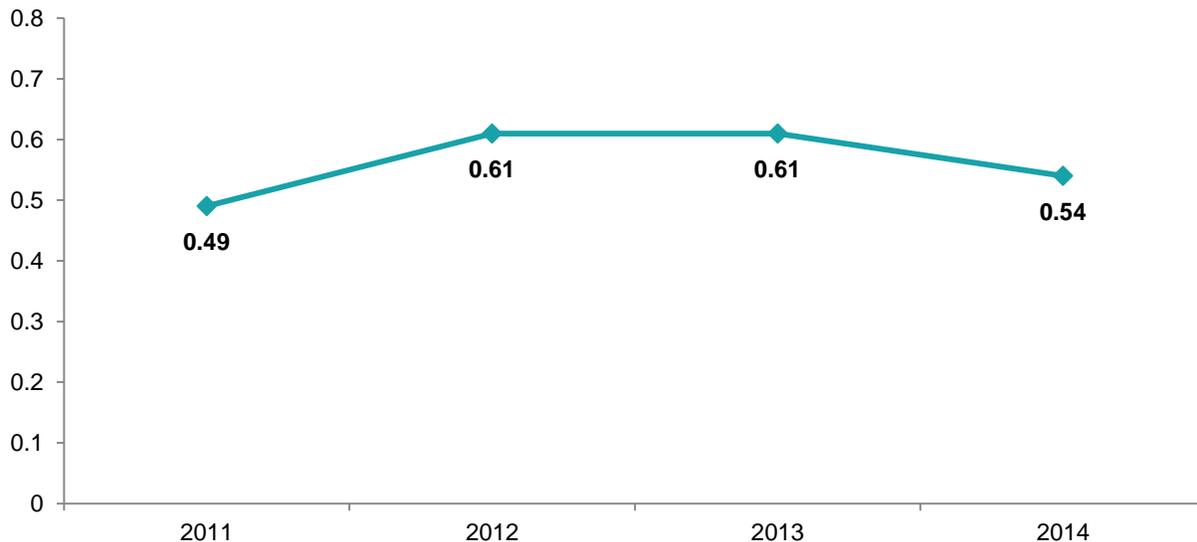


Figure 29 shows weighted statewide admissions per 1,000 member-months in STAR for 3M™ *Potentially Preventable Admissions (PPA)* from 2011 to 2014. The relative weight for each admission at risk was assigned based on typical health care resource utilization.

ⁱ Lower values indicate stronger performance.

Figure 30 shows comparative performance on 3M™ *Potentially Preventable Admissions (PPA)* among health plans participating in STAR in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix. Three health plans, Cook Children's Health Plan, Molina Healthcare of Texas, and Parkland Community Health Plan, saw at least 20 percent fewer events than the statewide rate. Two health plans, FirstCare and RightCare from Scott & White Health Plan, saw at least 20 percent more potentially preventable admissions than the statewide rate.

Figure 30. STAR – 3M™ Potentially Preventable Admissions (PPA), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

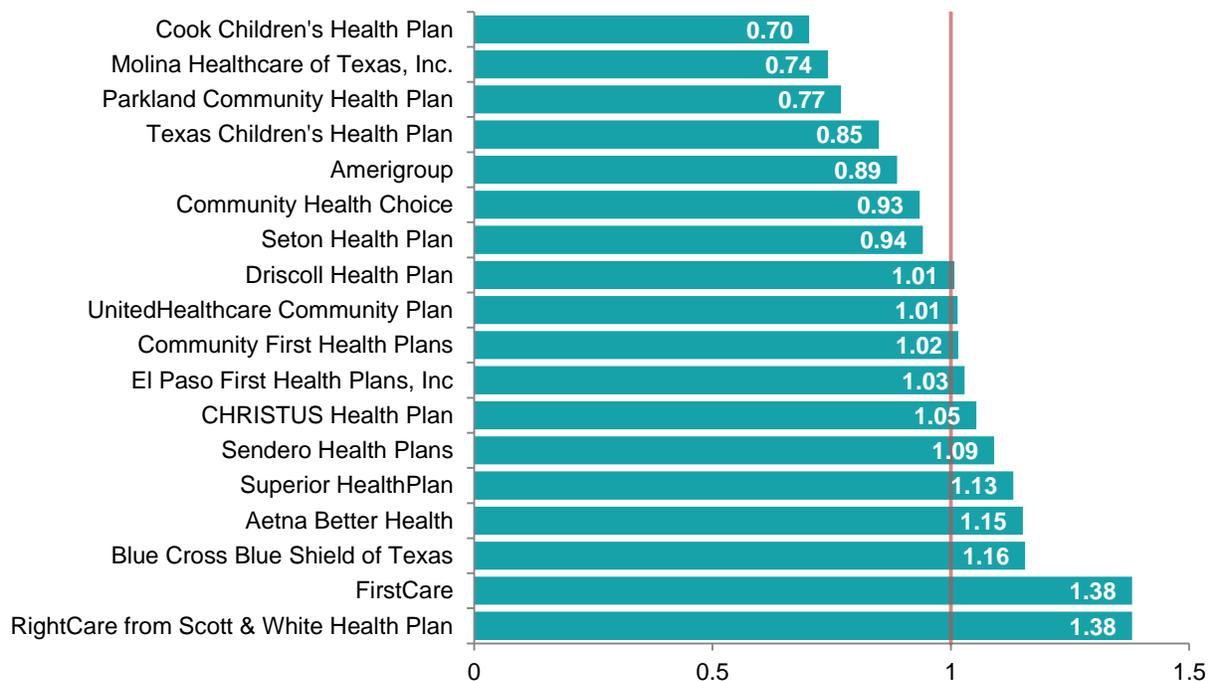


Table 15 presents the most common reasons for 3M™ *Potentially Preventable Admissions (PPA)* among all members in STAR in 2014. Statewide, 18,791 unique members experienced 20,559 events; the weighted rate was 0.54 events per 1,000 member-months. The two categories asthma and other pneumonia accounted for more than one-quarter of potentially preventable admissions.

ⁱ Lower values indicate stronger performance.

Table 15. STAR – Most Common Reasons for 3M™ Potentially Preventable Admissions (PPA), 2014

PPA Reason	% of PPAs in STAR
1 Asthma	15.9%
2 Other Pneumonia	13.8%
3 Cellulitis and Other Bacterial Skin Infections	11.4%
4 Bipolar Disorders	7.4%
5 Diabetes	6.2%
6 Kidney and Urinary Tract Infections	5.9%
7 Seizure	5.8%
8 Non-Bacterial Gastroenteritis, Nausea and Vomiting	5.5%
9 Infections of Upper Respiratory Tract	5.2%
10 Major Depressive Disorders and Other Unspecified Psychoses	5.1%

Figure 31 shows weighted statewide readmissions per 1,000 member-months in STAR for 3M™ Potentially Preventable Readmissions (PPR) from 2011 to 2014. The relative weight for each readmission at risk was assigned based on typical health care resource utilization. A readmission chain includes all readmissions clinically related to an initial admission.

Figure 31. STAR – 3M™ Potentially Preventable Readmissions (PPR), Weighted Readmissions per 1,000 Member-months, 2011-2014ⁱ

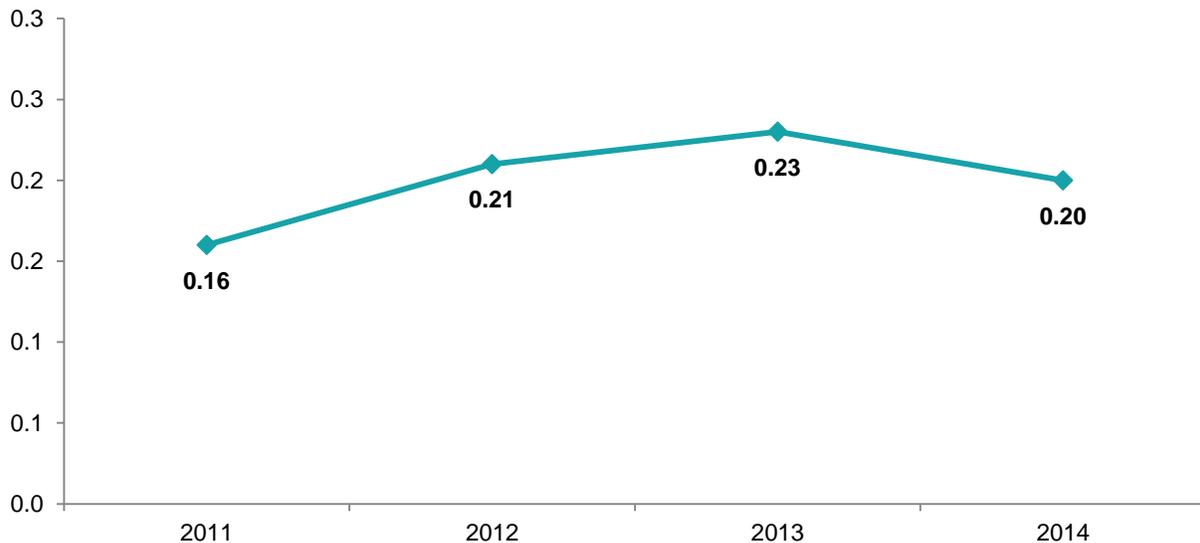
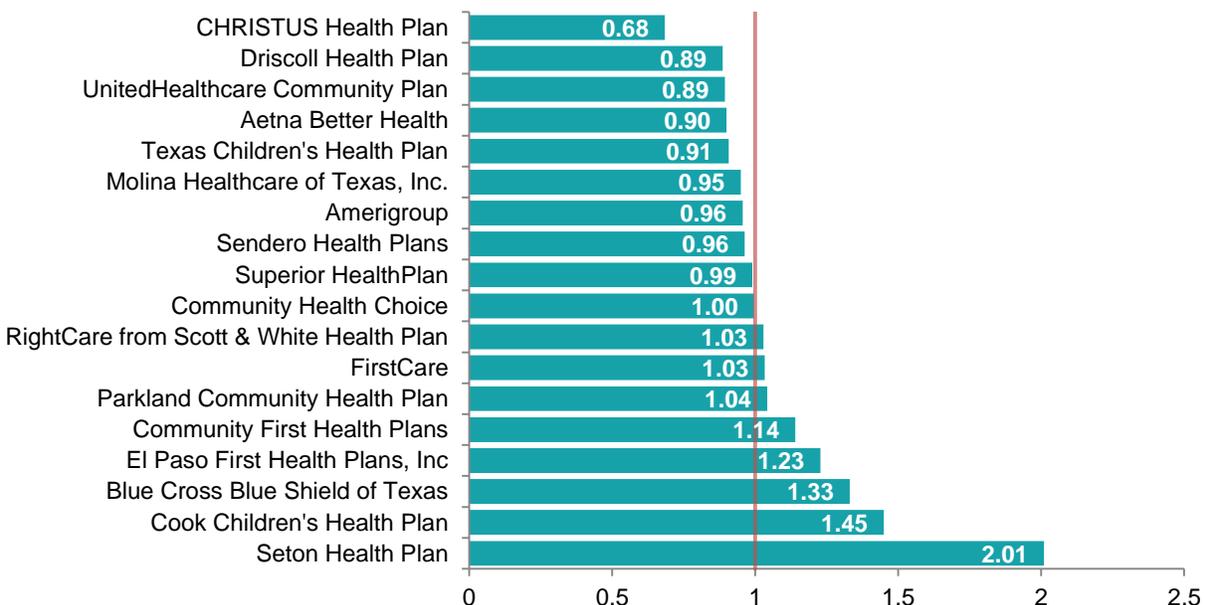


Figure 32 shows comparative performance on 3M™ Potentially Preventable Readmissions (PPR) among health plans participating in STAR in 2014. Actual-to-expected ratios show the

ⁱ Lower values indicate stronger performance.

relative performance of the health plan compared to their peers after adjusting for their case-mix. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. One health plan, CHRISTUS Health Plan, saw at least 20 percent fewer events than the statewide rate. Four health plans, El Paso First Health Plans, Blue Cross Blue Shield of Texas, Cook Children's Health Plan, and Seton Health Plan, saw at least 20 percent more potentially preventable readmissions than the statewide rate.

Figure 32. STAR – 3M™ Potentially Preventable Readmissions (PPR), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ



ⁱ Lower values indicate stronger performance.

Table 16. STAR – Most Common Reasons for 3M™ Potentially Preventable Readmissions (PPR), 2014

PPR Reason		% of PPRs in STAR
1	Medical readmission for acute medical condition or complication that may be related to or may have resulted from care during initial admission or in post-discharge period after initial admission.	41.6%
2	Mental health or substance abuse readmission following an initial admission for a substance abuse or mental health diagnosis.	29.0%
3	Medical readmission for a continuation or recurrence of the reason for the initial admission, or for a closely related condition.	15.6%
4	All other readmissions for a chronic problem that may be related to care either during or after the initial admission.	5.3%
5	Readmission for mental health reasons following an initial admission for a non-mental health, non-substance abuse reason.	2.9%
6	Ambulatory care-sensitive conditions as designated by AHRQ.	2.3%
7	Readmission for surgical procedure to address a complication that may be related to or may have resulted from care during the initial admission.	1.5%
8	Readmission for surgical procedure to address a continuation or a recurrence of the problem causing the initial admission.	1.0%
9	Readmission for a substance abuse diagnosis reason following an initial admission for a non-mental health, non-substance abuse reason.	0.8%

Table 16 presents the most common reasons for 3M™ *Potentially Preventable Readmissions (PPR)* among all members in STAR in 2014. Statewide, 5,382 unique members experienced 5,612 readmission chains; the weighted rate was 0.20 events per 1,000 member-months. The most common category accounted for more than 40 percent of readmissions.

Figure 33. STAR – 3M™ Potentially Preventable Emergency Department Visits (PPV), Weighted Visits per 1,000 Member-months, 2011-2014ⁱ

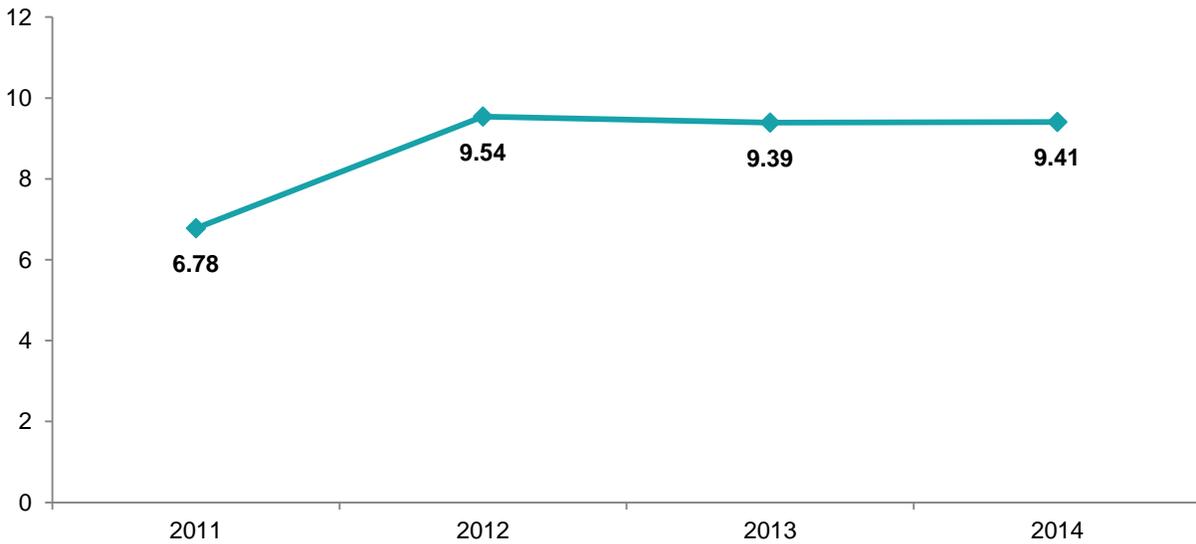


Figure 33 shows weighted statewide emergency department visits per 1,000 member-months in STAR for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* from 2011 to 2014. The relative weight for each emergency department visit at risk was assigned based on typical resource utilization.

Figure 34 shows comparative performance on 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among health plans participating in STAR in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix. Lower values indicate stronger performance. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. Two health plans, Molina Healthcare of Texas and UnitedHealthcare, saw at least 30 percent fewer events than the statewide rate. Four health plans, RightCare from Scott & White, Blue Cross Blue Shield of Texas, Aetna Better Health, and Sendero Health Plans, saw at least 30 percent more potentially preventable emergency department visits than the statewide rate.

ⁱ Lower values indicate stronger performance.

Figure 34. STAR – 3M™ Potentially Preventable Emergency Department Visits (PPV), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ



Table 17. STAR – Most Common Reasons for 3M™ Potentially Preventable Emergency Department Visits (PPV), 2014

PPV Reason	% of PPVs in STAR
1 Infections of Upper Respiratory Tract	25.6%
2 Non-Bacterial Gastroenteritis, Nausea and Vomiting	7.6%
3 Signs, Symptoms and Other Factors Influencing Health Status	6.6%
4 Other Skin, Subcutaneous Tissue and Breast Disorders	5.9%
5 Level I Other Ear, Nose, Mouth, Throat and Cranial / Facial Diagnoses	5.6%
6 Level II Other Musculoskeletal System & Connective Tissue Diagnoses	4.9%
7 Contusion, Open Wound & Other Trauma To Skin & Subcutaneous Tissue	4.7%
8 Abdominal Pain	4.3%
9 Viral Illness	4.0%
10 Cellulitis & Other Bacterial Skin Infections	2.7%

ⁱ Lower values indicate stronger performance.

Table 17 presents the most common reasons for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among all members in STAR in 2014. Statewide, 701,783 unique members experienced 1,119,877 events; the weighted rate was 9.41 events per 1,000 member months. Infections of the upper respiratory tract accounted for one-quarter of potentially preventable emergency department visits.

Figure 35. STAR – 3M™ Potentially Preventable Complications (PPC), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

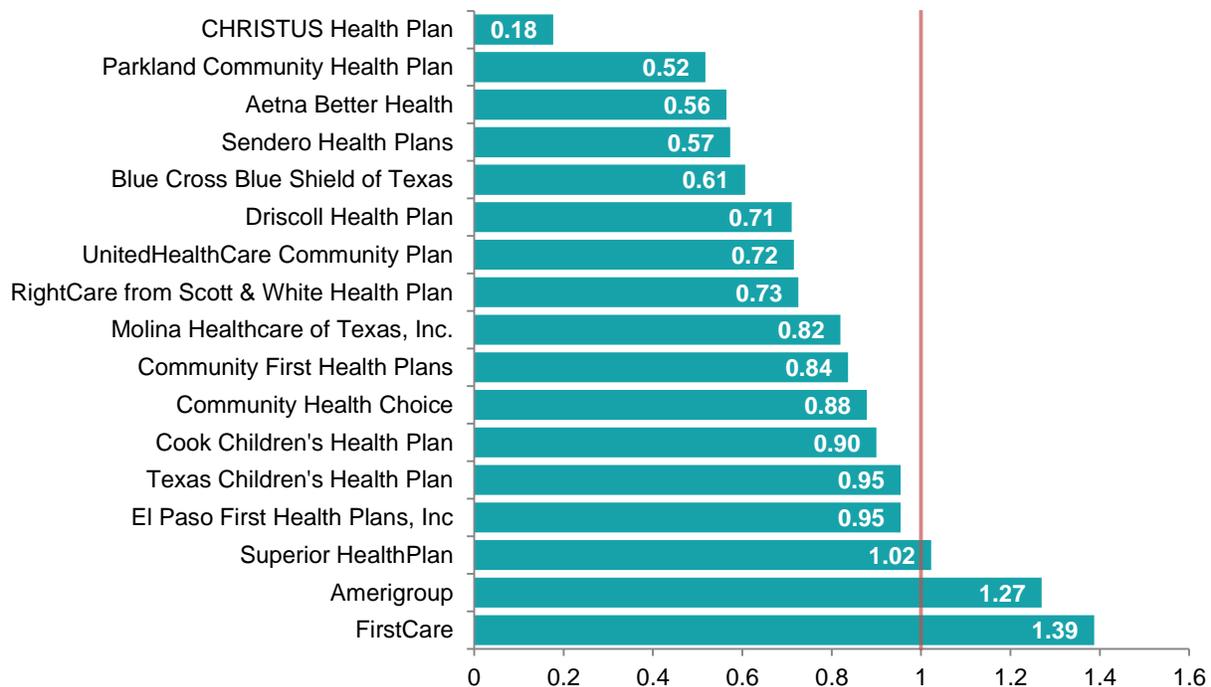


Figure 35 shows comparative performance on 3M™ *Potentially Preventable Complications (PPC)* among health plans participating in STAR in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix. Lower values indicate stronger performance. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. Four health plans, CHRISTUS Health Plan, Parkland Community Health Plan, Aetna Better Health, and Sendero Health Plans, saw at least 40 percent fewer events than the statewide rate. Two health plans, Amerigroup and FirstCare, saw at least 25 percent more potentially preventable complications than the statewide rate.

Table 18 presents the most common reasons for 3M™ *Potentially Preventable Complications (PPC)* among all members in STAR in 2014. Statewide, 4,360 unique members experienced 4,999 events. The weighted rate was 0.05 events per 1,000 member-months; the relative weight

ⁱ Lower values indicate stronger performance.

for each complication at risk was assigned based on typical resource utilization. Obstetrical hemorrhage without transfusion accounted for nearly one-quarter of potentially preventable complications.

Table 18. STAR – Most Common Reasons for 3M™ Potentially Preventable Complications (PPC), 2014

PPC Reason	% of PPCs in STAR
1 Obstetrical Hemorrhage without Transfusion	24.9%
2 Obstetric Lacerations & Other Trauma without Instrumentation	17.9%
3 Obstetrical Hemorrhage with Transfusion	8.9%
4 Medical & Anesthesia Obstetric Complications	8.8%
5 Obstetric Lacerations & Other Trauma with Instrumentation	5.5%
6 Delivery with Placental Complications	4.1%
7 Urinary Tract Infection	3.3%
8 Renal Failure without Dialysis	3.0%
9 Other Complications of Obstetrical Surgical & Perineal Wounds	3.0%
10 Acute Pulmonary Edema and Respiratory Failure without Ventilation	2.0%

5.2.2. Effectiveness of Care in STAR

Table 19 shows statewide performance in 2014 across all managed care organizations participating in the STAR program on measures of effectiveness of care. HEDIS® *Asthma Medication Ratio (AMR)* has been added to the HHSC Performance Indicator Dashboard for STAR for the 2015 measurement year. Two further components of HEDIS® *Comprehensive Diabetes Care (CDC)* were calculated using the hybrid method, with all plans rotating results as allowed by NCQA specifications: *HbA1c Testing* and *HbA1c Adequate Control (<8%)*. The behavioral health measures HEDIS® *Follow-up After Hospitalization for Mental Illness (FUH)* and HEDIS® *Follow-up Care for Children Prescribed ADHD Medication (ADD)* are discussed in more detail in **Section 6.4 Behavioral Health**.

Children and adolescents in STAR with asthma were very likely to be prescribed an appropriate medication in 2014, with performance in the top decile on the HEDIS® national benchmark percentiles for Medicaid. Access to and use of asthma controller medications had more room for improvement, with the rate of members using more asthma controller medications than quick-relief medications (an indicator of good disease management)^{41,42} just exceeding the 50th percentile nationally and the rate of members being dispensed controller medications covering at least 75 percent of days performing in the bottom decile nationally. Members were screened for two common complications of diabetes, diabetic retinopathy and diabetic nephropathy, at rates in the bottom tertile nationally. All health plans participating in STAR provide disease management services covering asthma and diabetes.

Table 19. STAR – HEDIS® Effectiveness of Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Ratingⁱⁱ
HEDIS® Appropriate Testing for Children with Pharyngitis (CWP)	61.9%	68%	★★
HEDIS® Use of Appropriate Medications for People with Asthma (All Ages) (ASM)	93.7%	95%	★★★★★
HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%	60.9%	N/A	★★★
HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total)	15.5%	29%	★
HEDIS® Comprehensive Diabetes Care (CDC), Eye Exam	38.6%	53%	★★
HEDIS® Comprehensive Diabetes Care (CDC), Medical Attention for Nephropathy	66.7%	79%	★
HEDIS® Follow-up After Hospitalization for Mental Illness (FUH), 7 Days	37.5%	44%	★★★
HEDIS® Follow-up After Hospitalization for Mental Illness (FUH), 30 Days	61.5%	64%	★★★
HEDIS® Follow-up Care for Children Prescribed ADHD Medication (ADD), Initiation Phase	49.9%	47%	★★★★
HEDIS® Follow-up Care for Children Prescribed ADHD Medication (ADD), Continuation and Maintenance Phase	67.3%	58%	★★★★★

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 36 shows the percentage of children and adolescents in STAR ages 2 to 18 presenting with pharyngitis who were appropriately tested for streptococcal pharyngitis from 2010 through 2014. Statewide performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid, with 12 health plans also performing in this band. The remaining six health plans performed in the middle tertile.

Figure 36. STAR – HEDIS[®] Appropriate Testing for Children with Pharyngitis (CWP), 2010-2014

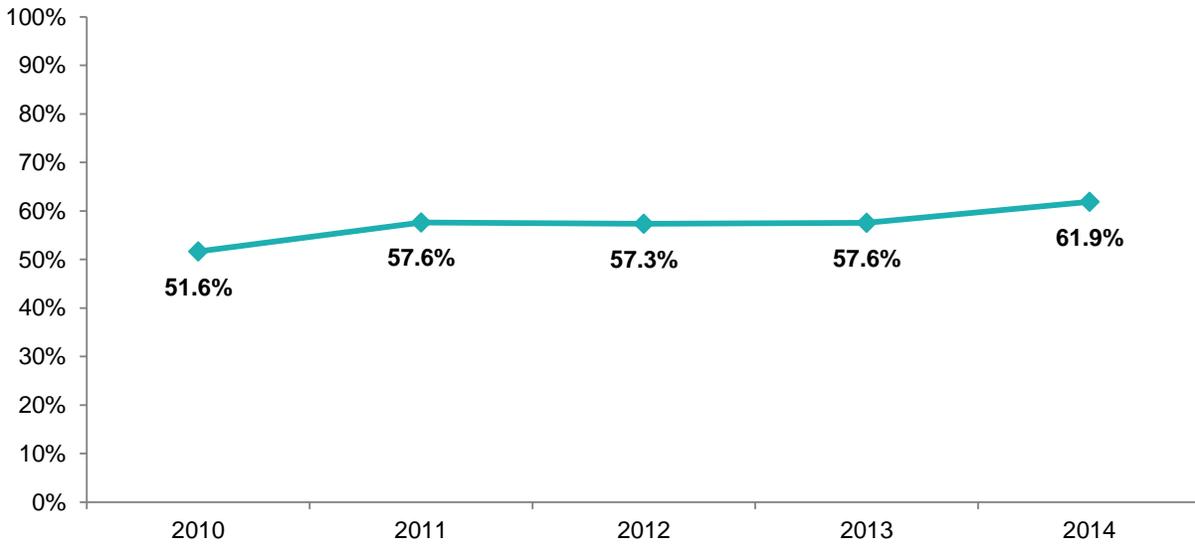


Figure 37. STAR – HEDIS[®] Use of Appropriate Medications for People with Asthma (ASM), All Ages, 2010-2014

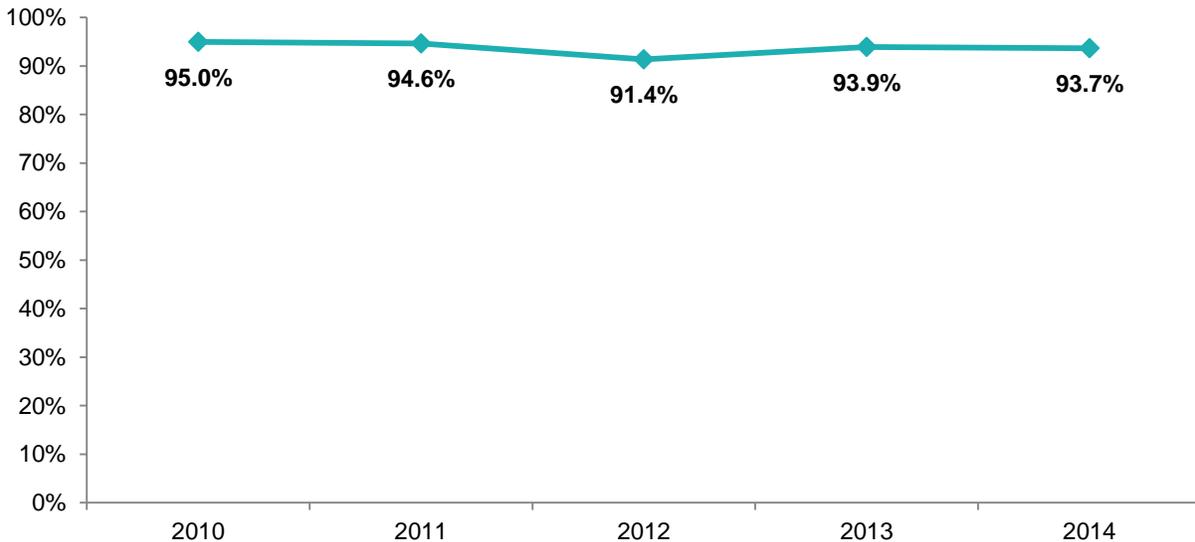


Figure 37 provides the percentage of people in STAR ages 5 to 64 identified as having persistent asthma who were prescribed an appropriate medication during the measurement

year, showing trends from 2010 through 2014. Performance in 2014 was in the top decile on the HEDIS® national benchmark percentiles for Medicaid, with 16 health plans also performing in this band. One health plan, Sendero Health Plans, had too few events to report (fewer than 30). One health plan, Aetna Better Health, performed between the 66th and 89th percentiles.

Figure 38 shows the percentage of people in STAR ages 5 to 64 identified as having persistent asthma who used more controller medications than quick-relief medications from 2012 to 2014. Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with nine health plans also performing in this band. One health plan, Sendero Health Plans, had too few events to report (fewer than 30). Five health plans performed between the 10th and 32nd percentiles; three health plans, Molina Healthcare of Texas, Parkland Community Health Plan, and UnitedHealthcare, performed between the 66th and 89th percentiles.

Figure 38. STAR – HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%, 2012-2014

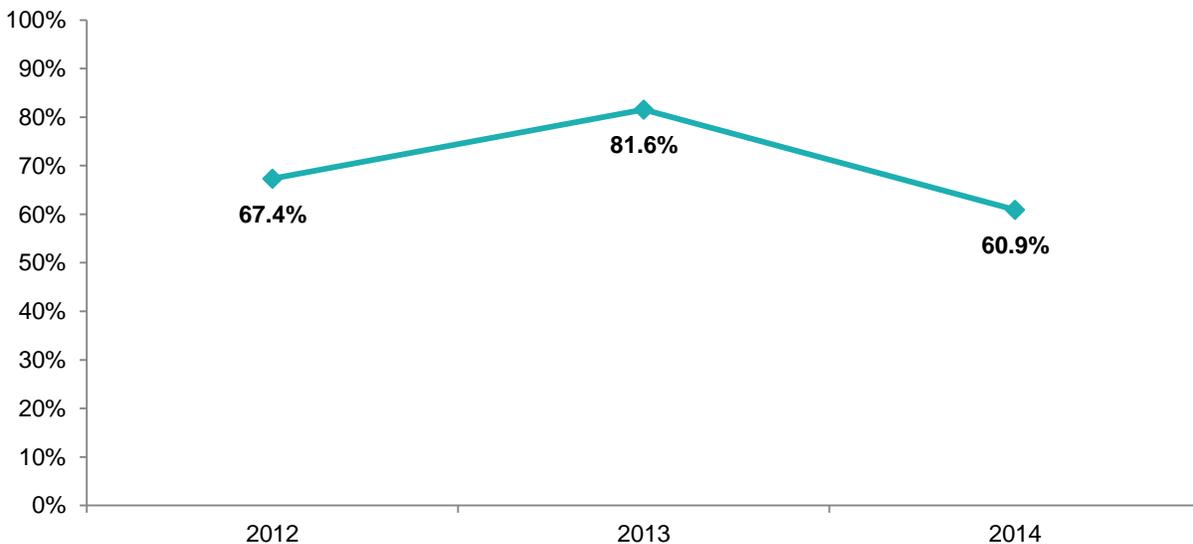


Figure 39 provides the percentage of people in STAR ages 5 to 64 identified as having persistent asthma who were dispensed asthma controller medications covering at least 75 percent of days during the measurement year, showing trends from 2012 through 2014. Performance in 2014 was in the bottom decile on the HEDIS® national benchmark percentiles for Medicaid, with 15 health plans also performing in this band. One health plan, Sendero Health Plans, had too few events to report (fewer than 30). Two health plans, FirstCare and RightCare from Scott & White Health Plan, performed between the 10th and 32nd percentiles. Two health plans, Parkland Community Health Plan and Superior HealthPlan, performed above the statewide rate on all three measures of asthma medication.

Figure 39. STAR – HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total), 2012-2014

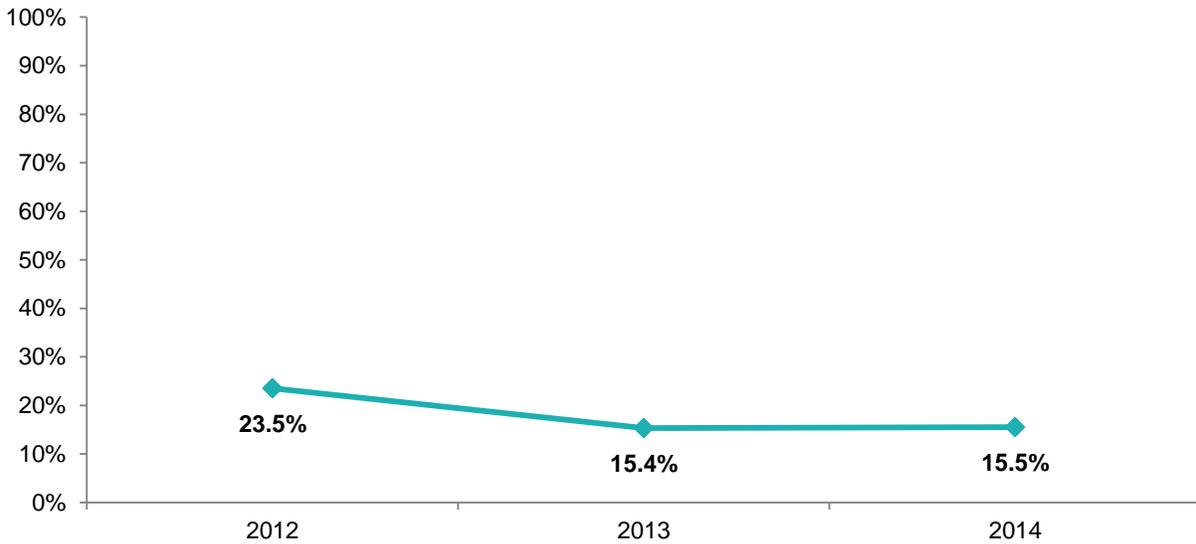


Figure 40 provides the percentage of people in STAR ages 18 to 75 with type 1 or type 2 diabetes who were screened for diabetic retinal disease in the past two years, showing trends from 2010 through 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid, with ten health plans also performing in this band. Four health plans had too few events to report (fewer than 30). Three health plans, El Paso First Health Plans, RightCare from Scott & White Health Plan, and Superior HealthPlan, performed between the 10th and 32nd percentiles. One health plan, Molina Healthcare of Texas, performed in the middle tertile.

Figure 40. STAR – HEDIS® Comprehensive Diabetes Care (CDC), Eye Exam, 2010-2014

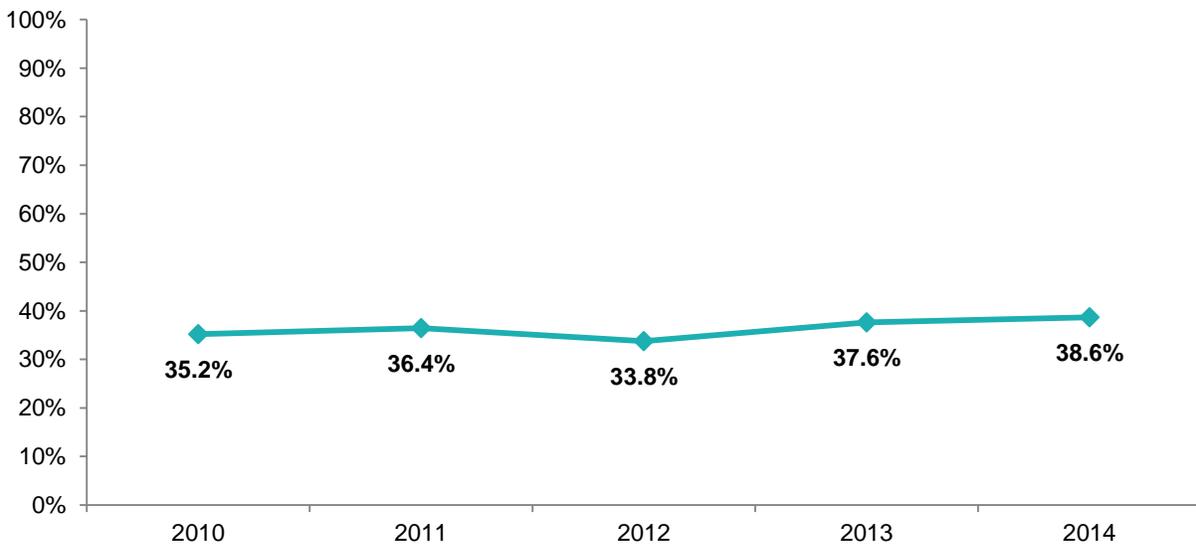
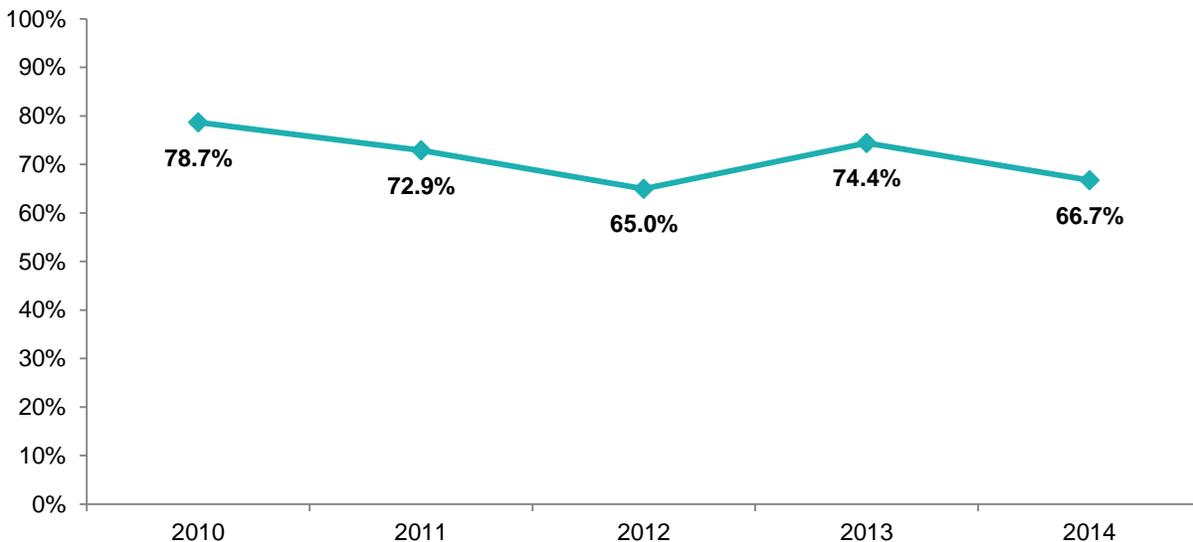


Figure 41 provides the percentage of people in STAR ages 18 to 75 with type 1 or type 2 diabetes who were screened for nephropathy or showed evidence of nephropathy during the measurement year, showing trends from 2010 through 2014. Performance in 2014 was in the bottom decile on the HEDIS® national benchmark percentiles for Medicaid, with 14 health plans also performing in this band. Four health plans had too few events to report (fewer than 30).

Figure 41. STAR – HEDIS® Comprehensive Diabetes Care (CDC), Medical Attention for Nephropathy, 2010-2014



5.2.3. Satisfaction with Care in STAR

Table 20 presents CAHPS® composites and ratings from the member survey conducted with adult members in STAR in 2014. Rates for the 2014 CAHPS® composites represent the percentage of members who “usually” or “always” had positive experiences with the given domain. Results for the ratings measures represent the percentage of members who rated their care a “9” or “10” (on a scale from 0 to 10, with higher scores indicating greater satisfaction). The survey found high levels of member satisfaction in regard to communicating with doctors and getting help and information from health plan customer service, as well as generally positive ratings of care that met or exceeded CAHPS® Medicaid national rates. Rates for *Getting Needed Care* (71 percent), *Getting Care Quickly* (76 percent), and *How Well Doctors Communicate* (88 percent), were below the CAHPS® Medicaid national rate.

Table 20. STAR – Adult Member Satisfaction with Care, 2014

CAHPS® Measure ("Usually" or "Always")	2014 Rate ⁱ	HHSC Dashboard Standard 2014	CAHPS® Adult Medicaid 2014 ⁴³
Getting Needed Care	71.4%	N/A	81%
Getting Care Quickly	76.3%	N/A	82%
How Well Doctors Communicate	88.1%	89%	90%
Health Plan Information and Customer Service	87.4%	N/A	86%
Personal Doctor Rating	66.2%	63%	64%
Specialist Rating	65.4%	N/A	64%
Health Plan Rating	61.3%	60%	57%
Health Care Rating	53.5%	N/A	51%

Table 21 presents CAHPS® composites and ratings from the survey conducted with caregivers of children and adolescents enrolled in STAR in 2015. Rates for the 2015 CAHPS® composites use top box reporting, which represents the percentage of members who “always” had positive experiences with the given domain. Overall, the STAR program performed well on measures of caregiver satisfaction with care. The program exceeded national Medicaid rates for all four ratings measures. In particular, the percentage of caregivers who rated their child or adolescent’s STAR health plan a “9” or “10” (81 percent) exceeded the national Medicaid rate by more than ten percentage points. Similar to the ratings measures, all four CAHPS® composite measures in the STAR program exceeded the national child Medicaid population rates.

Table 21. STAR – Caregiver Satisfaction with Child Health Care, 2015

CAHPS® Measure ("Always")	2015 Rate ⁱ	HHSC Dashboard Standard 2015	CAHPS® Child Medicaid National Rate 2015 ⁴⁴
Getting Needed Care	61.7%	N/A	60%
Getting Care Quickly	76.5%	N/A	72%
How Well Doctors Communicate	79.2%	80%	77%
Health Plan Information and Customer Service	78.3%	N/A	66%
Personal Doctor Rating	76.1%	77%	73%
Specialist Rating	77.9%	N/A	70%
Health Plan Rating	81.3%	81%	67%
Health Care Rating	72.7%	N/A	65%

ⁱ Higher values indicate stronger performance.

Assessment of calendar year 2014 adult and calendar year 2015 caregiver satisfaction measures by health plan showed:

- In the 2014 STAR adult survey, rates for *Getting Needed Care* ranged from 62 percent in Community Health Choice to 80 percent in RightCare. Rates for *Getting Care Quickly* ranged from 65 percent in Texas Children’s to 82 percent in FirstCare.
- In the 2015 STAR Child survey, rates for *Getting Needed Care* ranged from 49 percent in Texas Children's Health Plan to 73 percent in Community Health Choice. Rates for *Getting Care Quickly* ranged from 68 percent in Community First Health Plans to 85 percent in Superior HealthPlan. All managed care organizations exceeded the CAHPS® Medicaid national rate for health plan rating.

Table 22 provides findings from the 2015 survey with caregivers of children and adolescents in STAR who need behavioral health services. Although no national averages are available for comparison, the findings show generally positive experiences with clinician communication, getting treatment and information from the health plan, and perceived improvement. Lower scores were observed for the timeliness of behavioral health care and getting information about treatment options.

Table 22. STAR – Caregiver Satisfaction with Child Behavioral Health Care (ECHO®), 2015

ECHO® Measure	2015 Meanⁱ	Standard Deviation	Range
Getting Treatment Quickly	2.06	0.75	1.00-3.00
How Well Clinicians Communicate	2.35	0.72	1.00-3.00
Getting Treatment and Information from the Plan	2.33	0.57	1.00-3.00
Getting Treatment and Information from the Behavioral Health Organization	2.05	0.56	1.00-3.00
Information about Treatment Options	0.64	0.48	0.00-1.00
Perceived Improvement	3.23	0.75	1.00-4.00
Global Ratings – Treatment	8.13	2.52	0.00-10.00
Global Ratings – Health Plan (Managed Care Organizations only)	8.80	1.92	0.00-10.00

Table 23 provides results from the ECHO® behavioral health survey conducted with adults in STAR in 2015. Similar to the child and adolescent results, positive experiences were reported for the *How Well Clinicians Communicate* and *Getting Treatment and Information from the Plan*. Although STAR members generally were satisfied with their behavioral health care, the measures with the most room for improvement were *Information about Treatment Options* and *Getting Treatment and Information from the Behavioral Health Organization*.

ⁱ Higher values indicate stronger performance.

Table 23. STAR – Adult Member Satisfaction with Behavioral Health Care (ECHO®), 2015

ECHO® Measure	2015 Meanⁱ	Standard Deviation	Range
Getting Treatment Quickly	2.00	0.72	1.00-3.00
How Well Clinicians Communicate	2.40	0.62	1.00-3.00
Getting Treatment and Information from the Plan	2.22	0.59	1.00-3.00
Getting Treatment and Information from the Behavioral Health Organization	1.81	0.75	1.00-3.00
Information about Treatment Options	0.47	0.43	0.00-1.00
Perceived Improvement	2.75	0.90	1.00-4.00
Global Ratings – Treatment	7.63	2.58	0.00-10.00
Global Ratings – Health Plan (Managed Care Organizations only)	8.30	2.38	0.00-10.00

5.3. CHIP Program

5.3.1. Access to and Utilization of Care in CHIP

Table 24 presents statewide performance in 2014 across all managed care organizations participating in the CHIP program on measures of well-care visits, immunization status, screening, and access to a primary care provider. HHSC annually publishes benchmarks in the form of Performance Indicator Dashboard standards; these are derived from prior year performance among all health plans participating in Texas CHIP. The 2014 standard provides a reference comparison for 2014 performance. The HEDIS® 2015 percentile ratings are based on national health plan performance in 2014. HEDIS® *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34)* was calculated using the hybrid method; two of seventeen health plans chose to rotate the measure, as allowed by NCQA specifications, and no statewide rating is available. All three components of *Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents (WCC)* were calculated using the hybrid method; eight of seventeen health plans chose to rotate the measure, as allowed by NCQA specifications, and no statewide rating is available. HEDIS® *Childhood Immunization Status* was rotated by all health plans in CHIP. CHIPRA® *Developmental Screening in the First Three Years of Life (DVS)* is not a HEDIS® measure, but is part of the CHIPRA® Child Core Set of measures. Income-based eligibility for Medicaid covers almost all children in the first year of life who would otherwise be covered by CHIP; the denominator for HEDIS® *Children and Adolescents' Access to Primary Care Practitioners (CAP), 12 to 24 months* is therefore substantially smaller than the other components. The CHIP population is not necessarily comparable to the national Medicaid population, and benchmark comparisons are provided for reference purposes only.

ⁱ Higher values indicate stronger performance.

Table 24. CHIP – HEDIS® Access and Preventive Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Well-Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life (W34)	No state rate	72%	N/A
HEDIS® Adolescent Well-Care Visits (AWC)	61.3%	57%	★★★★
HEDIS® Chlamydia Screening in Women (CHL)	33.5%	55%	★
CHIPRA® Developmental Screening in the First Three Years of Life (DVS)	49.9%	N/A	N/A
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 12 to 24 months	94.4%	96%	★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 25 months to 6 years	90.6%	95%	★★★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 7-11	93.7%	95%	★★★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 12-19	92.2%	93%	★★★★
HEDIS® Weight Assessment & Counseling for Nutrition & Physical Activity for Children & Adolescents (WCC), BMI Percentile	No state rate	46%	N/A
HEDIS® Weight Assessment & Counseling for Nutrition & Physical Activity for Children & Adolescents (WCC), Counseling for Nutrition	No state rate	60%	N/A
HEDIS® Weight Assessment & Counseling for Nutrition & Physical Activity for Children & Adolescents (WCC), Counseling for Physical Activity	No state rate	46%	N/A

Adolescents in CHIP received a high standard of well-care compared with the national Medicaid population, with statewide performance falling between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid and exceeding the HHSC Performance Indicator Dashboard standard. Children in CHIP were largely up-to-date on recommended vaccinations on their second birthday, as measured by the Combination 4 list for HEDIS® *Childhood Immunization Status (CIS), Combination 4*; performance statewide fell between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid and

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

exceeded the HHSC Performance Indicator Dashboard standard. One-third of sexually active female adolescents ages 16 to 19 (34 percent) received a screening test for chlamydia, in the bottom decile on the HEDIS® national benchmark percentiles for Medicaid and below the HHSC Performance Indicator Dashboard standard. An overwhelming majority (94 percent) of children ages 1 to 2 had a visit with a primary care provider in the measurement year, a rate falling between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid and lower than the HHSC Performance Indicator Dashboard standard. Performance in each of the other three age bands of access to primary care providers was between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid and was also lower than the HHSC Performance Indicator Dashboard standard. Across all age bands, 92 percent of children and adolescents in CHIP had had a visit with a primary care provider within the past one year for children up to age 6 or within the past two years for children and adolescents up to age 19.

HEDIS® *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34)* measures the percentage of children ages 3 to 6 in CHIP who received at least one well-child visit in the measurement year. Three of 17 health plans, Community Health Choice, El Paso First Health Plans, and Seton Health Plan, performed in the top decile on the HEDIS® national benchmark percentiles for Medicaid. Six health plans performed between the 66th and 89th percentiles. Seven health plans performed in the middle tertile. One health plan, CHRISTUS Health Plan, had too few events to report (fewer than 30).

Figure 42 provides the percentage of adolescents in CHIP ages 12 to 19 who received at least one well-care visit in the measurement year, showing trends from 2010 through 2014. Starting with measurement year 2013, HEDIS® *Adolescent Well-Care Visits (AWC)* has been reported using hybrid methodology; as this method captures more events in the numerator, this change may in part explain improvement seen in that year. Performance in 2014 was between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid, with six health plans also performing in this band. Four health plans, Community Health Choice, El Paso First Health Plans, Sendero Health Plans, and Seton Health Plan, performed in the top decile. One health plan, CHRISTUS Health Plan, performed in the bottom decile. Three health plans, Community First Health Plans, El Paso First Health Plans, and Seton Health Plan, performed in the top decile on both HEDIS® *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34)* and HEDIS® *Adolescent Well-Care Visits (AWC)*.

Figure 42. CHIP – HEDIS® Adolescent Well-Care Visits (AWC), 2010-2014

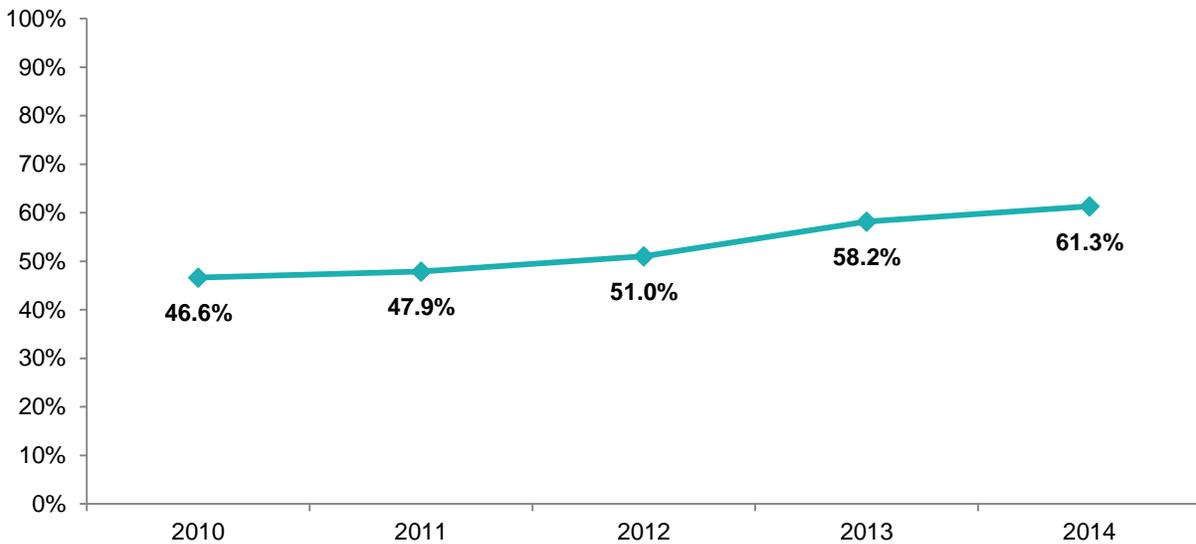


Figure 43 provides the percentage of sexually active female adolescents ages 16 to 19 who received at least one test for chlamydia in the measurement year, showing trends from 2010 through 2014. Performance in 2014 was in the bottom decile on the HEDIS® national benchmark percentiles for Medicaid, with 13 health plans also performing in this band. Three health plans had too few events to report (fewer than 30). One health plan, Community Health Choice, performed between the 10th and 32nd percentiles.

Figure 43. CHIP – HEDIS® Chlamydia Screening in Women (CHL), 2010-2014

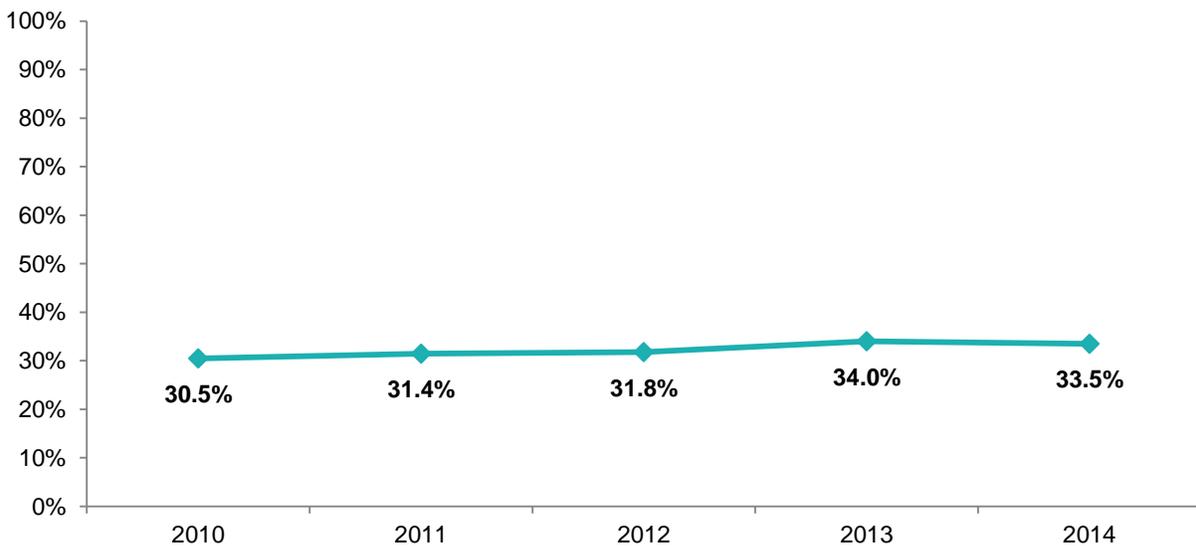


Figure 44 shows statewide performance on HEDIS® *Children and Adolescents' Access to Primary Care Practitioners* with all age strata combined from 2010 through 2014. Five health plans performed in the top decile on the HEDIS® national benchmark percentiles for Medicaid on at least two of the four components and not lower than the top tertile on the remaining two:

Driscoll Health Plan, El Paso First Health Plans, FirstCare, Parkland Community Health Plan, and Seton Health Plan.

Figure 44. CHIP – HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), All Members, 2010-2014

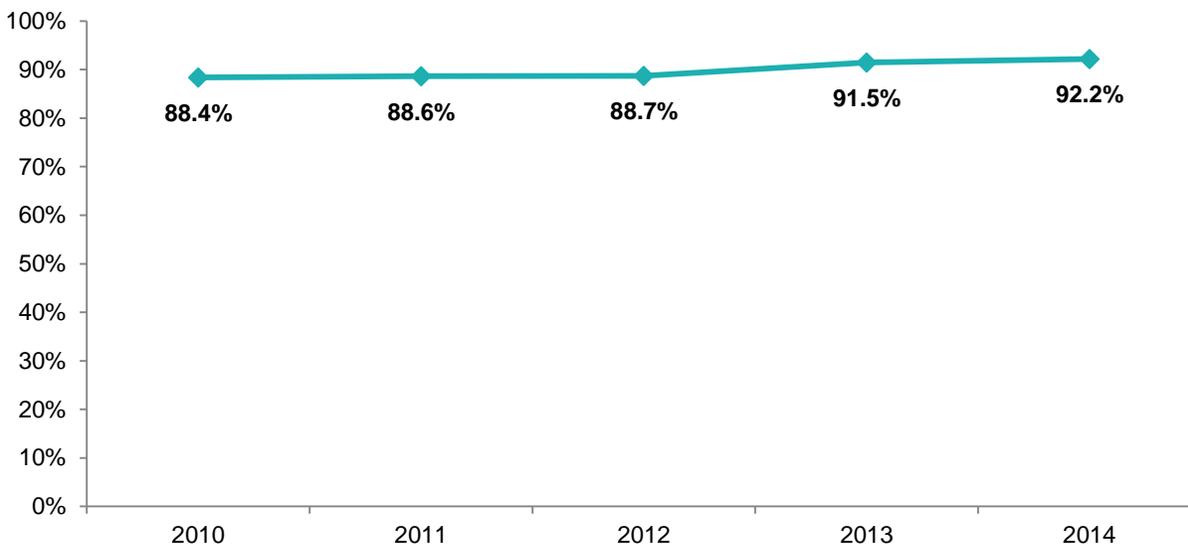


Table 25 shows utilization rates in 2014 across all managed care organizations participating in the CHIP program. Higher rates of utilization do not necessarily indicate stronger performance. The two components of HEDIS® *Ambulatory Care (AMB)* presented summarize utilization of two types of ambulatory care: outpatient visits per 1,000 member-months, and emergency visits per 1,000 member-months. HEDIS® *Inpatient Utilization (IPU)* measures acute inpatient care and services per 1,000 member-months in the following four categories: total inpatient, maternity, surgery, and medicine. The rates reported here combine all service categories for each measure.

Rates of utilization varied among health plans:

- Outpatient visits per 1,000 member-months ranged from 192.92 for Blue Cross Blue Shield of Texas to 273.3 for Driscoll Health Plan.
- Emergency department visits per 1,000 member-months varied very little; utilization in all 17 health plans was between 17.75 and 29.71 visits per 1,000 member-months.
- Acute inpatient discharges per 1,000 member-months ranged from 0.71 for Amerigroup to 1.58 for FirstCare.

Table 25. CHIP – HEDIS® Utilization of Care Measures, 2014

Measure	2014 Rate ⁱ	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Ambulatory Care, (AMB) Outpatient Visits (per 1,000 member-months)	239.34	★
HEDIS® Ambulatory Care, (AMB) Emergency Department Visits (per 1,000 member-months)	22.72	★
HEDIS® Inpatient Utilization (IPU) Total Inpatient Discharges (per 1,000 member-months)	0.90	★

Table 26 shows five Agency for Healthcare Research and Quality (AHRQ) Pediatric Quality Indicators (PDIs). These measures are derived from hospital inpatient discharge data and can identify areas of potential concern, such as unexpectedly high rates of complications or health care needs that could be met in the community without hospitalization. Numerators for all Pediatric Quality Indicators were very small for most health plans.

Table 26. CHIP – AHRQ Pediatric Quality Indicators (PDI), 2014ⁱⁱⁱ

Measure	2014 Rate	Range
Asthma Admission Rate (PDI 14) (per 100,000 member-months)	7.69	4.28 – 45.82
Diabetes Short-Term Complications (PDI 15) (per 100,000 member-months)	1.99	0.00 – 5.31
Gastroenteritis Admission Rate (PDI 16) (per 100,000 member-months)	1.52	0.00 – 13.94
Perforated Appendix Admission Rate (PDI 17) (per 100 admissions for appendicitis)	58.33	42.11 – 66.67
Urinary Tract Infection (PDI 18) (per 100,000 member-months)	1.24	0.00 – 4.05

The external quality review organization calculated statewide performance across all managed care organizations participating in the CHIP program on measures of potentially preventable events, including admissions, readmissions within 30 days, emergency department visits, and complications; the external quality review organization calculated these measures using 3M™ Health Information Systems software. These measures assess the frequency and cost of visits

ⁱ Higher or lower values do not necessarily indicate better quality of care.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

ⁱⁱⁱ Lower values indicate stronger performance.

that potentially could have been prevented with better primary and outpatient care; not all events classified as potentially preventable necessarily will have been preventable. Program-level rates are expressed as the weighted actual number of visits per 1,000 member-months, with lower rates indicating higher performance. Weights are assigned based on resource utilization to account for different health system impact of different potentially preventable events – events requiring more health care resources (e.g., hospital bed-hours) are weighted more heavily in the measure; resource accounting is independent of actual cost in dollars. Actual-to-expected ratios are calculated so that a health plan that sees fewer weighted potentially preventable events than the CHIP program as a whole will have a ratio of less than one, while a health plan that sees more weighted potentially preventable events than the CHIP program as a whole will have a ratio greater than one. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. **Tables 27 through 30** present the top ten most common causes of each potentially preventable event category; for categories with fewer than ten distinct reasons, all reasons are given. Trends in actual weighted number of events per 1,000 member-months are shown for measures calculated by the external quality review organization for three or more years (since 2012 or earlier).

Figure 45 shows weighted statewide admissions per 1,000 member-months in CHIP for 3M™ *Potentially Preventable Admissions (PPA)* from 2011 to 2014. The relative weight for each admission at risk was assigned based on typical health care resource utilization.

Figure 45. CHIP – 3M™ Potentially Preventable Admissions (PPA), Weighted Admissions per 1,000 Member-months, 2011-2014ⁱ

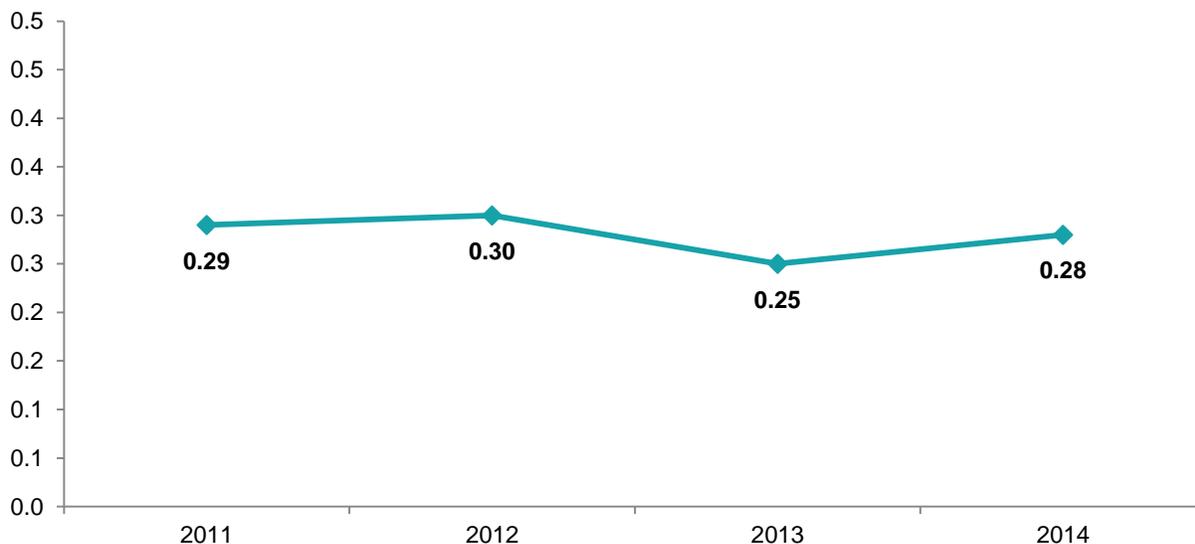


Figure 46 shows comparative performance on 3M™ *Potentially Preventable Admissions (PPA)* among health plans participating in CHIP in 2014. Actual-to-expected ratios show the relative

ⁱ Lower values indicate stronger performance.

performance of the health plan compared to their peers after adjusting for their case-mix. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. Two health plans, Amerigroup and Molina Healthcare of Texas, saw at least 20 percent fewer events than the statewide rate. Five health plans, Superior HealthPlan, Seton Health Plan, Blue Cross Blue Shield of Texas, FirstCare, and Aetna Better Health, saw at least 20 percent more potentially preventable admissions than the statewide rate.

Figure 46. CHIP – 3M™ Potentially Preventable Admissions (PPA), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

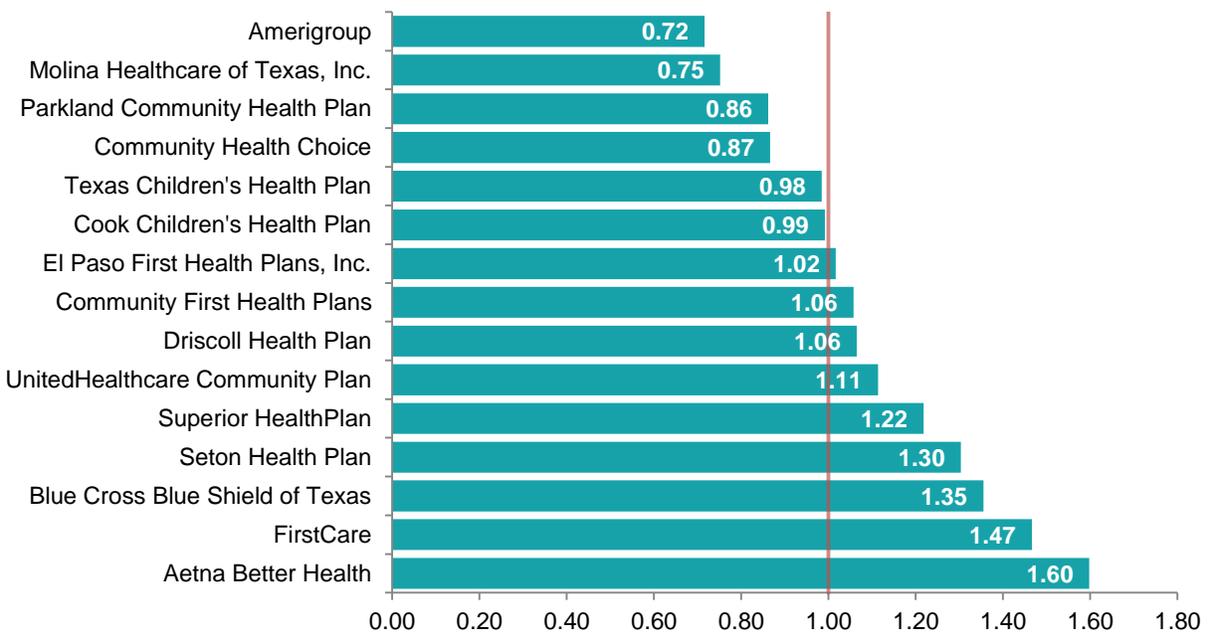


Table 27 presents the most common reasons for 3M™ *Potentially Preventable Admissions (PPA)* among all members in CHIP in 2014. Statewide, 1,801 unique members experienced 1,928 events; the weighted rate was 0.28 events per 1,000 member-months. Two categories – asthma and other pneumonia – accounted for nearly one-third of potentially preventable admissions.

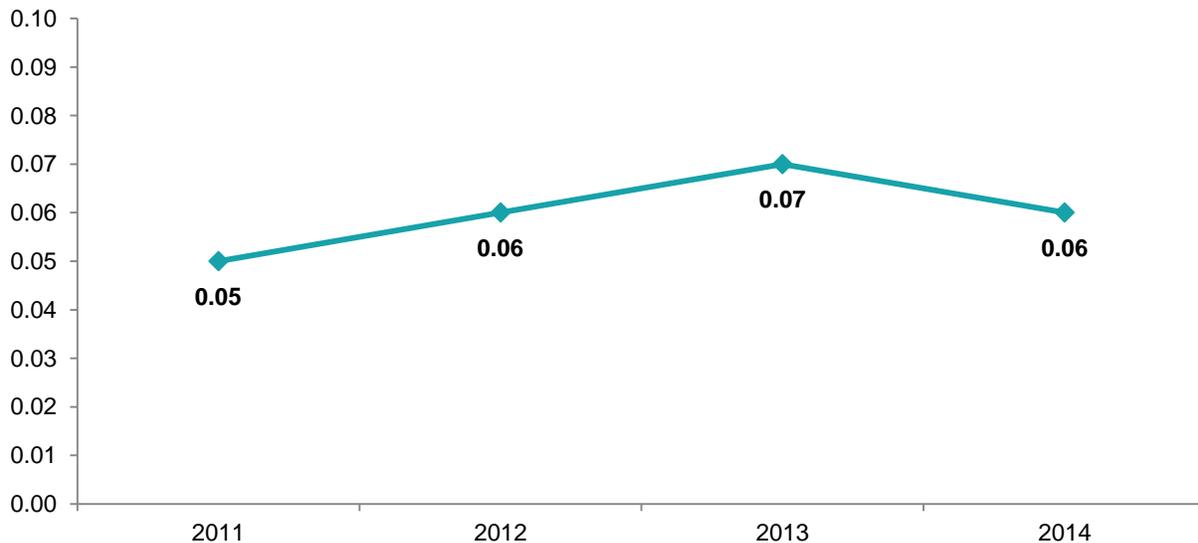
ⁱ Lower values indicate stronger performance.

Table 27. CHIP – Most Common Reasons for 3M™ Potentially Preventable Admissions (PPA), 2014

PPA Reason	% of PPAs in CHIP
1 Asthma	19.6%
2 Other Pneumonia	10.7%
3 Major Depressive Disorders and Other / Unspecified Psychoses	9.5%
4 Diabetes	9.2%
5 Cellulitis and Other Bacterial Skin Infections	8.7%
6 Bipolar Disorders	8.1%
7 Seizure	7.5%
8 Infections of Upper Respiratory Tract	4.0%
9 Non-Bacterial Gastroenteritis, Nausea and Vomiting	3.9%
10 Kidney and Urinary Tract Infections	3.7%

Figure 47 shows weighted statewide readmissions per 1,000 member-months in CHIP for 3M™ Potentially Preventable Readmissions (PPR) from 2011 to 2014. The relative weight for each readmission at risk was assigned based on typical health care resource utilization. A readmission chain includes all readmissions clinically related to an initial admission.

Figure 47. CHIP – 3M™ Potentially Preventable Readmissions (PPR), Weighted Readmissions per 1,000 Member-months, 2011-2014ⁱ



ⁱ Lower values indicate stronger performance.

Figure 48. CHIP – 3M™ Potentially Preventable Readmissions (PPR), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

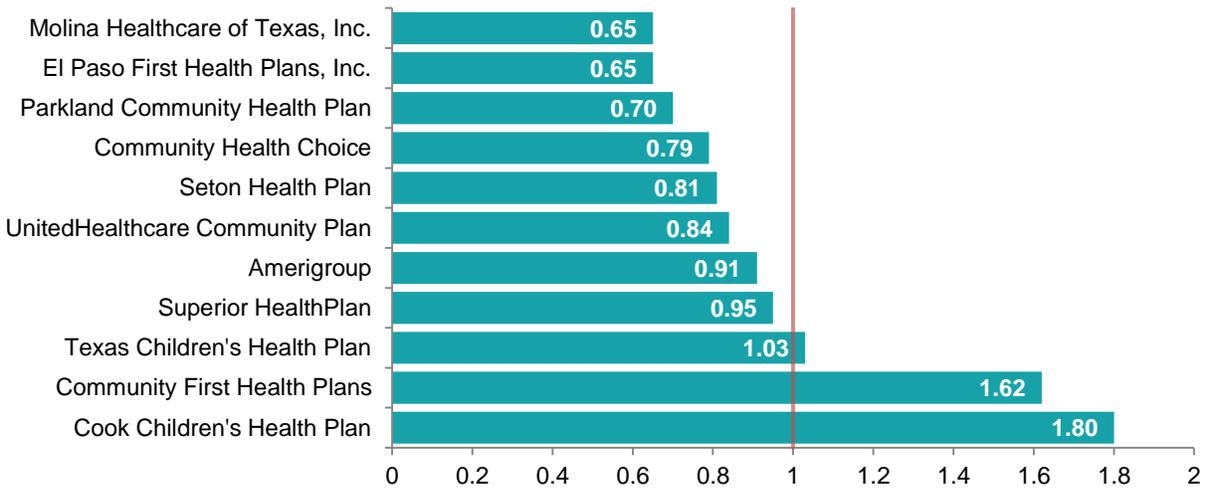


Figure 48 shows comparative performance on 3M™ *Potentially Preventable Readmissions (PPR)* among health plans participating in CHIP in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix. Lower values indicate stronger performance. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. Three health plans, Molina Healthcare of Texas, El Paso First Health Plans, and Parkland Community Health Plan, saw at least 30 percent fewer events than the statewide rate. Two health plans, Community First Health Plans and Cook Children's Health Plan, saw at least 30 percent more potentially preventable readmissions than the statewide rate.

ⁱ Lower values indicate stronger performance.

Table 28. CHIP – Most Common Reasons for 3M™ Potentially Preventable Readmissions (PPR), 2014

PPR Reason	% of PPRs in CHIP
1 Mental health or substance abuse readmission following an initial admission for a substance abuse or mental health diagnosis.	67.5%
2 Medical readmission for a continuation or recurrence of the reason for the initial admission, or for a closely related condition.	10.6%
3 Medical readmission for acute medical condition or complication that may be related to or may have resulted from care during initial admission or in post-discharge period after initial admission.	10.4%
4 All other readmissions for a chronic problem that may be related to care either during or after the initial admission.	4.5%
5 Readmission for mental health reasons following an initial admission for a non-mental health, non-substance abuse reason.	4.3%
6 Readmission for surgical procedure to address a continuation or a recurrence of the problem causing the initial admission.	1.2%
7 Readmission for surgical procedure to address a complication that may be related to or may have resulted from care during the initial admission.	0.9%
8 Ambulatory care-sensitive conditions as designated by AHRQ	0.7%

Table 28 presents the most common reasons for 3M™ *Potentially Preventable Readmissions (PPR)* among all members in CHIP in 2014. Statewide, 297 unique members experienced 313 readmission chains; the weighted rate was 0.06 events per 1,000 member-months. The most common category accounted for more than two-thirds of readmissions.

Figure 49 shows weighted statewide emergency department visits per 1,000 member-months in CHIP for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* from 2011 to 2014. The relative weight for each emergency department visit at risk was assigned based on typical health care resource utilization.

Figure 49. CHIP – 3M™ Potentially Preventable Emergency Department Visits (PPV), Weighted Visits per 1,000 Member-months, 2011-2014ⁱ

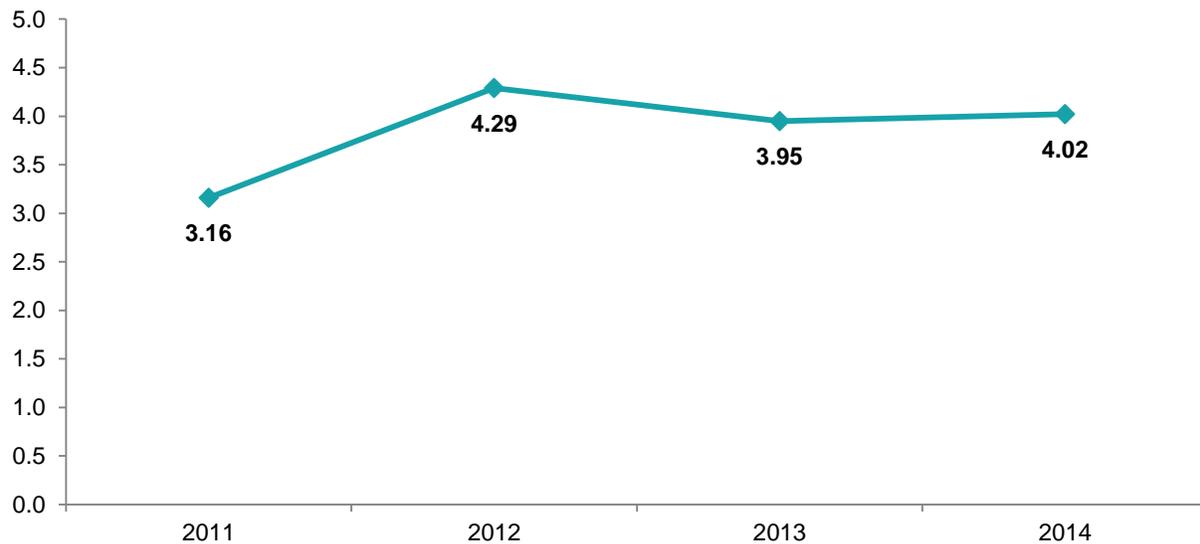


Figure 50 shows comparative performance on 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among health plans participating in CHIP in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix. Lower values indicate stronger performance. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. One health plan, Community Health Choice, saw at least 20 percent fewer potentially preventable emergency department visits than the statewide rate. Three health plans, Community First Health Plans, FirstCare, and Blue Cross Blue Shield of Texas, saw at least 20 percent more potentially preventable emergency department visits than the statewide rate.

ⁱ Lower values indicate stronger performance.

Figure 50. CHIP – 3M™ Potentially Preventable Emergency Department Visits (PPV), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

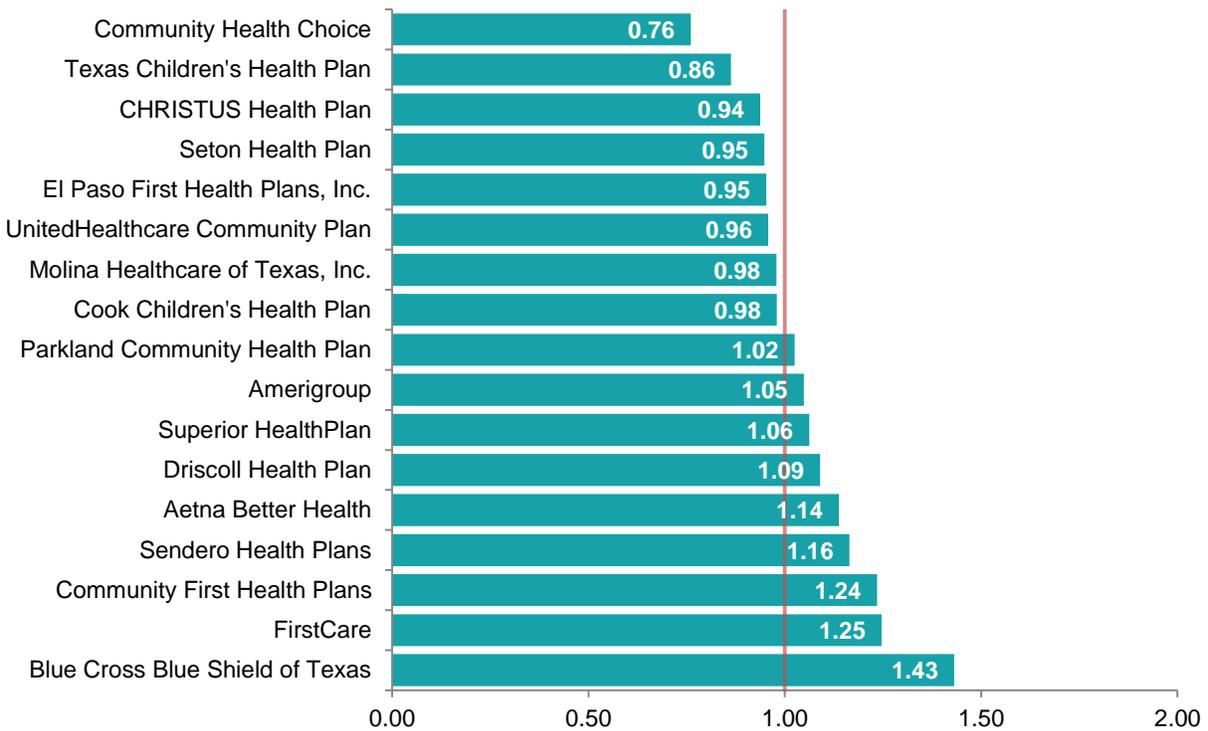


Table 29. CHIP – Most Common Reasons for 3M™ Potentially Preventable Emergency Department Visits (PPV), 2014

PPV Reason	% of PPVs in CHIP
1 Infections of Upper Respiratory Tract	21.6%
2 Level II Other Musculoskeletal System and Connective Tissue Diagnoses	7.3%
3 Non-Bacterial Gastroenteritis, Nausea and Vomiting	7.3%
4 Abdominal Pain	6.0%
5 Level I Other Ear, Nose, Mouth, Throat & Cranial / Facial Diagnoses	5.6%
6 Contusion, Open Wound and Other Trauma to Skin and Subcutaneous Tissue	5.6%
7 Signs, Symptoms and Other Factors Influencing Health Status	5.5%
8 Other Skin, Subcutaneous Tissue and Breast Disorders	4.9%
9 Splint, Strapping and Cast Removal	3.6%
10 Viral Illness	3.3%

ⁱ Lower values indicate stronger performance.

Table 29 presents the most common reasons for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among all members in CHIP in 2014. Statewide, 62,030 unique members experienced 78,705 events; the weighted rate was 4.02 events per 1,000 member-months. Infections of the upper respiratory tract accounted for more than 20 percent of potentially preventable emergency department visits.

Table 30 presents the most common reasons for 3M™ *Potentially Preventable Complications (PPC)* among all members in CHIP in 2014. Statewide, 10 unique members experienced 12 events. The weighted rate was less than 0.01 events per 1,000 member-months; relative weight for each complication at risk was assigned based on typical health care resource utilization. Accidental puncture or laceration during an invasive procedure accounted for one-quarter of potentially preventable complications.

Table 30. CHIP – Most Common Reasons for 3M™ Potentially Preventable Complications (PPC), 2014

PPC Reason		% of PPCs in CHIP
1	Accidental Puncture/Laceration during Invasive Procedure	25.0%
2	Obstetrical Hemorrhage without Transfusion	16.7%
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	8.3%
4	Other Pulmonary Complications	8.3%
5	Shock	8.3%
6	Renal Failure without Dialysis	8.3%
7	Septicemia & Severe Infections	8.3%
8	Post-Operative Infection & Deep Wound Disruption without Procedure	8.3%
9	Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Procedure	8.3%

5.3.2. Effectiveness of Care in CHIP

Table 31 presents statewide performance in 2014 across all managed care organizations participating in CHIP on measures of effectiveness of care. HEDIS® *Asthma Medication Ratio (AMR)* has been added to the HHSC Performance Indicator Dashboard for CHIP for the 2015 measurement year. The behavioral health measures HEDIS® *Follow-Up After Hospitalization for Mental Illness (FUH)* and HEDIS® *Follow-Up Care for Children Prescribed ADHD Medication (ADD)* are discussed in more detail in **Section 6.4 Behavioral Health**. The CHIP population is not necessarily comparable to the national Medicaid population, and benchmark comparisons are provided for reference purposes only.

Table 31. CHIP – HEDIS® Effectiveness of Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Appropriate Testing for Children with Pharyngitis (CWP)	67.2%	68%	★★★
HEDIS® Use of Appropriate Medications for People with Asthma (ASM), All Ages	95.1%	95%	★★★★★
HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%	72.2%	N/A	★★★★★
HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total)	18.5%	29%	★
HEDIS® Follow-up After Hospitalization for Mental Illness (FUH), 7 Days	41.8%	44%	★★★
HEDIS® Follow-up After Hospitalization for Mental Illness (FUH), 30 Days	63.8%	67%	★★★
HEDIS® Follow-up Care for Children Prescribed ADHD Medication (ADD), Initiation Phase	43.0%	45%	★★★
HEDIS® Follow-up Care for Children Prescribed ADHD Medication (ADD), Continuation and Maintenance Phase	56.8%	46%	★★★★★

Two-thirds of children and adolescents in CHIP in 2014 (67 percent) were appropriately tested for streptococcal pharyngitis when presenting with pharyngitis, in the middle tertile compared to the HEDIS® national benchmark percentiles for Medicaid and slightly below the HHSC

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Performance Indicator Dashboard standard. Members with asthma were very likely to be prescribed a controller medication and to use more controller medications than quick-relief medications compared to the national Medicaid population, with both measures performing in the top decile on the HEDIS® national benchmark percentiles for Medicaid. The rate of members being dispensed controller medications covering at least 75 percent of days showed room for improvement, performing in the bottom decile nationally and below the HHSC Performance Indicator Dashboard standard.

Figure 51 shows the percentage of children and adolescents in CHIP ages 2 to 18 presenting with pharyngitis who were appropriately tested for streptococcal pharyngitis from 2010 through 2014. Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with six health plans also performing in this band. One health plan, CHRISTUS health plan, had too few events to report (fewer than 30). Seven health plans performed between the 10th and 32nd percentiles. Three health plans, Cook Children's Health Plan, Parkland Community Health Plan, and Seton Health Plan, performed between the 66th and 89th percentiles.

Figure 51. CHIP – HEDIS® Appropriate Testing for Children with Pharyngitis (CWP), 2010-2014

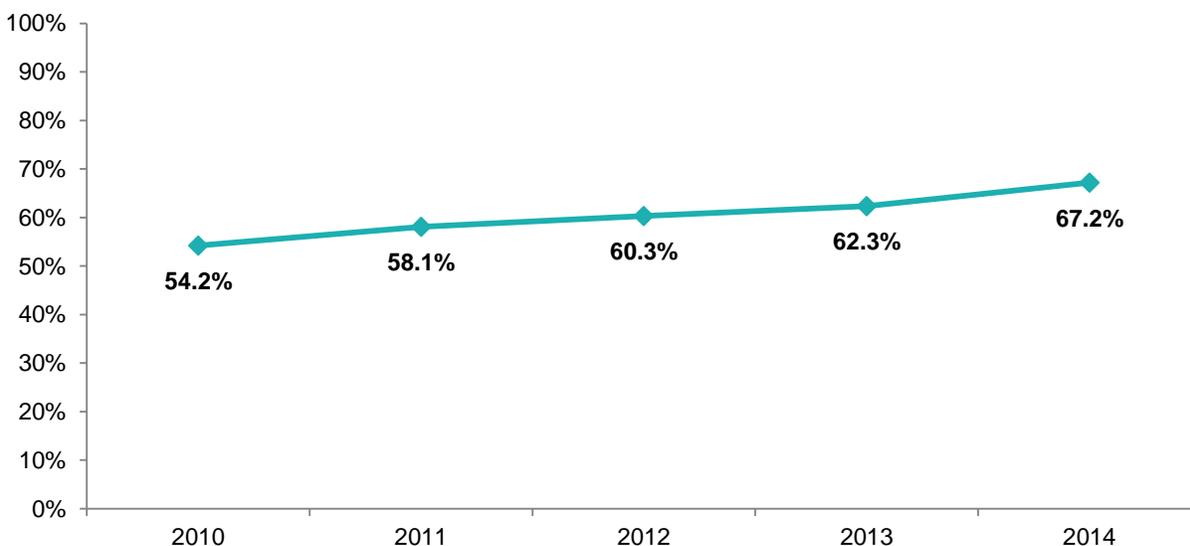


Figure 52 provides the percentage of people in CHIP ages 5 to 64 identified as having persistent asthma who were prescribed an appropriate medication during the measurement year, showing trends from 2010 through 2014. Performance in 2014 was in the top decile on the HEDIS® national benchmark percentiles for Medicaid, with 13 health plans also performing in this band. Three health plans, Blue Cross Blue Shield of Texas, CHRISTUS Health Plan, and Sendero Health Plan, had too few events to report (fewer than 30). One health plan, FirstCare, performed between the 66th and 89th percentiles.

Figure 52. CHIP – HEDIS® Use of Appropriate Medications for People with Asthma (ASM), All Ages, 2010-2014

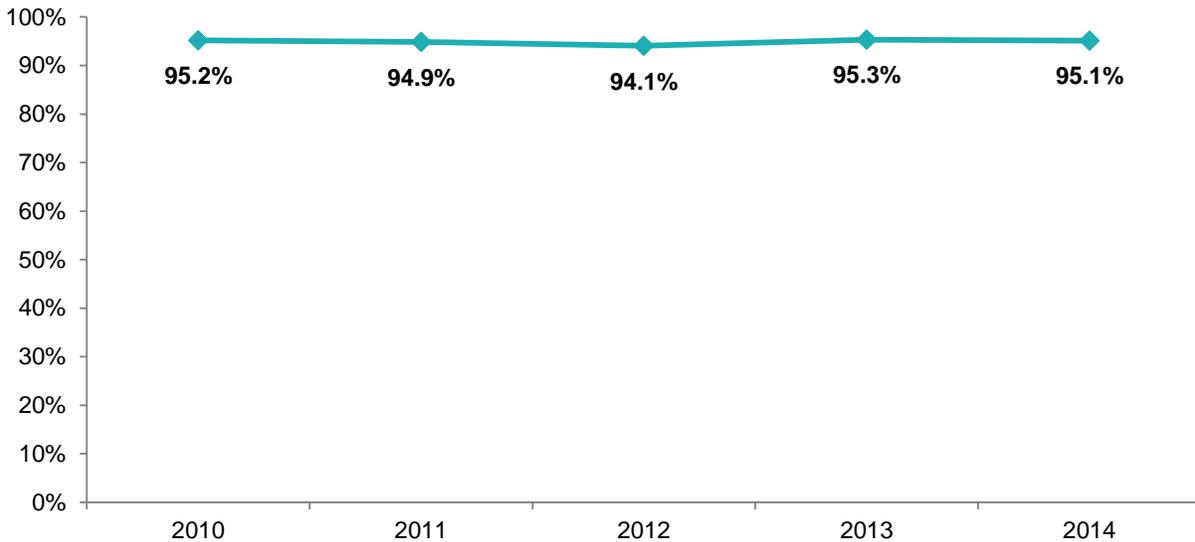


Figure 53 shows the percentage of people in CHIP ages 5 to 64 identified as having persistent asthma who used more controller medications than quick-relief medications (an indicator of good disease management)⁴⁵ from 2012 through 2014. Performance in 2014 was in the top decile on the HEDIS® national benchmark percentiles for Medicaid, with seven health plans also performing in this band. Three health plans, Blue Cross Blue Shield of Texas, CHRISTUS Health Plan, and Sendero Health Plan, had too few events to report (fewer than 30). Two health plans, Aetna Better Health and FirstCare, performed in the middle tertile.

Figure 53. CHIP – HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%, 2012-2014

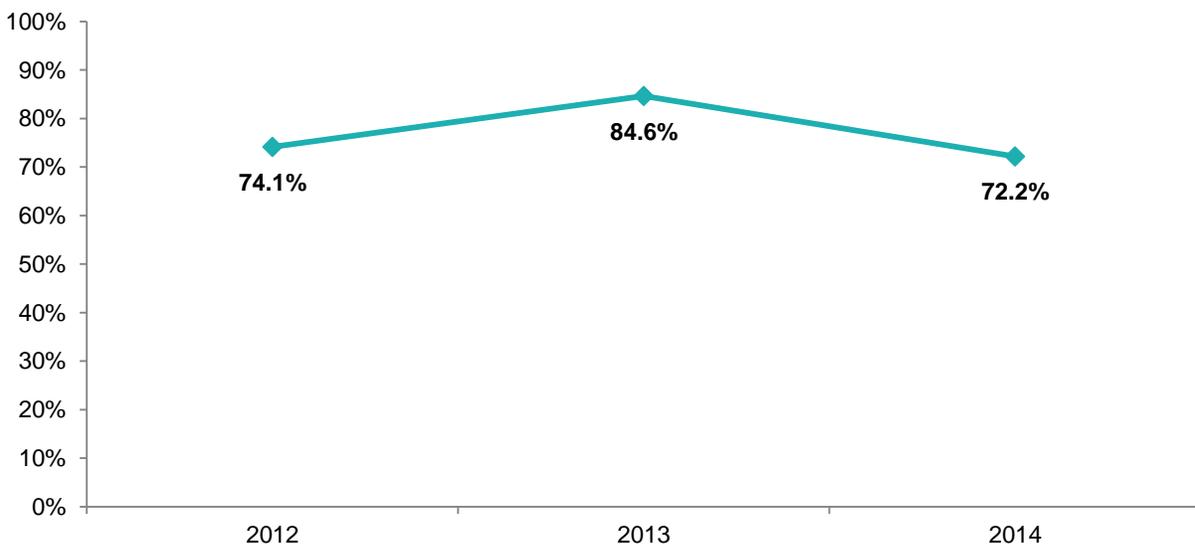
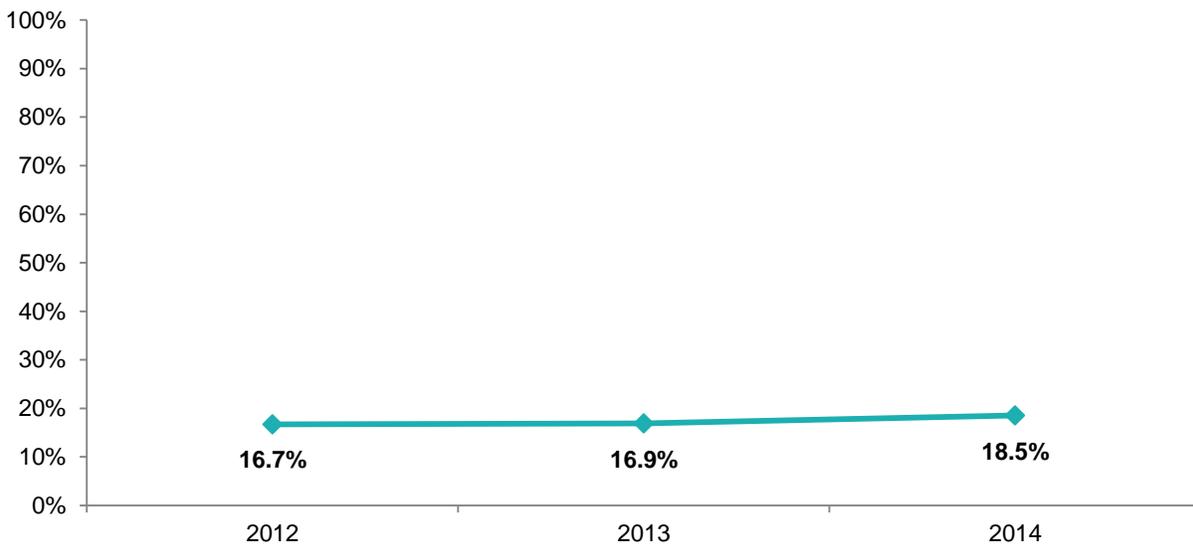


Figure 54 provides the percentage of people in CHIP ages 5 to 64 identified as having persistent asthma who were dispensed asthma controller medications covering at least 75 percent of days during the measurement year, showing trends from 2012 through 2014. Performance in 2014 was in the bottom decile on the HEDIS® national benchmark percentiles for Medicaid, with nine health plans also performing in this band. Three health plans, Blue Cross Blue Shield of Texas, CHRISTUS Health Plan, and Sendero Health Plan, had too few events to report (fewer than 30). Five health plans performed between the 10th and 32nd percentiles. Three health plans, Community Health Choice, Superior HealthPlan, and UnitedHealthcare, performed above the statewide rate on all three measures of asthma medication.

Figure 54. CHIP – HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total), 2012-2014



5.3.3. Satisfaction with Care in CHIP

Table 32 presents CAHPS® composites and ratings from the member survey conducted with caregivers of children and adolescents enrolled in CHIP in 2015. The survey found high levels of caregiver satisfaction in regard to communicating with doctors and health plan information and customer service. Caregiver ratings of their child or adolescent’s personal doctor were approximately equal to those reported in the national CHIP population, while all other ratings exceeding the national rates.

The percentage of caregivers in CHIP who “always” had positive experiences with *Getting Needed Care* (55 percent) was lower than reported nationally (62 percent), which highlights access to care, tests, treatment, and specialists as areas for improvement.

Table 32. CHIP – Caregiver Satisfaction with Care, 2015

CAHPS® Measure (“Always”)	2015 Rate ⁱ	HHSC Dashboard Standard 2015	CAHPS® CHIP 2015 ⁴⁶
Getting Needed Care	55.4%	N/A	62%
Getting Care Quickly	72.7%	N/A	74%
How Well Doctors Communicate	78.2%	78%	78%
Health Plan Information and Customer Service	74.6%	N/A	65%
Personal Doctor Rating	73.3%	72%	73%
Specialist Rating	72.0%	N/A	70%
Health Plan Rating	73.3%	72%	68%
Health Care Rating	69.8%	N/A	66%

ⁱ Higher values indicate stronger performance.

5.4. STAR+PLUS Program

5.4.1. Access to and Utilization of Care in STAR+PLUS

Table 33 shows statewide performance in 2014 across all managed care organizations participating in the STAR+PLUS program on measures of access and prevention. HHSC annually publishes benchmarks in the form of Performance Indicator Dashboard standards; these are derived from prior year performance among all health plans participating in the STAR+PLUS program. The 2014 standard provides a reference comparison for 2014 performance. The HEDIS® 2015 percentile ratings are based on national health plan performance in 2014. It is important to note that the STAR+PLUS program is designed to serve a population with generally greater health care needs, and the population is not necessarily comparable to the national Medicaid population. National benchmark comparisons are provided for reference purposes only; high rates of utilization and other indicators of greater health care needs are expected.

Adults' access to preventive and ambulatory health services in STAR+PLUS in 2014 was above the 50th percentile on the HEDIS® national benchmark percentiles for Medicaid. Performance on the rate of assessing adult BMI was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid but exceeded the HHSC Performance Indicator Dashboard standard. The rate of screening for breast cancer was between the 10th and 32nd percentiles nationally but exceeded the HHSC Performance Indicator Dashboard standard. The statewide rate of screening for cervical cancer was in the bottom decile nationally and did not meet the HHSC Performance Indicator Dashboard standard.

Table 33. STAR+PLUS – HEDIS® Access and Preventive Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Adults' Access to Preventive / Ambulatory Health Services (AAP)	84.5%	N/A	★★★
HEDIS® Adult BMI Assessment (ABA)	78.1%	65%	★★
HEDIS® Breast Cancer Screening (BCS)	52.6%	51%	★★
HEDIS® Cervical Cancer Screening (CCS)	44.2%	67%	★
HEDIS® Initiation & Engagement of Alcohol & Other Drug Dependence Treatment (IET), Initiation	34.9%	43%	★★★
HEDIS® Initiation & Engagement of Alcohol & Other Drug Dependence Treatment (IET), Engagement	4.5%	14%	★★

Figure 55 provides the percentage of adults in STAR+PLUS ages 20 or older who had an ambulatory or preventive care visit during the measurement year, showing trends from 2010 through 2014. Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with four health plans also performing in this band. One health plan, Superior HealthPlan, performed between the 66th and 89th percentiles.

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 55. STAR+PLUS – HEDIS® Adults' Access to Preventive / Ambulatory Health Services (AAP), 2010-2014

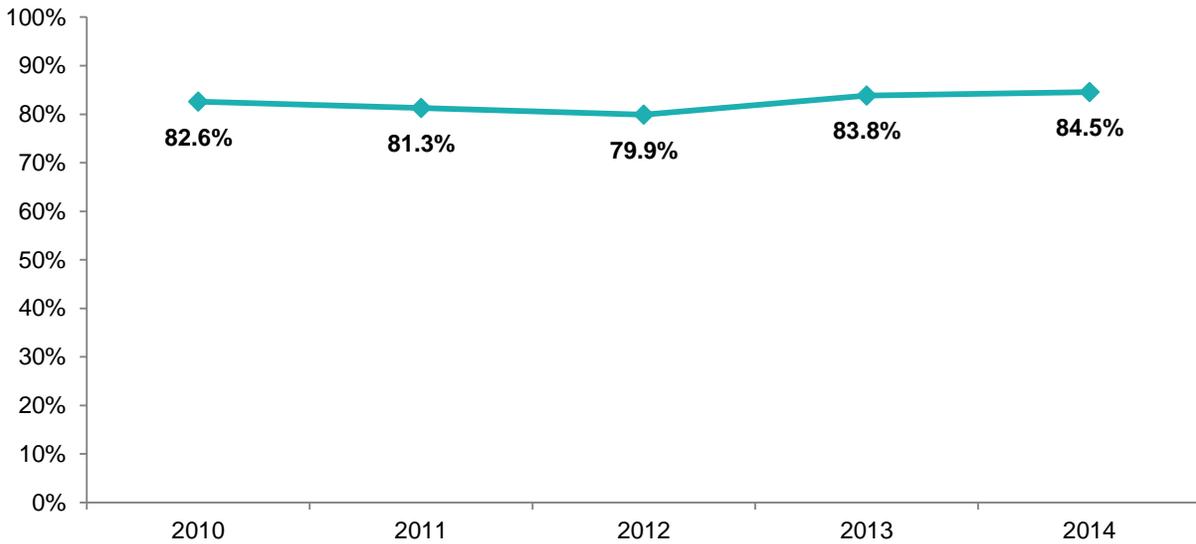


Figure 56. STAR+PLUS – HEDIS® Adult BMI Assessment (ABA), 2011-2014

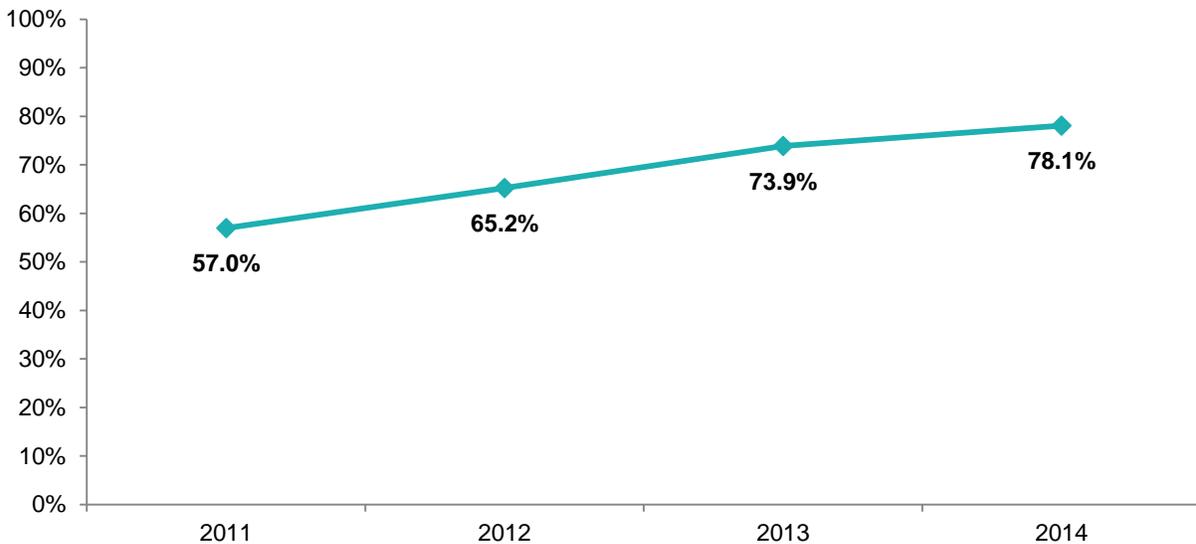


Figure 56 provides the percentage of adults in STAR+PLUS ages 18 to 74 whose body mass index (BMI) was documented in the past two years, showing trends from 2011 through 2014. Statewide performance on this measure increased consistently over the four-year period, from 57 percent in 2011 to 78 percent in 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid, with three health plans performing in this band. One health plan, Cigna-Healthspring, performed in the bottom decile. One health plan, Amerigroup, performed in the middle tertile.

Figure 57 provides the percentage of women in STAR+PLUS ages 50 to 74 who were screened for breast cancer within the past two years, showing trends from 2010 through 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid, with three health plans performing in this band. Two health plans, Cigna-Healthspring and Molina Healthcare of Texas, performed in the middle tertile.

Figure 57. STAR+PLUS – HEDIS[®] Breast Cancer Screening (BCS), 2010-2014

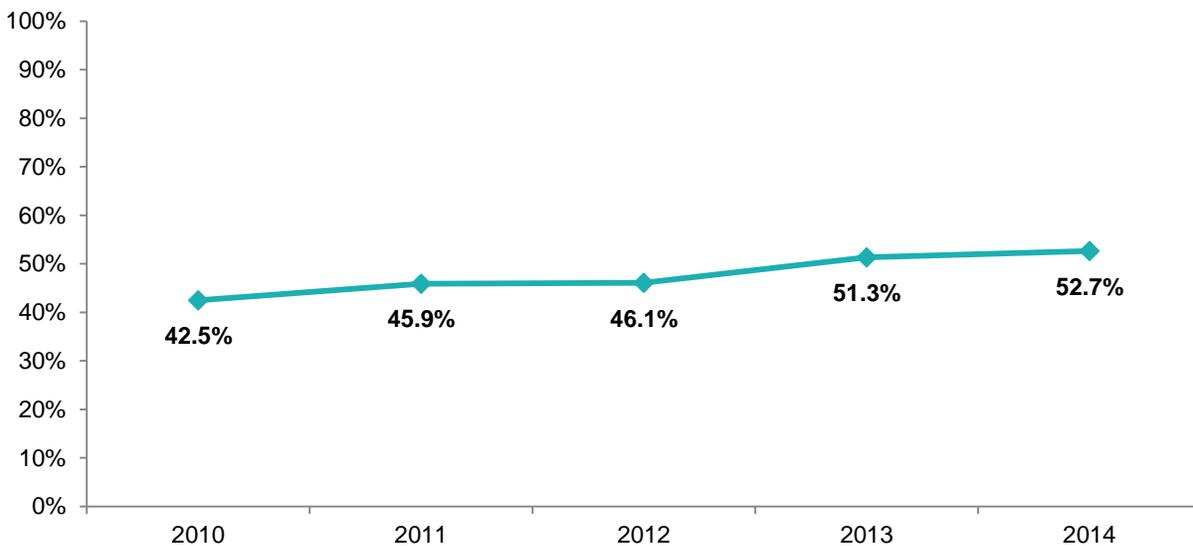


Figure 58 provides the percentage of women in STAR+PLUS ages 21 to 64 who were screened for cervical cancer within the past three or five years, depending on age and method of screening, showing trends from 2010 through 2014. Performance in 2014 was in the bottom decile on the HEDIS® national benchmark percentiles for Medicaid, with four health plans also performing in this band. One health plan, Superior HealthPlan, performed between the 10th and 32nd percentiles. One health plan, Superior HealthPlan, performed above the statewide rate on both cancer screening measures.

Figure 58. STAR+PLUS – HEDIS® Cervical Cancer Screening (CCS), 2010-2014

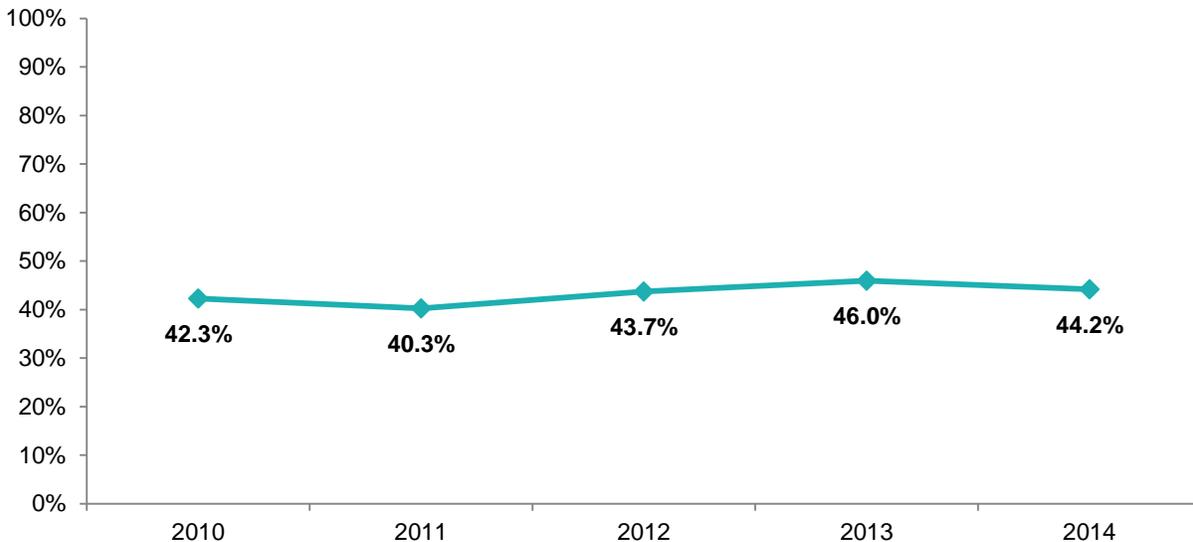


Table 34 shows utilization rates in 2014 across all managed care organizations participating in the STAR+PLUS program. It is important to note that higher rates of utilization do not necessarily indicate higher quality of care. The two components of HEDIS® *Ambulatory Care (AMB)* presented summarize utilization of two types of ambulatory care: outpatient visits per 1,000 member-months, and emergency department visits per 1,000 member-months. *Inpatient Utilization* measures acute inpatient care and services per 1,000 member-months in the following four categories: total inpatient, maternity, surgery, and medicine. *Mental Health Utilization* identifies the percentage of members who received one of the following mental health services during the measurement period: inpatient services, intensive outpatient or partial hospitalization services, or outpatient or emergency department services. The rates reported here reflect all service categories combined for each measure.

Table 34. STAR+PLUS – HEDIS® Utilization of Care Measures, 2014

Measure	2014 Rate ⁱ	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Ambulatory Care (AMB), Outpatient Visits (per 1,000 member-months)	581.1	★★★★★
HEDIS® Ambulatory Care (AMB), Emergency Department Visits (per 1,000 member-months)	117.5	★★★★★
HEDIS® Inpatient Utilization (IPU), Total Inpatient Discharges (per 1,000 member-months)	24.0	★★★★★
HEDIS® Mental Health Utilization (MPT), Any Services (per 100 member-years)	31.3	★★★★★

Rates of utilization varied among health plans:

- Outpatient visits per 1,000 member-months ranged from 555.5 for Amerigroup to 610.0 for Superior HealthPlan.
- Emergency department visits per 1,000 member-months were consistent across health plans, ranging from 112.5 for Superior HealthPlan to 122.2 for Molina Healthcare of Texas.
- Acute inpatient discharges per 1,000 member-months ranged from 19.2 for Cigna-Healthspring to 28.3 for UnitedHealthcare.
- Mental health services per 100 member-years ranged from 25.6 for Cigna-Healthspring to 32.9 for Superior HealthPlan.

All four utilization rates are substantially higher than the corresponding rates for the STAR program. This reflects the design of the STAR+PLUS program to identify and enroll Medicaid beneficiaries needing more and more complex health care.

Table 35 shows 13 AHRQ Prevention Quality Indicators across all STAR+PLUS managed care organizations. These measures are derived from hospital inpatient discharge data and can identify areas of potential concern, such as unexpectedly high rates of complications or health care needs that could be met in the community without hospitalization.

ⁱ Higher or lower values do not necessarily indicate better quality of care.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Table 35. STAR+PLUS – AHRQ Prevention Quality Indicators (PQI), 2014ⁱ

Measure	2014 Rate	Range
Diabetes Short-term Complications Admission Rate (PQI 1) (per 100,000 member-months)	47.57	31.20 – 56.90
Perforated Appendix Admission Rate (PQI 2) (per 100 admissions for appendicitis)	37.01	28.00 – 40.43
Diabetes Long-term Complications Admission Rate (PQI 3) (per 100,000 member-months)	59.77	42.99 – 64.61
Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI 5) (per 100,000 member-months)	159.33	125.00 – 209.22
Hypertension Admission Rate (PQI 7) (per 100,000 member-months)	18.94	9.01 – 22.41
Heart Failure (CHF) Admission Rate (PQI 8) (per 100,000 member-months)	120.16	101.23 – 151.29
Dehydration Admission Rate (PQI 10) (per 100,000 member-months)	25.46	17.29 – 30.62
Bacterial Pneumonia Admission Rate (PQI 11) (per 100,000 member-months)	61.87	51.86 – 69.72
Urinary Tract Infection Admission Rate (PQI 12) (per 100,000 member-months)	42.84	29.56 – 51.08
Angina without Procedure Admission Rate (PQI 13) (per 100,000 member-months)	3.53	2.08 – 4.60
Uncontrolled Diabetes Admission Rate (PQI 14) (per 100,000 member-months)	8.04	5.26 – 10.57
Asthma in Younger Adults Admission Rate (PQI 15) (per 100,000 member-months)	21.36	13.61 – 31.89
Rate of Lower-extremity Amputation among Patients with Diabetes (PQI 16) (per 100,000 member-months)	10.45	9.01 – 12.64

Error! Reference source not found. The external quality review organization calculated performance across all managed care organizations participating in the STAR+PLUS program on measures of potentially preventable events, using 3M™ Health Information Systems software. These events were: hospital admissions, readmissions within 30 days, emergency department visits, and complications. The potentially preventable event measures assess the frequency and cost of visits that potentially could have been prevented with better primary and outpatient care; not all events classified as potentially preventable necessarily will have been preventable. Program-level rates are expressed as the weighted actual number of visits per 1,000 member-months, with lower rates indicating better performance. Weights are assigned based on resource utilization to account for different health system impact of different potentially preventable events – events requiring more health care resources (e.g., hospital bed-hours) are

ⁱ Lower values indicate stronger performance.

weighted more heavily in the measure; resource accounting is independent of actual cost in dollars. Actual-to-expected ratios are calculated so that a health plan that sees fewer potentially preventable events than the STAR+PLUS program as a whole will have a ratio of less than one, while a health plan that sees more potentially preventable events than the STAR+PLUS program as a whole will have a ratio greater than one. To ensure statistical validity and interpretability of reported results, health plans seeing too few actual or expected potentially preventable events or admissions at risk are not reported here. **Tables 36** through **39** present the top ten most common causes of each potentially preventable event category; for categories with fewer than ten distinct reasons, all reasons are given. Trends in actual weighted number of events per 1,000 member-months are shown for measures calculated by the external quality review organization for three or more years (since 2012 or earlier). Observed rates of weighted events are higher for STAR+PLUS than for STAR in every category. This is consistent with the higher health care needs of the population compared to the STAR population, which is more similar to the national Medicaid population.

Figure 59. STAR+PLUS – 3M™ Potentially Preventable Admissions (PPA), Weighted Admissions per 1,000 Member-months, 2011-2014ⁱ

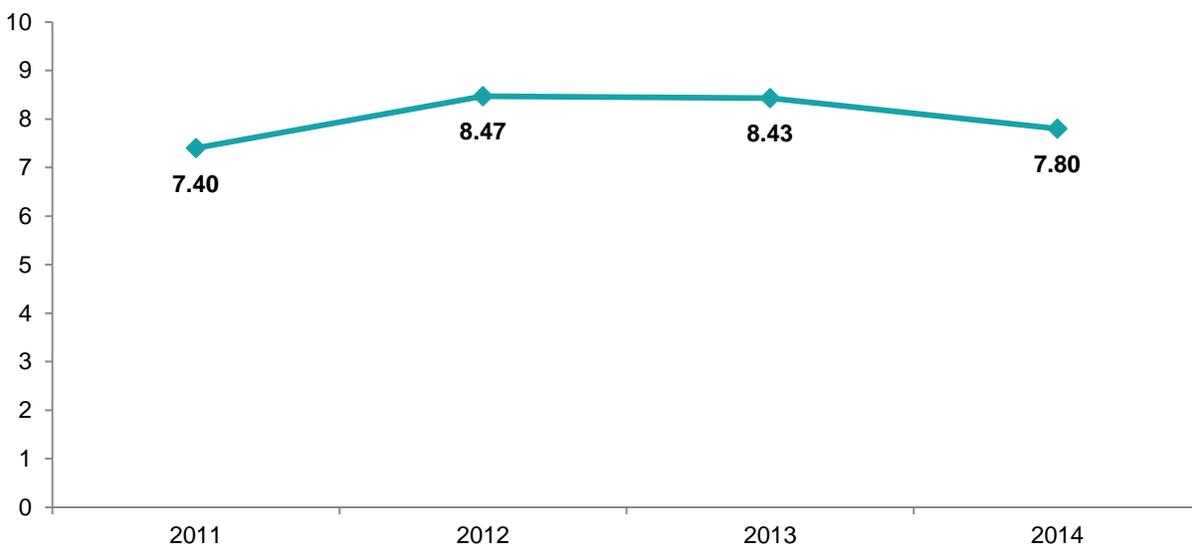


Figure 59 shows weighted statewide admissions per 1,000 member-months in STAR+PLUS for 3M™ Potentially Preventable Admissions (PPA) from 2011 to 2014. The relative weight for each admission at risk was assigned based on typical health care resource utilization.

ⁱ Lower values indicate stronger performance.

Figure 60 shows comparative performance on 3M™ *Potentially Preventable Admissions (PPA)* among health plans participating in STAR+PLUS in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix.

Figure 60. STAR+PLUS – 3M™ Potentially Preventable Admissions (PPA), Actual-to-expected ratio by Managed Care Organization, 2014ⁱ

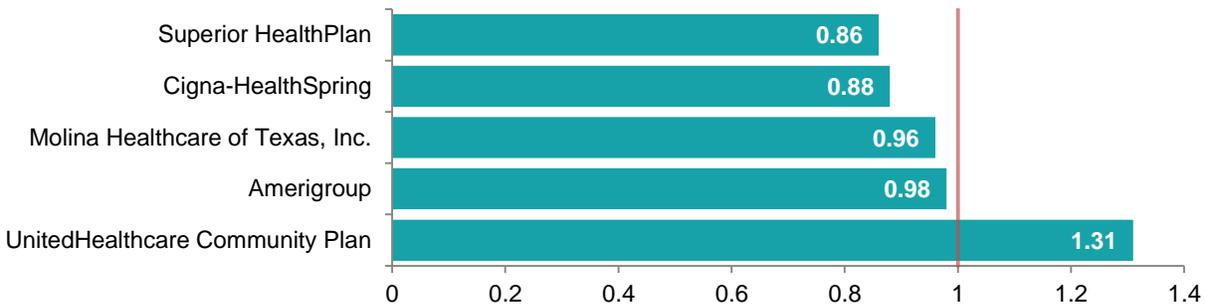


Table 36. STAR+PLUS – Most Common Reasons for 3M™ Potentially Preventable Admissions (PPA), 2014

PPA Reason	% of PPAs in STAR+PLUS
1 Chronic Obstructive Pulmonary Disease	10.6%
2 Heart Failure	9.9%
3 Schizophrenia	8.6%
4 Cellulitis and other Bacterial Skin Infections	7.9%
5 Other Pneumonia	7.8%
6 Diabetes	6.3%
7 Seizure	5.5%
8 Bipolar Disorders	5.4%
9 Sickle Cell Anemia Crisis	4.9%
10 Kidney and Urinary Tract Infections	4.9%

Table 36 presents the most common reasons for 3M™ *Potentially Preventable Admissions (PPA)* among all members in STAR+PLUS in 2014. Statewide, 12,263 unique members experienced 16,048 events; the weighted rate was 7.80 events per 1,000 member-months. The top three categories – COPD, heart failure, and schizophrenia – together accounted for more than one-quarter of potentially preventable admissions. None of these three categories appear in the ten most common causes of potentially preventable admissions in the STAR program. Asthma accounted for 16 percent of potentially preventable admissions in STAR, the most of any category, but less than two percent in STAR+PLUS. Six of the ten most common causes of

ⁱ Lower values indicate stronger performance.

potentially preventable admissions in the STAR+PLUS program also appear in the corresponding list for the STAR program: cellulitis and other bacterial skin infections; other pneumonia; diabetes; seizure; bipolar disorders; and kidney and urinary tract infections.

Figure 61 shows weighted statewide readmissions per 1,000 member-months in STAR+PLUS for 3M™ *Potentially Preventable Readmissions (PPR)* from 2011 to 2014. The relative weight for each readmission at risk was assigned based on typical health care resource utilization. A readmission chain includes all readmissions clinically related to an initial admission.

Figure 61. STAR+PLUS – 3M™ Potentially Preventable Readmissions (PPR), Weighted Readmissions per 1,000 Member-months, 2011-2014ⁱ

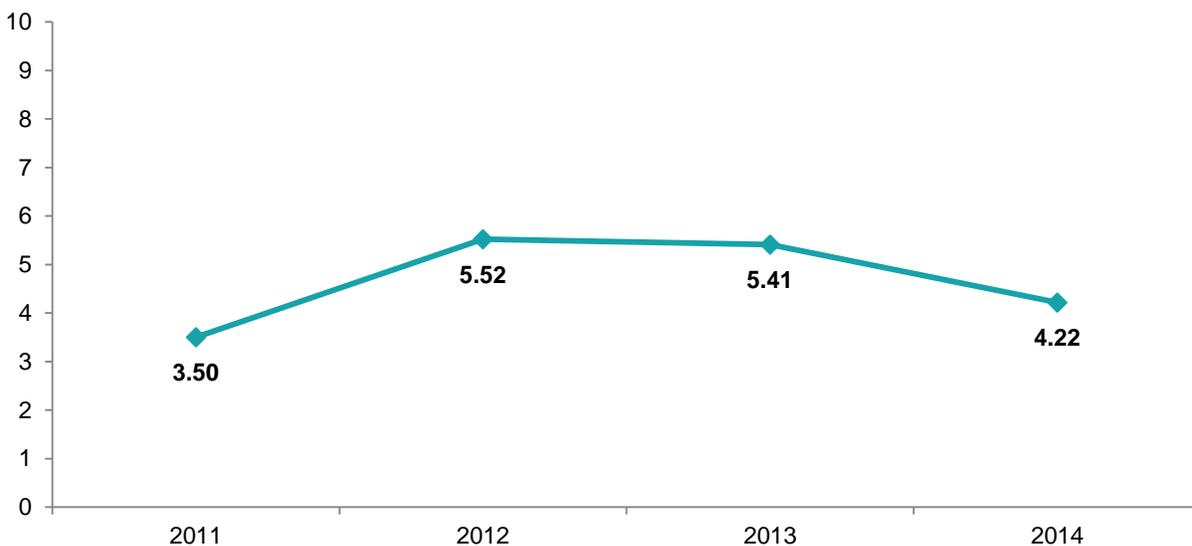


Figure 62 shows comparative performance on 3M™ *Potentially Preventable Readmissions (PPR)* among health plans participating in STAR+PLUS in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix.

ⁱ Lower values indicate stronger performance.

Figure 62. STAR+PLUS – 3M™ Potentially Preventable Readmissions (PPR), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

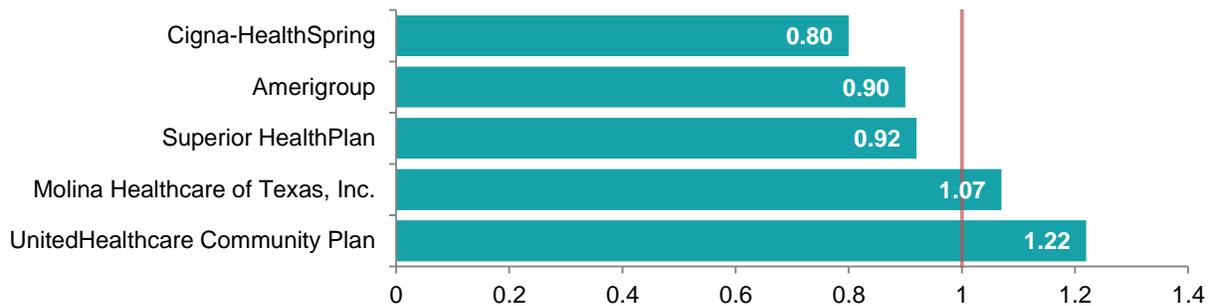


Table 37. STAR+PLUS – Most Common Reasons for 3M™ Potentially Preventable Readmissions (PPR), 2014

PPR Reason	% of PPRs in STAR+PLUS
1 Mental health or substance abuse readmission following an initial admission for a substance abuse or mental health diagnosis.	32.7%
2 Medical readmission for acute medical condition or complication that may be related to or may have resulted from care during initial admission or in post-discharge period after initial admission.	25.5%
3 Medical readmission for a continuation or recurrence of the reason for the initial admission, or for a closely related condition.	20.5%
4 All other readmissions for a chronic problem that may be related to care either during or after the initial admission.	7.8%
5 Ambulatory care-sensitive conditions as designated by AHRQ.	5.2%
6 Readmission for mental health reasons following an initial admission for a non-mental health, non-substance abuse reason.	4.1%
7 Readmission for surgical procedure to address a complication that may be related to or may have resulted from care during the initial admission.	1.9%
8 Readmission for surgical procedure to address a continuation or a recurrence of the problem causing the initial admission.	1.3%
9 Readmission for a substance abuse diagnosis reason following an initial admission for a non-mental health, non-substance abuse reason.	1.1%

Table 37 presents the most common reasons for 3M™ *Potentially Preventable Readmissions (PPR)* among all members in STAR+PLUS in 2014. Statewide, 4,991 unique members experienced 5,693 readmission chains; the weighted rate was 4.22 events per 1,000 member-months. The most common category accounted for nearly one-third (33 percent) of potentially preventable readmissions. The three most common categories, accounting for 79 percent of

ⁱ Lower values indicate stronger performance.

potentially preventable readmissions, were also the three most common categories for the STAR population, accounting for 86 percent of events.

Figure 63 shows weighted statewide emergency department visits per 1,000 member-months in STAR+PLUS for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* from 2011 to 2014. The relative weight for each emergency department visit at risk was assigned based on typical health care resource utilization.

Figure 63. STAR+PLUS – 3M™ Potentially Preventable Emergency Department Visits (PPV), Weighted Visits per 1,000 Member-months, 2011-2014ⁱ

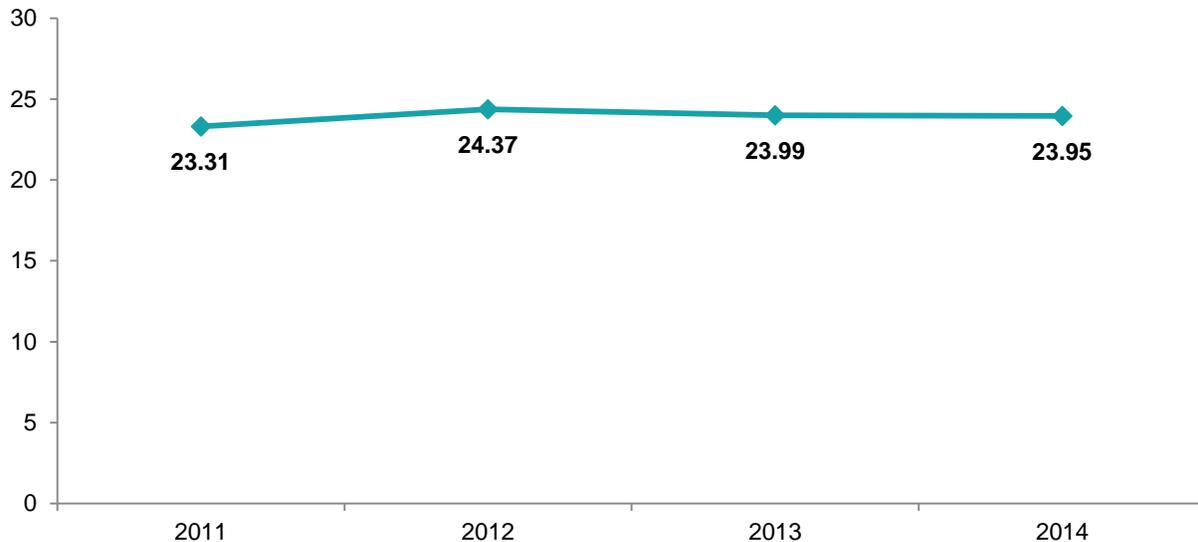


Figure 64 shows comparative performance on 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among health plans participating in STAR+PLUS in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix. Potentially preventable emergency department visits for all plans were within five percent of the statewide rate.

ⁱ Lower values indicate stronger performance.

Figure 64. STAR+PLUS – 3M™ Potentially Preventable Emergency Department Visits (PPV), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

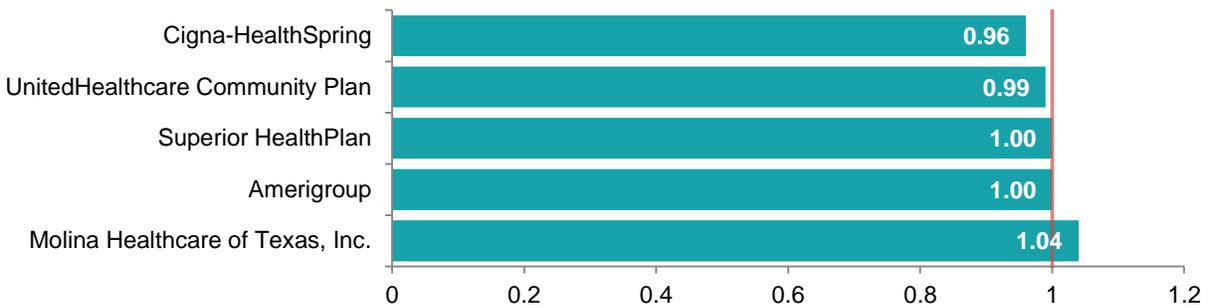


Table 38 presents the most common reasons for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among all members in STAR+PLUS in 2014. Statewide, 82,965 unique members experienced 208,622 events; the weighted rate was 23.95 events per 1,000 member-months. Taken together, the top ten most frequent reasons for potentially preventable emergency department visits accounted for half (53 percent) of events. Common causes of potentially preventable readmissions in STAR+PLUS and STAR reflected the different populations served. Level II other musculoskeletal system and connective tissue diagnoses were also relatively common in STAR, but less so, accounting for 5 percent of events. Infections of the upper respiratory tract, the second most common causes of events in STAR+PLUS, accounted for 26 percent of events in STAR+PLUS, which was triple the share of the next most common cause. Three of the ten most common causes in STAR+PLUS are not among the ten most common causes for STAR: chest pain, lumbar disc disease, and acute lower urinary tract infections; these three causes accounted for 15 percent of events in STAR+PLUS and five percent of events in STAR.

ⁱ Lower values indicate stronger performance.

Table 38. STAR+PLUS – Most Common Reasons for 3M™ Potentially Preventable Emergency Department Visits (PPV), 2014

PPV Reason	% of PPVs in STAR+PLUS
1 Level II Other Musculoskeletal System and Connective Tissue Diagnoses	9.0%
2 Infections Of Upper Respiratory Tract	7.6%
3 Chest Pain	7.3%
4 Abdominal Pain	6.9%
5 Lumbar Disc Disease	4.5%
6 Contusion, Open Wound and Other Trauma To Skin & Subcutaneous Tissue	3.9%
7 Signs, Symptoms & Other Factors Influencing Health Status	3.7%
8 Acute Lower Urinary Tract Infections	3.5%
9 Non-Bacterial Gastroenteritis, Nausea and Vomiting	3.5%
10 Other Skin, Subcutaneous Tissue & Breast Disorders	3.1%

Figure 65 shows comparative performance on 3M™ *Potentially Preventable Complications (PPC)* among health plans participating in STAR+PLUS in 2014. Actual-to-expected ratios show the relative performance of the health plan compared to their peers after adjusting for their case-mix.

Figure 65. STAR+PLUS – 3M™ Potentially Preventable Complications (PPC), Actual-to-expected Ratio by Managed Care Organization, 2014ⁱ

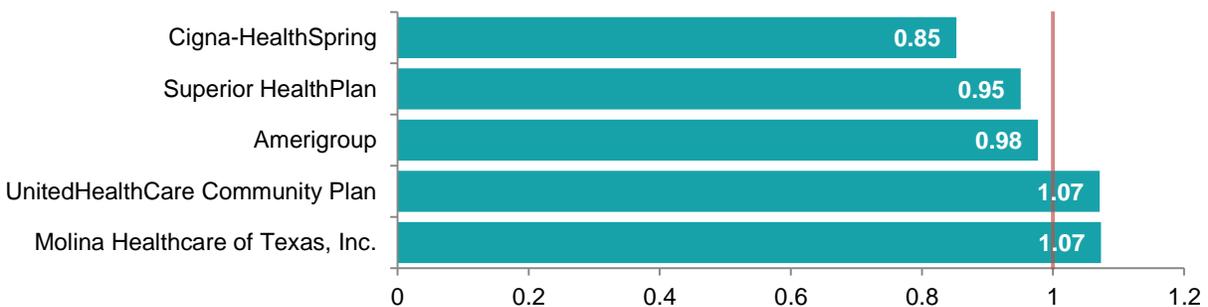


Table 39 presents the most common reasons for 3M™ *Potentially Preventable Complications (PPC)* among all members in STAR+PLUS in 2014. Statewide, 1,843 unique members experienced 2,767 events. The weighted rate was 1.21 events per 1,000 member-months; the relative weight for each complication at risk was assigned based on typical health care resource utilization. The two most frequently observed categories, renal failure without dialysis and urinary tract infection, accounted for more than one-quarter of potentially preventable complications. These two categories are also relatively common in STAR, together accounting

ⁱ Lower values indicate stronger performance.

for seven percent of events. Potentially preventable complications in STAR are dominated by obstetric and delivery-related events, which together account for 54 percent of events. These categories together account for two percent of events in STAR+PLUS; none of the ten most common categories in STAR+PLUS are related to pregnancy.

Table 39. STAR+PLUS – Most Common Reasons for 3M™ Potentially Preventable Complications (PPC), 2014

PPC Reason		% of PPCs in STAR+PLUS
1	Renal Failure without Dialysis	17.4%
2	Urinary Tract Infection	10.0%
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	8.5%
4	Septicemia & Severe Infections	6.0%
5	Shock	4.8%
6	Ventricular Fibrillation / Cardiac Arrest	4.7%
7	Pneumonia & Other Lung Infections	4.3%
8	Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Procedure	3.1%
9	Acute Pulmonary Edema and Respiratory Failure with Ventilation	3.0%
10	Aspiration Pneumonia	2.7%

5.4.2. Effectiveness of Care in STAR+PLUS

Table 40 shows statewide performance in 2014 across all managed care organizations participating in the STAR+PLUS program on measures of effectiveness of care. Please note the following:

- HEDIS® *Asthma Medication Ratio (AMR)* was added to the HHSC Performance Indicator Dashboard for STAR+PLUS for the 2015 measurement year; therefore, the HHSC dashboard standard is not yet set.
- The three chronic obstructive pulmonary disease (COPD) process measures (HEDIS® *Pharmacotherapy Management of COPD Exacerbation (PCE), Bronchodilators*, HEDIS® *Pharmacotherapy Management of COPD Exacerbation (PCE), Systemic Corticosteroids*, and HEDIS® *Use of Spirometry Testing in the Assessment and Diagnosis of COPD (SPR)*), were not run in prior years; therefore, there is no HHSC dashboard standard and no trend data is available.
- All health plans participating in STAR+PLUS offer disease management programs for asthma, diabetes, chronic obstructive pulmonary disease, congestive heart failure, and coronary artery disease. These are reviewed through the quality assessment and performance improvement program evaluation process.

Table 40. STAR+PLUS – HEDIS® Effectiveness of Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Use of Appropriate Medications for People with Asthma (ASM), All Ages	78.8%	90%	★★
HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%	50.6%	N/A	★★
HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total)	34.8%	43%	★★★★
HEDIS® Avoidance of Antibiotic Therapy for Adults with Acute Bronchitis (AAB)	22.0%	24%	★★
HEDIS® Comprehensive Diabetes Care (CDC), HbA1c Testing	86.5%	83%	★★★
HEDIS® Comprehensive Diabetes Care (CDC), HbA1c Control (<8%)	42.3%	48%	★★
HEDIS® Comprehensive Diabetes Care (CDC), Medical Attention for Nephropathy	83.3%	80%	★★★
HEDIS® Comprehensive Diabetes Care (CDC), Eye Exams	43.4%	53%	★★
HEDIS® Controlling Blood Pressure (CBP)	45.6%	56%	★★
HEDIS® Pharmacotherapy Management of COPD Exacerbation (PCE), Bronchodilators	88.1%	N/A	★★★★
HEDIS® Pharmacotherapy Management of COPD Exacerbation (PCE), Systemic Corticosteroids	66.6%	N/A	★★★
HEDIS® Use of Spirometry Testing in the Assessment and Diagnosis of COPD (SPR)	27.0%	N/A	★★

Members in STAR+PLUS with asthma were prescribed appropriate medications at a rate below the HHSC Performance Indicator Dashboard standard in 2014. Both the rate of an appropriate medication being prescribed and the rate of asthma controller medications being used more frequently than quick-relief medication were between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid. The rate of being prescribed a controller medication covering at least 75 percent of days in the measurement year was also below the

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

HHSC Performance Indicator Dashboard standard but was between the 66th and 89th percentiles on the HEDIS[®] national benchmark percentiles for Medicaid. Performance on HEDIS[®] *Avoidance of Antibiotic Therapy for Adults with Acute Bronchitis (AAB)* was 22 percent in 2014, below the HHSC Performance Indicator Dashboard standard, indicating room for improvement in management of antibiotics. The rate of testing HbA1c levels in members with type 1 or type 2 diabetes was in the middle tertile of Medicaid health plans nationally, and exceeded the HHSC Performance Indicator Dashboard standard. Although control of HbA1c levels (less than eight percent) improved markedly from 2013 to 2014, performance was between the 10th and 32nd percentiles nationally and did not meet the HHSC Performance Indicator Dashboard standard. Screening for diabetic nephropathy was in the middle tertile nationally and exceeded the HHSC Performance Indicator Dashboard standard. Screening for diabetic retinopathy was between the 10th and 32nd percentiles nationally and did not meet the HHSC Performance Indicator Dashboard standard. The rate of adequate control of blood pressure among members diagnosed with hypertension showed room for improvement, performing between the 10th and 32nd percentiles nationally and below the HHSC Performance Indicator Dashboard standard.

Figure 66 provides the percentage of people in STAR+PLUS ages 5 to 64 identified as having persistent asthma who were prescribed an appropriate medication during the measurement year, showing trends from 2010 through 2014. Overall, health plan performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid, with three health plans performing in this band. Amerigroup performed in the bottom decile, while Cigna-Healthspring performed between the 66th and 89th percentiles.

Figure 66. STAR+PLUS – HEDIS[®] Use of Appropriate Medications for People with Asthma (ASM), All Ages, 2010-2014

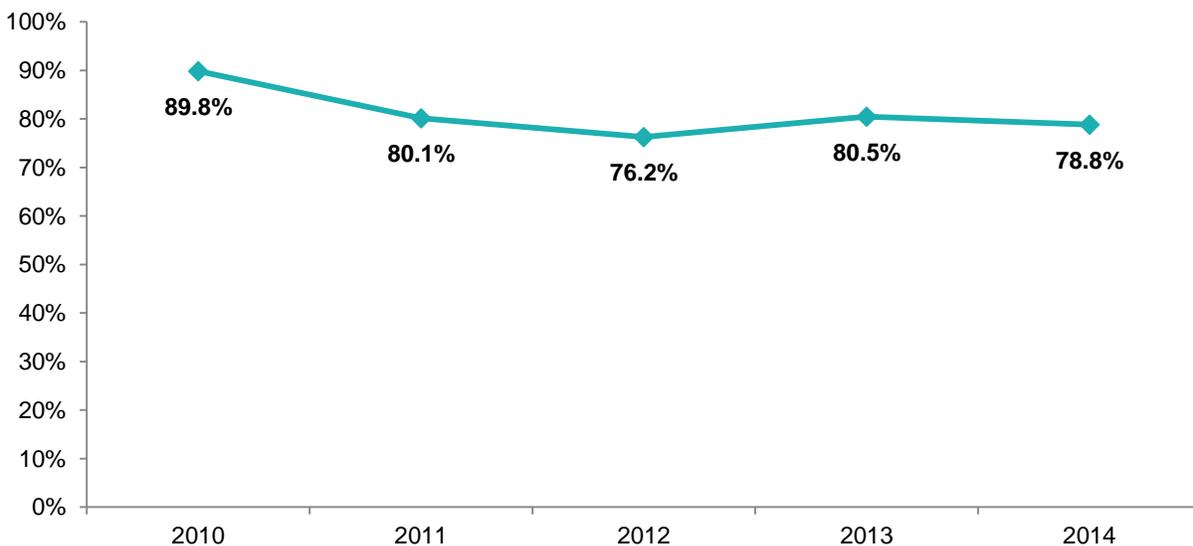


Figure 67. STAR+PLUS – HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio > 50%, 2012-2014

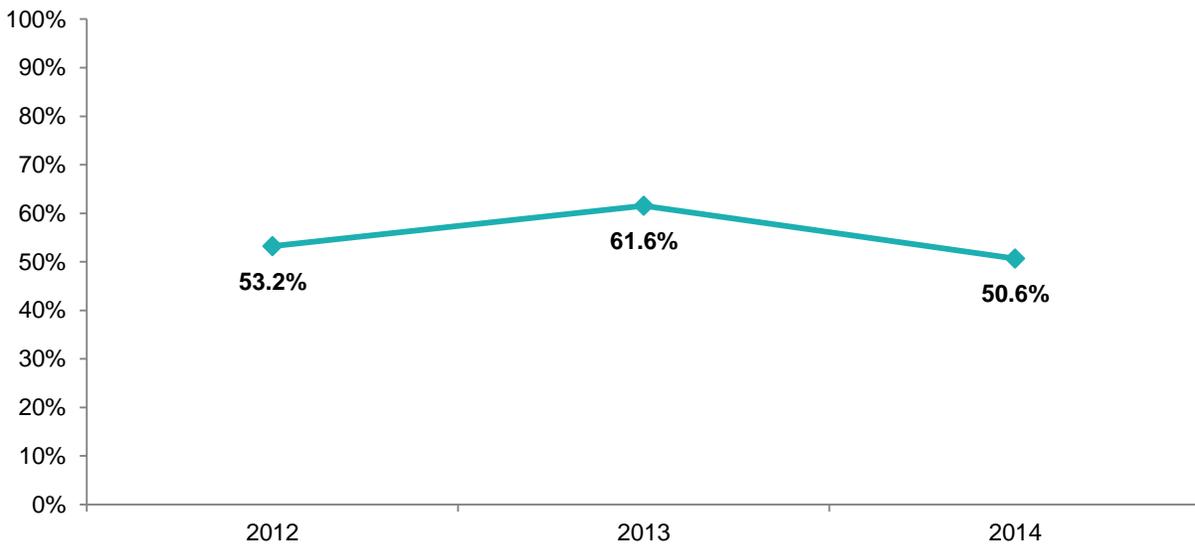


Figure 67 shows the percentage of people in STAR+PLUS ages 5 to 64 identified as having persistent asthma who used more controller medications than quick-relief medications (an indicator of good disease management)⁴⁷ from 2012 through 2014. Overall performance in 2014 was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid, with three health plans performing in this band. Molina Healthcare of Texas, performed in the bottom decile, and Cigna-Healthspring performed in the middle tertile.

Figure 68 provides the percentage of people in STAR+PLUS ages 5 to 64 identified as having persistent asthma who were dispensed asthma controller medications covering at least 75 percent of days during the measurement year, showing trends from 2012 through 2014. Overall performance in 2014 was between the 66th and 89th percentiles on the HEDIS® national benchmark percentiles for Medicaid, with four health plans performing in this band. Superior HealthPlan, performed in the middle tertile. Cigna-Healthspring performed above the statewide rate on all three measures of asthma medication.

Figure 68. STAR+PLUS – HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total), 2012-2014

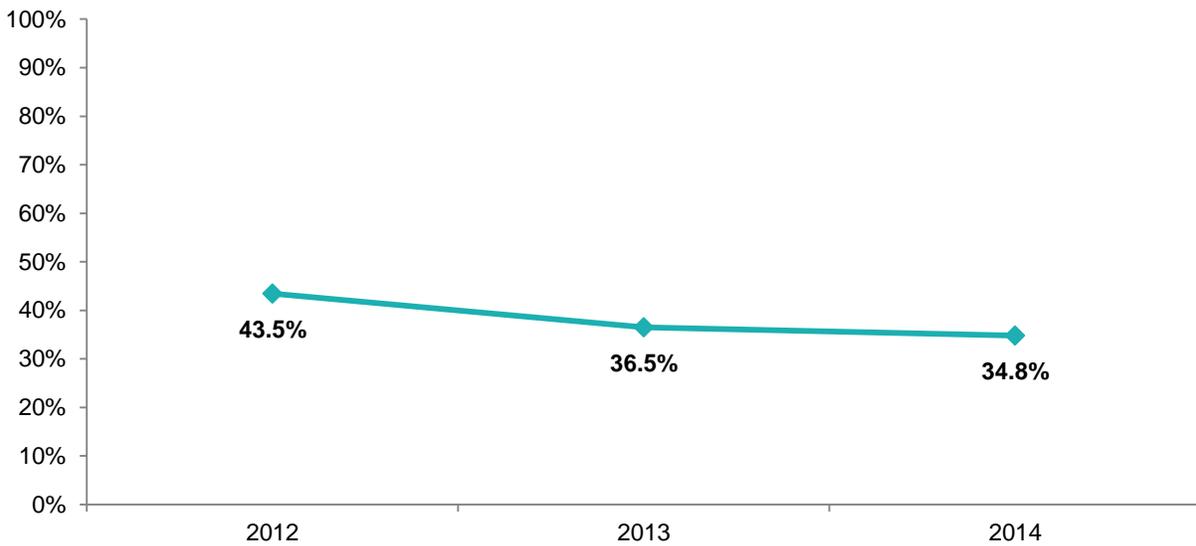


Figure 69 shows the percentage of adults in STAR+PLUS ages 18 to 64 who were diagnosed with acute bronchitis and were not dispensed an antibiotic prescription, showing trends from 2010 through 2014; higher performance indicates appropriate treatment. Overall performance in 2014 was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid, with four health plans performing in this band. UnitedHealthcare performed in the middle tertile.

Figure 69. STAR+PLUS – HEDIS® Avoidance of Antibiotic Therapy for Adults with Acute Bronchitis (AAB), 2010-2014

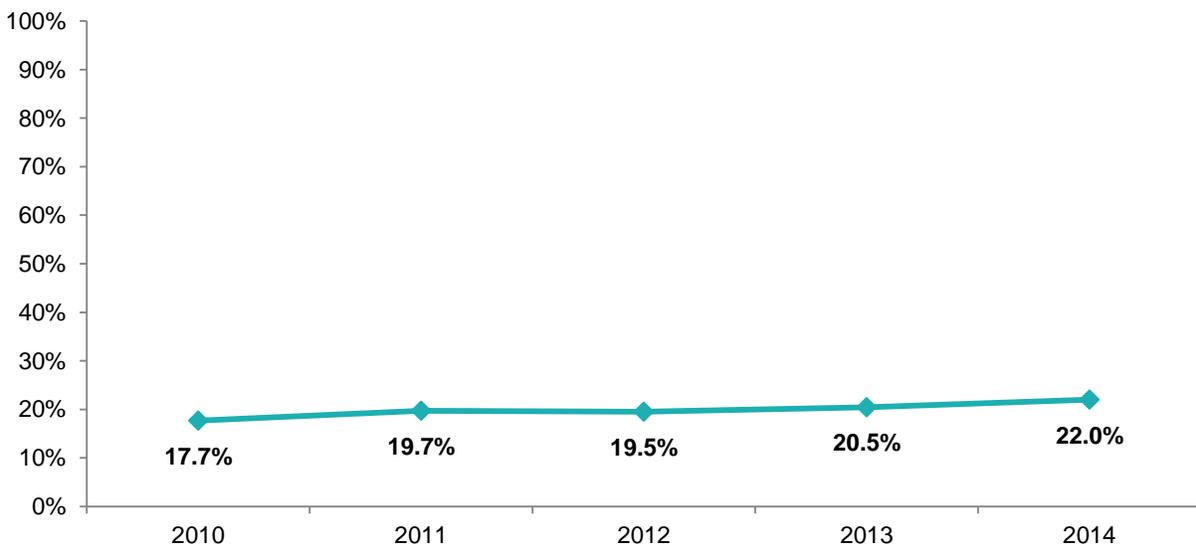


Figure 70. STAR+PLUS – HEDIS® Comprehensive Diabetes Care (CDC), HbA1c Testing, 2010-2014

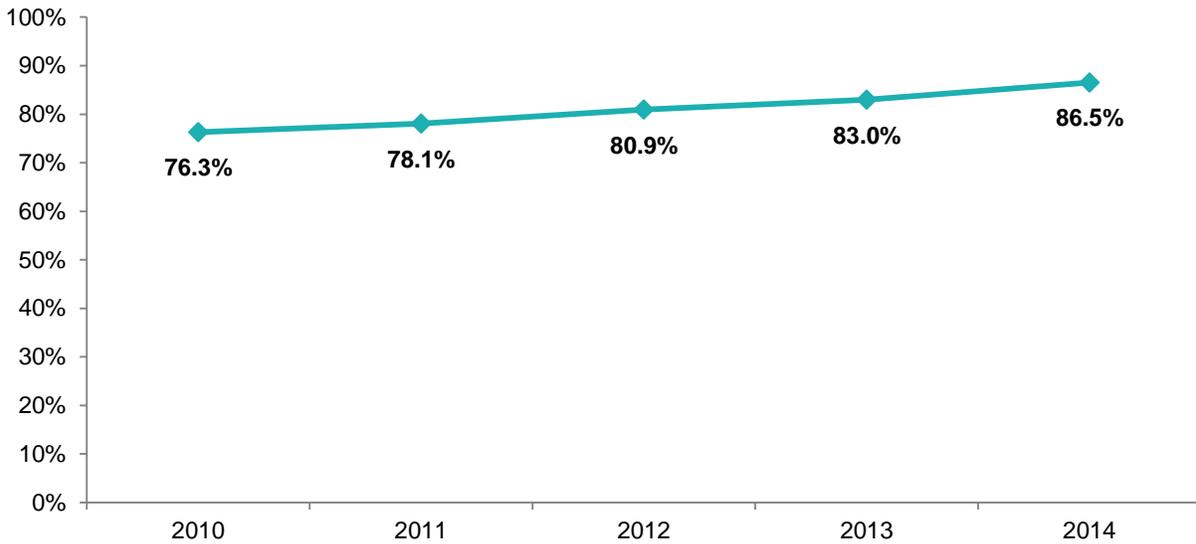


Figure 70 shows the percentage of people in STAR+PLUS ages 18 to 75 with type 1 or type 2 diabetes whose HbA1c level was tested during the measurement year (2010—2014). Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with three health plans performing in this band. UnitedHealthcare, performed between the 10th and 32nd percentiles. Cigna-Healthspring performed between the 66th and 89th percentiles.

Figure 71 shows the percentage of people in STAR+PLUS ages 18 to 75 with type 1 or type 2 diabetes whose most recent HbA1c test result was less than eight percent between 2011 and 2014. The rate for this measure has improved gradually over the past four years, from 26 percent in 2011 to 42 percent in 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid, with four health plans also performing in this band. Amerigroup performed in the middle tertile.

Figure 71. STAR+PLUS – HEDIS® Comprehensive Diabetes Care (CDC), HbA1c Control (<8%), 2011-2014

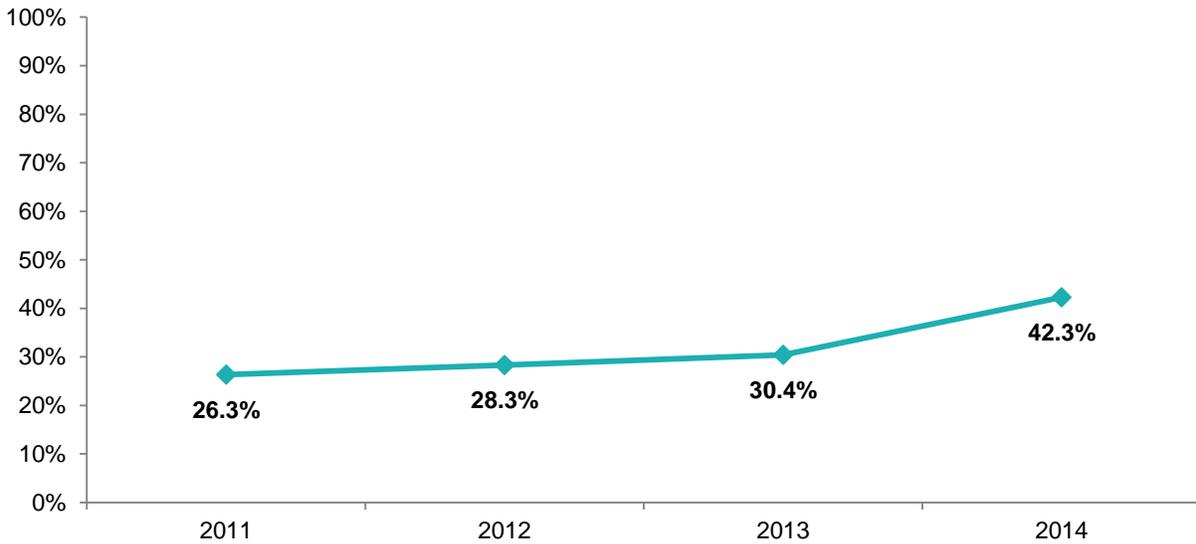


Figure 72. STAR+PLUS – HEDIS® Comprehensive Diabetes Care (CDC), Medical Attention for Nephropathy, 2010-2014

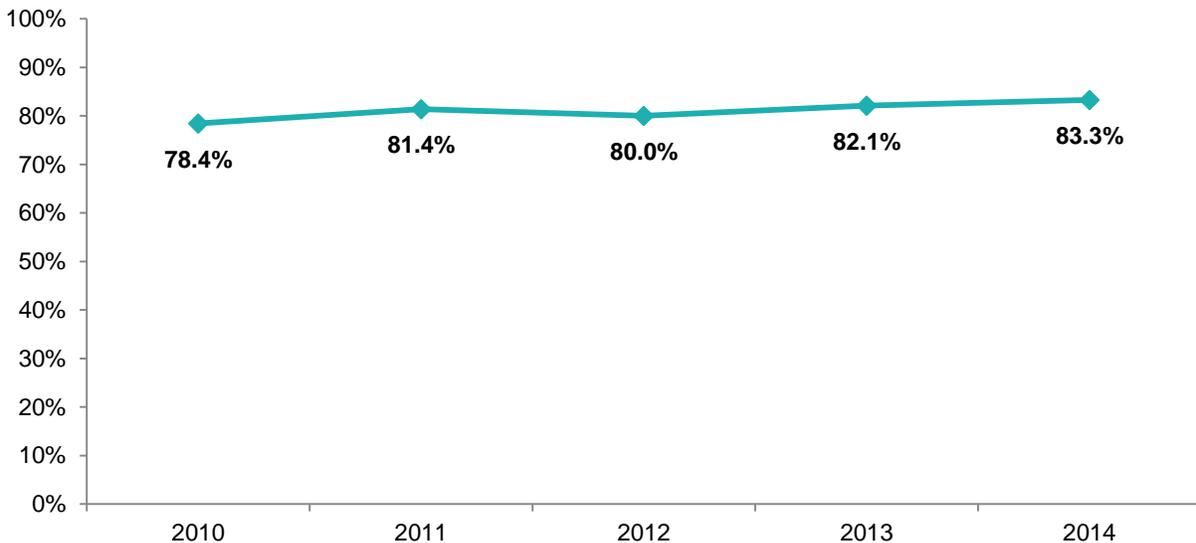


Figure 72 provides the percentage of people in STAR+PLUS ages 18 to 75 with type 1 or type 2 diabetes who were screened for nephropathy or showed evidence of nephropathy during the measurement year, showing trends from 2010 through 2014. Performance in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid, with three health plans performing in this band. Amerigroup and Molina Healthcare of Texas performed between the 66th and 89th percentiles.

Figure 73 provides the percentage of people in STAR+PLUS ages 18 to 75 with type 1 or type 2 diabetes who were screened for diabetic retinopathy in the past two years, showing trends from 2010 through 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid, with four health plans performing in this band. UnitedHealthcare performed in the bottom decile. Amerigroup and Molina Healthcare of Texas performed above the statewide rate on three of the four diabetes measures.

Figure 73. STAR+PLUS – HEDIS[®] Comprehensive Diabetes Care (CDC), Eye Exams, 2010-2014

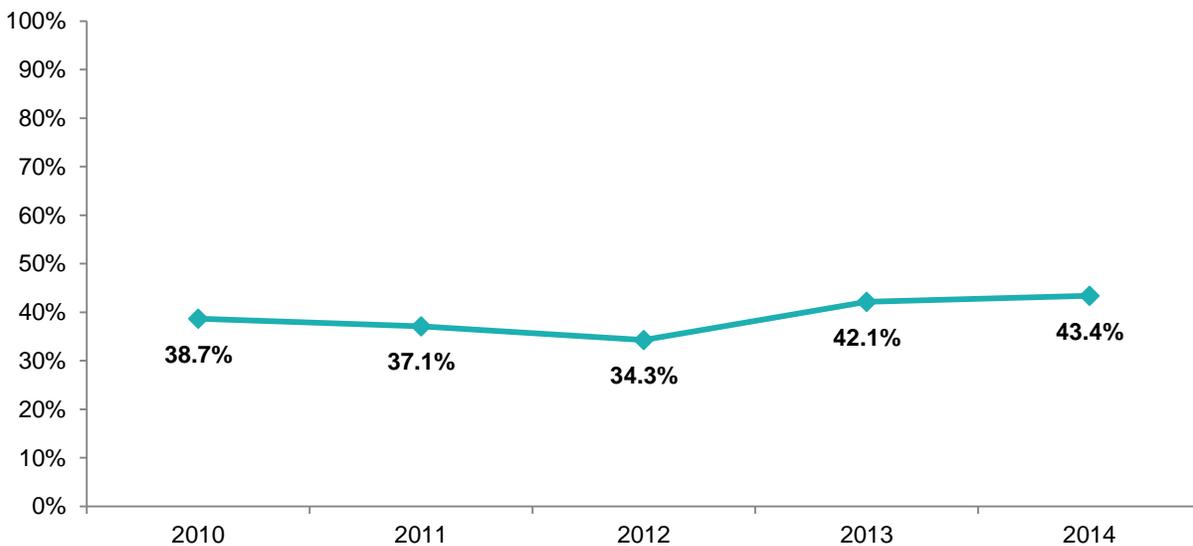


Figure 74 shows the percentage of adults in STAR+PLUS diagnosed with hypertension whose blood pressure was adequately controlled for their age and health status from 2011 through 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid, with two health plans performing in this band. Cigna-Healthspring and Molina Healthcare of Texas performed in the bottom decile. Amerigroup performed in the middle tertile.

Figure 74. STAR+PLUS – HEDIS® Controlling Blood Pressure (CBP), 2011-2014

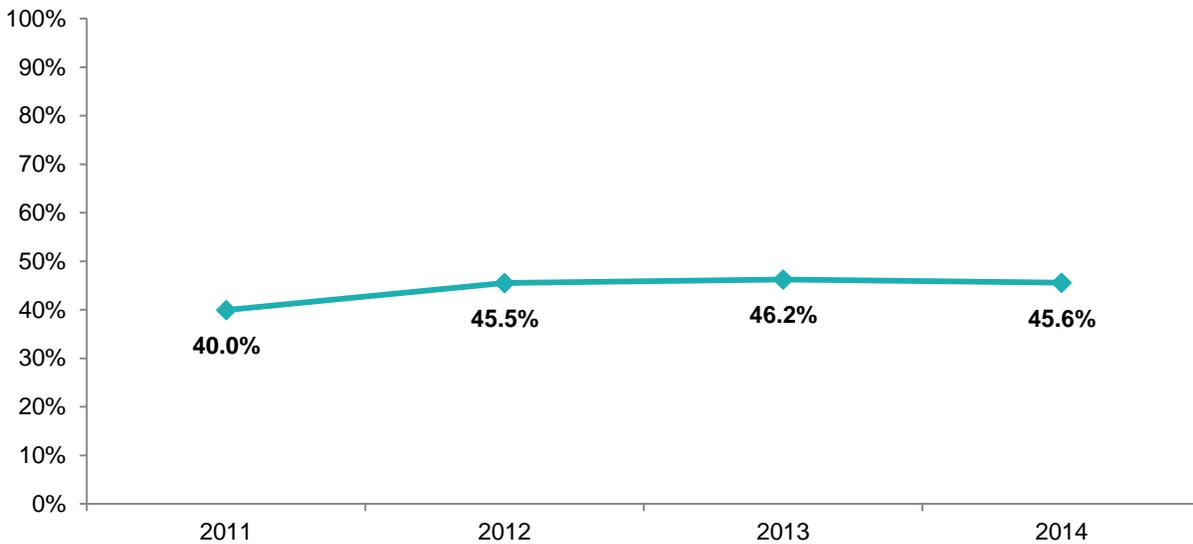


Table 41 shows statewide performance in 2014 across all managed care organizations participating in the STAR+PLUS program on behavioral health effectiveness of care measures. These measures are discussed in more detail in **Section 6.4 Behavioral Health**.

Table 41. STAR+PLUS – Effectiveness of Behavioral Health Care Measures, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Antidepressant Medication Management (AMM), Acute Phase	42.5%	59%	★
HEDIS® Antidepressant Medication Management (AMM) Continuation Phase	30.0%	47%	★★
HEDIS® Follow-Up after Hospitalization for Mental Illness (FUH), 7 days	34.3%	44%	★★
HEDIS® Follow-Up after Hospitalization for Mental Illness (FUH), 30 days	57.4%	64%	★★

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

5.4.3. Satisfaction with Care in STAR+PLUS

Table 42 provides results from the 2014 CAHPS® survey of adults in STAR+PLUS. The following rates represent the percentage of Medicaid-only members who “usually” or “always” had positive experiences with the given domain. Rates on measures of getting timely care, doctors’ communication, and health plan information and customer service were similar to those observed in the national Medicaid population. As with the other Texas Medicaid programs, the rate for *Getting Needed Care* was below the national average, with 66 percent of STAR+PLUS members having positive experiences with access to care, tests, treatment, and specialists. Ratings of care were generally positive in STAR+PLUS.

Table 42. STAR+PLUS – Medicaid-only Member Satisfaction with Care, 2014

CAHPS® Measure ("Usually" or "Always")	STAR+PLUS Medicaid-only 2014 Rates ⁱ	HHSC Dashboard Standard 2014 Rates	National CAHPS® Adult Medicaid 2014 Rates ⁴⁸
Getting Needed Care	65.7%	N/A	81%
Getting Care Quickly	78.7%	N/A	82%
How Well Doctors Communicate	86.2%	89%	90%
Health Plan Information and Customer Service	82.3%	N/A	86%
Personal Doctor Rating	66.7%	64%	64%
Specialist Rating	70.2%	N/A	64%
Health Plan Rating	56.5%	56%	57%
Health Care Rating	52.4%	N/A	51%

Table 43 provides results from the 2015 ECHO® behavioral health survey conducted with adults in STAR+PLUS. STAR+PLUS members report satisfaction with *How Well Clinicians Communicate* and *Getting Treatment and Information from the Plan*. The measures with the greatest room for improvement were *Information about Treatment Options* and *Getting Treatment and Information from the Behavioral Health Organization*.

ⁱ Higher values indicate stronger performance.

Table 43. STAR+PLUS – Medicaid-only Member Satisfaction with Behavioral Health Care (ECHO®), 2015

ECHO® Measure	2015 Meanⁱ	Standard Deviation	Range
Getting Treatment Quickly	2.06	0.73	1.00-3.00
How Well Clinicians Communicate	2.35	0.68	1.00-3.00
Getting Treatment and Information from the Plan	2.18	0.63	1.00-3.00
Getting Treatment and Information from the Behavioral Health Organization	1.83	0.76	1.00-3.00
Information about Treatment Options	0.47	0.43	0.00-1.00
Perceived Improvement	2.60	0.85	1.00-4.00
Global Ratings – Treatment	7.77	2.74	0.00-10.00
Global Ratings – Health Plan (Managed Care Organizations only)	8.19	2.55	0.00-10.00

Table 44. STAR+PLUS – Dual-eligible Member Satisfaction with Behavioral Health Care (ECHO®), 2015

ECHO® Measure	2015 Meanⁱ	Standard Deviation	Range
Getting Treatment Quickly	2.02	0.77	1.00-3.00
How Well Clinicians Communicate	2.22	0.74	1.00-3.00
Getting Treatment and Information from the Plan	2.09	0.70	1.00-3.00
Getting Treatment and Information from the Behavioral Health Organization	N/A	N/A	1.00-3.00
Information about Treatment Options	0.38	0.42	0.00-1.00
Perceived Improvement	2.56	0.86	1.00-4.00
Global Ratings – Treatment	7.61	2.87	0.00-10.00
Global Ratings – Health Plan (Managed Care Organizations only)	8.35	2.50	0.00-10.00

ⁱ Higher values indicate stronger performance.

Table 44 provides results from the 2015 ECHO® behavioral health survey conducted with dual-eligible members in STAR+PLUS. It is important to note that for dual-eligible members, Medicare is the primary insurer and behavioral health services are generally provided through Medicare. Results for *Getting Treatment and Information from the Behavioral Health Organization* were not available for dual-eligible members as all STAR+PLUS managed care organizations which serve dual-eligible members provide behavioral health care through the managed care organization and not a managed behavioral health organization (MBHO). Similar to the Medicaid-only STAR+PLUS behavioral health survey results, findings generally show positive experiences with clinician communication and getting treatment and information from the health plan. Dual-eligible members reported lower satisfaction with getting information about treatment options.

5.5. STAR Health Program

5.5.1. Access to and Utilization of Care in STAR Health

Table 45 presents statewide performance in 2014 for the STAR Health program on measures of access to care. Superior HealthPlan is the exclusive provider for the program. HHSC annually publishes benchmarks in the form of Performance Indicator Dashboard standards; these are derived from prior year performance. The 2014 standard provides a reference comparison for 2014 performance. The HEDIS® 2015 percentile ratings are based on national health plan performance in 2014. The STAR Health population is not necessarily comparable to the national Medicaid population, and benchmark comparisons are provided for reference purposes only.

Table 45. STAR Health – Access to Care, 2014

Measure	2014 Rate	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Well-Child Visits in the First 15 Months of Life (W15), Six or More Visits	64.4%	64%	★★★
HEDIS® Well-Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life (W34)	89.1%	87%	★★★★★
HEDIS® Adolescent Well-Care Visits (AWC)	70.4%	74%	★★★★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 12-24 months	98.7%	98%	★★★★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 25 months to 6 years	96.7%	95%	★★★★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 7-11 years	99.0%	98%	★★★★★
HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), 12-19 years	97.8%	97%	★★★★★

Children and adolescents in STAR Health generally had excellent access to care in 2014 compared to the national Medicaid population and to Texas standards. The rate of members receiving at least six well-child visits in the first 15 months of life was in the middle tertile on the HEDIS® national benchmark percentiles for Medicaid and exceeded the HHSC Performance Indicator Dashboard standard. Performance on the other two measures of well-care visits for children and adolescents were in the top decile nationally, with well-care visits for three- to six-year-olds exceeding the HHSC Performance Indicator Dashboard standard and well-care visits

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

for adolescents performing below the standard. Access to primary care practitioners for members in STAR Health was in the top decile nationally and met or exceeded the HHSC Performance Indicator Dashboard standard for all age bands.

Figure 75 shows the percentage of children in STAR Health who received 6 or more well-child visits in the first 15 months of life from 2011 through 2014. Performance was steady from 2011 to 2013 before rising in 2014. Performance statewide in 2014 was in the middle tertile on the HEDIS® national benchmark percentiles.

Figure 75. STAR Health – HEDIS® Well-Child Visits in the First 15 Months of Life (W15), Six or More Visits, 2011-2014

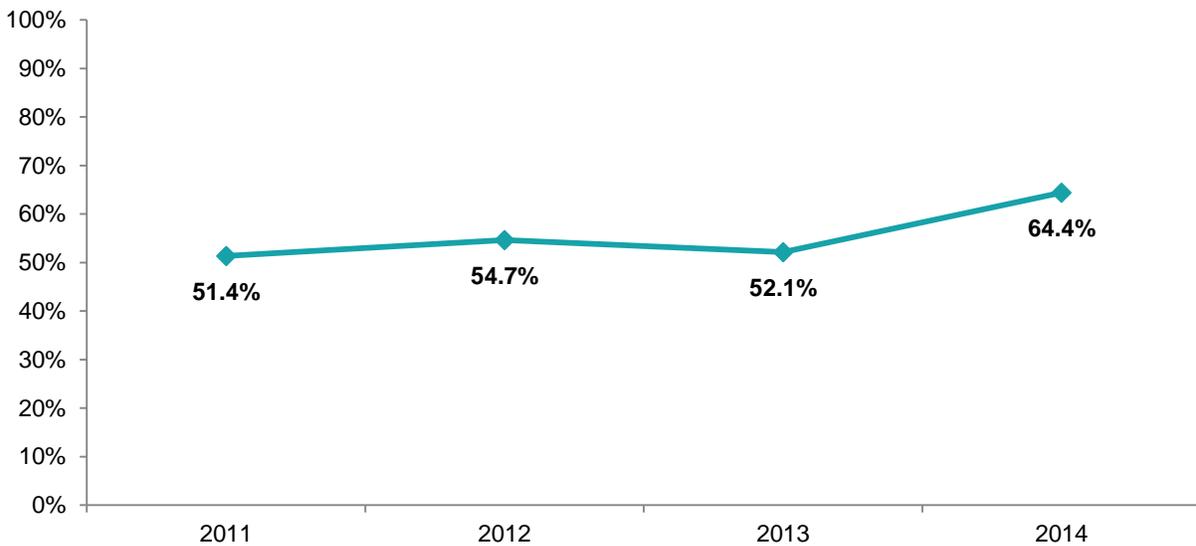


Figure 76. STAR Health – HEDIS® Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34), 2011-2014

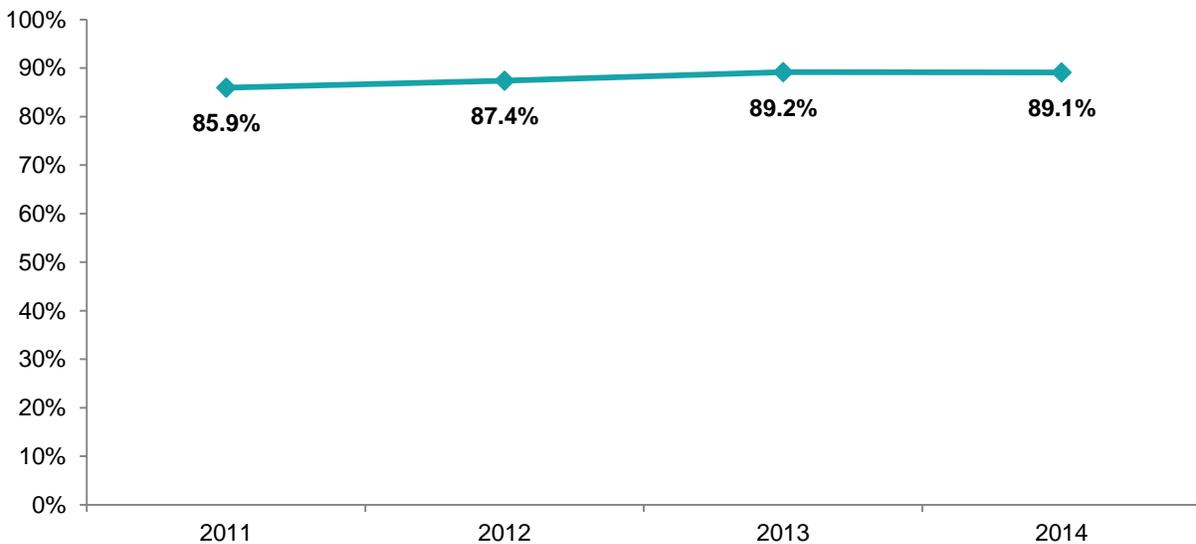


Figure 76 provides the percentage of children in STAR Health ages 3 to 6 who received at least one well-child visit in the measurement year, showing trends from 2011 through 2014. Performance was steady across all four years. Performance statewide in 2014 was in the top decile on the HEDIS® national benchmark percentiles.

Figure 77 provides the percentage of adolescents in STAR Health ages 12 to 21 who received at least one well-care visit in the measurement year, showing trends from 2011 through 2014. Performance statewide in 2014 was in the top decile on the HEDIS® national benchmark percentiles.

Figure 77. STAR Health – HEDIS® Adolescent Well-Care Visits (AWC), 2011-2014

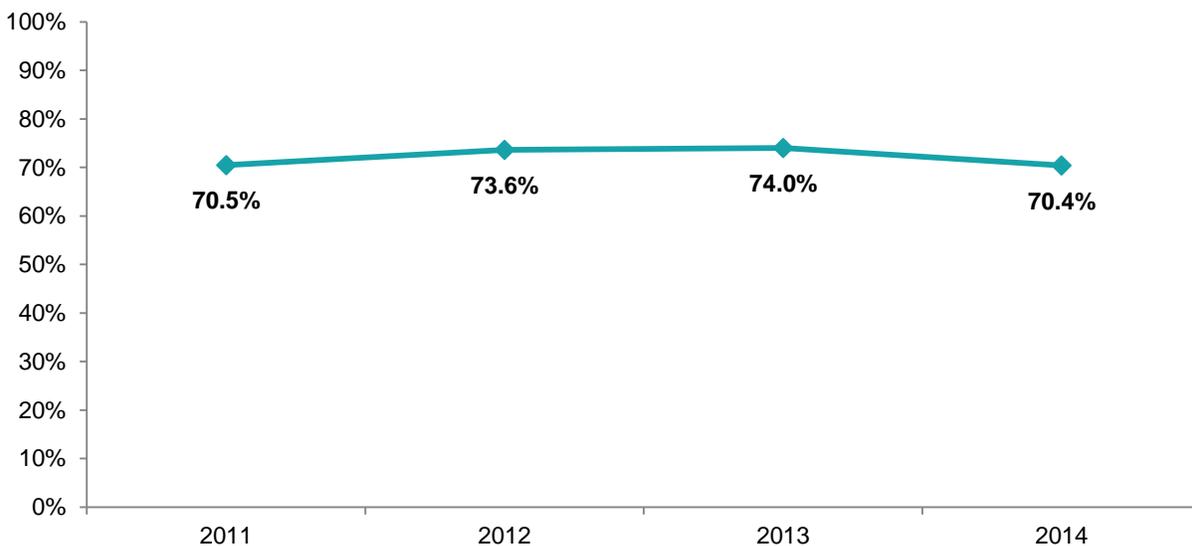


Figure 78. STAR Health – HEDIS® Children and Adolescents' Access to Primary Care Practitioners (CAP), All Members, 2011-2014

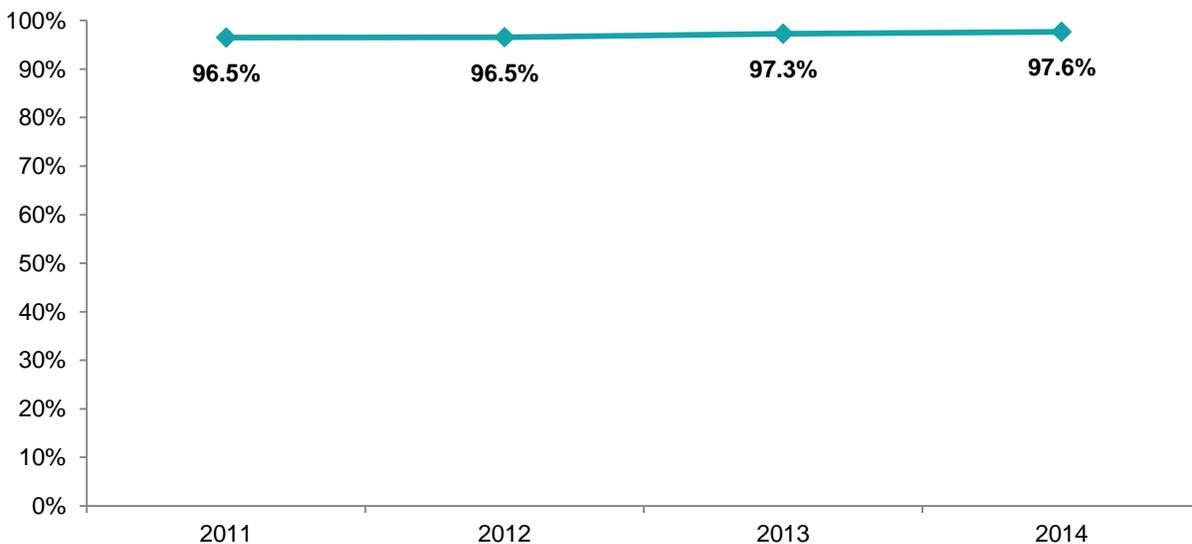


Figure 78 shows statewide performance on HEDIS® *Children and Adolescents' Access to Primary Care Practitioners* with all age strata combined from 2011 through 2014. Performance was steady across all four years. Performance statewide in 2014 was in the top decile on the HEDIS® national benchmark percentiles on all four components.

Table 46. STAR Health – Utilization of Care Measures, 2015

Measure	2014 Rate	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Ambulatory Care (AMB), Outpatient Visits (per 1,000 member-months)	485.8	★★★★★
HEDIS® Ambulatory Care (AMB), Emergency Department Visits (per 1,000 member-months)	62.1	★★★
HEDIS® Mental Health Utilization (MPT), Any Services (per 100 member-years)	82.0	★★★★★

Table 46 shows utilization rates in 2014 for STAR Health. Higher rates of utilization do not necessarily indicate stronger performance. The two reported components of HEDIS® *Ambulatory Care (AMB)* summarize utilization of two types of ambulatory care: outpatient visits per 1,000 member-months and emergency department visits per 1,000 member-months. HEDIS® *Mental Health Utilization (MPT)* identifies mental health services per 100 member-years during the one-year measurement period in the following categories: inpatient services, intensive outpatient or partial hospitalization services, and outpatient or emergency department services. The rates reported here are for all service categories combined for each measure.

Table 47 shows results for five AHRQ Pediatric Quality Indicators (PDI) in STAR Health in 2014. These measures are derived from hospital inpatient discharge data and can identify areas of potential concern, such as unexpectedly high rates of complications or health care needs that could be met in the community without hospitalization. Numerators for all Pediatric Quality Indicators were less than 40 events statewide.

ⁱ Higher or lower values do not necessarily indicate better quality of care.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Table 47. STAR Health – AHRQ Pediatric Quality Indicators (PDI), 2014

Measure	2014 Rateⁱ
Asthma Admission Rate (PDI 14) (per 100,000 member-months)	12.59
Diabetes Short-Term Complications (PDI 15) (per 100,000 member-months)	6.74
Gastroenteritis Admission Rate (PDI 16) (per 100,000 member-months)	7.04
Perforated Appendix Admission Rate (PDI 17) (per 100 admissions for appendicitis)	LD ⁱⁱ
Urinary Tract Infection (PDI 18) (per 100,000 member-months)	3.38

The external quality review organization calculated performance for STAR Health on measures of potentially preventable events, including hospital admissions, readmissions within 30 days, emergency department visits, and complications; the external quality review organization calculated these measures using 3M™ Health Information Systems software. The potentially preventable event measures assess the frequency and cost of visits that potentially could have been prevented with better primary and outpatient care; not all events classified as potentially preventable necessarily will have been preventable. Rates are expressed as the weighted actual number of visits per 1,000 member-months, with lower rates indicating stronger performance. Weights are assigned based on resource utilization to account for different health system impact of different potentially preventable events. Events requiring more health care resources (e.g., hospital bed-hours) are weighted more heavily in the measure; resource accounting is independent of actual cost in dollars. **Tables 48** through **51** present the top ten most common reasons for each category of potentially preventable event; for categories with fewer than ten distinct reasons, all reasons are given. Trends in actual weighted number of events per 1,000 member-months are shown for measures calculated by the external quality review organization for three or more years (since 2012 and earlier).

ⁱ Lower values indicate stronger performance.

ⁱⁱ Low Denominator

Figure 79. STAR Health – 3M™ Potentially Preventable Admissions (PPA), Weighted Admissions per 1,000 Member-months, 2011-2014ⁱ

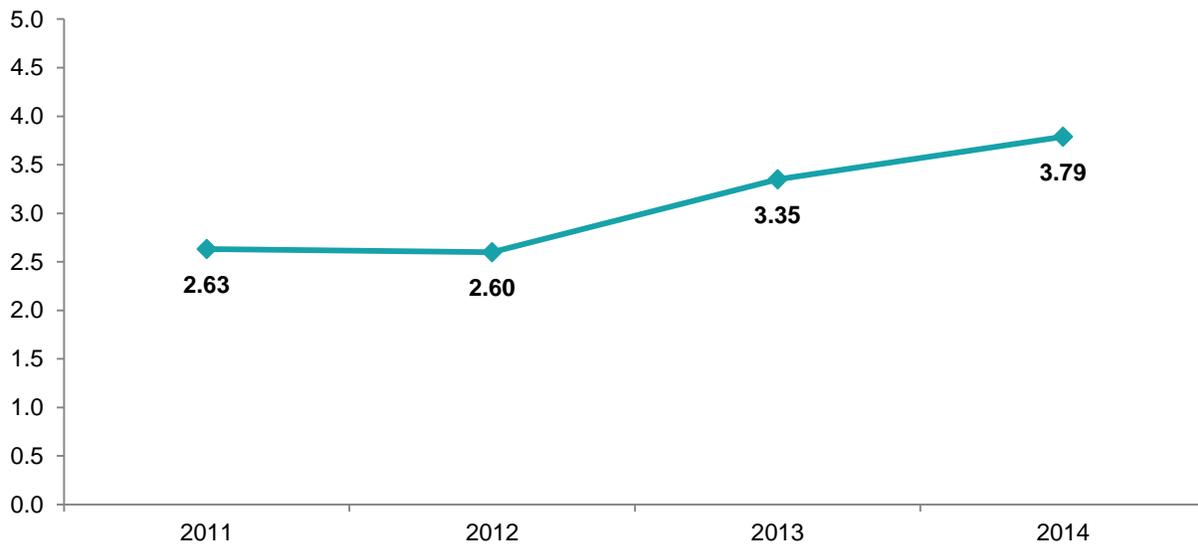


Figure 79 shows weighted statewide admissions per 1,000 member-months in STAR Health for 3M™ *Potentially Preventable Admissions (PPA)* from 2011 to 2014. The relative weight for each admission at risk was assigned based on typical health care resource utilization.

Table 48 presents the most common reasons for 3M™ *Potentially Preventable Admissions (PPA)* among all members in STAR Health in 2014. Statewide, 1,631 unique members experienced 2,068 events; the weighted rate was 3.79 events per 1,000 member-months. Admissions for bipolar disorders accounted for two-thirds (68 percent) of potentially preventable admissions.

ⁱ Lower values indicate stronger performance.

Table 48. STAR Health – Most Common Reasons for 3M™ Potentially Preventable Admissions (PPA), 2014

PPA Reason	% of PPAs in STAR Health
1 Bipolar Disorders	67.9%
2 Major Depressive Disorders & Other / Unspecified Psychoses	12.9%
3 Seizure	3.0%
4 Asthma	2.3%
5 Other Pneumonia	2.3%
6 Cellulitis and Other Bacterial Skin Infections	1.5%
7 Schizophrenia	1.5%
8 Diabetes	1.3%
9 Non-Bacterial Gastroenteritis, Nausea and Vomiting	1.2%
10 Childhood Behavioral Disorders	1.1%

Figure 80. STAR Health – 3M™ Potentially Preventable Readmissions (PPR), Weighted Readmissions per 1,000 Member-months, 2011-2014ⁱ

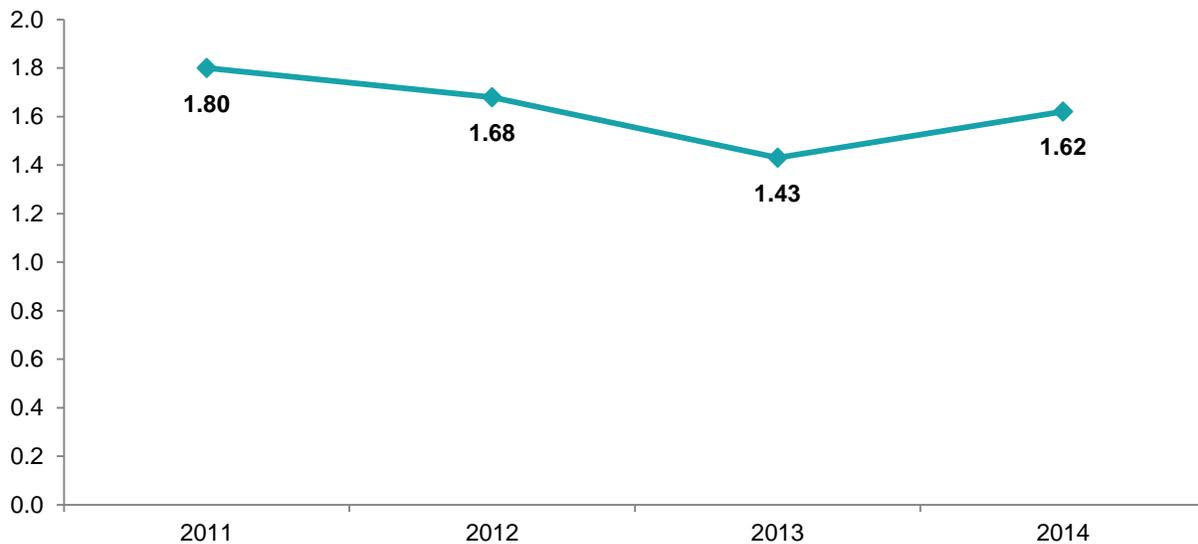


Figure 80 shows weighted statewide readmissions per 1,000 member-months in STAR Health for 3M™ *Potentially Preventable Readmissions (PPR)* from 2011 to 2014. The relative weight for each readmission at risk was assigned based on typical health care resource utilization. A readmission chain includes all readmissions clinically related to an initial admission.

Table 49 presents the most common reasons for 3M™ *Potentially Preventable Readmissions (PPR)* among all members in STAR Health in 2014. Statewide, 583 unique members

ⁱ Lower values indicate stronger performance.

experienced 644 events; the weighted rate was 1.62 events per 1,000 member-months. The most common category accounted for 90 percent of readmissions.

Table 49. STAR Health – Most Common Reasons for 3M™ Potentially Preventable Readmissions (PPR), 2014

PPR Reason		% of PPRs in STAR Health
1	Mental health or substance abuse readmission following an initial admission for a substance abuse or mental health diagnosis.	89.8%
2	Medical readmission for acute medical condition or complication that may be related to or may have resulted from care during initial admission or in post-discharge period after initial admission.	3.9%
3	Medical readmission for a continuation or recurrence of the reason for the initial admission, or for a closely related condition.	2.5%
4	All other readmissions for a chronic problem that may be related to care either during or after the initial admission.	1.7%
5	Readmission for mental health reasons following an initial admission for a non-mental health, non-substance abuse reason.	0.9%
6	Ambulatory care-sensitive conditions as designated by AHRQ	0.7%
7	Readmission for surgical procedure to address a complication that may be related to or may have resulted from care during the initial admission.	0.3%
8	Readmission for surgical procedure to address a continuation or a recurrence of the problem causing the initial admission.	0.2%

Figure 81 shows weighted statewide emergency department visits per 1,000 member-months in STAR Health for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* from 2011 to 2014. The relative weight for each emergency department visit at risk was assigned based on typical health care resource utilization.

Figure 81. STAR Health – 3M™ Potentially Preventable Emergency Department Visits (PPV), Weighted Visits per 1,000 Member-months, 2011-2014ⁱ

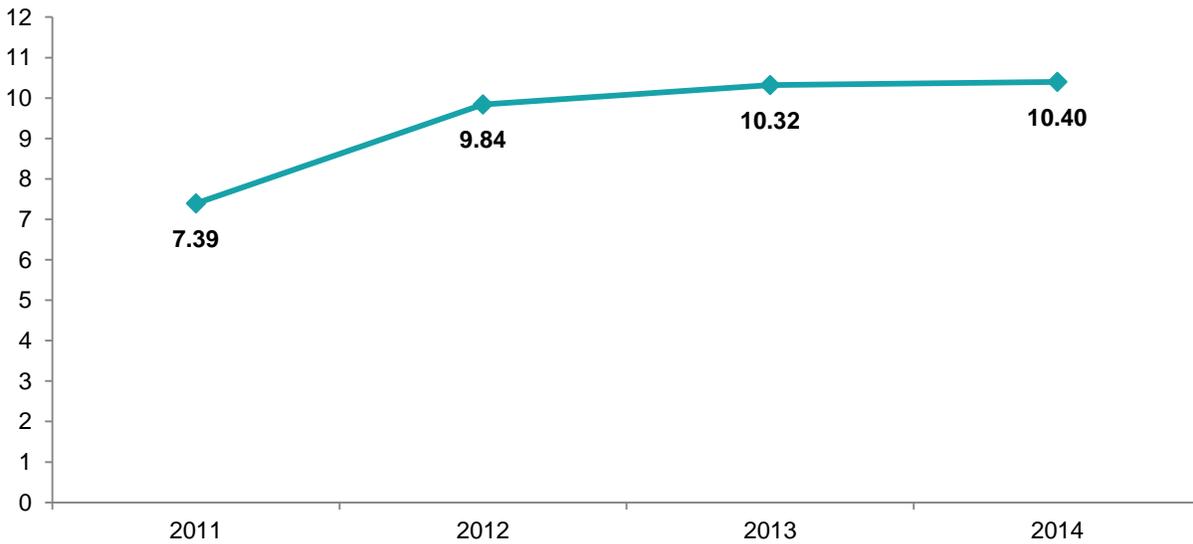


Table 50 presents the most common reasons for 3M™ *Potentially Preventable Emergency Department Visits (PPV)* among all members in STAR Health in 2014. Statewide, 9,745 unique members experienced 15,130 events; the weighted rate was 10.40 events per 1,000 member-months. Infections of the upper respiratory tract accounted for one-quarter of potentially preventable emergency department visits.

Table 50. STAR Health – Most Common Reasons for 3M™ Potentially Preventable Emergency Department Visits (PPV), 2014

PPV Reason	% of PPVs in STAR Health
1 Infections Of Upper Respiratory Tract	25.4%
2 Signs, Symptoms & Other Factors Influencing Health Status	6.7%
3 Contusion, Open Wound & Other Trauma To Skin & Subcutaneous Tissue	6.3%
4 Other Skin, Subcutaneous Tissue & Breast Disorders	6.3%
5 Non-Bacterial Gastroenteritis, Nausea & Vomiting	6.0%
6 Level II Other Musculoskeletal System & Connective Tissue Diagnoses	4.7%
7 Level I Other Ear, Nose, Mouth, Throat & Cranial/Facial Diagnoses	4.7%
8 Viral Illness	3.5%
9 Abdominal Pain	3.2%
10 Cellulitis & Other Bacterial Skin Infections	2.8%

ⁱ Lower values indicate stronger performance.

Table 51 presents the most common reasons for 3M™ *Potentially Preventable Complications (PPC)* among all members in STAR Health in 2014. Statewide, 12 unique members experienced 13 events. The weighted rate was 0.02 events per 1,000 member-months; the relative weight for each complication at risk was assigned based on typical health care resource utilization. Obstetrical hemorrhage without transfusion accounted for nearly half (46 percent) of potentially preventable complications.

Table 51. STAR Health – Most Common Reasons for 3M™ Potentially Preventable Complications (PPC), 2014

PPC Reason	% of PPCs in STAR Health
1 Obstetrical Hemorrhage without Transfusion	46.2%
2 Ventricular Fibrillation/Cardiac Arrest	7.7%
3 Decubitus Ulcer	7.7%
4 Septicemia & Severe Infections	7.7%
5 Obstetric Lacerations & Other Trauma without Instrumentation	7.7%
6 Obstetric Lacerations & Other Trauma with Instrumentation	7.7%
7 Medical & Anesthesia Obstetric Complications	7.7%
8 Urinary Tract Infection	7.7%

5.5.2. Effectiveness of Care in STAR Health

Table 52 shows statewide performance in 2014 for the STAR Health program. Superior HealthPlan is the exclusive provider for the program. The STAR Health population is not necessarily comparable to the national Medicaid population, and benchmark comparisons are provided for reference purposes only. Because only two years of data are available for CHIPRA® *Developmental Screening in the First Three Years of Life (DVS)*, no trend chart is provided. The behavioral health measures HEDIS® *Follow-up After Hospitalization for Mental Illness (FUH)* and HEDIS® *Follow-up Care for Children Prescribed ADHD Medication (ADD)* are discussed in more detail in **Section 6.4 Behavioral Health**.

Table 52. STAR Health – HEDIS® Effectiveness of Care Measures, 2014

Measure	2014 Rate ⁱ	HHSC Dashboard Standard 2014	HEDIS® 2015 Percentile Rating ⁱⁱ
HEDIS® Appropriate Testing for Children with Pharyngitis (CWP)	58.3%	N/A	★★
HEDIS® Use of Appropriate Medication for People with Asthma (ASM), All Ages	86.5%	89%	★★★★
HEDIS® Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%	72.9%	N/A	★★★★★
HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total)	41.7%	50%	★★★★
HEDIS® Follow-up After Hospitalization for Mental Illness (FUH), 7 Days	60.8%	63%	★★★★
HEDIS® Follow-up After Hospitalization for Mental Illness (FUH), 30 Days	83.3%	87%	★★★★★
HEDIS® Follow-up Care for Children Prescribed ADHD Medication (ADD), Initiation Phase	89.1%	52%	★★★★★
HEDIS® Follow-up Care for Children Prescribed ADHD Medication (ADD), Continuation and Maintenance Phase	92.8%	59%	★★★★★
HEDIS® Appropriate Treatment for Children With Upper Respiratory Infection (URI)	82.1%	N/A	★★
CHIPRA® Developmental Screening in the First Three Years of Life (DVS), All Ages	56.2%	N/A	N/A

Six in 10 children and adolescents in STAR Health in 2014 (58 percent) were appropriately tested for streptococcal pharyngitis when presenting with pharyngitis, between the 10th and 32nd percentiles compared to the HEDIS® national benchmark percentiles. Children and adolescents in STAR Health were very likely relative to the national Medicaid population to be prescribed an appropriate medication, to use more asthma controller medications than quick-relief medications, and to be dispensed controller medications covering at least 75 percent of days in the measurement year; the rate of being prescribed an appropriate medication and the rate of being dispensed controller medications did not meet the HHSC Performance Indicator Dashboard standards.

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

- ★★★★★ = 90th percentiles and above
- ★★★★ = 66th to 89th percentiles
- ★★★ = 33rd to 65th percentiles
- ★★ = 10th to 32nd percentiles
- ★ = Below 10th percentiles

Figure 82 shows the percentage of children and adolescents in STAR Health ages 2 to 18 presenting with pharyngitis who were appropriately tested for streptococcal pharyngitis between 2011 and 2014. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS[®] national benchmark percentiles.

Figure 82. STAR Health – HEDIS[®] Appropriate Testing for Children with Pharyngitis (CWP), 2011-2014

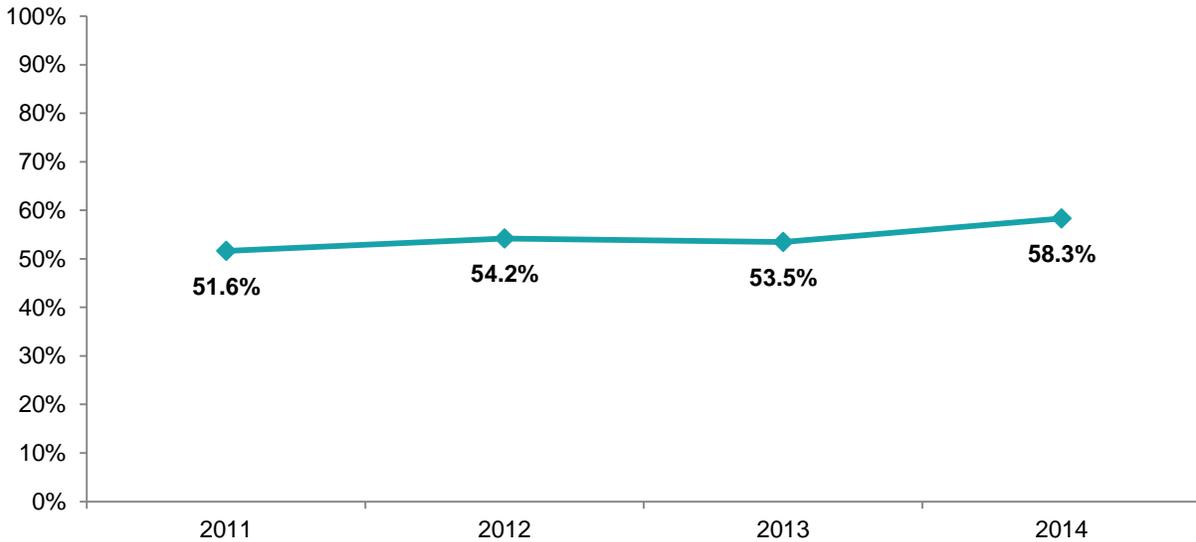


Figure 83. STAR Health – HEDIS[®] Use of Appropriate Medication for People with Asthma (ASM), All Ages, 2011-2014

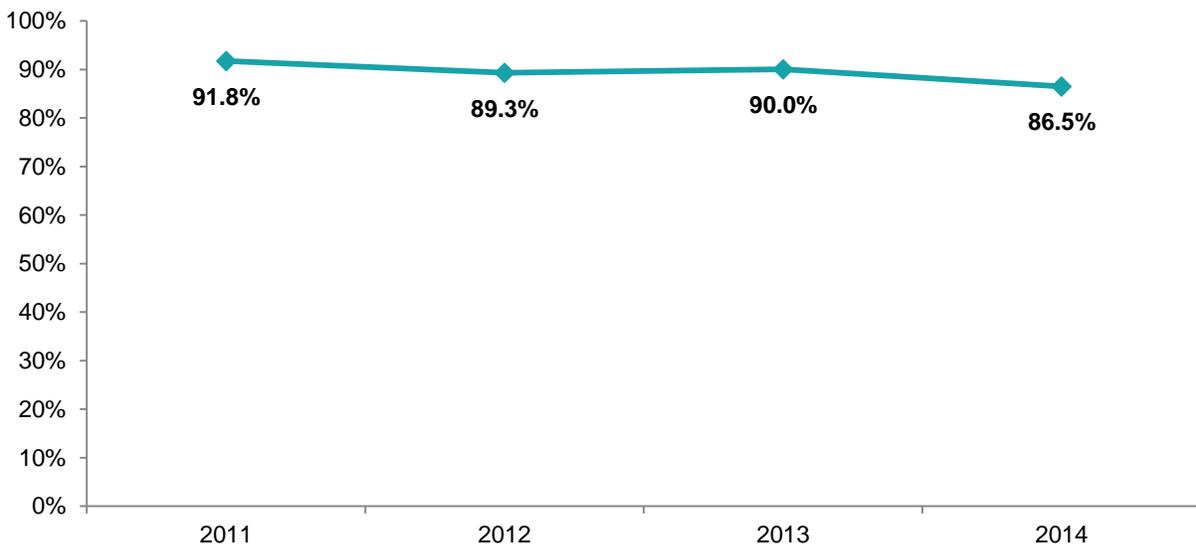


Figure 83 provides the percentage of people in STAR Health ages 5 or older identified as having persistent asthma who were prescribed an appropriate medication during the

measurement year, showing trends from 2011 to 2014. Performance in 2014 was between the 66th and 89th percentiles on the HEDIS[®] national benchmark percentiles.

Figure 84 shows the percentage of people in STAR Health ages 5 or older identified as having asthma who used more controller medications than quick-relief medications (an indicator of good disease management)⁴⁹ between 2012 and 2014. Performance in 2014 was in the top decile on the HEDIS[®] national benchmark percentiles.

Figure 84. STAR Health – HEDIS[®] Asthma Medication Ratio (AMR), Total Controller Medication Ratio >50%, 2012-2014

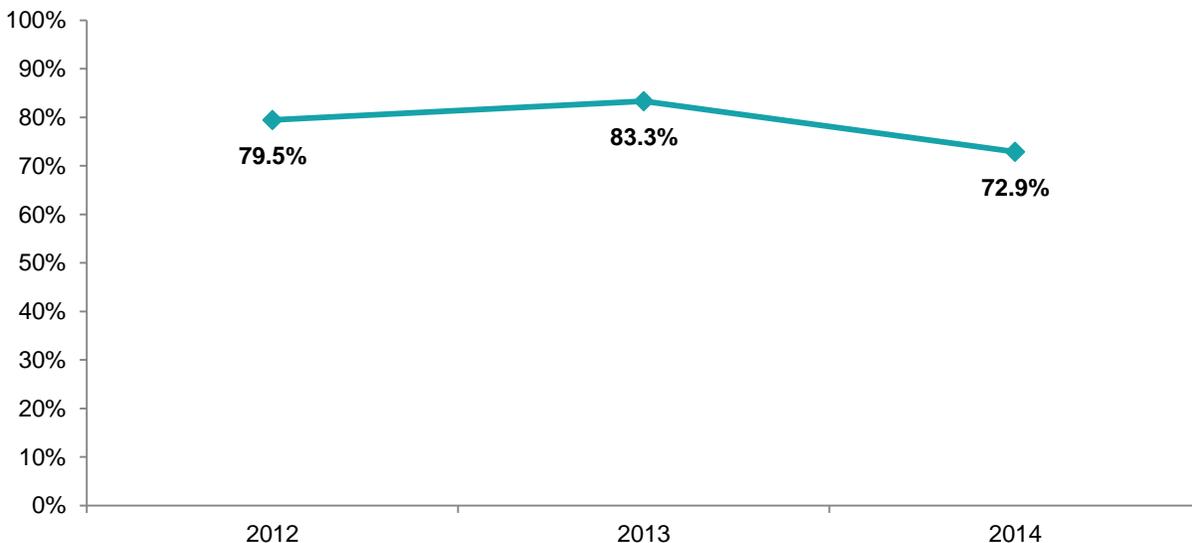


Figure 85 provides the percentage of people in STAR Health ages 5 or older identified as having asthma who were dispensed asthma controller medications covering at least 75 percent of days during the measurement year, showing trends from 2012 through 2014. Performance in 2014 was between the 66th and 89th percentiles on the HEDIS[®] national benchmark percentiles.

Figure 85. STAR Health – HEDIS® Medication Management for People with Asthma (MMA), Medication Compliance 75% of Treatment Period (total), 2012-2014

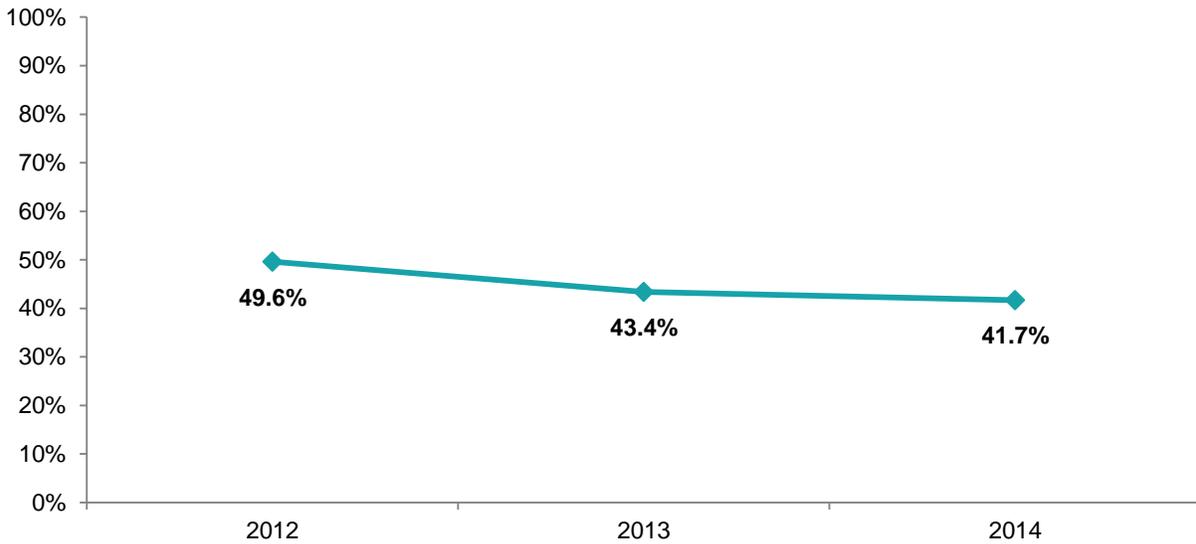
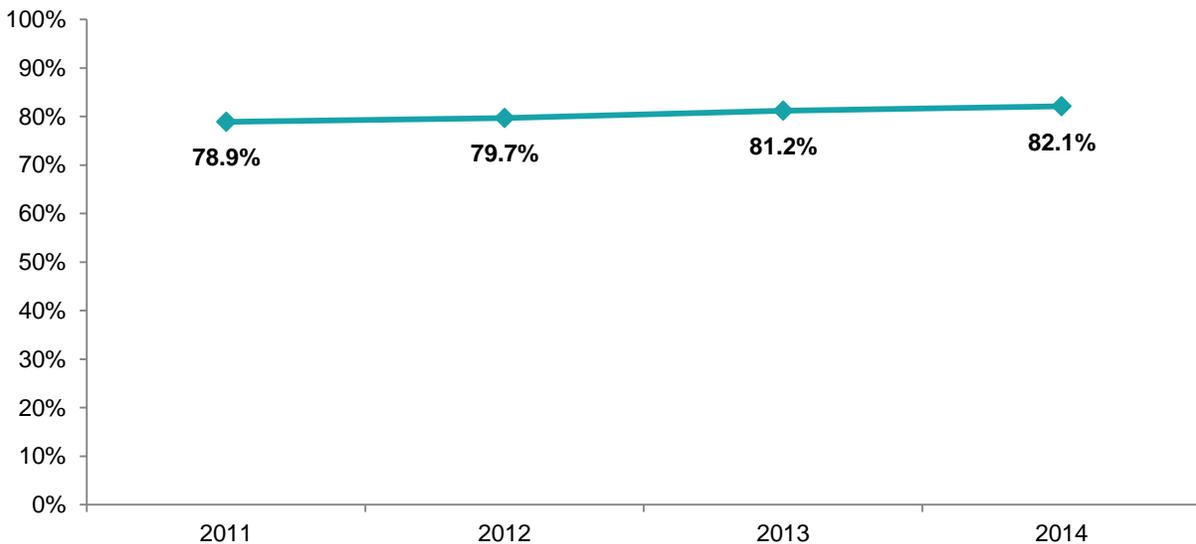


Figure 86 shows the percentage of children in STAR Health ages 3 months to 18 years who were diagnosed with an upper respiratory tract infection and were not dispensed an antibiotic prescription from 2011 to 2014; higher performance indicates appropriate treatment. Performance in 2014 was between the 10th and 32nd percentiles on the HEDIS® national benchmark percentiles for Medicaid.

Figure 86. STAR Health – HEDIS® Appropriate Treatment for Children With Upper Respiratory Infection (URI), 2011-2014



5.5.3. Satisfaction with Care in STAR Health

Table 53 provides results from the CAHPS® survey conducted with caregivers of children and adolescents in STAR Health in 2014. The following rates represent the percentage of members who “usually” or “always” had positive experiences with the given domain. Rates on measures of getting timely care, doctors’ communication, personal doctor rating were similar to those observed in the national Medicaid population. As with the other Texas Medicaid programs, the rate for *Getting Needed Care* was below the national average, with 72 percent of STAR Health caregivers having positive experiences with access to care, tests, treatment, and specialists. Ratings of specialist seen most often, health plan, and all health care were lower than those observed in the national Medicaid population.

Table 53. STAR Health – Caregiver Satisfaction with Care, 2014

CAHPS® Measure ("Usually" or "Always")	2014 Rate ⁱ	HHSC Dashboard Standard 2014	CAHPS® Child Medicaid 2014 ⁵⁰
Getting Needed Care	72.3%	N/A	85%
Getting Care Quickly	89.4%	N/A	90%
How Well Doctors Communicate	91.4%	94%	93%
Health Plan Information and Customer Service	LD ⁱⁱ	N/A	87%
Rating of Personal Doctor ‘9’ or ‘10’	71.3%	74%	73%
Rating of Specialist ‘9’ or ‘10’	61.2%	N/A	70%
Rating of Health Plan ‘9’ or ‘10’	60.2%	71%	67%
Rating of All Health Care ‘9’ or ‘10’	61.2%	N/A	66%

5.6. Medicaid Dental and CHIP Dental Programs

5.6.1. Access to and Utilization of Care in Medicaid Dental and CHIP Dental Programs

Table 54 shows rates of dental services access and utilization for the Medicaid Dental program and CHIP Dental program, along with HHSC Performance Indicator Dashboard standards where applicable. Higher rates on utilization measures do not necessarily indicate stronger performance. Both programs performed in the top decile on the HEDIS® national benchmark percentiles for Medicaid on all components of HEDIS® *Annual Dental Visit (ADV)* except CHIP Dental for the 7 to 10 age band, which performed between the 66th and 89th percentiles. The First Dental Home program is a state initiative aimed at improving oral health in children ages 6 months to 35 months; a visit can include caries risk assessment, dental prophylaxis, oral hygiene instructions, scheduling of future visits, and similar activities.

ⁱ Higher values indicate stronger performance.

ⁱⁱ Low Denominator

Table 54. Medicaid Dental and CHIP Dental – Access and Utilization Measures, 2014

Measure	2014 Rate ⁱ		HHSC Dashboard Standard 2014	
	Medicaid	CHIP	Medicaid	CHIP
HEDIS® Annual Dental Visit (ADV), 2-3 years	75.6%	67.1%	75%	80% ⁱ
HEDIS® Annual Dental Visit (ADV), 4-6 years	80.1%	74.9%	81%	88% ⁱ
HEDIS® Annual Dental Visit (ADV), 7-10 years	80.1%	75.5%	82%	90% ⁱ
HEDIS® Annual Dental Visit (ADV), 11-14 years	76.2%	71.0%	80%	85% ⁱ
HEDIS® Annual Dental Visit (ADV), 15-18 years	68.2%	62.3%	73%	75% ⁱ
HEDIS® Annual Dental Visit (ADV), 19-21 years	49.2%	N/A	47%	N/A
First Dental Home Services Visit	66.7%	N/A	51%	N/A
Preventive Dental Service	73.7%	68.2%	85% ⁱⁱ	80% ⁱ
Dental Sealants, 2-5 years	13.3%	1.5%	15%	2%
Dental Sealants, 6-9 years	29.8%	23.9%	27%	21%
Dental Sealants, 10-14 years	38.4%	30.1%	34%	24%
Dental Sealants, 15-20 years ⁱⁱⁱ	16.4%	14.2%	15%	12%
Treatment and Prevention of Caries	74.0%	67.3%	N/A	N/A

ⁱ Higher values indicate stronger performance.

ⁱⁱ This is a 2014 P4Q measure. The dashboard standard is the attainment goal; however actual performance will follow the P4Q methodology. Therefore, the listed standard is for reference only.

ⁱⁱⁱ Ages 15-19 years for CHIP Dental.

5.6.2. Satisfaction with Care in Medicaid and CHIP Dental Programs

Table 55 provides results from the Medicaid and CHIP Dental Caregiver Survey conducted in 2015. Findings are shown in four domains of dental care: (1) care from dentists and staff, (2) access to dental care, (3) dental plan costs and services, and (4) caregiver ratings. For all items except caregiver ratings, the results represent the percentage of caregivers who responded “always” to the question. For caregiver ratings items, the results represent the percentage of caregivers who rated their child’s dental services a “9” or “10” on a scale from 0 to 10, with higher scores indicating greater satisfaction.

Overall, the survey showed that caregivers had good experiences with care their child received from dentists and staff. In particular, 92 percent of Medicaid and CHIP Dental caregivers said their child’s regular dentist “always” treated them with courtesy and respect. About one-eighth of caregivers reported that they had to spend more than 15 minutes in the waiting room for their child’s dental appointment. However, among those who reported a delay, about one-quarter said they were informed of the reasons for the delay or the expected length of the delay.

Caregivers of children in Medicaid Dental generally reported better experiences than caregivers of children in CHIP Dental, particularly in regard to access to dental care, coverage, and satisfaction with plan and care.

Table 55. Medicaid Dental and CHIP Dental – Caregiver Satisfaction with Care, 2015

Measure	Medicaid ⁱ	CHIP ⁱ
Care from Dentists and Staff – Responses of “Always”		
Regular dentist explained things in a way that was easy to understand.	84.9%	83.1%
Regular dentist listened carefully.	86.6%	84.5%
Regular dentist treated patient with courtesy and respect.	92.2%	92.5%
Regular dentist spent enough time with patient.	79.9%	79.0%
Dentists or dental staff did everything they could to help patient feel as comfortable as possible during dental work.	82.8%	80.5%
Dentists or dental staff explained what they were doing during treatment.	86.0%	81.5%
Access to Dental Care – Responses of “Always”		
Member able to get a dental appointment as soon as needed.	76.5%	73.0%
Member waited more than 15 minutes in waiting room for a dental appointment.	12.8% ⁱⁱ	14.2% ⁱⁱ
Member was informed of reason for delay or length of delay if wait was longer than 15 minutes.	24.9%	27.0%
Dental Plan Costs and Services - Responses of “Usually” or “Always”		
Dental plan covered all services caregiver thought were covered.	85.6%	64.4%
The toll-free telephone number, written materials or website provided all information caregiver wanted.	58.0%	48.8%
Dental plan’s customer service gave caregiver all information or help needed.	72.3%	65.8%
Dental plan’s customer service staff treated caregiver with courtesy and respect.	92.8%	85.0%
Dental plan covered needed services for member and family.	84.6%	62.6%
Information from dental plan helped caregiver find a dentist they were happy with.	80.8%	74.1%
Caregiver Ratings		
Dentist Rating (9 or 10)	77.5%	72.2%
Dental Care Rating (9 or 10)	79.4%	70.1%
Access to Dental Care Rating (9 or 10)	76.0%	70.0%
Dental Plan Rating (9 or 10)	82.2%	69.1%

ⁱ Higher values indicate stronger performance.

ⁱⁱ Lower values indicate stronger performance.

Focus Studies and Special Projects

6.1. Appointment Availability

Ensuring that beneficiaries of public insurance programs receive timely appointments for primary and specialist care is an important component of quality improvement efforts that address access to care. In Texas, managed care organizations participating in Medicaid and CHIP must meet specific contractual standards for the availability of health care appointments for members. The external quality review organization introduced the Appointment Availability study in 2015 to assess the compliance of Texas Medicaid and CHIP health care providers with appointment timeliness standards. Overall, this study assesses standards for appointment availability of primary care, obstetrics and gynecology (OB/GYN), vision, and behavioral health providers as outlined in the Uniform Managed Care Contract (UMCC) between the Texas Health and Human Services Commission (HHSC) and participating health plans.

The external quality review organization uses a “secret shopper” methodology to assess timely availability of appointments for several levels and types of care (**Table 56**).⁵¹ Average wait times are compared to specified maximum wait times for each type of care. The external quality review organization assesses average availability for: adult members in STAR who need routine primary care, obstetrics and gynecological care, or behavioral health services; child and adolescent members in STAR and CHIP who need routine primary care, vision care, or behavioral health services; and adult members in STAR+PLUS who need routine primary care, vision care, or behavioral health services.

Table 56. Appointment Standards Defined in the Texas Medicaid Uniform Managed Care Contract

Level/Type of care	Time to treatment
Urgent care (child and adult)	Within twenty-four (24) hours
Routine primary care (child and adult)	Within fourteen (14) calendar days
Preventive health services for newborn members	No later than fourteen (14) calendar days after enrollment
Preventive health services for new child members	No later than ninety (90) calendar days after enrollment
Initial outpatient behavioral health visits (child and adult)	Within fourteen (14) calendar days
Preventive health services for adults	Within ninety (90) calendar days
Prenatal care (not high-risk)	Within fourteen (14) calendar days
Prenatal care (high risk)	Within five (5) calendar days
Prenatal care (new member in 3 rd trimester)	Within five (5) calendar days
Vision care (ophthalmology, therapeutic optometry)	Access without PCP referral

Background

All members of managed care organizations participating in Medicaid or CHIP must have reasonably prompt access to all covered services, consistent with medically appropriate guidelines and accepted practice parameters. The providers in the managed care organization networks must deliver timely access to all covered services as measured by waiting times for appointments. In the *Access to Care* study⁵² of 32 states contracting with Medicaid managed care organizations, the Office of the Inspector General (OIG) reported about half (49 percent) of the primary care providers offered new patient appointments, 43 percent of primary care providers did not participate in the health plan at the location listed, and 8 percent were not accepting new patients. The median wait time to get an appointment was 10 days. Another study⁵³ reported a median wait time of 12 days for new enrollees after Medicaid expansion in Michigan. The external quality review organization developed this study to assess appointment wait times for new Medicaid members in the state of Texas.

Methodology

This study uses the secret shopper methodology to assess the availability of appointments and responsiveness of staff at sampled provider offices. Various studies^{54,55} have found this methodology to be a valid, reliable, effective, and efficient way to determine service accessibility. The external quality review organization hired and trained four staff members to pose as potential new patients telephoning provider offices to schedule an appointment. The study process included developing several scripts to guide the process of eliciting and recording data needed to assess compliance with appointment standards. No appointments were actually scheduled.

Instrument Development

The external quality review organization developed the telephone scripts after review of a similar study also conducted by the Institute for Child Health Policy for the Florida Healthy Kids Corporation. Independent instruments are used to collect data for different studies based on member populations and provider types. These tools use an online data entry system for convenient and reliable data collection. HHSC reviewed and approved all instruments prior to the start of data collection.

The external quality review organization is currently making calls for this study and will continue to collect data in 2016. Results on appointment availability will be available for the 2016 Summary of Activities report.

6.2. STAR+PLUS Expansion for Individuals with Intellectual and Developmental Disabilities (IDD)

To improve the efficiency and effectiveness of systems of care for people with intellectual and developmental disabilities (IDD), some states have turned to managed care for health services delivery— whether for acute care, long-term services and supports (LTSS), or both. Texas recently joined in this effort through implementation of provisions in Senate Bill (S.B.) 7 of the

Texas 83rd Legislature requiring the Texas Health and Human Services Commission (HHSC) and the Department of Aging and Disability Services (DADS) to jointly design and implement an acute-care services and LTSS system for people with IDD. Managed care delivery of acute care services began in September 2014 through the STAR+PLUS program, while LTSS delivery continues to operate through fee-for-service waiver programs. The state's managed care program for long-term services and supports for people with intellectual and developmental disabilities will roll out gradually over the next six years.

In 2015, the external quality review organization began a Quarterly Topic Study of this expansion, with results to be disseminated in four reports. The first report – *Managed Care for Individuals with IDD in National Context* – summarized findings in the policy and academic literature in regard to: (1) similar efforts made in other states toward managed care expansion for IDD populations; (2) methods of measuring quality-of-care and outcomes specific to IDD populations, and preliminary findings on indicators in states that have implemented managed care for IDD; and (3) barriers and facilitators to implementation of managed care for IDD populations.

The second report – *Baseline Findings – Demographics, Health Status, and Health Care Utilization* – summarizes baseline findings on the demographic, health status, and health care utilization characteristics of the IDD population after the STAR+PLUS expansion. Findings are based on claims and encounter data for members who meet the eligibility criteria in the nine-month measurement period from September 1, 2014 through May 31, 2015.

As of May 2015, 15,745 members with intellectual and developmental disabilities were covered by STAR+PLUS; enrollment of such members increased by approximately 19 percent between September 2014 and May 2015. Over this period, the vast majority of STAR+PLUS members with intellectual and developmental disabilities were between 20 and 44 years old (87 percent). More were male (58 percent) than female (42 percent). The population was 18 percent Black, non-Hispanic, 22 percent Hispanic, 36 percent White, non-Hispanic, and 24 percent other or unknown. More than two-thirds of members with intellectual and developmental disabilities had either moderate or major chronic conditions (67 percent), and one quarter had routine needs (23 percent). The external quality review organization observed statistically significant differences in member race/ethnicity and health status by managed care organization and service area.

Compared with the general STAR+PLUS population:

- Members with intellectual and developmental disabilities had similar or lower rates of outpatient visits (414 per 1,000 member-months), emergency department visits (53 per 1,000 member-months), and inpatient care (9 per 1,000 member-months). Those in older age groups had higher rates of outpatient visits, emergency department visits, and medical and surgical inpatient stays. Those in the Unassigned Clinical Risk Group (CRG) had higher rates of inpatient stays, which may suggest a greater need for hospitalization among newly enrolled members.
- Members with IDD had notably higher mental health care utilization (51 per 100 member-years). Mental health care utilization was inversely proportional to member health status.

Those in the Unassigned Clinical Risk Group had higher rates of outpatient and emergency department mental health visits, which may suggest a greater need for mental health care among newly enrolled members.

- Members with IDD had higher rates of HEDIS® *Follow-Up After Hospitalization for Mental Illness (FUH), 7 days* (39 percent) and HEDIS® *Follow-Up After Hospitalization for Mental Illness (FUH), 30 days* (67 percent) following discharge. Although the external quality review organization observed differences in rates of follow-up by member characteristics, managed care organization, and service delivery area, these differences were not statistically significant.

Using the Medicaid Network for Evidence-based Treatment (MEDNET) Medication Possession Ratio (MPR), the study found that 83 percent of members with IDD and schizophrenia had antipsychotic medication available on more than 90 percent of days (MPR > 0.90) during the measurement period. Availability varied by race and ethnicity, with 90 percent of White, non-Hispanic members, 87 percent of Hispanic members, and 77 percent of Black, non-Hispanic members having antipsychotic medication available on more than 90 percent of days.

6.3. STAR+PLUS Home- and Community-Based Services (HCBS) Waiver Study

The STAR+PLUS Home- and Community-Based Services (HCBS) program operates under the authority of the Texas Healthcare Transformation Quality Improvement Program 1115 Demonstration waiver to provide home- and community-based services as an alternative to institutional care in Medicaid-certified nursing facilities. Service coordinators from the managed care organizations participating in STAR+PLUS work with beneficiaries to develop a person-centered individual service plan (ISP). Each service plan identifies, allocates, and authorizes services in accordance with the individual's preferences and needs.

Provision of home- and community-based services must follow requirements mandated by the Centers for Medicare & Medicaid Services (CMS). In order to meet these requirements in the STAR+PLUS HCBS program, HHSC has set the following objectives for evaluating the adequacy of coordination between service plans, service coordinators, and waiver participants:

- 1) The State must monitor service plan development in accordance with its policies and procedures.
- 2) Services must be delivered in accordance with the service plan, including the type, scope, amount, and frequency of services specified in the service plan.
- 3) Service plans must be revised and updated at least annually or when warranted by changes in the Demonstration participant's needs.
- 4) Service plans must address all participants' assessed needs (including health and safety risk factors) and personal goals, either by the provision of Demonstration HCBS or through other means.
- 5) Participants must be afforded choices:
 - a) Between Demonstration services and institutional care.
 - b) Among Demonstration services and providers.

In addition, the external quality review organization recommends a study to compare the quality of care between STAR+PLUS members who receive home- and community-based services and those who do not, using administrative performance measures that reflect the types of care most often required for the STAR+PLUS population.

In 2015, the external quality review organization evaluated the completeness and validity of key data elements in STAR+PLUS HCBS Waiver ISPs, and provided descriptive information on ISPs for each of the STAR+PLUS health plans. The external quality review organization used electronic ISP data submitted by the STAR+PLUS health plans in July 2013 and January 2014, with service start dates ranging from February 2013 through July 2013. The external quality review organization's data analytics team performed an initial quality review of the data to ensure that complete claims and encounter data will be available for validation of ISP services in future studies. A secondary data quality check focused on the electronic ISP service records, using established crosswalks for resource utilization group (RUG) codes, Texas Department of Aging and Disability Services service codes, and national Healthcare Common Procedure Coding System (HCPCS) codes. The data quality check assessed the percentage of missing and invalid values for critical ISP fields.

This report also provided a descriptive analysis of the ISP records for each of the five STAR+PLUS health plans including details on key ISP variables (e.g., authorization type, enrollment setting, and living arrangement), estimated waiver cost data quality, and the most common types of ISP services and their associated estimated annual costs.

The external quality review organization's data quality check found a high rate of missing Department of Aging and Disability Services service codes in ISPs from Cigna-Healthspring and high rates of missing HCPCS codes in ISPs from Amerigroup and UnitedHealthcare. In terms of data validity, Molina had a high rate of invalid HCPCS codes and Superior had a high rate of invalid Department of Aging and Disability Services service codes and RUG codes. Quality checks of two key ISP characteristics – enrollment setting and member's living arrangement – revealed discrepancies in coding. Molina's ISP records contained a high number of incorrect values for enrollment setting and living arrangement fields; the external quality review organization coded all of these values as invalid for subsequent analyses.

The external quality review organization also conducted an independent assessment of the estimated annual service cost for each record, which determined whether the annual service costs estimated by the health plan service coordinators were equal to, less than, or greater than the costs independently calculated by the external quality review organization. The study found a small percentage of records that underestimated service costs (less than calculated by the external quality review organization) or overestimated service costs (more than calculated by the external quality review organization). Over one-quarter of service records from Cigna-Healthspring had overestimated costs.

Overall, this study found a moderate level of data quality in the STAR+PLUS health plan electronic ISP data. However, to validate delivery of ISP services, health plans must address and correct the high rates of missing and invalid data observed in critical fields – particularly the

fields for Department of Aging and Disability Services service code, estimated service units, and estimated waiver service cost.

The findings will inform further studies that address the evaluation objectives listed above, with an emphasis on Objective 2, delivery of services in accordance with the service plan. A consolidated report containing the original revised report and service validation analysis will be submitted in January 2016. The service validation analysis includes a correspondence analysis of the ISP data described here, using the appropriate claims encounter codes to determine whether (and to what extent) members received the services authorized in their ISPs.

6.4. Behavioral Health

Behavioral health services include services for both mental health and substance use disorders. The 2014 National Survey on Drug Use and Health (NSDUH) showed that approximately 44 million adults reported any mental illness in the past year. Among adolescents between the ages of 12 and 17, 3 million reported a major depressive episode in the past year. Furthermore, about 22 million individuals over the age of 11 reported a substance use disorder in the past year.⁵⁶ Because behavioral health disorders are prevalent and related to a greater utilization of other health care services, it is important to provide and promote the use of behavioral health services. Medicaid is the single largest payer for mental health services in the United States and is continuously increasing the reimbursement for an array of substance use disorder services.⁵⁷

This section describes findings on available HEDIS® measures assessing behavioral health services in STAR, STAR+PLUS, STAR Health, and CHIP in 2014, and provides comparisons with available HHSC Performance Indicator Dashboard standards. Where available, 2012 and 2013 findings are provided to evaluate trends in the quality of behavioral health services across years. The external quality review organization fielded the AHRQ Experience of Care & Health Outcomes (ECHO®) survey of experience with behavioral health care for three populations: caregivers of child and adolescent members in STAR, adult members in STAR, and adult members in STAR+PLUS. Results of these surveys are presented in **Section 5.2.3 Satisfaction with Care in STAR** and **Section 5.4.3 Satisfaction with Care in STAR+PLUS**.

Mental Health Services Utilization

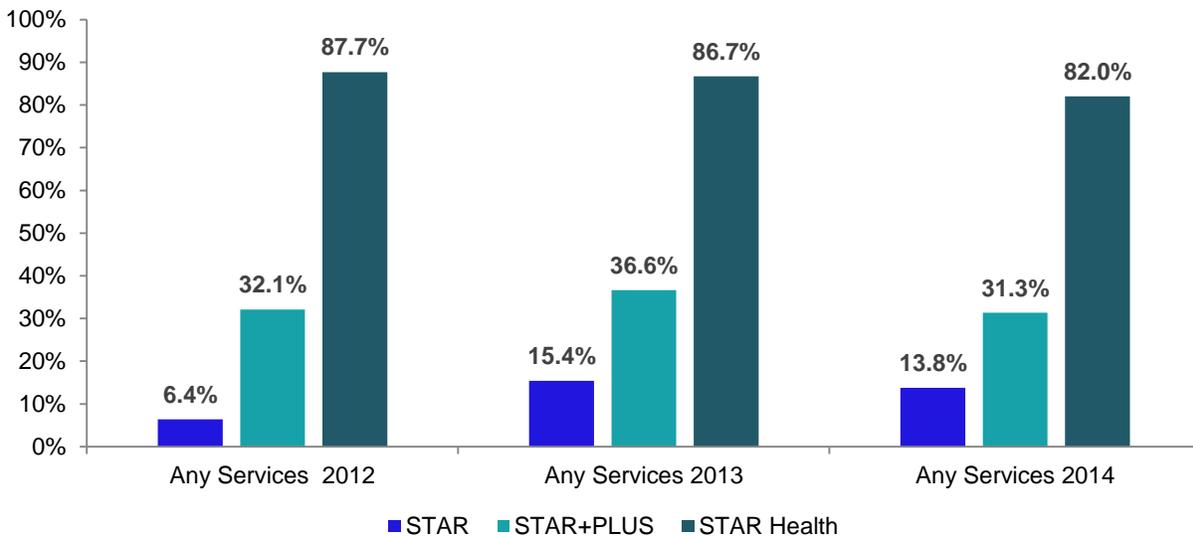
The HEDIS® *Mental Health Utilization (MPT)* measure captures utilization of mental health services per 100 member-years for (1) any services, (2) inpatient, (3) intensive outpatient or partial hospitalization, and (4) outpatient or emergency department services during the measurement year. Since Texas Medicaid does not cover intensive outpatient or partial hospitalization, the third component of this measure shows almost no utilization. Therefore, only the utilization of the other three categories of services captured by the MPT measure are discussed below and shown in **Table 57**. The very few cases of these services that were reported being used were included in the "Any Services" composite.

Table 57. HEDIS® Mental Health Utilization (MPT), 2014

Program	Any Services ^{i,ii}		Inpatient Services ^{i,ii}		Outpatient or Emergency Department Services ^{i,ii}	
STAR	13.8%	★★★★	0.4%	★★	13.7%	★★★★
STAR+PLUS	31.3%	★★★★★	3.9%	★★★★★	31.0%	★★★★★
STAR Health	82.0%	★★★★★	7.6%	★★★★★	82.1%	★★★★★

Examination of trends in mental health services utilization for any services (**Figure 87**), inpatient (**Figure 88**) and outpatient/emergency department services (**Figure 89**) in 2012, 2013, and 2014 showed generally similar percentages in mental health utilization in STAR, STAR+PLUS, and STAR Health across the three years. However, there were two exceptions: reported percentages of any services in STAR (**Figure 87**) and outpatient or emergency department utilization in STAR (**Figure 89**) in 2012 (6.4 percent and 6.3 percent, respectively) roughly doubled in 2013 (15.4 percent and 15.3 percent, respectively), before declining somewhat in 2014 (13.8 percent and 13.7 percent, respectively). This increase in utilization likely reflects changes in the covered population: in March 2012 the STAR program expanded coverage to the SSI population in specific geographic areas. This population transitioned to STAR+PLUS on September 1, 2014 when that program began operating statewide.

Figure 87. HEDIS® Mental Health Utilization (MPT), Any Services, 2012-2014



ⁱ Higher or lower values do not necessarily indicate better quality of care.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 88. HEDIS® Mental Health Services Utilization (MPT), Inpatient (IP), 2012-2014

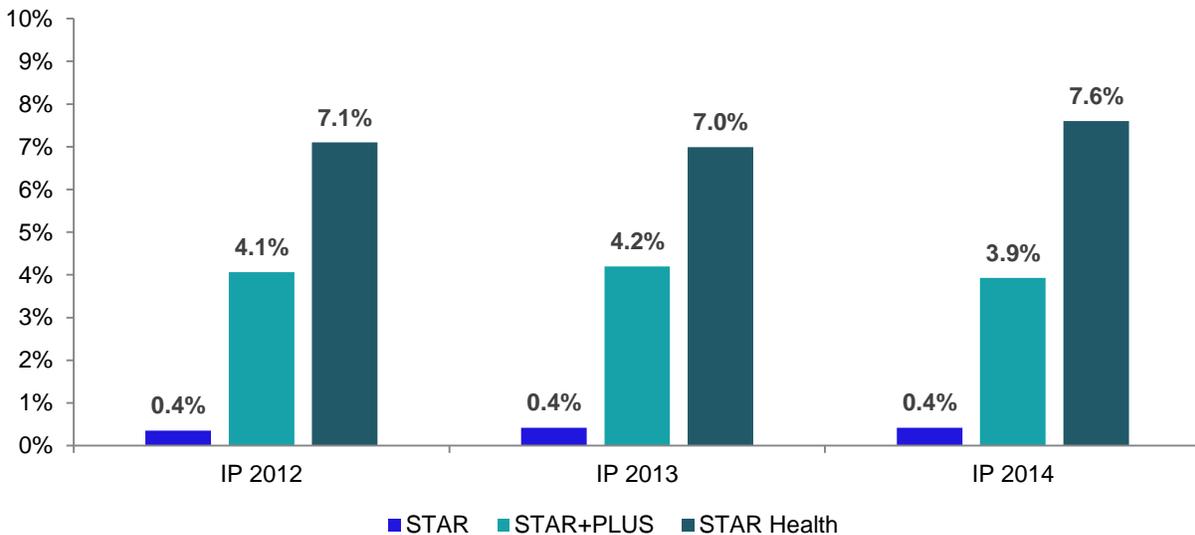
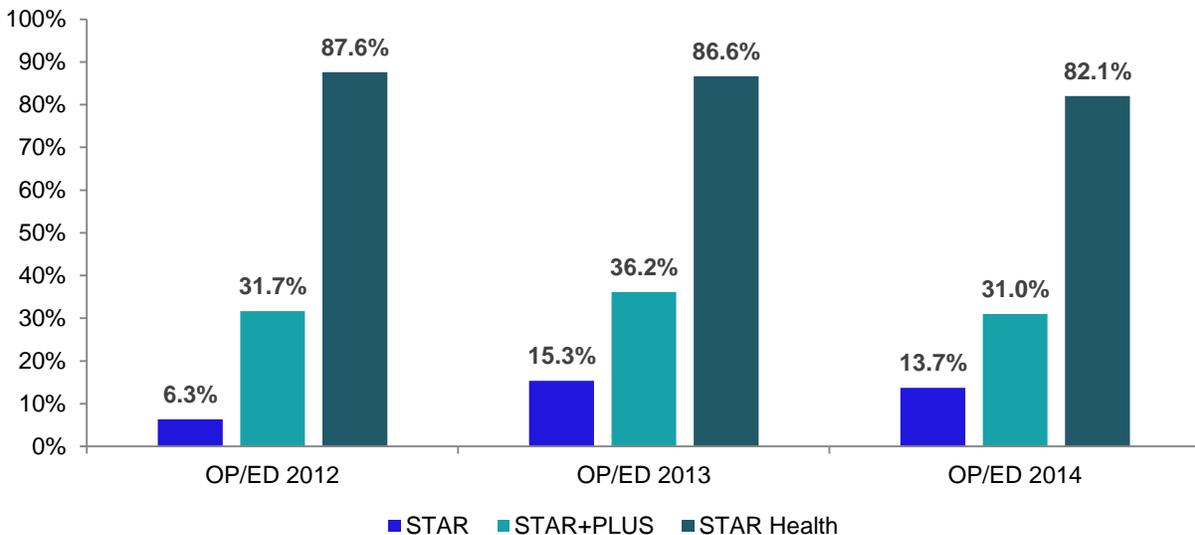


Figure 89. HEDIS® Mental Health Services Utilization (MPT), Outpatient or Emergency Department (OP/ED), 2012-2014



Alcohol and Other Drug Dependence Treatment

The HEDIS® *Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)* measure assesses the percentage of adolescent and adult members who have a new episode of alcohol or other drug dependence and received either *initiation* or *engagement* of alcohol or other drug dependence treatment during the measurement year. In 2014, *initiation*, which ranged from 35 percent in STAR+PLUS to 61 percent in STAR Health, was much greater than *engagement*, which ranged from 4 percent in STAR+PLUS to 18 percent in STAR Health

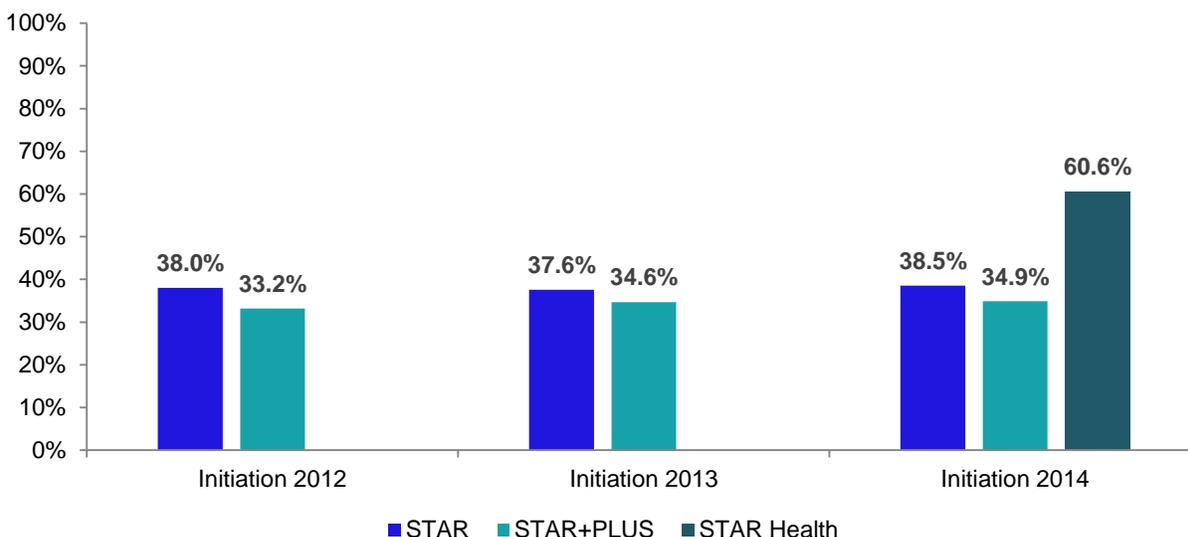
(Table 58). In both STAR and STAR+PLUS, *initiation* and *engagement* of alcohol or other drug dependence treatment in 2014 were below the Dashboard standards.

Table 58. HEDIS® Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET), 2014

Program	<i>Initiation</i> ^{i,ii}		<i>Engagement</i> ^{i,ii}		HHSC Dashboard Standard 2014 <i>Initiation</i> ^{i,ii}	HHSC Dashboard Standard 2014 <i>Engagement</i> ^{i,ii}
	Percentage	Stars	Percentage	Stars	Percentage	Percentage
STAR	38.5%	★★★	10.4%	★★★	43%	14%
STAR+PLUS	34.9%	★★★	4.5%	★★	43%	14%
STAR Health	60.6%	★★★★★	18.5%	★★★★★	N/A	N/A

Evaluation of trends in *initiation* (Figure 90) and *engagement* (Figure 91) of alcohol or other drug dependence treatment in 2012, 2013, and 2014 showed similar patterns in STAR and STAR+PLUS (IET was not reported in STAR Health in 2012 and 2013).

Figure 90. HEDIS® Alcohol and Other Drug Dependence Treatment (AOD), Initiation, 2012-2014



ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

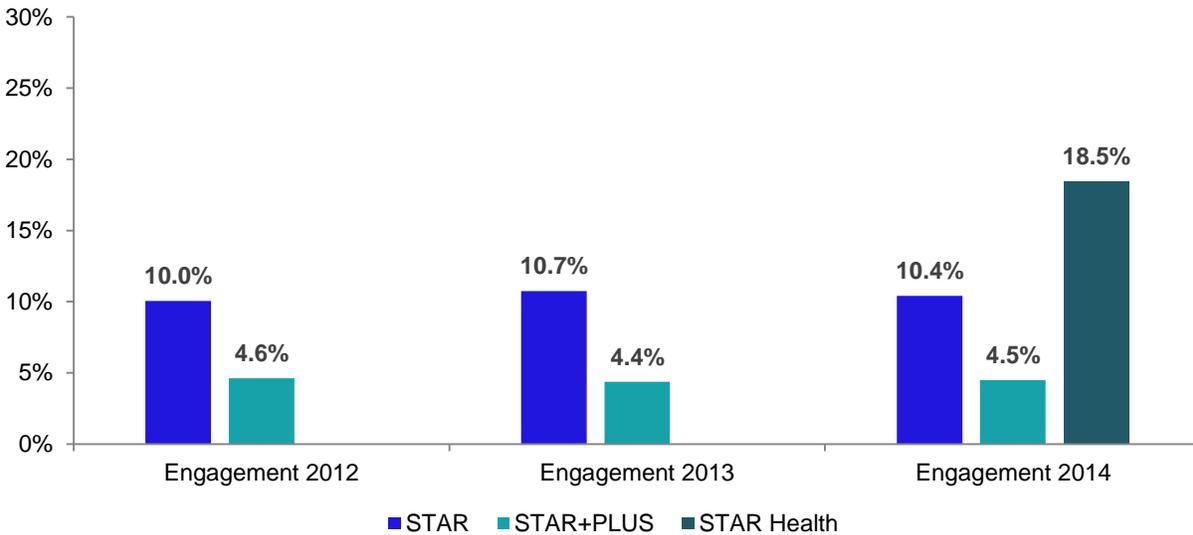
★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 91. HEDIS® Alcohol and Other Drug Dependence Treatment (AOD), Engagement, 2012-2014



Antidepressant Medication Management

The HEDIS® *Antidepressant Medication Management (AMM)* measure identifies the percentage of members 18 years of age and older who were treated with and remained on antidepressant medication for the duration of the treatment period. The measure captures (1) *effective acute phase treatment* and (2) *effective continuation phase treatment*. As presented in **Table 59**, in 2014 the rates of *effective acute phase treatment* ranged from 40 percent in STAR Health to 44 percent in STAR; rates of *effective continuation phase treatment* were lower and ranged from 24 percent in STAR Health to 30 percent in STAR+PLUS. When compared to the available HHSC 2014 Dashboard standards, STAR+PLUS performed below standards in both *effective acute phase treatment* and *effective continuation phase treatment*.

Table 59. HEDIS® Antidepressant Medication Management (AMM), 2014

Program	Acute Phase ^{i,ii}		Continuation Phase ^{i,ii}		HHSC Dashboard Standard 2014 Acute Phase ^{i,ii}	HHSC Dashboard Standard 2014 Continuation Phase ^{i,ii}
STAR	43.6%	★★	27.8%	★★	N/A	N/A
STAR+PLUS	42.5%	★	30.0%	★★	59%	47%
STAR Health	40.2%	★	24.4%	★	N/A	N/A

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★ = 90th percentiles and above

★★★ = 66th to 89th percentiles

★★ = 33rd to 65th percentiles

Trends in *effective acute phase treatment* (**Figure 92**) and *effective continuation phase treatment* (**Figure 93**) suggest a general decrease in STAR, STAR+PLUS, and STAR Health from 2012 to 2014. In particular, rates for both components in STAR+PLUS decreased from 59 percent to 42 percent during this period for *effective acute phase treatment* and from 47 percent to 30 percent for *effective continuation phase treatment*.

Figure 92. HEDIS® Antidepressant Medication Management (AMM), Effective Acute Phase Treatment, 2012-2014

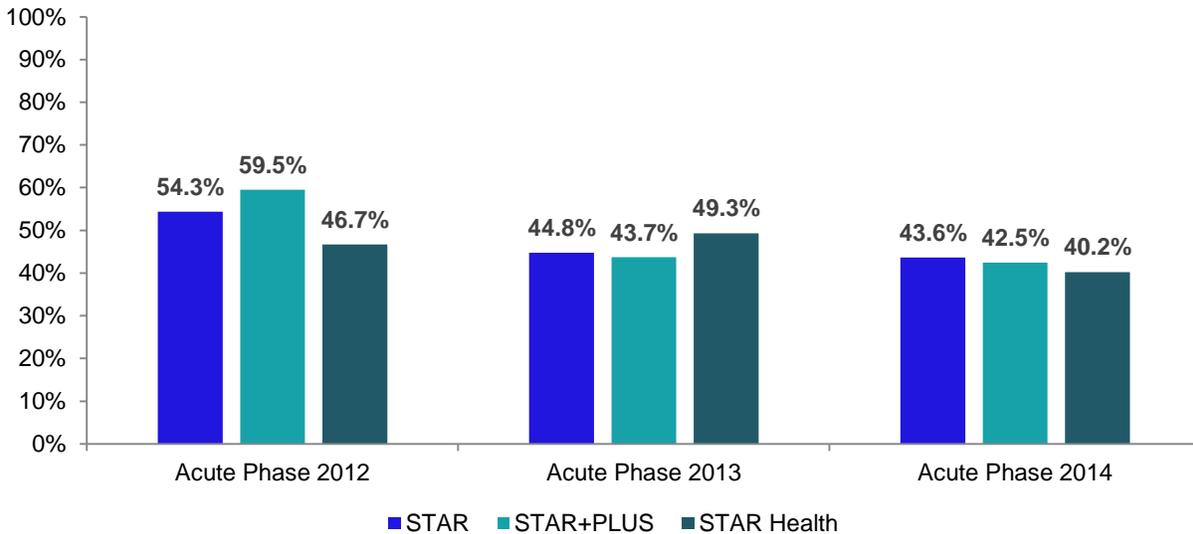
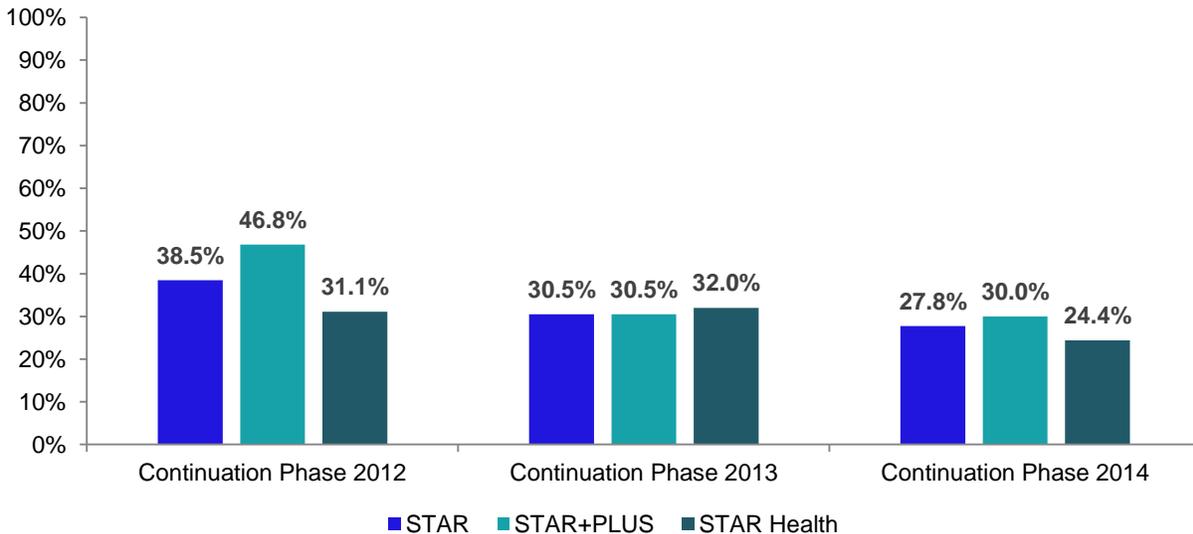


Figure 93. HEDIS® Antidepressant Medication Management (AMM), Effective Continuation Phase Treatment, 2012-2014



★★ = 10th to 32nd percentiles
★ = Below 10th percentiles

Follow-Up After Hospitalization for Mental Illness

The HEDIS® *Follow-Up After Hospitalization for Mental Illness (FUH)* measure identifies the percentage of discharges for members six years of age and older who were hospitalized for treatment of mental illness and who either had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner during the measurement period. As indicated in **Table 60**, two components comprise this HEDIS® measure: (1) The percentage of discharges for which members received follow-up care within 30 days of discharge; and (2) The percentage of discharges for which members received follow-up care within 7 days of discharge.

With the exception of STAR Health, most members did not receive follow-up care within 7 days of discharge; however, more than 50 percent did receive follow-up care within 30 days. Follow-up within 30 days in 2014 ranged from 57 percent for STAR+PLUS to 83 percent for STAR Health. Follow-up within 7 days in 2014 ranged from 34 percent for STAR+PLUS to 61 percent for STAR Health. Rates for both components were below the respective HHSC Performance Indicator Dashboard standards.

Table 60. HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH), 2014

Program	Follow-Up Within 30 Days ^{i,ii}		Follow-Up Within 7 Days ^{i,ii}		HHSC Dashboard Standard 2014, 30 Days ^{i,ii}	HHSC Dashboard Standard 2014, 7 Days ^{i,ii}
	Percentage	Stars	Percentage	Stars	Percentage	Percentage
STAR	61.5%	★★★	37.5%	★★★	64%	44%
STAR+PLUS	57.4%	★★	34.3%	★★	64%	44%
STAR Health	83.3%	★★★★★	60.8%	★★★★★	87%	63%
CHIP	63.8%	★★★	41.8%	★★★	67%	44%

Across 2012, 2013, and 2014, percentages were similar regarding *follow-up care within 30 days of discharge (Figure 94)* and *follow-up care within 7 days of discharge (Figure 95)* in STAR, STAR+PLUS, STAR Health, and CHIP.

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 94. HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH), 30 Days, 2012-2014

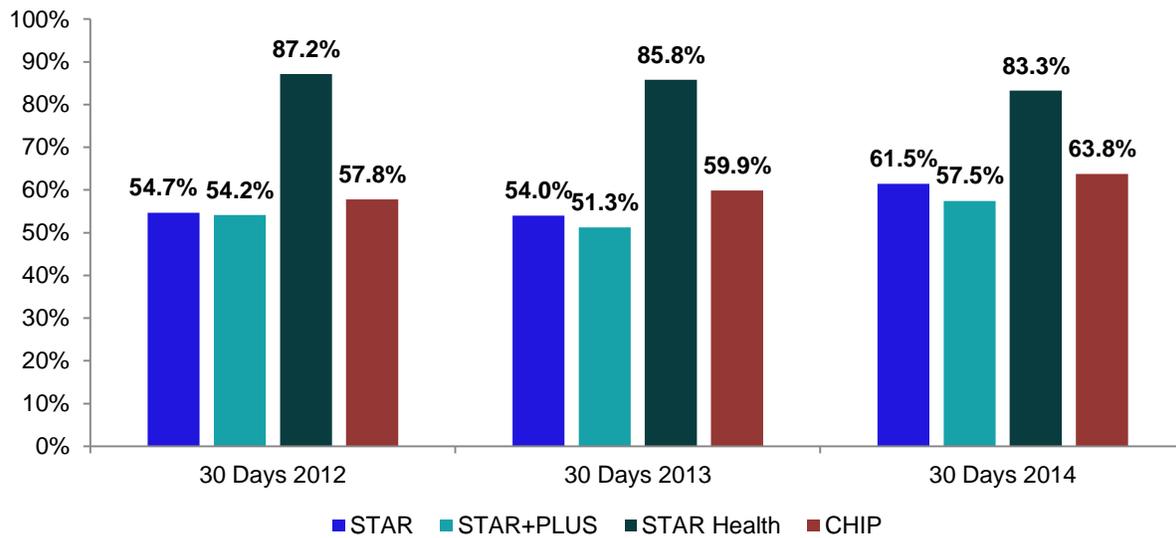
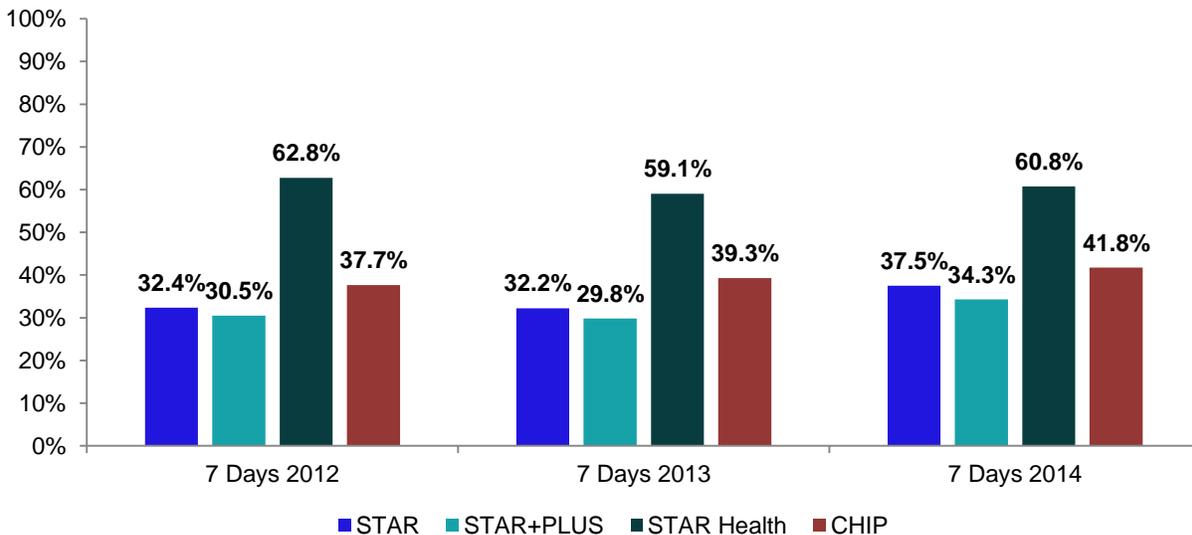


Figure 95. HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH), 7 Days 2012-2014



Follow-Up Care for Children Prescribed ADHD Medication

The HEDIS® *Follow-Up Care for Children Prescribed ADHD Medication (ADD)* measure assesses the percentage of children ages 6 to 12 who have newly prescribed ADHD medication and received two types of follow-up care during the measurement period:

- *Initiation Phase:* The percentage of children with an ambulatory prescription dispensed for ADHD medication who had a follow-up visit with a qualified practitioner during the 30-day initiation phase.

- *Continuation and Maintenance Phase*: The percentage of children with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who had at least two follow-up visits with a practitioner within 270 days after the initiation phase ended.

In 2014, follow-up care for children prescribed ADHD medication ranged from 43 percent in CHIP to 89 percent in STAR Health for the *initiation phase* and from 57 percent in CHIP to 93 percent in STAR Health for the *continuation and maintenance phase* (**Table 61**). Rates in 2014 for the *initiation phase* and *the continuation and maintenance phase* generally exceeded HHSC Performance Indicator Dashboard standards.

Table 61. HEDIS® Follow-Up Care for Children Prescribed ADHD Medication (ADD), 2014

Program	Initiation Phase ^{i,ii}		Continuation and Maintenance Phase ^{i,ii}		HHSC Dashboard Standard 2014 Initiation ^{i,ii}	HHSC Dashboard Standard 2014 Continuation ^{i,ii}
	Percentage	Stars	Percentage	Stars		
STAR	49.9%	★★★★	67.3%	★★★★★	47%	58%
STAR+PLUS	46.1%	★★★★	62.8%	★★★★	N/A	N/A
STAR Health	89.1%	★★★★★	92.8%	★★★★★	52%	59%
CHIP	43.0%	★★★	56.8%	★★★★	45%	46%

Consideration of trends over time showed a steady increase in the *initiation phase* (**Figure 96**) and *continuation and maintenance phase* (**Figure 97**) in STAR, STAR+PLUS, and CHIP. STAR Health showed a large increase between 2012 and 2013 in the *initiation phase* (52 percent in 2012 and 88 percent in 2013) and in the *continuation and maintenance phase* (59 percent in 2012 and 93 percent in 2013).

ⁱ Higher values indicate stronger performance.

ⁱⁱ Texas result in relation to HEDIS® national percentiles for Medicaid

★★★★★ = 90th percentiles and above

★★★★ = 66th to 89th percentiles

★★★ = 33rd to 65th percentiles

★★ = 10th to 32nd percentiles

★ = Below 10th percentiles

Figure 96. HEDIS® Follow-Up Care for Children Prescribed ADHD Medication (ADD), Initiation Phase, 2012-2014

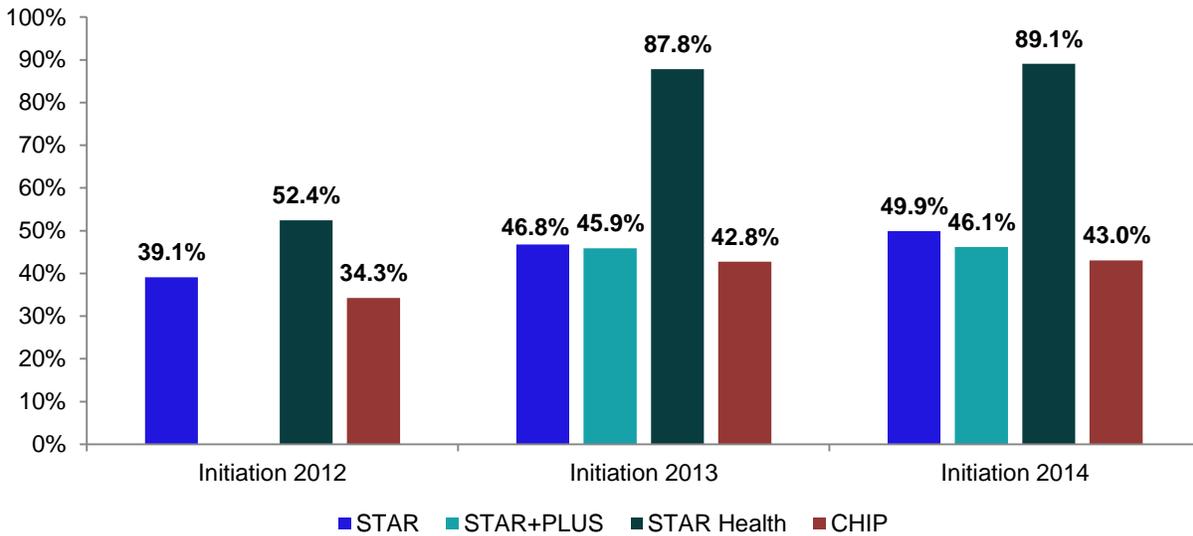
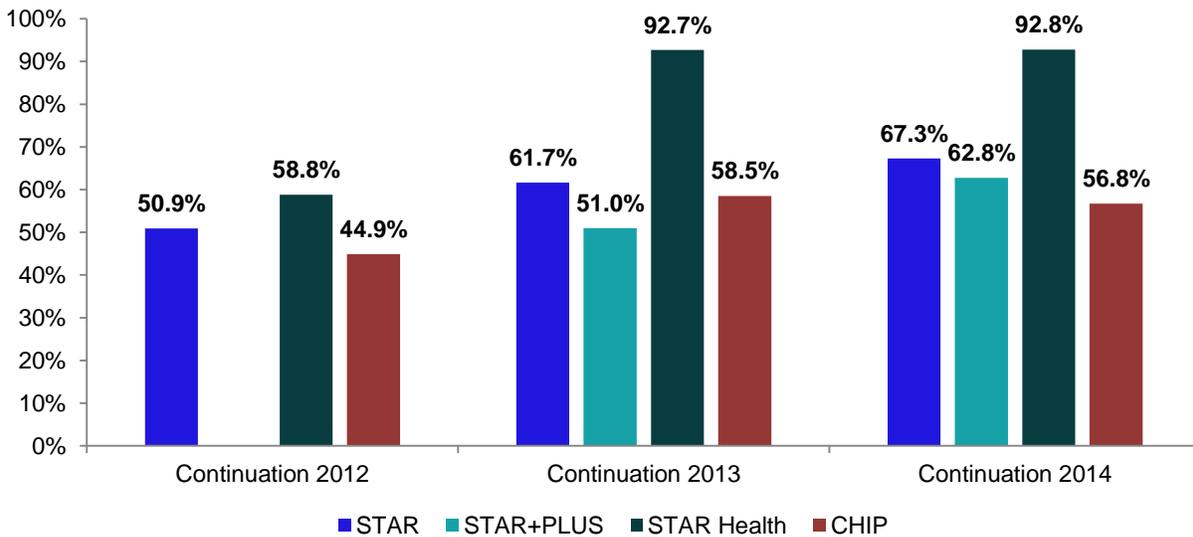


Figure 97. HEDIS® Follow-Up Care for Children Prescribed ADHD Medication (ADD), Continuation and Maintenance Phase, 2012-2014

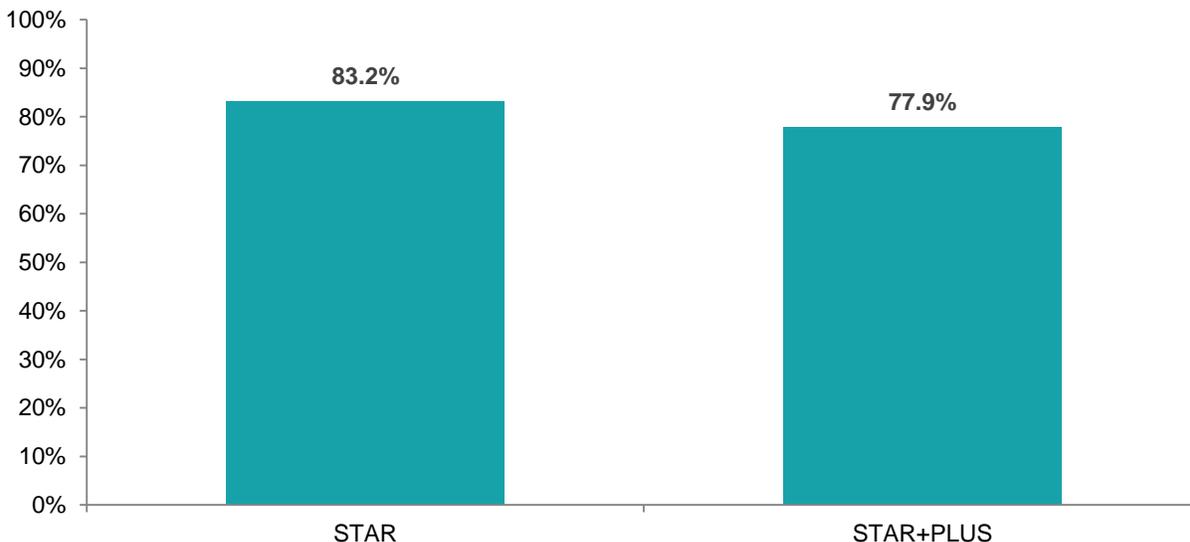


Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications

The HEDIS® *Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)* measure examines the percentage of members ages 18 to 64 with schizophrenia or bipolar disorder who were dispensed an antipsychotic medication and who had a diabetes screening test during the measurement year. As seen in **Figure 98**, this measure was 83 percent in STAR and 78 percent in STAR+PLUS. Performance for STAR

health plans overall was between the 66th and 89th percentiles and for STAR+PLUS health plans overall was between the 10th and 33rd percentiles on the HEDIS[®] national benchmark percentiles for Medicaid.

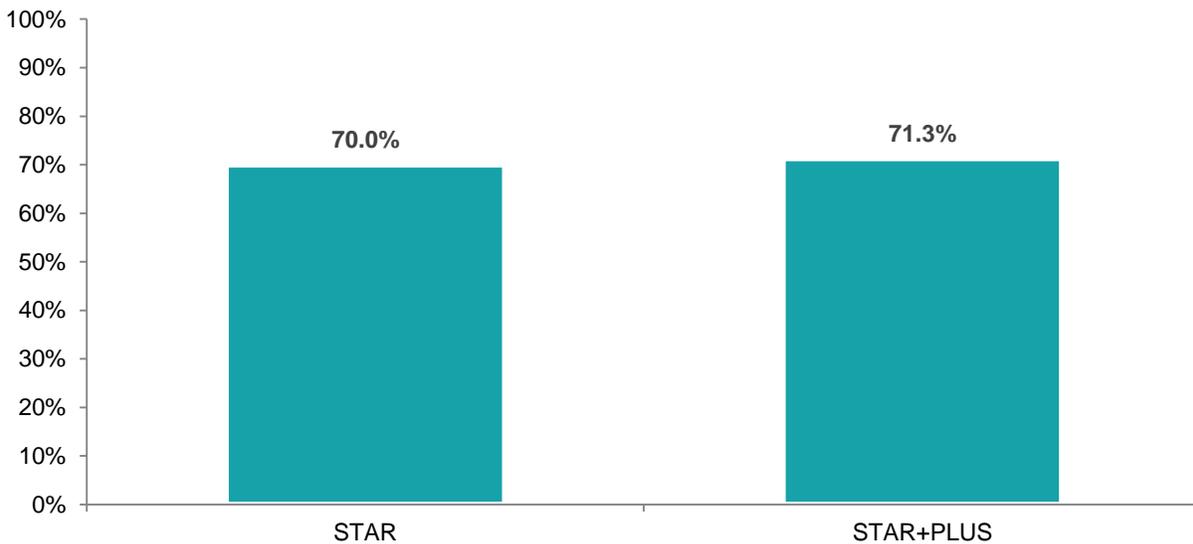
Figure 98. HEDIS[®] Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD), 2014



Diabetes Monitoring for People with Diabetes and Schizophrenia

The HEDIS[®] *Diabetes Monitoring for People with Diabetes and Schizophrenia (SMD)* measure identifies the percentage of members ages 18 to 64 with schizophrenia and diabetes who had an LDL-C test and an HbA1c test during the measurement year. This measure was 70 percent in STAR and 71 percent in STAR+PLUS (**Figure 99**). The performance for STAR health plans overall and for STAR+PLUS health plans overall was between the 33rd and 65th percentiles on the HEDIS[®] national benchmark percentiles for Medicaid.

Figure 99. HEDIS® Diabetes Monitoring for People with Diabetes and Schizophrenia (SMD), 2014



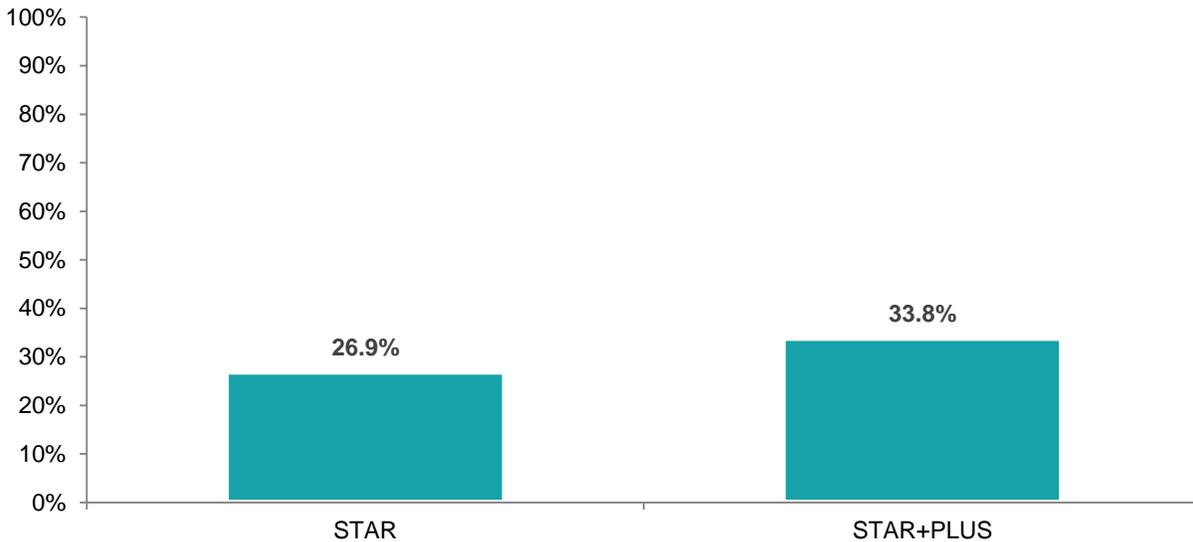
Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia

The HEDIS® *Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia (SMC)* measure assesses the percentage of members ages 18 to 64 with schizophrenia and cardiovascular disease who had an LDL-C test during the measurement year. This measure was 82 percent for STAR+PLUS health plans overall in 2014, which was between the 33rd and 65th percentiles on the HEDIS® national benchmark percentiles for Medicaid. STAR results are not presented here because the denominator was below thirty.

Metabolic Monitoring for Children and Adolescents on Antipsychotics

The HEDIS® *Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM)* measure captures the percentage of children and adolescents ages 1 to 17 who had two or more antipsychotic prescriptions and metabolic testing. This measure was 27 percent in STAR and 34 percent in STAR+PLUS (**Figure 100**).

Figure 100. HEDIS® Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM), 2014



6.5. Pay for Quality

Over the past year, the external quality review organization has provided a variety of continuing support activities to HHSC related to the design and implementation of the Texas pay-for-quality programs. In particular, the external quality review organization calculated the pay-for-quality (P4Q) results using the 2013-2014 data for STAR, STAR+PLUS, and CHIP and provided these results to HHSC. These results reflected new approaches to the points-to-dollars calculations in the pay-for-quality program and improved formulas for calculating incremental improvement for potentially preventable events. The measures used for pay-for-quality for health plans participating in each program are given in **Table 62**. The external quality review organization also participated in numerous meetings with both the medical and dental plans concerning the design of the pay-for-quality program. Under HHSC oversight, the external quality review organization designed and simulated a pay-for-quality program for dental plans in Texas Medicaid and CHIP.

The external quality review organization has continuously updated the *Texas P4Q Program Technical Specifications* report that outlines in detail the calculations that comprise the pay-for-quality incremental improvement program, and has also assisted HHSC in editing and updating the pay-for-quality content in the Uniform Managed Care Manual.

As health plans increasingly monitor their own pay-for-quality performance, the external quality review organization has responded to numerous questions from the health and dental plans concerning pay-for-quality and has updated the web-based list of frequently asked questions to assist health plans in their pay-for-quality monitoring.

Table 62. Pay-for-Quality Measures

Measure	STAR	STAR+PLUS	CHIP
HEDIS® Well-Child Visits in the 3 rd , 4 th , 5 th , and 6 th Years of Life	✓		✓
HEDIS® Adolescent Well-Care	✓		✓
HEDIS® Prenatal and Postpartum Care	✓		
3M™ Potentially Preventable Admissions	✓	✓	✓
3M™ Potentially Preventable Readmissions	✓	✓	
3M™ Potentially Preventable ED Visits	✓	✓	✓
HEDIS® Antidepressant Medication Management		✓	
HEDIS® Comprehensive Diabetes Care – HbA1c Control (<8%)		✓	

6.6. Report Cards

To support the state's ongoing efforts to improve consumer choice in Texas Medicaid and CHIP, the external quality review organization produced Managed Care Organization Report Cards for calendar years 2013, 2014, and 2015. The report cards are designed to assist Medicaid and CHIP enrollees and their caregivers in choosing a health plan and are in line with Federal requirements to provide quality ratings and member satisfaction information to consumers to facilitate comparison of health plans. Enrollment packets for new members include the MCO Report Cards for health plan options available to enrollees in their service area in addition to other information pertinent to enrollees' health plan options. The MCO Report Cards are also available on the HHSC website.

Report cards are divided into quality domains important to individual consumers and results are presented in a manner appropriate to the literacy and linguistic needs of the Texas Medicaid and CHIP populations. Other state Medicaid programs also have adopted consumer report cards for health plans. These states include California, Maryland, New York, and Ohio. Each report card covers one service delivery area and presents results for all managed care organizations operating in that area and program. It is possible for a health plan to score strongly in one service area and weakly in another.

The external quality review organization selected measures on the report cards with input from focus groups of Texas Medicaid members and their caregivers to identify how consumers make choices and evaluate options for health care. On each report card, measures are grouped into three domains – satisfaction with care, preventive care, and effectiveness of care for chronic conditions. The health plans are scored on each measure using a three-star rating system reflecting health plan performance in the service delivery area relative to the statewide performance. Stars are assigned to health plans as follows:

- One star – Health plan is in the bottom one-third percentile and below the 95 percent confidence interval for the statewide mean.

- Two stars – Health plan is in the middle one-third percentile or inside the 95 percent confidence interval for the statewide mean.
- Three stars – Health plan is in the top one-third percentile and above the 95 percent confidence interval for the statewide mean.

The MCO Report Cards produced by the external quality review organization for 2015 will be made available to new enrollees in both printed and online versions in early 2016. The external quality review organization produced two report cards for STAR: one focused on measures important for children and adolescents and one focused on measures important for adults. The four report cards focused on different items most likely to inform consumer decisions for the different populations, as given in **Table 63**.

Table 63. MCO Report Cards by Program, 2015

Measure	STAR Child	STAR Adult	CHIP	STAR+PLUS
Getting Timely Care	✓	✓	✓	✓
Getting Needed Care		✓		✓
Talking with Doctors	✓		✓	✓
Personal Doctor Rating	✓	✓	✓	✓
Health Plan Rating	✓	✓	✓	✓
Checkups for Infants	✓			
Checkups for Children and Teens	✓		✓	
Checkups for Adults				✓
Asthma	✓		✓	
Attention Deficit Hyperactivity Disorder (ADHD)	✓		✓	
Prenatal Care		✓		
New Mother Care		✓		
Breast Cancer Screening				✓
Cervical Cancer Screening		✓		
Chronic Obstructive Pulmonary Disease (COPD)				✓
Depression				✓
Diabetes		✓		✓
Overall Performance Rating	✓	✓	✓	✓

Five items were derived from surveys of members and caregivers: Getting Timely Care, Getting Needed Care, Talking with Doctors, Personal Doctor Rating, and Health Plan Rating. Twelve items were derived from claims and encounter data: Checkups for Infants, Checkups for Children and Teens, Checkups for Adults, Asthma, Attention Deficit Hyperactivity Disorder,

Prenatal Care, New Mother Care, Breast Cancer Screening, Cervical Cancer Screening, Chronic Obstructive Pulmonary Disease, Depression, and Diabetes. The Overall Performance Rating accounted for both member experience and satisfaction surveys and administrative and hybrid claims and encounter data.

The definition of each item varied slightly between programs to account for data availability and relevance to the different populations:

- Getting Timely Care used both components of the CAHPS® *Getting Care Quickly* composite for the STAR Child, CHIP, and STAR+PLUS report cards, and only the access to routine non-emergent care component for the STAR Adult report cards.
- Getting Needed Care used both components of the CAHPS® *Getting Needed Care* composite for the STAR+PLUS report cards, and only the access to routine non-specialist care component for the STAR Adult report cards.
- Talking with Doctors used the components of the CAHPS® *How Well Doctors Communicate* composite for STAR Child, CHIP, and STAR+PLUS.
- Personal Doctor Rating used the CAHPS® *Rating of Personal Doctor* individual item, with positive responses taken as rating a member or child's personal doctor as 9 or 10 on a 0-10 scale.
- Health Plan Rating used the CAHPS® *Rating of Health Plan* individual item, with positive responses taken as rating a member or child's health plan as 9 or 10 on a 0-10 scale.
- Checkups for Infants used HEDIS® *Well-Child Visits in the First 15 Months of Life (W15), Six or More Visits*.
- Checkups for Children and Teens used an equally weighted composite of HEDIS® *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34)* and HEDIS® *Adolescent Well-Care Visits (AWC)*.
- Checkups for Adults used HEDIS® *Adults' Access to Preventive / Ambulatory Health Services (AAP)*.
- Asthma used the quality index component of HEDIS® *Relative Resource Use for People with Asthma (RAS)*, including HEDIS® *Use of Appropriate Medications for People with Asthma (ASM), All Ages*, HEDIS® *Medication Management for People with Asthma (MMA)*, and HEDIS® *Asthma Medication Ratio (AMR)*.
- Attention Deficit Hyperactivity Disorder (ADHD) used HEDIS® *Follow-Up Care for Children Prescribed ADHD Medication (ADD), Initiation Phase*.
- Prenatal Care used HEDIS® *Prenatal and Postpartum Care (PPC), Timeliness of Prenatal Care*.
- New Mother Care used HEDIS® *Prenatal and Postpartum Care (PPC), Postpartum Care*.
- Breast Cancer Screening used HEDIS® *Breast Cancer Screening (BCS)*.
- Cervical Cancer Screening used HEDIS® *Cervical Cancer Screening (CCS)*.
- Chronic Obstructive Pulmonary Disease (COPD) used the quality index component of HEDIS® *Relative Resource Use for People With COPD (RCO)*, including both components of HEDIS® *Pharmacotherapy Management of COPD Exacerbation (PCE)* and HEDIS® *Use of Spirometry Testing in the Assessment and Diagnosis of COPD (SPR)*.

- Depression used an equally weighted composite of both components of HEDIS® *Antidepressant Medication Management (AMM)*.
- Diabetes used four measures in the quality index component of HEDIS® *Relative Resource Use for People With Diabetes (RDI)*: HEDIS® *Comprehensive Diabetes Care (CDC)*, *HbA1c Testing*, HEDIS® *Comprehensive Diabetes Care (CDC)*, *HbA1c Control (<8%)*. HEDIS® *Comprehensive Diabetes Care (CDC)*, *Eye Exams*, and HEDIS® *Comprehensive Diabetes Care (CDC)*, *Medical Attention for Nephropathy*.
- Overall Performance Rating was a weighted composite measure calculated using a subset of those measures used by NCQA to calculate Health Insurance Plan Ratings, including both survey measures and administrative and hybrid measures. Measures were chosen for each of the four report cards according to importance to the population, HHSC priorities, and data availability. Weighting followed NCQA Health Insurance Plan Ratings methodology: 1 point for process measures, 1.5 points for patient experience measures, and 3 points for outcome measures.⁵⁸ Stars were assigned according to relative performance as with the other items on the report cards.

To ensure sufficient sample sizes for survey measures, the external quality review organization annually conducts abbreviated Annual Report Card (ARC) surveys. In 2015, the STAR Adult and STAR+PLUS ARC surveys were conducted stand-alone, and the STAR Child and CHIP surveys were supplemented by the biennial caregiver surveys of those populations. **Table 64** shows the enrollment and fielding periods for these abbreviated surveys.

Table 64. Member and Caregiver Annual Report Card Survey Enrollment and Fielding Periods, 2015

Year	Survey	Enrollment period	Fielding period
2015	CHIP Caregiver ARC Survey	September 2014 – February 2015	May 2015 – August 2015
	STAR Child Caregiver ARC Survey	September 2014 – February 2015	April 2015 – August 2015
	STAR Adult ARC Survey	September 2014 – February 2015	July 2015 – September 2015
	STAR+PLUS ARC Survey	September 2014 – February 2015	June 2015 – September 2015

Managed Care Organization Report Card Evaluation Survey

The Texas Medicaid Managed Care Organization Report Card Evaluation Survey focuses on the experiences of new enrollees with their managed care organizations, the MCO Report Cards, and the overall enrollment packet mailed to new enrollees. While public reporting has the potential to help consumers make informed decisions, little evidence exists to show the impacts of such reporting. This survey retroactively examines how the Medicaid enrollees read, understood, and utilized the report cards and how the report cards impacted their health plan

decision-making process. The external quality review organization fielded a pilot study in November and December of 2015, and plans to field a full survey in early 2016.

This new enrollee survey is based on the Consumer Choice Model⁵⁹ to evaluate how new enrollees use the report cards in their decision-making process, as well as how they process and understand the other information in the enrollment packet. This information will give insight into what aspects of the report cards consumers find most helpful and what aspects could be improved.

Specifically, this evaluation will:

- Determine whether new enrollees recall receiving the MCO Report Card and instruction sheet in the mail with their new enrollment packet.
- Assess the extent to which new enrollees used the MCO Report Card to select their Medicaid or CHIP managed care plan.
- Assess how easy new enrollees found it to understand the MCO Report Card content.
- Assess how relevant the new enrollees thought the MCO Report Card content was for them or their children.
- For enrollees who used the MCO Report Card, assess what they liked the most and found the most useful about the card.
- For enrollees who did not use the MCO Report Card, assess why they did not use it.
- Collect information on other factors and resources that did and did not influence the enrollee's decision of which health plan to join (e.g., provider directories, word-of-mouth, network provider location, or online provider ratings).
- Determine whether enrollees chose their health plan, were assigned their health plan by the state, or had not yet joined a Medicaid or CHIP health plan.
- For enrollees who used the MCO Report Card to select their health plan, assess their current satisfaction with the plan. Do they feel they made the right decision?
- Collect information on the usefulness of the overall enrollment packet information by examining the most helpful aspects, as well as aspects that are less important to enrollees.

Survey Design

The external quality review organization will address these research questions using a computer-assisted telephone interview (CATI) survey of adult Medicaid members and of caregivers of child and adolescent Medicaid and CHIP members who joined their program in the past six months. The research team will select the sample based on monthly enrollment data, drawing four statewide, simple random samples of new enrollees by program (STAR Child, STAR Adult, CHIP, and STAR+PLUS). The University of Florida Survey Research Center (UFSRC) will administer the survey. Survey fielding will begin within three months of the first enrollment period and is expected to last two months.

A separate survey tool will be developed for each of the four program quotas, and will address the research questions listed above. The survey tool will take approximately 15 minutes to administer. Because this survey is newly developed, the external quality review organization is conducting a pilot test to evaluate the wording, ordering, and types of questions in the survey

and to inform sample size for the full survey. Feasibility of the skip patterns will be evaluated, and potentially misleading or confusing questions will be identified (e.g., those with a high frequency of “don’t know” or “refused” responses) and evaluated for editing. Open-ended responses will be analyzed for patterns that could inform survey design.

Two separate survey samples will be drawn from the rolling population of new enrollees: one for the pilot survey and one several months later for the full, revised survey. The pilot survey has a target of 25 completes for each quota: caregivers of child and adolescent members in STAR, adult members in STAR, caregivers of child and adolescent members in CHIP, and adult members in STAR+PLUS. The full survey is planned to have a target of 200 completes per quota for a total of 800 completed surveys.

Appendix A. Fiscal Year 2015 Recommendations

This appendix presents a description of the methodology used for making recommendations for the HHSC Performance Indicator Dashboard, as well as tables of recommendations made by the external quality review organization in 2015 (and 2014, for biennial survey studies conducted in that year) to improve the quality of care received by Texas Medicaid and CHIP members.

HHSC Performance Indicator Dashboard Standards

Recommendations for performance standards in 2016 were calculated using a revised methodology that differed from previous years. For administrative measures recommendations in each program were determined by comparison of the state mean to NCQA HEDIS® national Medicaid percentiles. NCQA HEDIS® provides mean and 5th, 10th, 25th, 33rd, 50th, 66th, 75th, 90th, and 95th percentiles for benchmark comparisons. The external quality review organization compared statewide performance to these NCQA HEDIS® percentiles. The recommendation for the comparison standard was set to the next higher percentile benchmark, to a minimum of the 50th percentile or a maximum of the 95th percentile. For measures where no national benchmark was available, the standard was calculated by taking the program rate and increasing the rate by five percent (multiplying the score by 1.05). For measures without a reported statewide mean in 2014 due to rotation by some plans, the previous year data were used to determine the recommended comparison. Dashboard recommendations were rounded to the nearest percentage point. Because there are no national standards for AHRQ PDI and PQI measures, the recommended comparison for each program was five percent less than the state mean for each measure. For all administrative pay-for-quality measures, the incremental improvement goals will be listed separately in Chapter 6.2.12 of the UMCM with the pay-for-quality documentation for 2016.

For survey measures, recommendations are determined for each program by comparison to AHRQ CAHPS® percentiles. As with administrative measures, the external quality review organization compares the statewide mean to the AHRQ CAHPS® percentile bands for top box reporting (proportion of respondents answering "always" on a never-to-always scale) or the proportion of respondents rating each category as 9 or 10 on a 0 to 10 scale. The recommendation is made to use the next percentile band upper bound as the recommended standard for 2016. AHRQ CAHPS® provides the 25th, 50th, 75th, and 90th percentiles for comparison benchmarks. As with administrative measures, all standards were set no lower than the 50th percentile benchmarks. In cases where the statewide mean was higher than the 90th percentile, the 90th percentile threshold is used as the recommended comparison. For measures where no national benchmark is available, the standard is calculated by taking the statewide rate and increasing it by five percent (multiplying statewide performance by 1.05).

The recommended comparison for all components of HEDIS® *Annual Dental Visits (ADV)* measure was the 95th percentile benchmark for Medicaid Dental. *ADV* will be a pay-for-quality measure for CHIP Dental, and the incremental improvement goal is the recommendation that will be listed with the pay-for-quality documentation in Chapter 6.2.13 of the UMCM. Cost and

utilization measures were calculated for monitoring purposes only and were not assigned a standard. The Medicaid Dental measure “% of members (1 year - 20 years) receiving more than two THSteps Dental Checkups per year” is likewise not assigned a standard. Because there is no AHRQ CAHPS® range for the dental satisfaction survey measure, the recommended standard is calculated by taking the score of the highest performing dental plan and increasing the rate by five percent (multiplying score by 1.05). For other measures, the standard is calculated by taking the score of the highest performing dental plan and increasing the rate by five percent (multiplying score by 1.05).

Detailed Recommendations

Table 65. Recommendations from the STAR Health Caregiver Survey

Program/s	Recommendations	Rationale
STAR Health	<p>Superior HealthPlan should implement or improve upon access to specialized services in general, with a particular focus on behavioral health treatment and counseling among adolescents. This may include integrating behavioral health treatment and counseling into other care initiatives for foster care children such as treatments involving psychotropic medication and trauma-informed care initiatives.</p> <p>In addition, increasing reimbursement rates for treating foster children and increasing coverage for less severe symptoms prior to the development of more serious disorders would enhance access to and improve upon the behavioral health treatment and counseling options for youth in foster care.⁶⁰</p> <p>Increasing care coordination may also be an opportunity to improve access to specialist care in the foster care population, which is a challenge given the numerous individuals and agencies involved. Other states have implemented care coordination initiatives for youth in foster care, such as the BlueCare Tennessee SelectKids Program. Superior HealthPlan may want to consider this initiative to determine if it could be adapted for the STAR Health population.⁶¹</p>	<p>The 2014 STAR Health Survey found low rates of access to specialist appointments; this is especially critical for children in foster care, who have a higher incidence of mental health and behavioral problems compared to their peers. In line with this, the current survey revealed that STAR Health members needed specialized services at a high rate, with 41 percent needing mental health treatment and 33 percent needing specialized therapies, equipment, or home health care.</p> <p>Furthermore, the survey found an age disparity in access to behavioral health treatment and counseling, with a lower rate among teens 12 to 18 years old (59 percent). This age disparity is problematic given that adolescence is a high risk age period/range for the onset of many mental health disorders.⁶²</p>
STAR Health	<p>Providers in the Superior HealthPlan network who serve STAR Health should be encouraged to improve shared decision-making practices with caregivers of children who take medications. This may include training and information on best practices and efforts to address malpractice liability concerns, which include concerns that a provider may be sued due to adverse outcomes where</p>	<p>Although caregivers reported a relatively high rate of access to prescription medicines for their children (88 percent on CAHPS® <i>Prescription Medicine</i>), they reported lower participation in discussions about these medications with their children’s</p>

"shared decisions, even evidence-based, conflict with local practice".⁶³

Superior HealthPlan should also take into account other known barriers to implementing strategies for improving shared decision-making, such as ambiguities in how shared decision-making is defined and measured in clinical practice, the absence of a certification process for decision aids (which reduces provider confidence in their use), provider reimbursement and engagement to incorporate shared decision-making practices, and resistance by providers in relation to workflow concerns.⁶⁴

providers (53 percent on CAHPS® *Shared Decision-Making*).

There is evidence that the practice of shared decision-making is associated with positive affective-cognitive outcomes (such as patient satisfaction with care),⁶⁵ and is particularly suited for long-term decisions, especially in the context of chronic illness.⁶⁶ This is particularly relevant for children in STAR Health who have been prescribed psychotropic medications. Nearly one in five caregivers reported their child had taken a psychotropic medication in the last six months (18 percent). Half of these caregivers said their child's doctors discussed non-pharmacological treatments with them (53 percent). These findings should be interpreted with caution given the low number of respondents (N = 34).

Table 66. Recommendations for Reducing Potentially Preventable Admissions and Emergency Department Visits

Program/s	Recommendations	Rationale
CHIP	<p>HHSC and CHIP MCOs should:</p> <ul style="list-style-type: none"> • Identify community-level characteristics (e.g., provider network, distance to access to care) associated with potentially preventable admissions and potentially preventable emergency department visits. • Identify family-level characteristics related to potentially preventable admissions and potentially preventable emergency department visits. • Identify gender-specific conditions associated with top reasons for potentially preventable emergency department visits among children and adolescents. 	<p>Nearly one percent of CHIP members had at least one hospital admission in 2013; one in ten members had at least one visit to the emergency department.</p> <p>Among members who had at least one hospitalization, 36 percent of the admissions were identified as potentially preventable. Among members who visited the emergency department, 80 percent were identified as potentially preventable.</p> <p>Younger children (age 5 compared to age 15) had a higher prevalence of potentially preventable admissions.</p> <p>Female members showed a higher rate of potentially preventable emergency department visits than did male members.</p>
	<p>CHIP MCOs should emphasize prevention and management of conditions associated with high rates of admissions and emergency department visits (e.g., asthma, bipolar disorders, diabetes, infections of the upper respiratory tract, gastroenteritis, and abdominal pain),⁶⁷ especially among those with major chronic conditions.</p>	<p>Members with major chronic conditions had a higher prevalence of potentially preventable admissions and potentially preventable emergency department visits than those with routine health needs.</p>

STAR

STAR MCOs and providers should continue to develop preventive services that address the specific behavioral and physical needs of all members, particularly for young children around age five.

HHSC and STAR MCOs should promote the health services and preventive interventions that address behavioral needs and psychiatric disorders associated with hospital admissions among STAR members (e.g., bipolar disorders, major depressive disorders and other/unspecified psychoses)⁶⁸ to reduce rates of potentially preventable admissions.

HHSC and STAR MCOs should emphasize prevention programs and management of conditions associated with high rates of admissions (e.g., asthma and other respiratory conditions) and emergency department visits (e.g., infections of the upper respiratory tract) in STAR.⁶⁹

Among STAR members, five percent had at least one hospital admission of any type, and one in four members (26 percent) had at least one visit to the emergency department, and one in ten (9.5 percent) had at least one candidate admission considered in the assessment of potentially preventable readmissions.

Among members who reported at least one hospitalization of any type, 14 percent of these admissions were identified as potentially preventable.

Among members who visited the emergency department for any reason, 8 out of 10 visits (82 percent) were identified as potentially preventable.

Of the candidate admissions, 1.8 percent were identified as having potentially preventable readmissions.

Younger members (age 5 compared to age 25 and age 35) had a greater prevalence of potentially preventable admissions and potentially preventable emergency department visits. However, older members (age 45 versus age 5) had a greater prevalence of potentially preventable readmissions.

Members with major chronic conditions compared to those with routine health needs had a greater prevalence of potentially preventable admissions, potentially preventable emergency department visits, and potentially preventable readmissions.

STAR+PLUS STAR+PLUS MCOs and providers should continue to develop preventive services that address the specific behavioral and physical needs of members with lower health status.

HHSC and STAR+PLUS MCOs should continue to promote health services and preventive interventions to address behavioral needs and treat psychiatric disorders that have been shown to reduce potentially preventable admissions, readmissions, and emergency department visits.

In 2013, 16 percent of STAR+PLUS members had at least one hospital admission of any type and 41 percent had at least one visit to the emergency department.

Among members who reported at least one hospitalization (of any type), almost one-third of these admissions were identified as potentially preventable.

Among members who visited the emergency department (for any reason), eight out of ten visits were identified as potentially preventable.

Among members who had at least one candidate admission, one out of ten readmissions were identified as potentially preventable.

Table 67. Recommendations for Preventive and Specialist Dental Care

Program/s	Recommendations	Rationale
Medicaid and CHIP Dental	<p>Medicaid and CHIP dental health plans should conduct outreach with early adolescents and boys to identify perceived barriers in receiving preventive oral health care.</p> <p>Medicaid and CHIP dental health plans should continue to target interventions and health messages in ways that maintain high compliance among Hispanic members, address potential barriers among Black, non-Hispanic members, and improve access to specialists for children with chronic and complex conditions.</p>	<p>Statistically significant age and gender differences existed in compliance for receiving a sealant and making an annual dental visit. Boys and early adolescents had lower compliance for receiving a sealant, as well as making an annual dental visit.</p> <p>When compared with Black, non-Hispanic children, Hispanic children consistently showed higher compliance with receiving sealants and making annual dental visits.</p>

Table 68. Recommendations for Behavioral Health Care

Program/s	Recommendations	Rationale
STAR, STAR+PLUS, CHIP	HHSC should use STAR Health as a model program for understanding methods to improve mental health service delivery.	STAR Health consistently has the highest rates of medication adherence (with the exception of antidepressants) and follow-up after hospitalization, showing marked improvements over the past 3 years in some areas.
STAR+PLUS	<p>STAR+PLUS MCOs should conduct outreach with younger members to identify perceived barriers in initiating treatment during the acute phase of antidepressant medication management.</p> <p>STAR+PLUS MCOs should continue to target interventions and health messages addressing antidepressant medication adherence, especially with Hispanic and Black, non-Hispanic members.</p>	<p>Among STAR+PLUS members diagnosed with major depression, fewer than half (45 percent) showed compliance with initiation of anti-depressant medications after 90 days.</p> <p>One-third of STAR+PLUS members (33 percent) showed compliance with continuation of medications after 180 days (6 months).</p> <p>Older members; White, non-Hispanic members; members with lower health status; and those in UnitedHealthcare and</p>

the Harris service area had higher compliance during the acute and continuation phases

Table 69. Recommendations for Home-and-Community-based Services Waiver

Program/s	Recommendations	Rationale
STAR+PLUS	<p>HHSC must ensure that STAR+PLUS MCOs populate both DADS and HCPCS code fields, which includes providing the MCOs any resources or assistance needed to populate these fields.</p>	<p>Several ISP-approvable services share the same HCPCS code, which researchers need to accurately validate the delivery of services using administrative claims and encounter data. In addition, STAR+PLUS HCBS program services and equivalent non-HCBS program services are not mutually exclusive (i.e., they may both be present in claims for the same member during the same time frame), yet they also share the same HCPCS codes. It is therefore essential that MCOs populate the DADS service codes, which enable researchers to identify the appropriate HCPCS code modifiers in the claims.</p>
	<p>DADS and HHSC should assign service codes for all services.</p>	<p>Five ISP services do not have established DADS service codes – protective supervision, ERS installation, cognitive rehabilitation therapy, employment assistance, and supported employment.</p>
	<p>MCOs should use interim string descriptors (e.g., "Protective Supervision") to populate the DADS service code field for services that do not yet have assigned DADS service codes</p>	
	<p>STAR+PLUS MCOs should indicate whether ISP services are approved under the consumer-directed services (CDS) option.</p>	<p>To date, the MCOs do not provide information as to whether or not approved services are under the CDS option. To permit a thorough and accurate validation of service delivery, the EQRO recommends that MCOs include this information in future ISP data submissions, which can be used to check</p>

against HCPCS modifiers in the claims data for the CDS option.

Table 70. Recommendations for Service Delivery for Individuals with Intellectual and Developmental Disabilities

Program/s	Recommendations	Rationale
STAR+PLUS	<p>HHSC should ensure that needs assessment and service allocation tools and methods are standardized across the STAR+PLUS MCOs, and that service authorizations and reviews are timely and consistent.</p> <p>HHSC should ensure that all MCOs have procedures for person-centered planning and delivery of services, which include service coordinators, providers, beneficiaries and their families.</p>	<p>Review of the literature revealed that states use different methods for needs assessment and determining cost-effectiveness of services for individuals with IDD, ranging from less formal retrospective reviews of individual service plans (e.g., Michigan) to standardized, in-person screening tools (e.g., Wisconsin) and automated, real-time tiered authorization systems (e.g., Arizona).</p>
	<p>HHSC and STAR+PLUS MCOs should ensure the adequacy of specialist provider networks in all MCOs and all areas of the state, focusing specifically on the needs of the IDD population.</p> <p>STAR+PLUS MCOs moving into new areas should leverage existing infrastructures of local service delivery and management entities and ensure that they have sufficient policies and procedures in place to connect with local service delivery agencies and communities.</p>	<p>Individuals with IDD can experience unmet needs within a managed care framework (including physical and long-term care needs) due to lack of provider training, communication difficulties, lack of engagement with regard to health awareness and health literacy, and denial of services.</p>

DADS should continue efforts to collect National Core Indicators survey data for individuals with IDD in Texas, and consider future data-sharing plans that allow independent analysis of NCI survey data after integration of LTSS with IDD managed care.

HHSC should begin efforts with the EQRO toward developing an administrative measure set tailored for individuals with IDD that focuses on health-related outcomes, utilization and access to primary and specialist care, and service compliance with clinical practice guidelines.

In the absence of a standardized, formal set of health-care quality indicators for individuals needing LTSS, existing frameworks for quality measurement in related populations (such as the CMS HCBS Quality Framework) may be used as the basis for a set of measures.

Appendix B. Positive Findings and Improvement Areas

Table 71. STAR – Positive Findings in Quality of Care

STAR		
Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Well-Child and Adolescent Well-Care Visits</i>	STAR performed well on measures of access to well-care visits for children three to six years old and adolescents, with statewide rates for children between the HEDIS® 66 th and 89 th national percentiles and statewide rates for adolescents at the HEDIS® 90 th percentile and above. The rate for <i>Adolescent Well-Care</i> also exceeded the HHSC Dashboard standard in 2014.
	<i>Timeliness of Prenatal Care</i>	Pregnant women in STAR had good access to timely prenatal care with statewide rates between the HEDIS® 66 th and 89 th national percentiles, exceeding the HHSC Dashboard standard in 2014.
	<i>Cervical Cancer Screening</i>	The rate in STAR of screening for cervical cancer rose from 39 percent in 2010 to 69 percent in 2014
Utilization of Care	<i>Potentially Preventable Events</i>	In STAR, rates of potentially preventable admissions and readmissions decreased between 2013 and 2014.
Effectiveness of Care	<i>Appropriate Medications for People with Asthma</i>	In STAR, the use of appropriate medications for people with asthma performed above the HEDIS® 90 th percentile.
	<i>Follow-up Care for Children Prescribed ADHD Medication, Initiation and Continuation/Maintenance Phase</i>	STAR performed well on measures of follow-up care for children prescribed ADHD medication. The statewide rate for the initiation phase was between the HEDIS® 66 th and 89 th national percentiles and the statewide rate for the continuation and maintenance phase was at the HEDIS® 90 th percentile and above. Both rates exceeded the HHSC Dashboard standard in 2014.
Satisfaction with Care	<i>Health Plan Information and Customer Service, Personal Doctor Rating, Specialist Rating, Health Plan Rating, and Health Care Rating</i>	The STAR program performed well on most measures of member satisfaction with care in 2014, exceeding national CAHPS® Adult Medicaid rates on all four ratings and on information and customer service.

Table 72. CHIP – Positive Findings in Quality of Care

CHIP

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Adolescent Well-Care Visits</i>	CHIP performed well on access to well-care visits for adolescents, with the statewide rate for adolescents performing between the HEDIS® 66 th and 89 th national percentiles and exceeding the HHSC Dashboard standard in 2014.
	<i>Children and Adolescents' Access to Primary Care Practitioners</i>	Children and adolescents in CHIP had good access to primary care, with all age bands performing above 90 percent and slight improvements in all but the youngest age band.
Effectiveness of Care	<i>Appropriate Medications for People with Asthma, Asthma Medication Ratio</i>	In CHIP, the provision of appropriate medications for and use of controller medications by people with asthma performed above the HEDIS® 90 th percentile.
	<i>Appropriate Testing for Children with Pharyngitis</i>	Testing for streptococcal pharyngitis in children with pharyngitis has improved steadily in CHIP over the past five years.
	<i>Follow-up Care for Children Prescribed ADHD Medication, Continuation and Maintenance Phase</i>	CHIP performed well on measures of follow-up care for children prescribed ADHD medication. The statewide rate for the continuation and maintenance phase was between the HEDIS® 66 th and 89 th national percentiles and exceeded the HHSC Dashboard standard in 2014.
Satisfaction with Care	<i>How Well Doctors Communicate, Health Plan Information and Customer Service, Personal Doctor, Specialist Rating, Health Plan Rating, and Health Care Rating</i>	The CHIP program performed well on most measures of caregiver satisfaction with care in 2015, exceeding national CAHPS® CHIP rates on all six measures and exceeding the HHSC Dashboard standards for communication with doctors and health plan rating.

Table 73. STAR+PLUS – Positive Findings in Quality of Care

STAR+PLUS

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Adult BMI Assessment</i>	The rate in STAR+PLUS of assessing BMI in adults has improved from 57 percent in 2011 to 78 percent in 2014, exceeding the HHSC Dashboard standard.
	<i>Breast Cancer Screening</i>	The rate in STAR+PLUS of screening older women for breast cancer has improved from 43 percent in 2010 to 53 percent in 2014.

Utilization of Care	<i>Potentially Preventable Readmissions</i>	In STAR+PLUS, rates of potentially preventable admissions and readmissions decreased between 2013 and 2014 – from 8.52 to 7.80 admissions per 1,000 member-months and from 5.42 to 4.22 readmissions per 1,000 member-months
Effectiveness of Care	<i>Comprehensive Diabetes Care</i>	All four components of diabetes care – HbA1c testing and control and screening for diabetic nephropathy and diabetic retinopathy – improved in STAR+PLUS from 2013 to 2014. HbA1c control increased sharply from 30 percent in 2013 to 42 percent in 2014. HbA1c testing has risen steadily from 76 percent in 2010 to 87 percent in 2014.
	<i>Pharmacotherapy Management of COPD Exacerbation, Bronchodilators</i>	The rate in STAR+PLUS of dispensing bronchodilators after a hospitalization or emergency department visit for COPD was 88 percent, between the HEDIS® 66 th and 89 th percentiles.
Satisfaction with Care	<i>Personal Doctor Rating, Specialist Rating, Health Plan Rating, Health Care Rating</i>	The STAR+PLUS program exceeded national CAHPS® Adult Medicaid rates for three of the four ratings, and rating of health plan met the HHSC Dashboard standard.

Table 74. STAR Health – Positive Findings in Quality of Care

STAR Health

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Well-Child Visits in the First 15 Months of Life</i>	Performance in STAR Health on infant well-care visits rose from 52 percent in 2013 to 64 percent in 2014, meeting the HHSC Dashboard standard.
	<i>Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life, Adolescent Well-Care</i>	The rates in STAR Health for well-care visits for children and adolescents exceeded the HEDIS® 90 th percentile.
	<i>Children and Adolescents' Access to Primary Care Practitioners</i>	Access to primary care practitioners for members in STAR Health exceeded the HEDIS® 90 th percentile and met or exceeded the HHSC Performance Indicator Dashboard standard for all age bands.
Utilization of Care	<i>Potentially Preventable Readmissions</i>	In STAR Health, rates of potentially preventable readmissions decreased from 1.80 weighted readmissions per 1,000 member-months in 2011 to 1.62 weighted readmissions per 1,000 member-months in 2014.

Effectiveness of Care	<i>Follow-up After Hospitalization for Mental Illness</i>	STAR Health performed above the HEDIS® 66 th percentile on follow-up after 7 days and above the HEDIS® 90 th percentile on follow-up after 30 days.
	<i>Follow-up Care for Children Prescribed ADHD Medication</i>	STAR Health performed above the HEDIS® 90 th percentile on both initiation and continuation components, and exceeded HHSC Dashboard standards.

Table 75. Medicaid Dental and CHIP Dental – Positive Findings in Quality of Care
Medicaid Dental and CHIP Dental

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Annual Dental Visit</i>	Medicaid Dental and CHIP Dental performed at or above the HEDIS® 90 th percentile for annual dental visits for all age bands, with the exception of CHIP Dental for the 7 to 10 age band, which performed between the HEDIS® 66 th and 89 th national percentile.
	<i>First Dental Home Services Visit</i>	Medicaid Dental exceeded the HHSC Dashboard standard for the First Dental Home program.

Table 76. STAR – Improvement Areas in Quality of Care
STAR

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Chlamydia Screening in Women</i>	The rate in STAR of screening for chlamydia was between the HEDIS® 10 th and 32 nd percentiles and did not meet the HHSC Dashboard standard.
Effectiveness of Care	<i>Medication Management for People with Asthma (MMA), Medication Compliance 75%</i>	The rate in STAR of members with asthma having controller medications covering at least 75 percent of days was below the HEDIS® 10 th percentile and did not meet the HHSC Dashboard standard.
	<i>Comprehensive Diabetes Care</i>	The rates in STAR of screening for diabetic nephropathy and diabetic retinopathy were each below the HEDIS® 10 th percentile and did not meet the HHSC Dashboard standards. The rate of screening for diabetic nephropathy fell from 79 percent in 2010 to 67 percent in 2014.
Satisfaction with Care	<i>Getting Needed Care, Getting Care Quickly</i>	Among adult members in STAR, satisfaction with access to and timeliness of care was lower than the CAHPS® Adult Medicaid rates.

Table 77. CHIP – Improvement Areas in Quality of Care

CHIP

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Chlamydia Screening in Women</i>	The rate in CHIP of screening for chlamydia was below the HEDIS® 10 th percentile and did not meet the HHSC Dashboard standard.
Effectiveness of Care	<i>Medication Management for People with Asthma (MMA), Medication Compliance 75%</i>	The rate in CHIP of members with asthma having controller medications covering at least 75 percent of days was below the HEDIS® 10 th percentile and did not meet the HHSC Dashboard standard.
	<i>Asthma Medication Ratio</i>	The rate in CHIP of members with asthma using more controller medications than quick-relief medications decreased sharply from 85 percent in 2013 to 72 percent in 2014. This lower rate remains above the HEDIS® 90 th percentile.
Satisfaction with Care	<i>Getting Needed Care</i>	Among caregivers in CHIP satisfaction with access to routine and specialist care was lower than the CAHPS® Child CHIP rate.

Table 78. STAR+PLUS – Improvement Areas in Quality of Care

STAR+PLUS

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Cervical Cancer Screening</i>	The rate in STAR+PLUS of screening for cervical cancer was below the HEDIS® 10 th percentile and did not meet the HHSC Dashboard standard.
	<i>Initiation and Engagement of Alcohol and Other Drug Dependence Treatment</i>	The rates in STAR+PLUS of both initiation and engagement of alcohol and other drug dependence treatment did not meet the HHSC Dashboard standard. The initiation rate was below the HEDIS® 50 th percentile, and the engagement rate was below the HEDIS® 10 th percentile.

Effectiveness of Care	<i>Use of Appropriate Medications for People with Asthma, Asthma Medication Ratio, Medication Management for People with Asthma</i>	The rates in STAR+PLUS of use of appropriate asthma medications and having controller medications covering 75 percent of days did not meet the HHSC Dashboard standards. The rates in STAR+PLUS of use of appropriate asthma medications and use of more controller medications than quick-relief medications were between the HEDIS® 10 th and 32 nd percentiles. The appropriate medications rate decreased from 90 percent in 2010 to 79 percent in 2014. The medication ratio rate decreased from 62 percent in 2013 to 51 percent in 2014. The controller medication coverage rate decreased from 44 percent in 2012 to 35 percent in 2014.
	<i>Controlling Blood Pressure</i>	The rate in STAR+PLUS of members with hypertension having well-controlled blood pressure was between the HEDIS® 10 th and 32 nd percentiles and did not meet the HHSC Dashboard standard.
	<i>Antidepressant Medication Management</i>	The rates in STAR+PLUS for antidepressant medication management were below the HEDIS® 10 th percentiles on both acute and continuation components, and neither met the HHSC Dashboard standard.
Satisfaction with Care	<i>Getting Needed Care</i>	Among adult members in STAR+PLUS, satisfaction with access to routine and specialist care was lower than the CAHPS® Adult Medicaid rate.
	<i>How Well Doctors Communicate</i>	Among adult members in STAR+PLUS, satisfaction with communication with their primary doctor was lower than the CAHPS® Adult Medicaid rate and below the HHSC Dashboard standard.

Table 79. STAR Health – Improvement Areas in Quality of Care

STAR Health

Quality Domain	Quality Indicator/s	Findings
Utilization of Care	<i>Potentially Preventable Admissions</i>	Potentially preventable admissions continued to increase in STAR Health in 2014. Two-thirds of potentially preventable admissions were related to bipolar disorders.
Effectiveness of Care	<i>Medication Management for People with Asthma</i>	The rate in STAR Health of members having asthma controller medications covering at least 75 percent of days decreased from 50 percent in 2012 to 42 percent in 2014. The decreased rate was between the HEDIS® 66 th and 89 th percentiles and did not meet the HHSC Dashboard standard.

Satisfaction with Care	<i>Getting Needed Care</i>	Among caregivers of members of STAR Health, satisfaction with access to routine and specialist care was lower than the CAHPS® Child Medicaid rate.
	<i>Rating of Specialist, Rating of Health Plan, Rating of All Health Care</i>	Caregivers of members of STAR Health rated their child or adolescent's specialist seen most often, health plan, and overall health care lower than the CAHPS® Child Medicaid rate.

Table 80. Medicaid Dental and CHIP Dental – Improvement Areas in Quality of Care

Medicaid Dental and CHIP Dental

Quality Domain	Quality Indicator/s	Findings
Access to Care	<i>Preventive Dental Service</i>	Rates of preventive dental services in Medicaid Dental and CHIP Dental did not meet HHSC Dashboard standards.
	<i>Annual Dental Visit</i>	Rates of annual dental visits among adolescents ages 11 to 18 in Medicaid Dental and CHIP Dental did not meet HHSC Dashboard standards.

Endnotes

- ¹ Smith, Vernon K., Kathleen Gifford, Eileen Ellis, Robin Rudowitz, Laura Snyder, and Elizabeth Hinton. 2015. *Medicaid Reforms to Expand Coverage, Control Costs and Improve Care: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2015 and 2016*. Kaiser Family Foundation. Available at: <http://kff.org/medicaid/report/medicaid-reforms-to-expand-coverage-control-costs-and-improve-care-results-from-a-50-state-medicaid-budget-survey-for-state-fiscal-years-2015-and-2016/>
- ² Rudowitz, Robin, Laura Snyder, and Vernon K. Smith. 2015 *Medicaid Enrollment & Spending Growth: FY 2015 & 2016*. Kaiser Family Foundation. Available at: <http://kff.org/medicaid/issue-brief/medicaid-enrollment-spending-growth-fy-2015-2016/>
- ³ IOM. 2001.
- ⁴ HHSC (Texas Health and Human Services Commission). 2015a. *Texas Medicaid and CHIP in Perspective, Tenth Edition*. Available at: <http://www.hhsc.state.tx.us/medicaid/about/PB/PinkBook.pdf>.
- ⁵ Altman, Drew, and William H. Frist. 2015. *Medicare and Medicaid at 50 Years: Perspectives of Beneficiaries, Health Care Professionals and Institutions, and Policy Makers*. JAMA. 2015;314(4):384-395. doi:[10.1001/jama.2015.7811](https://doi.org/10.1001/jama.2015.7811)
- ⁶ Kaiser Family Foundation. 2015. *Medicaid Managed Care Market Tracker*. Available at: <http://kff.org/data-collection/medicaid-managed-care-market-tracker/>
- ⁷ Altman 2015.
- ⁸ HHSC. 2015a.
- ⁹ Smith, Vernon K, Kathleen Gifford, Eileen Ellis, Robin Rudowitz, Laura Snyder, and Elizabeth Hinton. *Medicaid Reforms to Expand Coverage, Control Costs and Improve Care: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2015 and 2016*. The Henry J. Kaiser Family Foundation, October 15, 2015. Available at: <http://www.statehealthfacts.org>.
- ¹⁰ Ortolon, K. 2011. "Managing Medicaid." *Texas Medicine* 107(10): 53-56.
- ¹¹ Inglehart, J.K. 2011. "Desperately Seeking Savings: States Shift More Medicaid Enrollees to Managed Care." *Health Affairs* 30(9): 1627-1629.
- ¹² IOM (Institute of Medicine). 2001. *Crossing the Quality Chasm: A New Health System for the 20th Century*. Washington, D.C.: National Academy Press.
- ¹³ The U.S. Department of Health and Human Services first proposed regulations to specify these standards in a Notice of Proposed Rulemaking published in the Federal Register on September 29, 1998, and in a final regulation issued in the Federal Register on January 19, 2001. The final regulations published in the Federal Register on June 14, 2002 amended the Medicaid Managed Care regulations published on January 19, 2001.
- ¹⁴ CMS (Centers for Medicare & Medicaid Services). 2012. *External Quality Review Protocols*. Available at: <http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/quality-of-care-external-quality-review.html>

¹⁵ Throughout the report, references to “calendar year” (CY) correspond with the period January 1 through December 31, and are used in regard to data periods (e.g., claims and encounter data from CY 2014). References to “fiscal year” correspond with the period September 1 through August 31. In reference to external quality review organization reports, the term “fiscal year” may also refer to the external quality review organization contract year for which the report was written.

¹⁶ The set of HEDIS[®] measures run for STAR Health was more limited than the set run for STAR and CHIP. The following quality-of-care measures, which may be applied to children, were not run for STAR Health on calendar year 2014 data: *Inpatient Utilization–General Hospital/Acute Care*. Additionally, the following measures were run using only administrative data without supplementation with medical records to calculate a hybrid rate, and are not reported here: *Childhood Immunization Status, Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents*.

¹⁷ HHSC. 2015b. *Questions About Your Benefits*. Available at: <http://www.hhsc.state.tx.us/QuickAnswers/>.

¹⁸ Donabedian, A. 1980. *Explorations in Quality Assessment and Monitoring, Volume I. The Definition of Quality and Approaches to its Assessment*. Ann Arbor, MI: Health Administration Press.

¹⁹ Donabedian, A. 1988. "The quality-of-care. How can it be assessed?" *JAMA* 260:1743–1748.

²⁰ The prevalence of children and adolescents with special health care needs (CSHCN) and categories of special needs are assessed using questions from the National Survey of CSHCN, which have been incorporated into the most current version of the CAHPS[®] Health Plan Survey (Child Medicaid – Version 5.0).

²¹ Fallowfield, Lesley. 2009. *What is quality of life?*. Hayward Medical Communications. Available at: <http://www.medicine.ox.ac.uk/bandolier/painres/download/whatis/WhatisQOL.pdf>

²² Leslie, LK, JN Gordon, K Lambros, K Premji, J Peoples, and K Grist. 2005. *Addressing the Developmental and Mental Health Needs of Young Children in Foster Care*. *Journal of Developmental and Behavioral Pediatrics*. 2005 Apr; 26(2): 140–151. [pmid: 15827467](https://pubmed.ncbi.nlm.nih.gov/15827467/)

²³ Linares, LO, N Martinez-Martin, FX Castellanos. 2013. *Stimulant and atypical antipsychotic medications for children placed in foster homes*. *PLoS One*. 2013;8(1):e54152. doi: [10.1371/journal.pone.0054152](https://doi.org/10.1371/journal.pone.0054152)

²⁴ The external quality review organization’s encounter data validation studies were conducted on an annual basis until 2012, at which time they shifted to a biennial schedule.

²⁵ Texas Government Code § 533.0131. Available at: <http://www.legis.state.tx.us/tlodocs/77R/billtext/html/HB01591F.htm>.

²⁶ CMS. 2012.

²⁷ AMA. 2011. *CPT – Current Procedural Terminology*. Available at: <http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/cpt.page>

²⁸ CDC. 2009b. *International Classification of Diseases, Ninth Revision (ICD-9)*. Available at: <http://www.cdc.gov/nchs/icd/icd9.htm>

²⁹ HHSC. 2008. *HHSC Uniform Managed Care Manual: Disease Management*. Available at http://www.hhsc.state.tx.us/medicaid/managed-care/umcm/Chp9/9_1.pdf

-
- ³¹ CMS. 2012. *Preview of Nursing Home Quality Assurance & Performance Improvement (QAPI) Guide – QAPI at a Glance*. Available at <http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-13-05.pdf>
- ³² HRSA (Health Resources and Services Administration), 2011. *Developing and Implementing a QI Plan*. Available at <http://www.hrsa.gov/quality/toolbox/508pdfs/developingqiplan.pdf>
- ³³ CMS. 2012.
- ³⁴ NCQA 2015. *NCQA Health Insurance Plan Ratings Methodology*.
- ³⁵ AHRQ 2015a. *Prevention Quality Indicators Overview*. Available at: http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx
- ³⁶ AHRQ. 2011. CAHPS® *Dental Plan Survey*. Available at: <https://CAHPS.ahrq.gov/surveys-guidance/dental/index.html>.
- ³⁷ CAHPS® specifications indicate 300 completed surveys per comparison group. To ensure feasibility of large-scale surveys in STAR and CHIP, the external quality review organization determined that 250 completed surveys per comparison group would allow for reliable comparisons among the health plans.
- ³⁸ NCHS (National Center for Health Statistics). 2008. *National Health Interview Survey*. Available at: <http://www.cdc.gov/nchs/nhis.htm>.
- ³⁹ U.S. Census Bureau. 2008. *Current Population Survey*. Available at: <http://www.census.gov/cps>.
- ⁴⁰ Urban Institute. 2008. *National Survey of America's Families*. Available at: <http://www.urban.org/center/anf/nsaf.cfm>.
- ⁴¹ Slejko JF, VH Ghushchyan, B Sucher, DR Globe, SL Lin, G Globe, PW Sullivan. 2014. *Asthma control in the United States, 2008-2010: indicators of poor asthma control*. Jun;133(6):1579-87. doi: [10.1016/j.jaci.2013.10.028](https://doi.org/10.1016/j.jaci.2013.10.028)
- ⁴² Makhinova, Tatiana, JC Barner, KM Richards, and KL Rascati. 2015. *Asthma Controller Medication Adherence, Risk of Exacerbation, and Use of Rescue Agents Among Texas Medicaid Patients with Persistent Asthma*. *Journal of Managed Care & Specialty Pharmacy*. 2015 Dec;21(12):1124-32. pmid: [26679962](https://pubmed.ncbi.nlm.nih.gov/26679962/)
- ⁴³ AHRQ 2015b. CAHPS Health Plan Survey Database. Available at: <https://www.cahpsdatabase.ahrq.gov/CAHPSIDB/Public/about.aspx>
- ⁴⁴ AHRQ 2015b.
- ⁴⁵ Slejko 2014 and Makhinova 2015
- ⁴⁶ AHRQ 2015b.
- ⁴⁷ Slejko 2014 and Makhinova 2015
- ⁴⁸ AHRQ 2015b.

⁵⁰ AHRQ 2015b.

⁵¹ HHSC (Texas Health and Human Services Commission). 2015. *Uniform Managed Care Contract – Version 2.16*. Available at: <http://www.hhsc.state.tx.us/medicaid/managed-care/UniformManagedCareContract.pdf>.

⁵² Levinson, D.R. 2014. *Access to Care: Provider availability in Medicaid Managed Care*. Department of Health and Human Services – Office of Inspector General. OEI-02-13-00670. Available at: <http://oig.hhs.gov/oei/reports/oei-02-13-00670.pdf>.

⁵³ Tipirneni, R., Rhodes, K. V., Hayward, R. A., Lichtenstein, R. L., Reamer, E. N., & Davis, M. M. 2015. "Primary Care Appointment Availability For New Medicaid Patients Increased After Medicaid Expansion In Michigan." *Health Affairs*, 34(8):1399-1406.

⁵⁴ Steinman, K.J., Kelleher, K., Dembe, A.E., Wickizer, T.M., & Hemming, T. 2012. "The use of a "mystery shopper" methodology to evaluate children's access to psychiatric services." *Journal of Behavioral Health Services & Research* 39(3):305–313.

⁵⁵ Levinson. 2014.

⁵⁶ Center for Behavioral Health Statistics and Quality. 2015. "Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Available at, <http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf>

⁵⁷ Centers for Medicaid and Medicare Services. 2015. "Behavioral health services." Available at, <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Mental-Health-Services.html>

⁵⁸ NCQA 2015.

⁵⁹ Lawthers, Ann and Paul Kirby. 2012. *Best Practices in Publically Reporting Quality Information to Consumers*. Available at: <http://dvha.vermont.gov/administration/best-practices-in-reporting-quality-report.pdf>

⁶⁰ Kerker, B.D. and M. Morrison Dore. 2006. *Mental health needs and treatment of foster youth: barriers and opportunities*. American Journal of Orthopsychiatry 76(1):138-147. doi: [10.1037/0002-9432.76.1.138](https://doi.org/10.1037/0002-9432.76.1.138).

⁶¹ Medicaid Health Plans of America. 2013-2014. *Best Practices Compendium: An anthology of Medicaid managed care best practices*. Available at: http://mhpa.org/_upload/2013Compendium_final.pdf.

⁶² Kessler, RC, Berglund, P, Demler, O, Jin, R, Merikangas, KR, and EE Walters. 2005 "Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey replication". Archives of General Psychiatry 62: 593-602. pmid: [15939837](https://pubmed.ncbi.nlm.nih.gov/15939837/).

⁶³ National Institute for Health Care Reform. 2011. *Policy Options to Encourage Patient-Physician Shared Decision-Making*. Available at: <http://www.nihcr.org/Shared-Decision-Making>.

⁶⁴ Shafir, A and J. Rosenthal. 2012. *Shared Decision Making: Advancing Patient-Centered Care Through State and Federal Implementation*. National Academy for State Health Policy. Available at: http://www.nashp.org/sites/default/files/shared_decision_making_report.pdf.

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⁶⁵ Shay, LA and JE Lafata. 2015 “*Where is the evidence? A systematic review of shared decision making and patient outcomes*”. Medical Decision Making 35(1): 114-131. doi: [10.1177/0272989X14551638](https://doi.org/10.1177/0272989X14551638).

⁶⁶ Joosten, EA, DeFuentes-Merillas, L, de Weert, GH, Sensky, T, van der Staak, CP, and CA de Jong. 2008. “*Systematic review of the effects of shared decision-making on patient satisfaction, treatment adherence and health status*”. Psychotherapy and Psychosomatics 77(4): 219-226. pmid: [18418028](https://pubmed.ncbi.nlm.nih.gov/18418028/).

⁶⁷ ICHP (The Institute for Child Health Policy). 2014. Texas Medicaid Managed Care and Children’s Health Insurance Program – Potentially Preventable Events Tables for Calendar Year 2013. Gainesville, FL: The University of Florida.

⁶⁸ ICHP 2014.

⁶⁹ ICHP 2014.