



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

# **Texas Medicaid Managed Care STAR+PLUS Quality of Care Report**

**Fiscal Year 2010**

**Measurement Period:**

**September 1, 2009 through August 31, 2010**

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

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

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## Table of Contents

Executive Summary .....	1
Introduction.....	1
Methodology.....	2
Summary of Findings .....	2
Recommendations .....	4
The STAR+PLUS Population.....	7
Access to Care.....	9
Prenatal and Postpartum Care.....	9
Utilization of Services in the STAR+PLUS Program .....	13
Well-Child and Adolescent Well-Care Visits.....	13
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life.....	13
Adolescent Well-Care Visits .....	14
Utilization of Ambulatory Care.....	16
Outpatient Care .....	16
Emergency Department Utilization .....	18
AHRQ Quality Indicators .....	21
Pediatric Quality Indicators .....	21
Adult Prevention Quality Indicators.....	22
Effectiveness of Care in the STAR+PLUS Program .....	26
Respiratory Conditions .....	26
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis.....	26
Use of Appropriate Medications for People with Asthma.....	27
Diabetes Care .....	30
Women’s Preventive Care and Screenings.....	33
Cervical Cancer Screening .....	33
Breast Cancer Screening.....	35
Behavioral Health Care in STAR+PLUS .....	36
Antidepressant Medication Management .....	36
Follow-up Care after Hospitalization for Mental Illness.....	38

Readmission within 30 Days after an Inpatient Stay for Mental Health .....	41
Appendix A: Detailed Methodology .....	43
Appendix B: AHRQ Quality Indicators .....	46
Endnotes .....	48

### **List of Figures**

Figure 1. Total Number of Unduplicated Medicaid-only Members in STAR+PLUS in August 2010, by MCO .....	7
Figure 2. Distribution of STAR+PLUS Members by Race/Ethnicity in August 2010 .....	8
Figure 3. The Percentage of Female Members in STAR+PLUS Receiving Prenatal and Postpartum Care .....	10
Figure 4. HEDIS® Adults' Access to Preventive/Ambulatory Health Services – STAR+PLUS Members 20 to 44 Years Old .....	12
Figure 5. HEDIS® Adult Access to Preventive/Ambulatory Health Services – STAR+PLUS Members 45 to 64 Years Old .....	12
Figure 6. HEDIS® Adult Access to Preventive Ambulatory Health Services – STAR+PLUS Members 65+ Years Old .....	13
Figure 7. The Percentage of STAR+PLUS Members 3 to 6 Years Old With One or More Well-Child Visits .....	14
Figure 8. The Percentage of Adolescent STAR+PLUS Members with One or More Well-Care Visits .....	15
Figure 9. HEDIS® Ambulatory Care – The Overall Rate of Outpatient Visits per 1,000 Member Months in the STAR+PLUS Program .....	17
Figure 10. HEDIS® Ambulatory Care - The Overall Rate of ED Visits per 1,000 Member Months in the STAR+PLUS Program .....	19
Figure 11. HEDIS® Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis in STAR+PLUS .....	26
Figure 12. HEDIS® Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis in STAR+PLUS, by Service Area .....	27
Figure 13. HEDIS® Use of Appropriate Medications for People With Asthma – STAR+PLUS Members 10 to 17 Years Old .....	28
Figure 14. HEDIS® Use of Appropriate Medications for People with Asthma – STAR+PLUS Members 18 to 56 Years Old .....	29

Figure 15. HEDIS® Use of Appropriate Medications for People with Asthma – STAR+PLUS Members 18 to 56 Years Old, by Service Area.....	29
Figure 16. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had Hemoglobin A1c Testing.....	31
Figure 17. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had an Eye Exam Performed.....	31
Figure 18. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had LDL-C Screening .....	32
Figure 19. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had Medical Attention for Nephropathy .....	32
Figure 20. HEDIS® Cervical Cancer Screening.....	34
Figure 21. HEDIS® Cervical Cancer Screening, by STAR+PLUS Service Area.....	34
Figure 22. HEDIS® Breast Cancer Screening .....	35
Figure 23. HEDIS® Breast Cancer Screening, by STAR+PLUS Service Area .....	36
Figure 24. HEDIS® Antidepressant Medication Management in STAR+PLUS .....	37
Figure 25. HEDIS® Antidepressant Medication Management, by STAR+PLUS Service Area ...	38
Figure 26. The Percentage of STAR+PLUS Members Receiving Follow-up Care Within 7 and 30 Days After Hospitalization for Mental Illness.....	39
Figure 27. The Percentage of STAR+PLUS Members Receiving Follow-up Care Within 7 and 30 Days After Hospitalization for Mental Illness, by Service Area .....	40
Figure 28. The Percentage of STAR+PLUS Members (18 years of age and younger) Readmitted to the Hospital Within 30 Days After an Inpatient Stay for Mental Health.....	41
Figure 29. The Percentage of STAR+PLUS Adult Members (19+ Years Old) Readmitted to the Hospital Within 30 Days After an Inpatient Stay for Mental Health.....	42
Figure 30. The Percentage of STAR+PLUS Adult Members (19+ Years Old) Readmitted to the Hospital Within 30 Days After an Inpatient Stay for Mental Health, by Service Area.....	42

**List of Tables**

Table 1. Number of Unduplicated STAR+PLUS Medicaid-only Members by Service Area/MCO	8
Table 2. Prenatal and Postpartum Care in STAR+PLUS, by Service Area .....	9
Table 3. HEDIS® Adults’ Access to Preventive/Ambulatory Health Services in STAR+PLUS, by Service Area and Age cohort .....	11
Table 4. Child and Adolescent Well-Care Visits in STAR+PLUS, by Service Area .....	14
Table 5. HEDIS® Ambulatory Care Outpatient Utilization in STAR+PLUS, by MCO and Age Cohort .....	17

Table 6. HEDIS® Ambulatory Care Outpatient Utilization in STAR+PLUS, by Service Area and Age Cohort.....	18
Table 7. HEDIS® Ambulatory Care Emergency Department Utilization in STAR+PLUS, by MCO and Age Cohort.....	20
Table 8. HEDIS® Ambulatory Care Emergency Department Utilization in STAR+PLUS, by Service Area and Age Cohort .....	20
Table 9. AHRQ Pediatric Quality Indicators in STAR+PLUS, by MCO .....	22
Table 10. AHRQ Pediatric Quality Indicators in STAR+PLUS, by Service Area.....	22
Table 11. AHRQ Prevention Quality Indicator Results in STAR+PLUS, by MCO .....	23
Table 12. AHRQ Prevention Quality Indicator Results in STAR+PLUS, by Service Area .....	25
Table 13. HEDIS® Comprehensive Diabetes Care in STAR+PLUS, by Service Area .....	33
Table B1. AHRQ Pediatric Quality Indicators .....	46
Table B2. AHRQ Adult Prevention Quality Indicators .....	46

# Executive Summary

## *Introduction*

This report provides an annual update of the quality of care provided to members in the STAR+PLUS Medicaid Managed Care program for the State of Texas, prepared by the Institute for Child Health Policy (ICHP) at the University of Florida, the External Quality Review Organization (EQRO) for Texas Medicaid Managed Care. This update is for September 1, 2009 to August 31, 2010, covering fiscal year 2010.

STAR+PLUS is a Texas Medicaid Managed Care program designed to provide health care, acute and long-term services and support to the aged and disabled through a managed care system. In fiscal year 2010, the STAR+PLUS program was administered through four managed care organizations (MCOs) – AMERIGROUP, Evercare, Molina, and Superior HealthPlan – operating in 29 counties in the Bexar, Nueces, Travis, and Harris Expansion Service Areas (SAs).

This report provides descriptive information about the STAR+PLUS population, and evaluation of members' access to care, utilization of services, and effectiveness of preventive care and treatment. Results for the following quality of care measures are presented in this report:

- **Access to Care** – *Prenatal and Postpartum Care, and HEDIS<sup>®</sup> Adult Access to Preventive/Ambulatory Health Services.*
- **Utilization of Services** – *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life, Adolescent Well-Care Visits, HEDIS<sup>®</sup> Ambulatory Care, and AHRQ Pediatric Quality Indicators (PDIs) and Adult Prevention Quality Indicators (PQIs).*
- **Effectiveness of Care**
  - *Respiratory Conditions – HEDIS<sup>®</sup> Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis, and HEDIS<sup>®</sup> Use of Appropriate Medications for People with Asthma.*
  - *Diabetes – HEDIS<sup>®</sup> Comprehensive Diabetes Care.*
  - *Women's Preventive Care and Screening – HEDIS<sup>®</sup> Cervical Cancer Screening and HEDIS<sup>®</sup> Breast Cancer Screening.*
  - *Behavioral Health – HEDIS<sup>®</sup> Antidepressant Medication Management, Follow-up after Hospitalization for Mental Illness, and Readmission within 30 days after an Inpatient Stay for Mental Health.*

## **Methodology**

A detailed description of the methodology used in this report is presented in **Appendix A**. Information regarding the calculation of all measures included in this report can be found in the document “Quality of Care Measures Technical Specifications Report, July 2011.”<sup>1</sup>

Rates for Healthcare Effectiveness and Data Information Set (HEDIS<sup>®</sup>) measures were calculated using National Committee for Quality Assurance (NCQA) certified software. Discussion of results includes comparison with HEDIS<sup>®</sup> national Medicaid rates, which are derived from rates reported to the NCQA by Medicaid Managed Care plans nationally.<sup>2</sup>

At the request of the Texas Health and Human Services Commission (HHSC), the EQRO developed a methodology to allow for flexibility in the provider specialty codes when determining eligibility for certain HEDIS<sup>®</sup> measures. The following measures rely on specific provider specialty codes, and are therefore affected by this change in methodology:

- Prenatal Care
- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
- Adolescent Well-Care Visits
- Follow-up After Hospitalization for Mental Illness

For these measures, the name HEDIS<sup>®</sup> has been removed from the titles, as these measures do not adhere precisely to NCQA specifications and their results are likely inflated from the lifting of provider constraints. Thus, the discussion of results for these measures does not include comparison to HEDIS<sup>®</sup> national Medicaid rates.

Pediatric Quality Indicators (PDIs) and Adult Prevention Quality Indicators (PQIs) developed by the Agency for Healthcare Research and Quality (AHRQ) were used to evaluate STAR+PLUS program rates of inpatient admissions for ambulatory care sensitive conditions (ACSCs). The AHRQ considers ACSCs “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”<sup>3</sup>

## **Summary of Findings**

### **Access to Care**

- *Prenatal and postpartum care.* Fifty-eight percent of pregnant women in STAR+PLUS had prenatal care during their first trimester or within 42 days of enrollment, and 35 percent had a postpartum visit three to eight weeks after giving birth. All MCOs performed below the HHSC Dashboard standards for prenatal and postpartum care.
- *Adult access to preventive health services.* Middle-age and older adults (45+ years old) in STAR+PLUS generally had good access to preventive health services, with greater than 87 percent having an outpatient or preventive care visit during the measurement period. Seventy-four percent of younger adults (20 to 44 years old) had an outpatient or preventive care visit, which is below the national average of 81 percent.

## Utilization of Services

- *Preventive care for children and adolescents.* Sixty-nine percent of children and 46 percent of adolescents had a well-care visit.
- *Ambulatory care.* The rate of outpatient visits in STAR+PLUS was 578 per 1,000 member months, and the rate of emergency department visits was 88 per 1,000 member months.
- *Pediatric inpatient admissions.* The highest rate of potentially avoidable pediatric inpatient admissions in STAR+PLUS was for asthma.
- *Adult inpatient admissions.* Rates of potentially avoidable inpatient admissions in STAR+PLUS were more than four times the AHRQ national rates for four diabetes-related conditions, adult asthma, and hypertension.

### STAR+PLUS Member Demographics – August 2010

Number of Medicaid-only members: 80,259

Average member age: 42.2 years

Gender	Percent of STAR+PLUS Members
Female	54%
Male	46%

Race/ethnicity	Percent of STAR+PLUS Members
Hispanic	33%
Black, non-Hispanic	31%
White, non-Hispanic	26%

## Effectiveness of Care

- *Respiratory conditions.* Only 1 out of 5 members diagnosed with acute bronchitis were appropriately treated for this condition and not prescribed an antibiotic (18 percent).  
The vast majority of STAR+PLUS members who have asthma received appropriate medications for their condition (over 90 percent).
- *Diabetes care.* The majority of STAR+PLUS members received effective diabetic care, such as HbA1c testing, LDL-C screening, and medical attention for diabetic nephropathy. A considerably smaller percentage of members with diabetes had an eye exam (39 percent).
- *Women's preventive care and screening.* Forty-two percent of adult women in STAR+PLUS had a Pap test to screen for cervical cancer, and 43 percent had a mammogram to screen for breast cancer.
- *Behavioral health care and treatment.* Among members diagnosed with a new episode of major depression and treated with an antidepressant medication, 50 percent took the medication for at least three months, and 36 percent took the medication for at least six months.

Among STAR+PLUS members hospitalized for a mental health disorder, 46 percent had a follow-up visit within 7 days of discharge, and 72 percent had a follow-up visit within 30 days of discharge.

The STAR+PLUS program rate for mental health readmission within 30 days was 19 percent.

## Recommendations

The performance of the STAR+PLUS program and MCOs participating in STAR+PLUS was generally good for most quality of care measures in SFY 2010. The EQRO recommends that MCOs focus quality improvement efforts on areas where program-level rates were below national averages or where the majority of MCOs performed below HHSC Dashboard standards.

Domain	Recommendations	Rationale	HHSC Recommendations/Strategies
Breast and cervical cancer screening	<ul style="list-style-type: none"> <li>• Develop an intervention that addresses the barriers to breast and cervical cancer screenings among disabled women, and is tailored to meet the needs of women with different types of disabilities.<sup>4, 5</sup> Features of this intervention may include:               <ul style="list-style-type: none"> <li>- Providing transportation and accessibility to facilities.</li> <li>- Increasing women's knowledge about the importance of preventive screenings.</li> <li>- Educating providers about the preventive health needs of women with disabilities.</li> <li>- Improving the quality of the screening experience (e.g., characteristics of facilities, staff attitudes).</li> </ul> </li> <li>• Establish programs for monitoring provider compliance with breast and cervical cancer screenings. If a program is already in place, conduct quality improvement studies to ensure it is effective.</li> </ul>	<p>Women in the STAR+PLUS program had lower rates of breast and cervical cancer screenings, than women in Medicaid nationally.</p> <p>Less than half had a mammogram screening for breast cancer (43 percent), or a Pap test to screen for cervical cancer (42 percent).</p>	<ul style="list-style-type: none"> <li>• HEDIS<sup>®</sup> <i>Breast Cancer Screening and Cervical Cancer Screening</i> added to 2011 Performance Indicator Dashboard to monitor MCO improvement.</li> <li>• Review standard of care for breast and cervical cancer screening to determine if current baseline measurement reflects the industry standard.</li> <li>• Encourage MCOs to educate providers on the importance of preventive screening for breast cancer and cervical cancer.</li> </ul>

Domain	Recommendations	Rationale	HHSC Recommendations/Strategies
Avoidance of antibiotics for acute bronchitis	<ul style="list-style-type: none"> <li>• Develop a multidimensional intervention involving patient and clinician education to reduce the excessive use of antibiotics for treating acute bronchitis in the adult STAR+PLUS population.<sup>6</sup> Features of this intervention may include:               <ul style="list-style-type: none"> <li>- Mailing linguistically and culturally appropriate educational materials to members about colds, flus, and bronchitis, the over-use of antibiotics, and self-care strategies.</li> <li>- Distributing educational materials, such as posters and information sheets, to provider offices, and training staff to provide counseling to adult members (and their caregivers) with respiratory symptoms.</li> <li>- Providing education to providers regarding clinical practice guidelines for treating acute bronchitis in adults, and how to say “no” when patients demand antibiotics.</li> </ul> </li> </ul>	<p>The vast majority of STAR+PLUS members were given an antibiotic prescription to treat acute bronchitis. Only 18 percent were appropriately treated for acute bronchitis and not given an antibiotic prescription, compared to 26 percent nationally.</p> <p>Acute bronchitis is usually caused by a viral infection, thus symptom management is considered the appropriate treatment for this condition.</p>	<ul style="list-style-type: none"> <li>• HEDIS<sup>®</sup> <i>Avoidance of Antibiotics Treatment in Adults with Acute Bronchitis (AAB)</i> added to 2011 Performance Indicator Dashboard to monitor MCO performance improvement.</li> <li>• Encourage MCOs to educate providers and members on the appropriate use of prescribing antibiotics for the treatment of acute bronchitis.</li> </ul>

Domain	Recommendations	Rationale	HHSC Recommendations/Strategies
Preventive care for young adults	<ul style="list-style-type: none"> <li>• Ensure that STAR+PLUS Service Coordinators actively work with PCPs and young adults with disabilities to ensure scheduling of an annual preventive care visit, with follow-up reminders and phone calls.</li> <li>• Develop self-efficacy training for young adults in STAR+PLUS to improve use of preventive care, using the Chronic Care Model.<sup>7</sup> Self-efficacy in the context of health care involves a person's beliefs about their power to influence their health and health outcomes. Self-efficacy training has been shown to be positively associated with health-promoting behaviors, across various chronic conditions.<sup>8</sup></li> </ul>	<p>A smaller percentage of young adults 20 to 44 years old in STAR+PLUS had an outpatient or preventive care visit, compared to the same age cohort in the national Medicaid population (74 vs. 81 percent).</p> <p>One out of four young adults in STAR+PLUS did not have an outpatient or preventive care visit in SFY 2010 (26 percent), which suggests there are access barriers to preventive care services for a certain segment of the STAR+PLUS population.</p>	<ul style="list-style-type: none"> <li>• HHSC has targeted "Improving Members Understanding and Utilization of Service Coordination" as an overarching improvement goal for the STAR+PLUS program.</li> <li>• Percentage of STAR+PLUS members with good access to Service Coordination has been added to the MCO Quality Performance Indicators.</li> </ul>

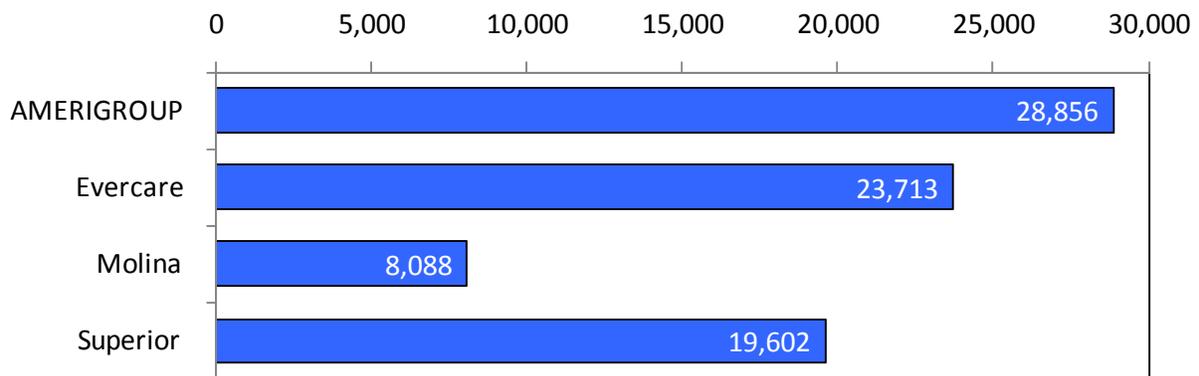
## The STAR+PLUS Population

There were 80,259 unduplicated Medicaid-only members in the STAR+PLUS program in August 2010. Slightly more than half of the STAR+PLUS population was female (54 percent). The average age of members was 42.2 years (SD = 16.18).

**Figure 1** provides the number of unduplicated STAR+PLUS Medicaid-only members in the four STAR+PLUS Managed Care Organizations in August 2010.

AMERIGROUP had the largest membership in STAR+PLUS, accounting for 36 percent of the STAR+PLUS population (28,856 members). Molina had the smallest membership, which comprised 10 percent of the STAR+PLUS population (8,088 members).

**Figure 1. Total Number of Unduplicated Medicaid-only Members in STAR+PLUS in August 2010, by MCO**



Reference: Table 1\_Medicaid

**Table 1** provides the number of unduplicated STAR+PLUS Medicaid-only members by Service Area and MCO.

More than half of the STAR+PLUS membership lived in the Harris Service Area (54 percent; 43,485 members), with the majority of these members receiving their health care through either AMERIGROUP or Evercare.

The Nueces and Travis Service Areas had the fewest STAR+PLUS members, with each comprising approximately 10 percent of the STAR+PLUS population (7,740 and 8,046 members, respectively).

**Table 1. Number of Unduplicated STAR+PLUS Medicaid-only Members by Service Area and MCO**

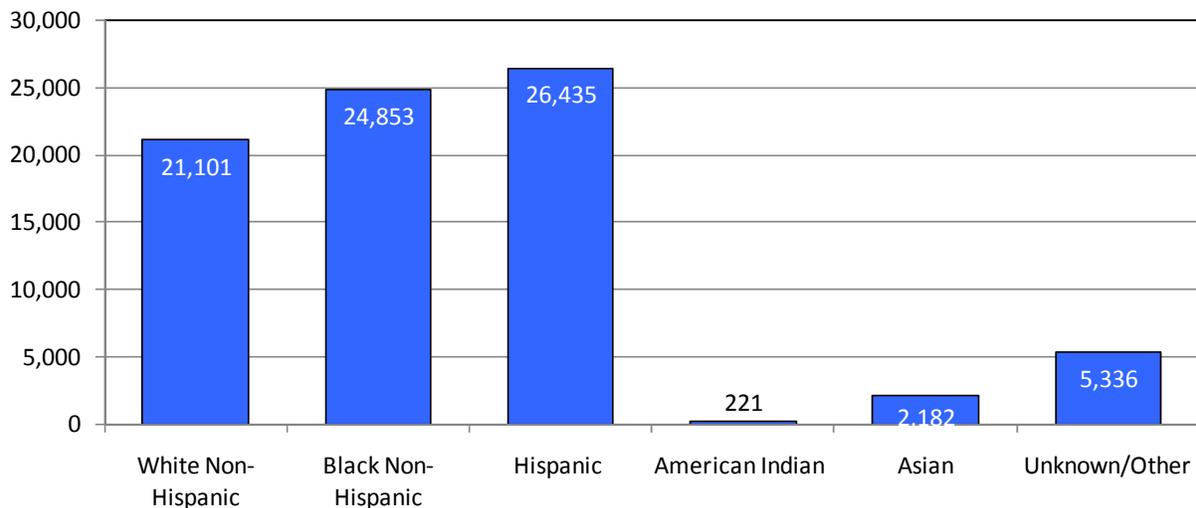
<b><u>BEXAR Service Area</u></b>	<b><u>20,988</u></b>	<b><u>HARRIS Service Area</u></b>	<b><u>43,485</u></b>
AMERIGROUP	3,382	AMERIGROUP	20,108
Molina	2,729	Evercare	18,018
Superior	14,877	Molina	5,359
<b><u>NUECES Service Area</u></b>	<b><u>7,740</u></b>	<b><u>TRAVIS Service Area</u></b>	<b><u>8,046</u></b>
Evercare	3,015	AMERIGROUP	5,366
Superior	4,725	Evercare	2,680

Reference: Table 1\_Medicaid

**Figure 2** provides the distribution of STAR+PLUS members by race/ethnicity in August 2010. Thirty-three percent of STAR+PLUS members were Hispanic, followed by Black, non-Hispanic (31 percent), and White, non-Hispanic (26 percent).

STAR+PLUS members of Asian race/ethnicity accounted for less than three percent of the member population, and those of American Indian race/ethnicity accounted for less than one percent. Seven percent of STAR+PLUS members could not be classified by race/ethnicity using the claims data.

**Figure 2. Distribution of STAR+PLUS Members by Race/Ethnicity in August 2010**



Reference: Table 2

## Access to Care

### *Prenatal and Postpartum Care*

**Figure 3** provides the percentage of live birth deliveries among women in STAR+PLUS who received prenatal care in their first trimester (or within 42 days of enrollment in STAR+PLUS), and who had a postpartum visit on or between 21 days and 56 days after delivery, by MCO. **Table 2** provides rates of prenatal and postpartum care, by STAR+PLUS Service Area.

There were 699 women in STAR+PLUS who were eligible for this measure in SFY 2010.

**The STAR+PLUS Program.** Fifty-eight percent of pregnant women in STAR+PLUS had prenatal care in their first trimester or within 42 days of enrollment, and 35 percent had a postpartum visit three to eight weeks after giving birth.

Although a small number of women gave birth in STAR+PLUS during SFY 2010, a fairly large percentage (42 percent) did not have access to timely prenatal care. Access to postpartum care was even more restricted, with the majority of women not getting postpartum care within eight weeks after delivery (65 percent).

**STAR+PLUS MCOs.** Overall, members in AMERIGROUP and Superior had slightly better access to prenatal and postpartum care than members in Evercare and Molina. However, none of the STAR+PLUS MCOs met the HHSC Performance Indicator Dashboard standards for prenatal care (72 percent) or postpartum care (65 percent).

**STAR+PLUS Service Areas.** STAR+PLUS members living in the Nueces Service Area had better access to prenatal care than members living in other regions of the State. The Nueces Service Area exceeded the HHSC Dashboard standard for prenatal care (77 vs. 72 percent).

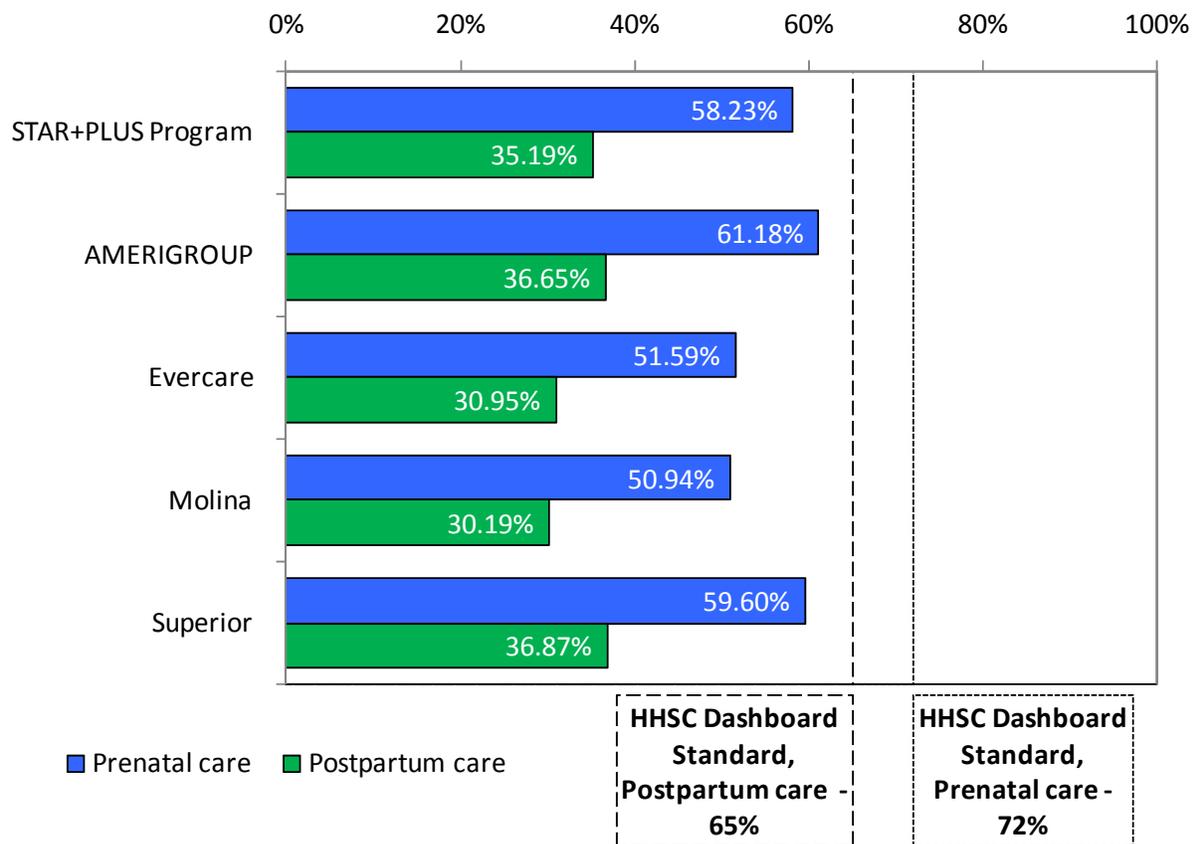
The rates of postpartum care across the STAR+PLUS Service Areas ranged from 31 percent in the Harris Service Area to 46 percent in the Travis Service Area (a difference of 15 percentage points).

**Table 2. Prenatal and Postpartum Care in STAR+PLUS, by Service Area**

<b>STAR+PLUS Service Area</b>	<b>Prenatal Care</b>	<b>Postpartum Care</b>
BEXAR	56.59%	35.61%
HARRIS	55.71%	31.20%
NUECES	76.92%	44.23%
TRAVIS	61.45%	45.78%

Reference: Table PPC

**Figure 3. The Percentage of Female Members in STAR+PLUS Receiving Prenatal and Postpartum Care**



Reference: Table PPC

### Adult Access to Preventive/Ambulatory Health Services

**Figures 4 through 6** provide results for the HEDIS® Adults' Access to Preventive/Ambulatory Health Services measure, which represents the percentage of STAR+PLUS adult members 20 years and older who had an ambulatory or preventive care visit during the measurement period, distributed by MCO. Rates are calculated separately for three age groups – 20 to 44 years old, 45 to 64 years old, and 65 years and older. **Table 3** provides the results for this measure, by STAR+PLUS Service Area.

**The STAR+PLUS Program.** Adult members over the age of 45 years generally had good access to preventive care. Eighty-eight percent of members 45 to 64 years old and 87 percent of members 65 years and older had an ambulatory or preventive care visit in SFY 2010. For each of these age cohorts, the STAR+PLUS program had higher rates of preventive care visits than Medicaid Managed Care Plans reporting to the NCQA.

Preventive care was lower among young adults 20 to 44 years old than older adults. Seventy-four percent had an ambulatory or preventive care visit in SFY 2010, which is below the HEDIS® Medicaid average of 81 percent.

**STAR+PLUS MCOs.** MCO performance on adult preventive care was more variable with the younger age cohort (20 to 44 years old), ranging from 63 percent in Molina to 82 percent in Superior (a difference of 19 percentage points). Superior was the only STAR+PLUS MCO that performed above the HEDIS® Medicaid average for this age cohort (82 vs. 81 percent).

In addition, Superior was the best performing MCO in providing preventive care to younger, middle age, and older adults.

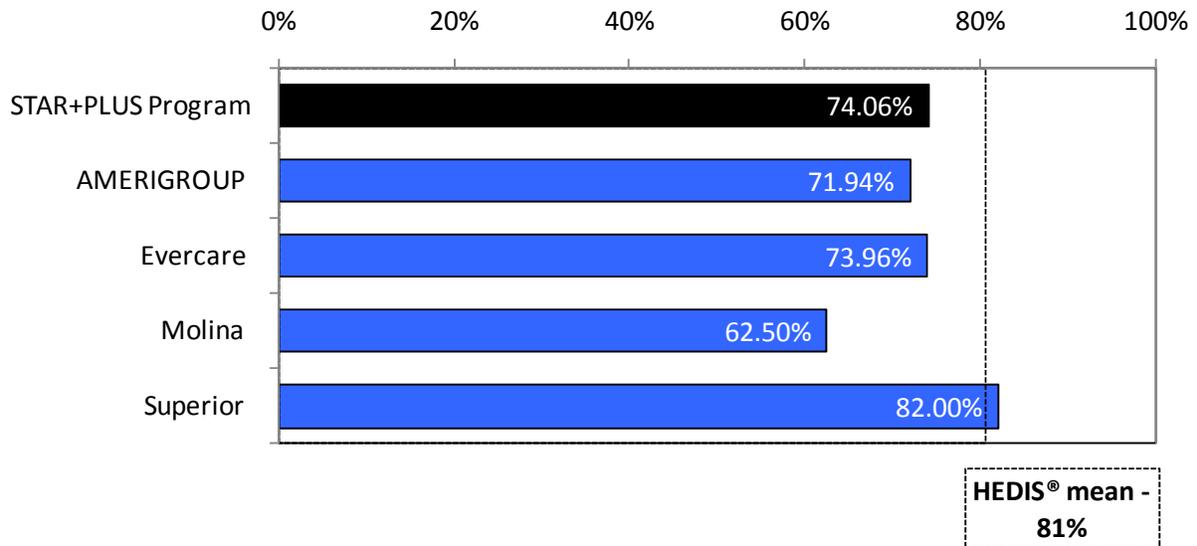
**STAR+PLUS Service Areas.** Overall, adult members living in the Nueces Service Area had the best access to preventive care.

**Table 3. HEDIS® Adults' Access to Preventive/Ambulatory Health Services in STAR+PLUS, by Service Area and Age cohort**

STAR+PLUS Service Area	HEDIS® Adults' Access to Preventive/Ambulatory Health Services		
	20 to 44 years old	45 to 64 years old	65 years and older
BEXAR	76.46%	89.92%	87.07%
HARRIS	72.84%	87.48%	89.04%
NUECES	79.73%	91.31%	90.24%
TRAVIS	68.68%	84.72%	78.53%

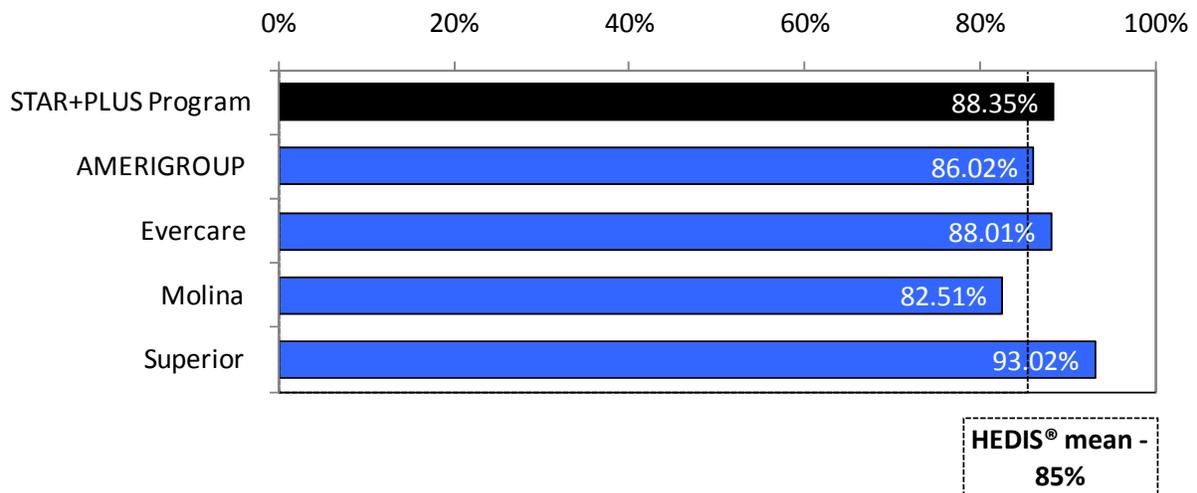
Reference: Table AAP

**Figure 4. HEDIS® Adults' Access to Preventive/Ambulatory Health Services – STAR+PLUS Members 20 to 44 Years Old**



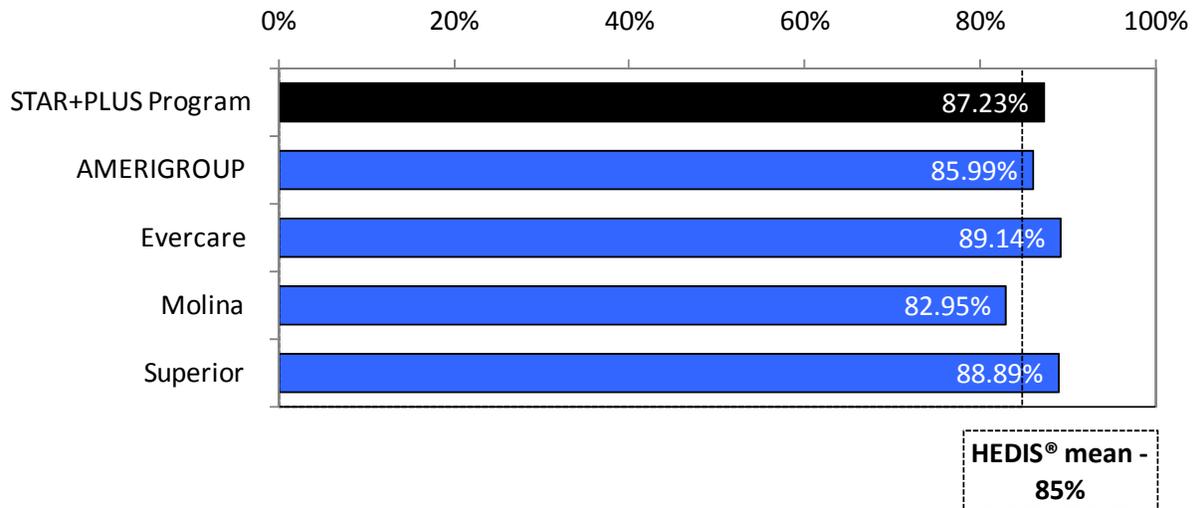
Reference: Table AAP

**Figure 5. HEDIS® Adult Access to Preventive/Ambulatory Health Services – STAR+PLUS Members 45 to 64 Years Old**



Reference: Table AAP

**Figure 6. HEDIS® Adult Access to Preventive Ambulatory Health Services – STAR+PLUS Members 65+ Years Old**



Reference: Table AAP

## Utilization of Services in the STAR+PLUS Program

### *Well-Child and Adolescent Well-Care Visits*

#### Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life

**Figure 7** provides results for the Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life measure, which represents the percentage of STAR+PLUS members between three and six years old who received one or more well-child visits with a provider during the measurement period, distributed by MCO. **Table 4** provides results for this measure by STAR+PLUS Service Area, along with results for the adolescent well-care measure presented in this report.

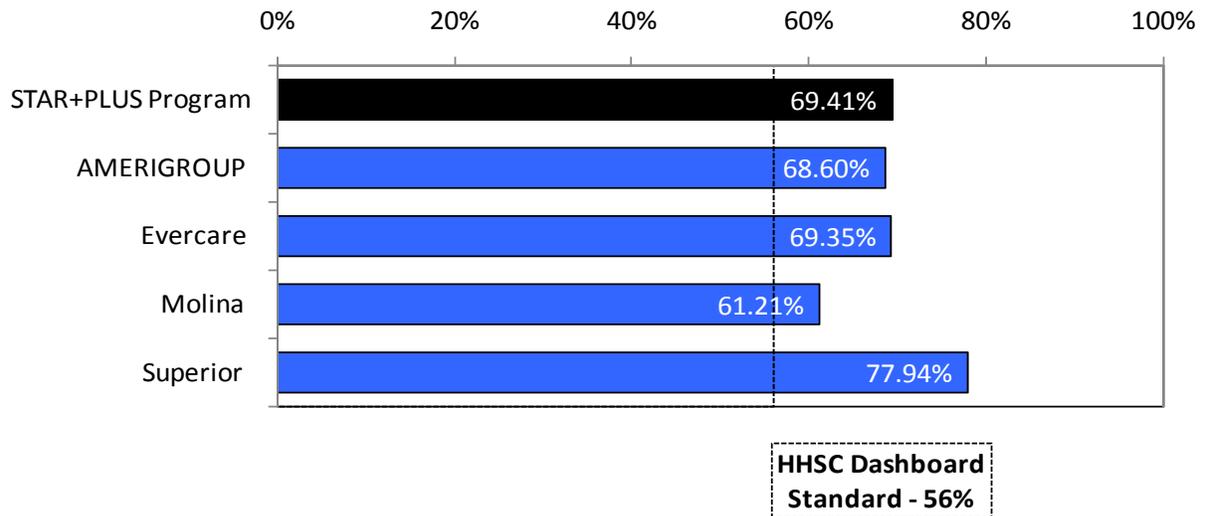
There were 572 STAR+PLUS child members eligible for this measure.

**The STAR+PLUS Program.** Sixty-nine percent of children 3 to 6 years old in STAR+PLUS had a well-child visit in SFY 2010.

**STAR+PLUS MCOs.** All STAR+PLUS MCOs exceeded the HHSC Performance Indicator Dashboard standard of 56 percent for this measure. The MCO with the greatest percentage of members 3 to 6 years old having at least one well-child visit was Superior at 78 percent.

**STAR+PLUS Service Areas.** The percentage of STAR+PLUS members 3 to 6 years old having at least one well-child visit ranged from 66 percent in Harris to 77 percent in Bexar (the rate for Nueces is not presented to due low denominator).

**Figure 7. The Percentage of STAR+PLUS Members 3 to 6 Years Old With One or More Well-Child Visits**



Reference: Table W34

**Table 4. Child and Adolescent Well-Care Visits in STAR+PLUS, by Service Area**

STAR+PLUS Service Area	Well-Child Visits in the 3 <sup>rd</sup> , 4 <sup>th</sup> , 5 <sup>th</sup> , and 6 <sup>th</sup> Years of Life	Adolescent Well-Care Visits
BEXAR	76.86%	50.88%
HARRIS	66.41%	44.94%
NUECES	-	44.55%
TRAVIS	72.97%	43.66%

Reference: Table W34 and AWC

### Adolescent Well-Care Visits

**Figure 8** provides results for the Adolescent Well-Care Visits measure, which represents the percentage of STAR+PLUS members 12 to 21 years old who received one or more comprehensive adolescent well-care visits with a provider during the measurement period, distributed by MCO. **Table 4** provides results for this measure by STAR+PLUS Service Area, along with results for the well-child visits measure presented in this report.

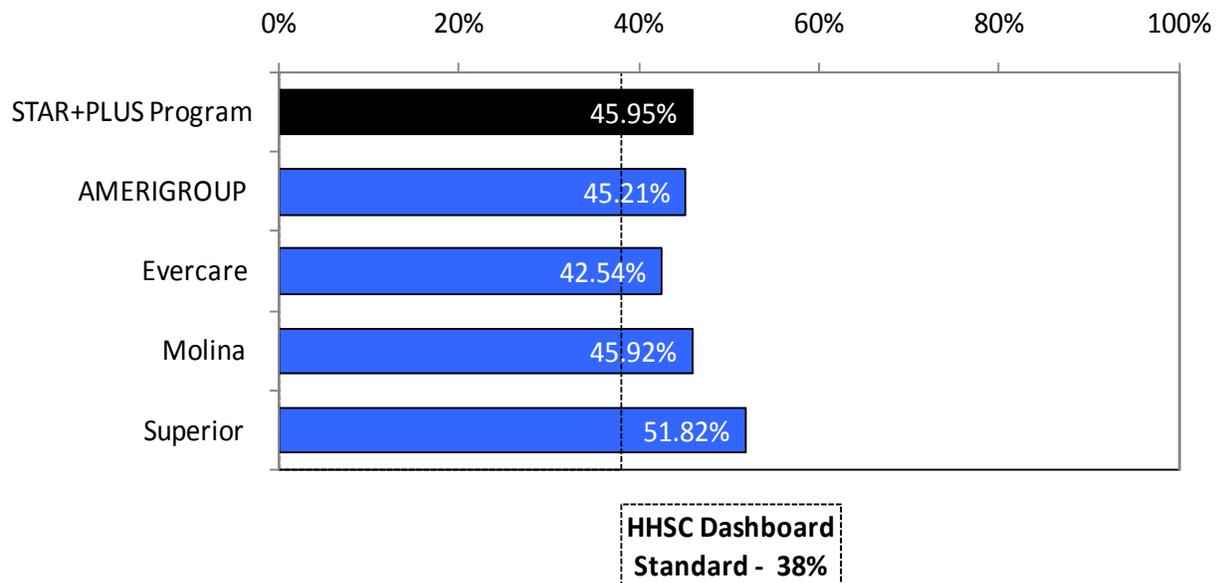
There were 4,446 STAR+PLUS adolescent members eligible for this measure.

**The STAR+PLUS Program.** Forty-six percent of adolescents in STAR+PLUS had a well-care visit in SFY 2010.

**STAR+PLUS MCOs.** Superior had the highest rate of adolescent well-care visits in the STAR+PLUS program at 52 percent. All STAR+PLUS MCOs exceeded the HHSC Performance Indicator Dashboard standard of 38 percent for this measure. However, it should be noted that in each health plan, approximately half of the adolescent membership did not have a well-care visit during the measurement year.

**STAR+PLUS Service Areas.** Rates of adolescent well-care visits ranged from 44 percent in Travis to 51 percent in Bexar.

**Figure 8. The Percentage of Adolescent STAR+PLUS Members with One or More Well-Care Visits**



Reference: Table AWC

## **Utilization of Ambulatory Care**

### **Outpatient Care**

**Figures 9** provides results for the HEDIS® Ambulatory Care outpatient measure, showing the rate of outpatient visits per 1,000 member months in the STAR+PLUS program, distributed by MCO. **Table 5** provides results for this measure by STAR+PLUS MCO and age cohort, and **Table 6** provides results for this measure by STAR+PLUS Service Area and age cohort.

**The STAR+PLUS Program.** Overall, STAR+PLUS members had 578 outpatient visits per 1,000 member months during the measurement year. This rate is higher than the national HEDIS® rate of 367 per 1,000 member months.

In STAR+PLUS, utilization of outpatient care was highest among:

- Infants less than one year old – 1,248 per 1,000 member months.
- Adults 45 to 64 years old – 753 per 1,000 member months.
- Older adults 65 to 74 years old – 653 per 1,000 member months.

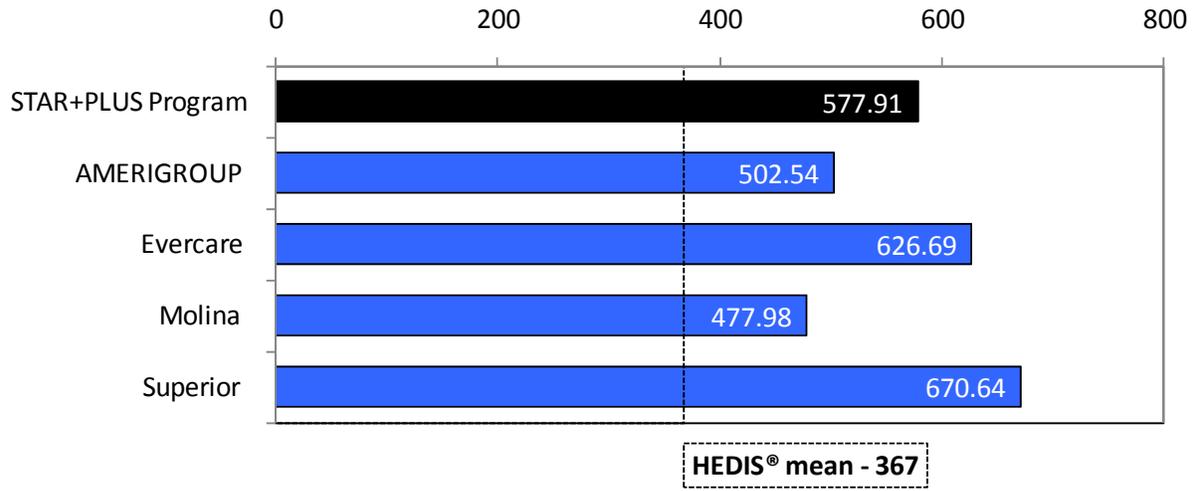
The lowest rates of outpatient care utilization were observed for members 10 to 19 years old (274 per 1,000 members months) and members 85 years old and above (350 per 1,000 member months).

Utilization of outpatient care was higher than the corresponding rates reported by Medicaid Managed Care Plans to the NCQA on this measure for the three age cohorts between birth and 19 years old, and for members 45 to 64 years old.

**STAR+PLUS MCOs.** The highest rate of outpatient utilization was observed in Superior (671 per 1,000 member months) and the lowest in Molina (478 per 1,000 member months). In addition, Superior had the highest rate of outpatient visits per 1,000 member months for five out of the eight age cohorts for this measure.

**STAR+PLUS Service Areas.** Rates of outpatient utilization ranged from 432 per 1,000 member months in Travis to 641 per 1,000 member months in Bexar, with rates varying by STAR+PLUS Service Area and the age of members. For example, members between 45 and 84 years old living in the Harris Service Area had the highest outpatient utilization rates, and members between 10 and 74 years old living in the Travis Service Area had the lowest outpatient utilization rates.

**Figure 9. HEDIS® Ambulatory Care – The Overall Rate of Outpatient Visits per 1,000 Member Months in the STAR+PLUS Program**



Reference: Table AMB

**Table 5. HEDIS® Ambulatory Care Outpatient Utilization in STAR+PLUS, by MCO and Age Cohort**

Age cohort	HEDIS® Ambulatory Care Rate of Outpatient Visits per 1,000 Member Months					
	HEDIS®	STAR+PLUS Program	AMERIGROUP	Evercare	Molina	Superior
Less than 1 yr	718.3	1,247.83	1,153.85	1,312.50	1,379.31	1,586.21
1 to 9 yrs	312.7	433.54	370.26	432.61	521.82	502.65
10 to 19 yrs	243.1	274.05	237.55	260.20	291.09	386.93
20 to 44 yrs	432.9	409.07	368.32	408.30	335.43	504.37
45 to 64 yrs	606.7	753.32	676.86	806.23	642.16	819.72
65 to 74 yrs	880.3	652.74	616.63	678.92	627.86	712.50
75 to 84 yrs	541.0	537.00	602.18	516.43	404.55	333.33
85+ yrs	441.8	350.10	307.69	405.17	500.00	305.56

Reference: Table AMB

**Table 6. HEDIS® Ambulatory Care Outpatient Utilization in STAR+PLUS, by Service Area and Age Cohort**

Age cohort	HEDIS® Ambulatory Care Rate of Outpatient Visits per 1,000 Member Months					
	HEDIS®	STAR+PLUS Program	BEXAR	HARRIS	NUECES	TRAVIS
Total	367.2	577.91	607.97	578.51	640.64	431.87
Less than 1 yr	718.3	1,247.83	1,314.29	1,150.68	1,444.44	1,500.00
1 to 9 yrs	312.7	433.54	476.14	415.02	538.55	453.98
10 to 19 yrs	243.1	274.05	369.82	250.97	346.67	236.78
20 to 44 yrs	432.9	409.07	445.34	407.92	452.06	287.13
45 to 64 yrs	606.7	753.32	756.87	785.11	768.00	559.63
65 to 74 yrs	880.3	652.74	682.94	692.99	624.57	454.99
75 to 84 yrs	541.0	537.00	359.90	612.74	252.87	418.56
85+ yrs	441.8	350.10	322.78	373.33	125.00	533.33

Reference: Table AMB

### Emergency Department Utilization

**Figure 10** provides results for the HEDIS® Ambulatory Care emergency department (ED) measure, showing the rate of ED visits per 1,000 member months in the STAR+PLUS program, distributed by MCO. **Table 7** provides results for this measure by STAR+PLUS MCO and age cohort, and **Table 8** provides results by STAR+PLUS Service Area and age cohort.

**The STAR+PLUS Program.** Overall, STAR+PLUS members had 88 ED visits per 1,000 member months during the measurement year. This rate is above the national HEDIS® rate of 67 per 1,000 member months.

In STAR+PLUS, utilization of the ED was highest among:

- Infants less than one year old – 178 per 1,000 member months.
- Young adults 20 to 44 years old – 101 per 1,000 member months.
- Adults 45 to 64 years old – 88 per 1,000 member months.

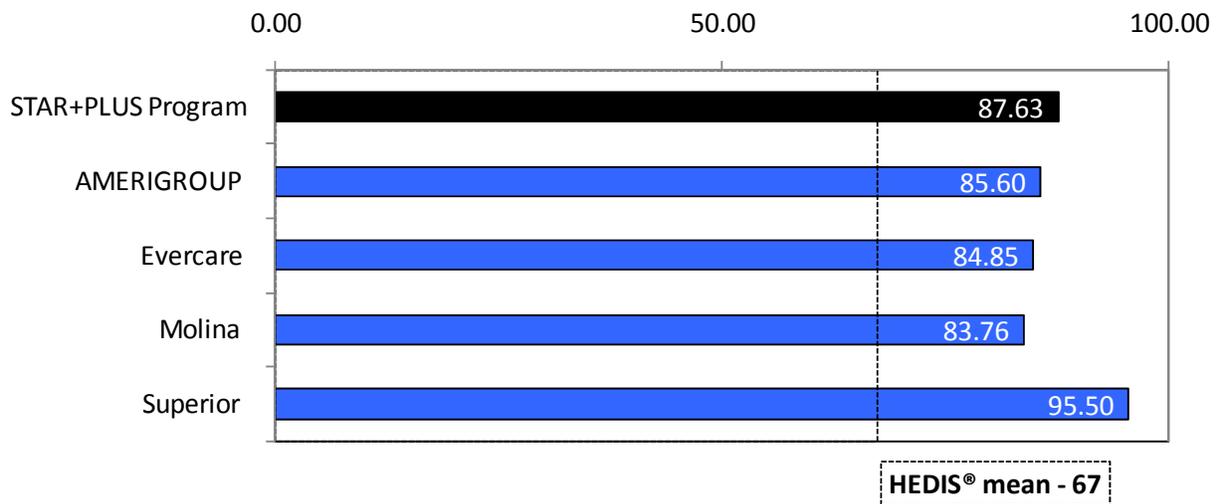
The lowest rates of ED use were observed for members older than 74 years old.

Utilization of the ED was higher than the corresponding rates reported by Medicaid Managed Care Plans to the NCQA on this measure for members less than one year old and for members 45 to 64 years old.

**STAR+PLUS MCOs.** The membership in Superior had the total highest utilization of the ED at 96 per 1,000 member months. Across MCOs, the highest rate of ED use was for members less than one year old in Evercare (500 per 1,000 member months), and the lowest was for members 85 years and older in AMERIGROUP (5 per 1,000 member months).

**STAR+PLUS Service Areas.** Overall, rates of ED utilization ranged from 74 per 1,000 member months in Harris to 138 per 1,000 member months in Travis. Across age cohorts, rates of ED use were generally highest in Travis (except for members 65 to 74 years old) and lowest in Harris (except for members less than one year old and members 75 years and older).

**Figure 10. HEDIS® Ambulatory Care - The Overall Rate of ED Visits per 1,000 Member Months in the STAR+PLUS Program**



Reference: Table AMB

**Table 7. HEDIS® Ambulatory Care Emergency Department Utilization in STAR+PLUS, by MCO and Age Cohort**

Age cohort	HEDIS® Ambulatory Care Rate of Emergency Department Visits per 1,000 Member Months					
	HEDIS®	STAR+PLUS Program	AMERIGROUP	Evercare	Molina	Superior
Less than 1 yr	98.3	178.26	166.67	500.00	137.93	103.45
1 to 9 yrs	56.3	56.24	47.36	54.60	59.95	73.78
10 to 19 yrs	46.9	44.35	41.36	43.34	41.37	56.08
20 to 44 yrs	105.2	100.86	100.30	94.92	89.29	114.09
45 to 64 yrs	79.6	87.76	90.03	83.73	90.74	88.91
65 to 74 yrs	57.5	40.87	33.41	49.64	31.16	49.17
75 to 84 yrs	37.2	22.23	22.90	19.95	36.36	15.15
85+ yrs	25.5	14.08	4.52	34.48	19.23	9.26

Reference: Table AMB

**Table 8. HEDIS® Ambulatory Care Emergency Department Utilization in STAR+PLUS, by Service Area and Age Cohort**

Age cohorts	HEDIS® Ambulatory Care Rate of Emergency Department Visits per 1,000 Member Months					
	HEDIS®	STAR+PLUS Program	BEXAR	HARRIS	NUECES	TRAVIS
<b>Total</b>	67.4	87.63	90.10	73.96	106.76	138.17
Less than 1 yr	98.3	178.26	142.86	191.78	0.00	200.00
1 to 9 yrs	56.3	56.24	71.01	48.28	85.54	86.44
10 to 19 yrs	46.9	44.35	56.78	39.50	51.72	78.93
20 to 44 yrs	105.2	100.86	105.12	83.09	124.55	154.54
45 to 64 yrs	79.6	87.76	84.28	78.34	98.20	134.73
65 to 74 yrs	57.5	40.87	43.95	32.68	95.29	47.22
75 to 84 yrs	37.2	22.23	19.32	21.23	11.49	30.30
85+ yrs	25.5	14.08	6.33	16.67	0.00	66.67

Reference: Table AMB

## **AHRQ Quality Indicators**

The Agency for Healthcare Research and Quality (AHRQ) Pediatric Quality Indicators (PDIs) and Prevention Quality Indicators (PQIs) use hospital inpatient discharge data to calculate rates of admission for various ambulatory care sensitive conditions for children and adults, respectively. These indicators screen for inpatient stays that were potentially avoidable with better access to care in the outpatient setting. This information is useful for monitoring trends, comparing MCO performance, and addressing access to care issues.

### **Pediatric Quality Indicators**

**Table 9** provides PDI rates for asthma, diabetes short-term complications, gastroenteritis, and urinary tract infections among children and adolescents in the STAR+PLUS program, up to 17 years of age, distributed by MCO. **Table 10** shows results for these four indicators by STAR+PLUS Service Area.

**Table B1** in Appendix B describes each of the five AHRQ PDIs shown here. Discussion of PDIs in the key points below includes comparisons with national rates reported by AHRQ.<sup>9</sup> It should be noted that these AHRQ national estimates are based on data collected in 2008 and are area-level indicators, including commercial and Medicaid populations.

**The STAR+PLUS Program.** At the program level, inpatient admission rates for all PDI conditions except urinary tract infection were comparable to or lower than the corresponding national averages, which is indicative of good pediatric outpatient care. Among PDIs calculated per 100,000 members, the highest rate in the STAR+PLUS program was for asthma, and the lowest was for diabetes short-term complications.

- **Asthma.** The inpatient admissions rate for asthma was 127 per 100,000 members in the STAR+PLUS program overall, which is slightly above, but comparable to the national rate of 124 per 100,000.
- **Diabetes short-term complications.** The inpatient admissions rate for diabetes short-term complications was 28 per 100,000 members in the STAR+PLUS program overall, which is comparable to the national rate of 28 per 100,000.
- **Gastroenteritis.** The inpatient admissions rate for gastroenteritis was 113 per 100,000 members in the STAR+PLUS program overall, which is slightly above, but comparable to the national rate of 105 per 100,000.
- **Urinary tract infection.** The inpatient admissions rate for urinary tract infection was 75 per 100,000 members in the STAR+PLUS program overall, which is higher than the national rate of 43 per 100,000.

**STAR+PLUS MCOs.** Rates of inpatient admissions for ACSCs among children in STAR+PLUS varied across MCOs, with the highest admissions related to asthma and diabetes short-term complications occurring in Superior, and the highest admissions related to gastroenteritis and urinary tract infection occurring in Molina.

**STAR+PLUS Service Areas.** Across STAR+PLUS Service Areas, PDI rates were highest in Bexar; above the national AHRQ rates for all four conditions.

**Table 9. AHRQ Pediatric Quality Indicators in STAR+PLUS, by MCO**

AHRQ Pediatric Quality Indicators	AHRQ rate	STAR+PLUS Program	AMERIGROUP	Evercare	Molina	Superior
Asthma	123.78	126.79	75.55	0.00	184.67	328.08
Diabetes Short-term Complications	28.17	28.13	0.00	0.00	0.00	149.03
Gastroenteritis	105.26	112.81	49.76	151.75	273.22	129.62
Urinary Tract Infection	43.09	75.21	49.76	0.00	182.15	129.62

Note: All rates are per 100,000 members. Reference: Table PDI

**Table 10. AHRQ Pediatric Quality Indicators in STAR+PLUS, by Service Area**

AHRQ Pediatric Quality Indicators	AHRQ rate	STAR+PLUS Program	BEXAR	HARRIS	NUECES	TRAVIS
Asthma	123.78	126.79	334.90	69.00	0.00	268.10
Diabetes Short-term Complications	28.17	28.13	150.38	0.00	0.00	0.00
Gastroenteritis	105.26	112.81	132.36	119.64	0.00	0.00
Urinary Tract Infection	43.09	75.21	132.36	68.36	0.00	0.00

Note: All rates are per 100,000 members. Reference: Table PDI

### Adult Prevention Quality Indicators

**Table 11** provide PQI rates of inpatient admissions for 12 out of 14 ambulatory care sensitive conditions in the STAR+PLUS program, among adults 18 years or older, distributed by MCO. Inpatient admissions rates for perforated appendix and low birth weight are not shown due to low denominators. **Table 12** shows PQI results in the four STAR+PLUS Service Areas.

In addition, **Table B2** in Appendix B describes each of the AHRQ PQIs in more detail. The discussion below of PQIs includes comparisons with national rates reported by the AHRQ.<sup>10</sup> It should be noted that these AHRQ national estimates are based on data collected in 2008 and are area-level indicators, including commercial and Medicaid populations.

**The STAR+PLUS Program.** At the program level, the highest inpatient admissions rate was for congestive heart failure, and the lowest was for angina without procedure. STAR+PLUS inpatient admissions rates for all PQIs reported were greater than the AHRQ national rates.

Inpatient admissions rates for the following conditions were *more than four times greater* than the corresponding AHRQ national rates:

- **Diabetes short-term complications** – 417 per 100,000 members in the STAR+PLUS program, compared to 62 per 100,000 nationally.
- **Uncontrolled diabetes** – 150 per 100,000 members in the STAR+PLUS program, compared to 23 per 100,000 nationally.
- **Diabetes long-term complications** – 747 per 100,000 members in the STAR+PLUS program, compared to 128 per 100,000 nationally.
- **Adult asthma** – 696 per 100,000 adult members in the STAR+PLUS program, compared to 129 per 100,000 nationally.
- **Lower extremity amputation** – 167 per 100,000 members in the STAR+PLUS program, compared to 36 per 100,000 nationally.
- **Hypertension** – 288 per 100,000 members in the STAR+PLUS program, compared to 62 per 100,000 nationally.

**STAR+PLUS MCOs.** Across MCOs, rates of inpatient admissions varied depending on the condition. Evercare had the highest inpatient admission rates for uncontrolled diabetes, congestive heart failure, COPD, and dehydration. Superior had the highest inpatient admission rates for diabetes long-term complications, hypertension, angina without procedure, and bacterial pneumonia. The greatest range between MCOs in the rate of inpatient admissions for an ACSC was observed for:

- **COPD**, with rates ranging from 634 per 100,000 in Molina to 1,076 per 100,000 in Evercare.
- **Congestive heart failure**, with rates ranging from 1,058 per 100,000 in Superior to 1,476 per 100,000 in Evercare.

**STAR+PLUS Service Areas.** Rates of potentially avoidable inpatient admissions were variable across the STAR+PLUS Service Areas, with Nueces having the highest rate of inpatient admissions for five out of the 12 PQI conditions.

**Table 11. AHRQ Prevention Quality Indicator Results in STAR+PLUS, by MCO**

<b>AHRQ Prevention Quality Indicators</b>	<b>AHRQ rate</b>	<b>STAR+PLUS Program</b>	<b>AMERIGROUP</b>	<b>Evercare</b>	<b>Molina</b>	<b>Superior</b>
Adult Asthma	129.30	696.47	748.69	702.80	585.22	659.01
Diabetes Short-term Comp.	61.51	417.16	424.84	372.76	536.45	414.38
Diabetes Long-term Comp.	128.21	747.25	713.86	749.40	682.76	818.77
Uncontrolled Diabetes	23.02	149.93	114.91	186.38	134.11	159.76
Lower Extremity Amputation	36.14	166.86	142.77	186.38	219.46	154.77
Hypertension	61.87	287.78	264.65	287.33	304.80	314.53
Angina w/out Procedure	24.93	53.20	45.27	58.24	48.77	59.91
Congestive Heart Failure	398.47	1,232.12	1,072.54	1,475.50	1,450.87	1,058.41
COPD	242.99	891.14	894.94	1,075.56	633.99	753.87
Bacterial Pneumonia	360.29	807.71	706.90	865.88	743.72	903.64
Dehydration	110.85	118.50	111.43	132.02	85.35	124.81
Urinary Tract Infection	205.61	562.25	574.57	559.14	548.65	554.17

Note: All rates are per 100,000 members. Reference: Table PQI

**Table 12. AHRQ Prevention Quality Indicator Results in STAR+PLUS, by Service Area**

<b>AHRQ Prevention Quality Indicators</b>	<b>AHRQ rate</b>	<b>STAR+PLUS Program</b>	<b>BEXAR</b>	<b>HARRIS</b>	<b>NUECES</b>	<b>TRAVIS</b>
Adult Asthma	129.30	696.47	601.69	687.74	751.07	919.08
Diabetes Short-term Comp.	61.51	417.16	344.48	408.06	572.25	493.16
Diabetes Long-term Comp.	128.21	747.25	799.19	712.96	894.13	650.08
Uncontrolled Diabetes	23.02	149.93	165.35	151.30	154.98	100.87
Lower Extremity Amputation	36.14	166.86	183.72	171.94	131.14	134.50
Hypertension	61.87	287.78	307.73	293.44	298.04	201.75
Angina w/out Procedure	24.93	53.20	59.71	64.19	35.77	0.00
Congestive Heart Failure	398.47	1,232.12	1,051.81	1,377.78	1,180.26	1,008.74
COPD	242.99	891.14	610.88	1,004.10	1,180.26	750.95
Bacterial Pneumonia	360.29	807.71	748.67	763.39	1,216.02	784.58
Dehydration	110.85	118.50	105.64	121.50	143.06	112.08
Urinary Tract Infection	205.61	562.25	459.31	580.00	631.86	661.29

Note: All rates are per 100,000 members. Reference: Table PQI

## Effectiveness of Care in the STAR+PLUS Program

### Respiratory Conditions

#### Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis

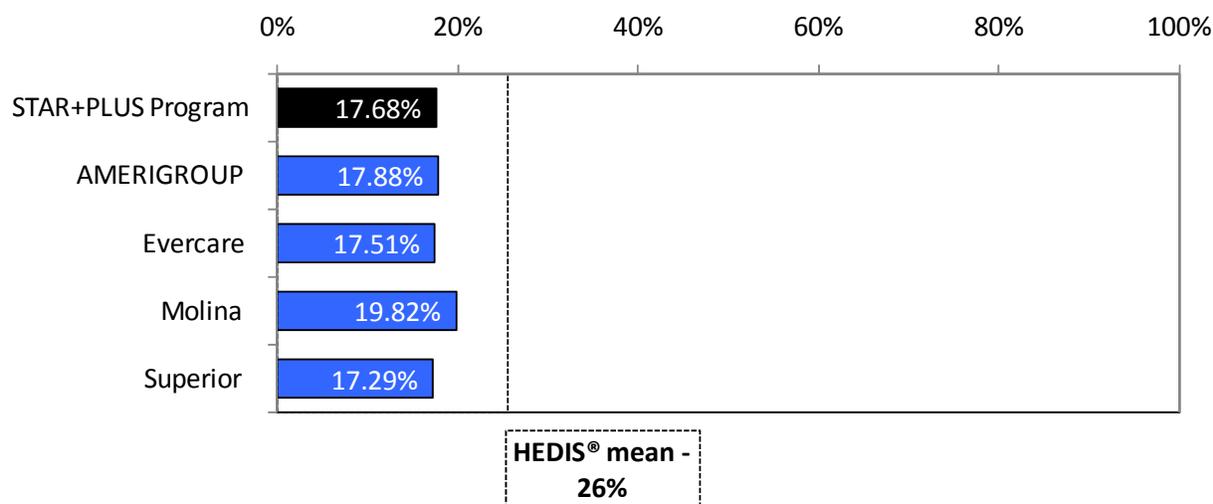
**Figure 11** provides results for the HEDIS® Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis measure, which represents the percentage of STAR+PLUS members 18 to 64 years old who had a diagnosis of acute bronchitis and who were not dispensed an antibiotic prescription. The results for this measure are presented as inverted rates [1 – (numerator/eligible population)]. Higher rates are considered desirable and indicate that members were appropriately treated for acute bronchitis by the avoidance of antibiotics. Acute bronchitis is usually caused by a viral infection, and thus symptom management is considered the appropriate treatment for people with this condition (e.g., preventing or controlling the cough), rather than prescribing antibiotics.

**The STAR+PLUS Program.** Eighteen percent of members who were diagnosed with acute bronchitis in SFY 2010 were appropriately treated for this condition, compared to 26 percent among the Medicaid Managed Care Plans reporting to NCQA on this measure.

**STAR+PLUS MCOs.** MCO performance on this measure was comparable across plans, with the vast majority of members not receiving appropriate treatment for acute bronchitis.

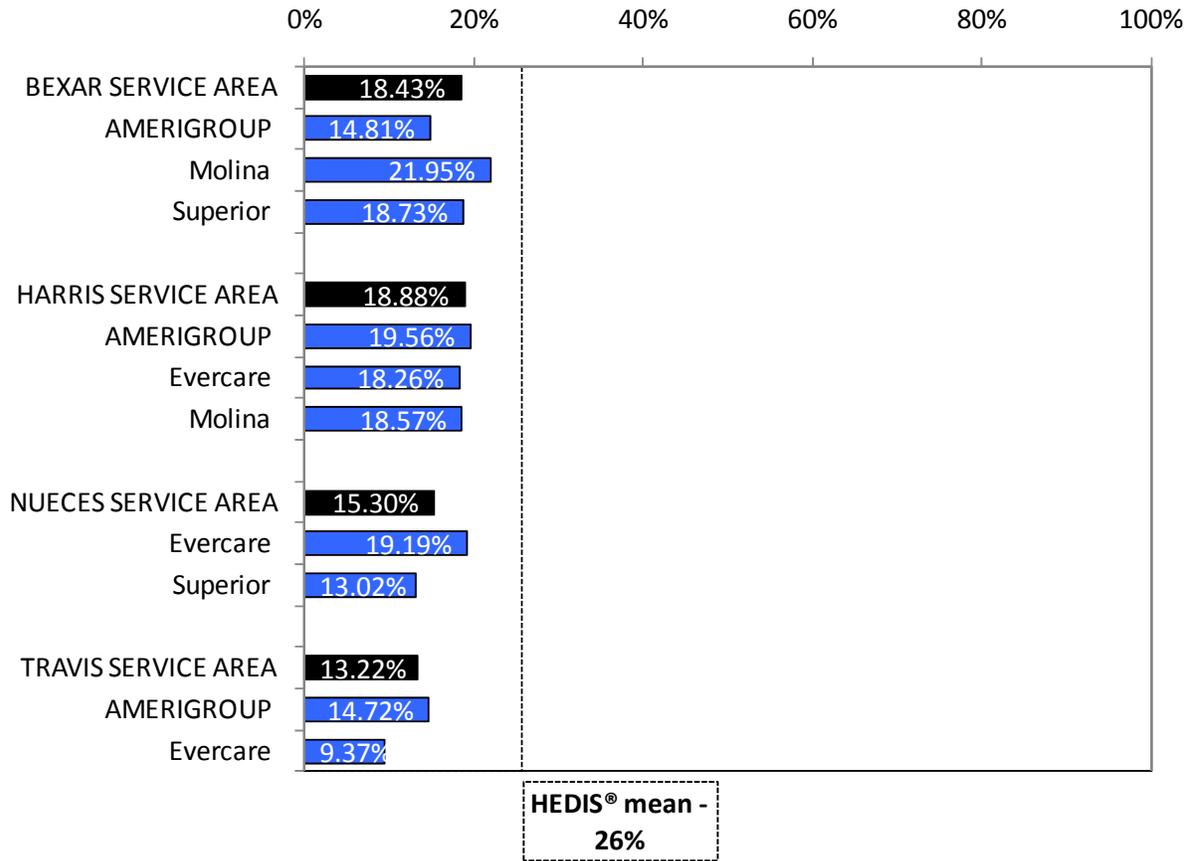
**STAR+PLUS Service Areas.** The percentage of members who were appropriately treated for acute bronchitis ranged from 13 percent in the Travis SA to 19 percent in the Harris SA.

**Figure 11. HEDIS® Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis in STAR+PLUS**



Reference Table AAB

**Figure 12. HEDIS® Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis in STAR+PLUS, by Service Area**



Reference Table AAB

### Use of Appropriate Medications for People with Asthma

The HEDIS® Use of Appropriate Medications for People with Asthma measure provides the percentage of members who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement period. For the present report, the 2009 HEDIS® specifications were used to calculate this measure, rather than the specifications for 2010, which assigned new age cohorts. The age cohorts specified in the 2009 HEDIS® specifications – 5 to 9 years old, 10 to 17 years old, and 18 to 56 years old – are still in use on the HHSC Performance Indicator Dashboard. Therefore, these age cohorts were used to permit comparisons with the Dashboard standards. Rates for members 5 to 9 years old are not presented due to low denominators.

**Figure 13** provides the percentage of STAR+PLUS program members 10 to 17 years old who were prescribed appropriate asthma medication, distributed by MCO. **Figure 14** provides the percentage of STAR+PLUS members 18 to 56 years old who were prescribed appropriate

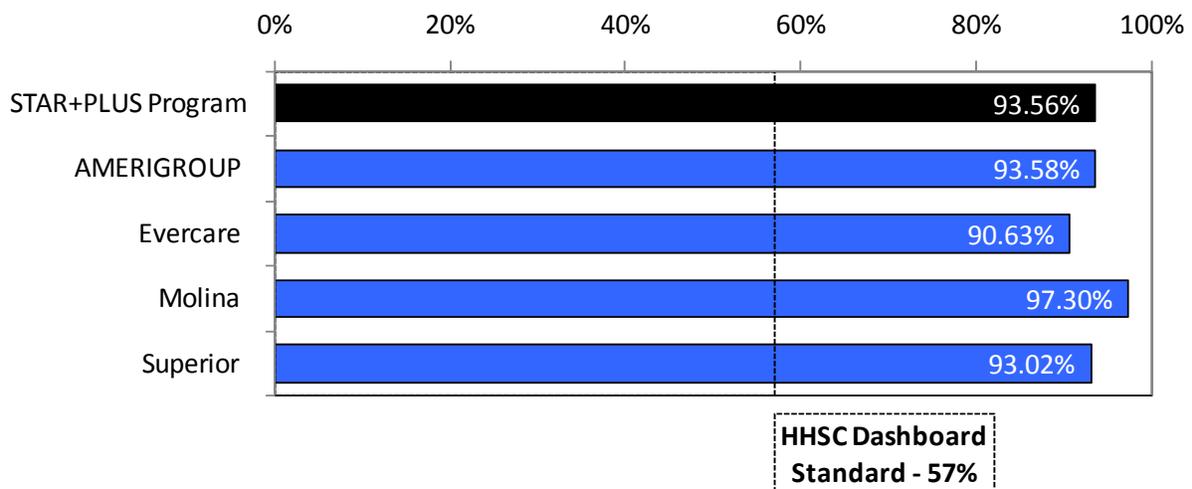
asthma medication, distributed by MCO, and **Figure 15** provides results for this age cohort by STAR+PLUS Service Area. Service Area rates for members 10 to 17 years old are not presented due to low denominators.

**The STAR+PLUS Program.** Ninety-four percent of STAR+PLUS members 10 to 17 years old were appropriately treated for asthma, and 91 percent of members 18 to 56 years old were appropriately treated for asthma.

**STAR+PLUS MCOs.** All MCOs provided appropriate asthma care for the vast majority of their memberships, with rates ranging from 87 percent for Molina members 18 to 56 years old to 97 percent for Molina members 10 to 17 years old. All MCOs exceeded the HHSC Performance Indicator Dashboard standards for appropriate asthma care for members 10 to 19 years old (57 percent) and members 18 to 56 years old (62 percent).

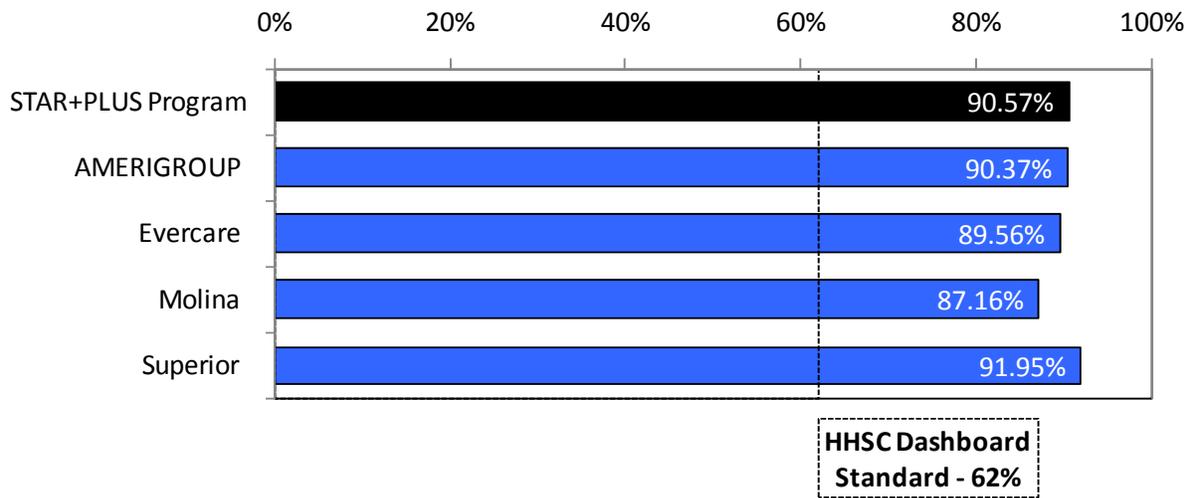
**STAR+PLUS Service Areas.** The quality of asthma care across the STAR+PLUS Service Areas was comparable for adults. Within STAR+PLUS Service Areas, MCO rates of prescribing appropriate asthma medication were within two percentage points of each other, except for in the Bexar Service Area where rates ranged from 84 percent in Molina to 93 percent in Superior.

**Figure 13. HEDIS® Use of Appropriate Medications for People with Asthma – STAR+PLUS Members 10 to 17 Years Old**



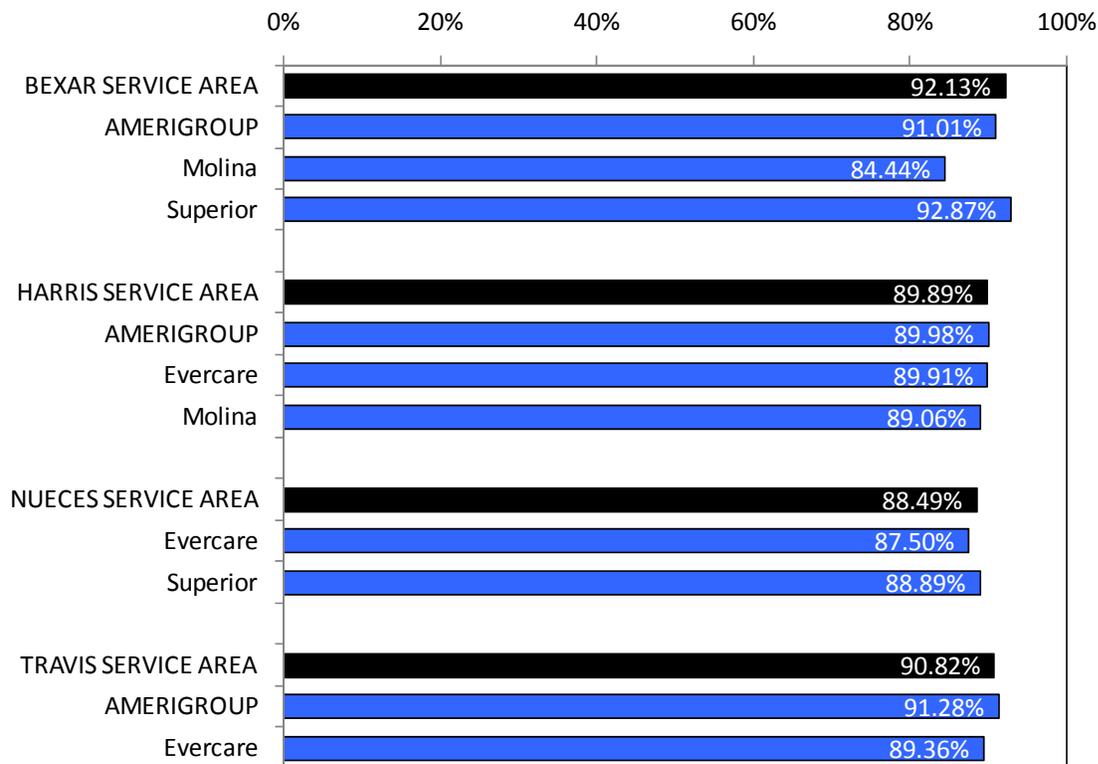
Reference: Table ASM-Special

**Figure 14. HEDIS® Use of Appropriate Medications for People with Asthma – STAR+PLUS Members 18 to 56 Years Old**



Reference: Table ASM-Special

**Figure 15. HEDIS® Use of Appropriate Medications for People with Asthma – STAR+PLUS Members 18 to 56 Years Old, by Service Area**



Reference: Table ASM-Special

## **Diabetes Care**

The HEDIS® Comprehensive Diabetes Care measure provides the percentage of STAR+PLUS program members 18 to 75 years of age with diabetes (type 1 and 2) who had hemoglobin A1c (HbA1c) testing, eye exams, LDL-C screenings, and medical attention for diabetic nephropathy during the measurement period. HEDIS® technical specifications for the Comprehensive Diabetes Care measures allow for the use of administrative and medical record review data. Results shown were calculated using administrative data only. Note that only eye exams conducted by a vision specialist are counted as eye exam visits.

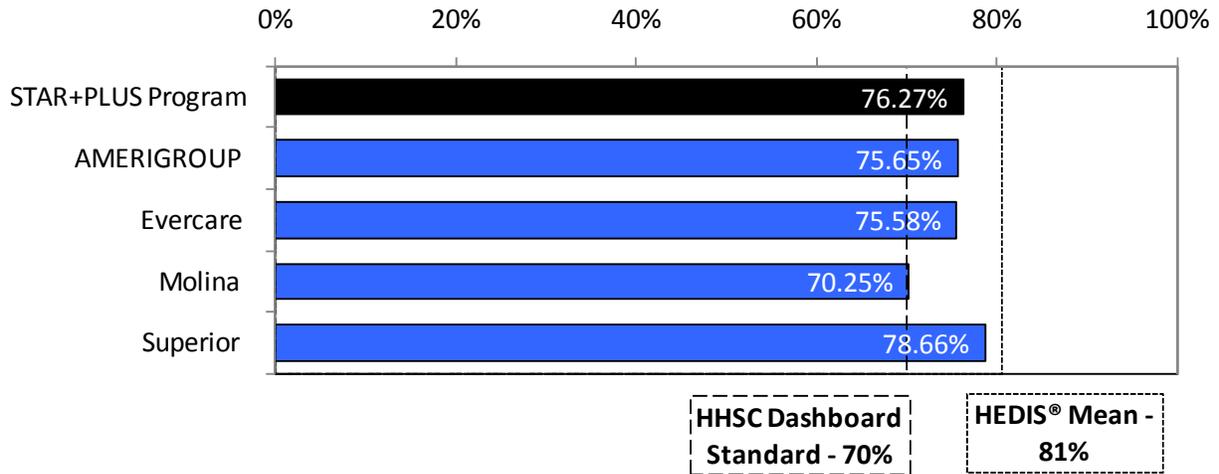
**Figures 16 through 19** provide results for each of the four Comprehensive Diabetes Care submeasures, distributed by MCO. **Table 13** provides results for all four sub-measures by Service Area.

### **The STAR+PLUS Program and MCOs.**

- **HbA1c Testing.** Seventy-six percent of STAR+PLUS members with diabetes received HbA1c testing, which is below the HEDIS® average of 81 percent for this measure. All MCOs met the HHSC Dashboard standard of 70 percent for this measure, with the highest rate observed for Superior at 79 percent.
- **Eye Exams.** Thirty-nine percent of STAR+PLUS members with diabetes received an eye exam, which is lower than the HEDIS® average of 52 percent for this measure. None of the STAR+PLUS MCOs met the HHSC Dashboard standard of 45 percent for this measure, with rates ranging from 34 percent in Molina to 43 percent in Superior.
- **LDL-C Screening.** Seventy-six percent of STAR+PLUS members with diabetes received LDL-C screening, which is slightly above the HEDIS® average of 74 percent for this measure. All MCOs met the HHSC Performance Indicator Dashboard standard of 65 percent for this measure, with rates ranging from 69 percent in Molina to 77 percent in Superior.
- **Monitoring for Nephropathy.** Seventy-eight percent of STAR+PLUS members with diabetes were monitored for diabetic nephropathy, which is slightly above the HEDIS® average of 76 percent for this measure. MCO performance on this measure was comparable, with all MCOs exceeding the HHSC Performance Indicator Dashboard standard of 41 percent for this measure.

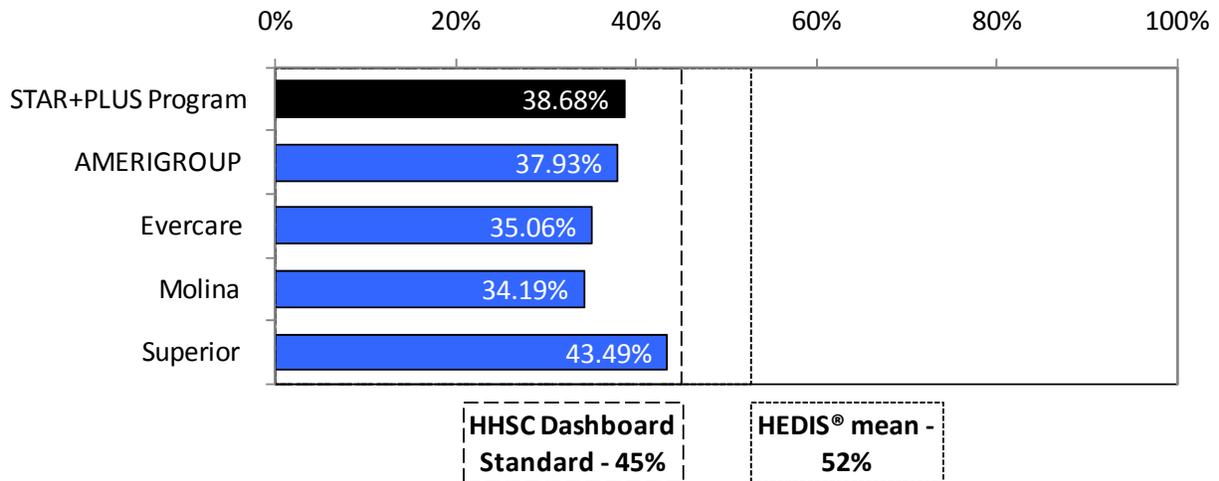
**STAR+PLUS Service Areas.** The quality of diabetes care was similar across the STAR+PLUS Service Areas, with rates varying by only a few percentage points for each diabetes submeasure.

**Figure 16. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had Hemoglobin A1c Testing**



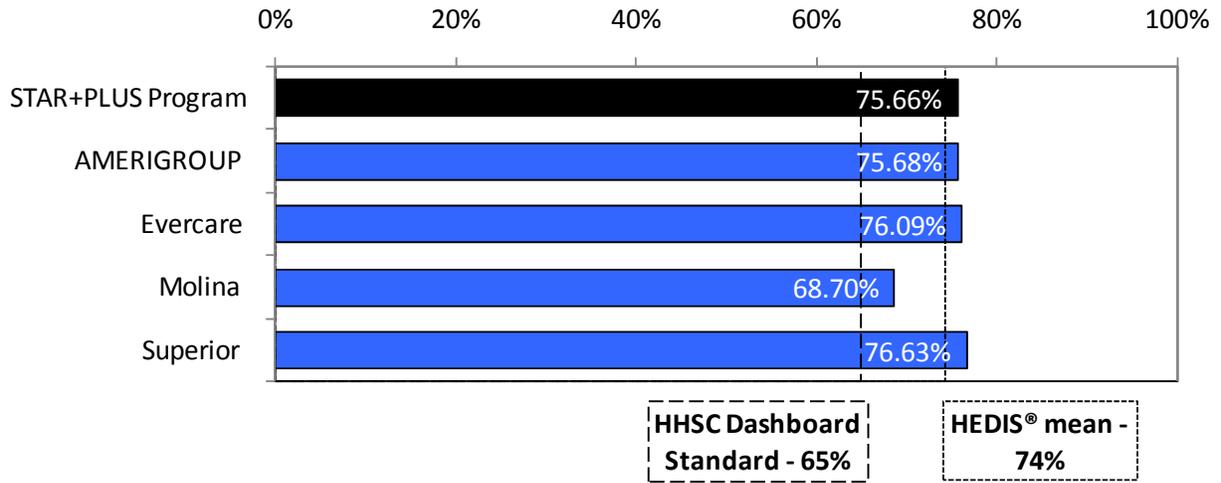
Reference: Table CDC

**Figure 17. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had an Eye Exam Performed**



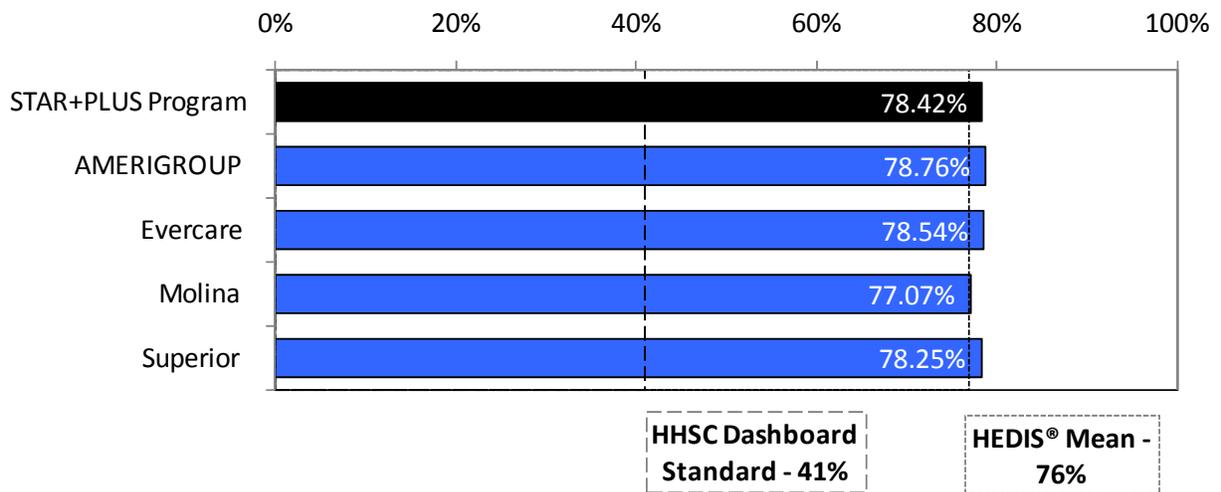
Reference: Table CDC

**Figure 18. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had LDL-C Screening**



Reference: Table CDC

**Figure 19. HEDIS® Comprehensive Diabetes Care - The Percentage of STAR+PLUS Members with Diabetes who had Medical Attention for Nephropathy**



Reference: Table CDC

**Table 13. HEDIS® Comprehensive Diabetes Care in STAR+PLUS, by Service Area**

STAR+PLUS Service Area	HEDIS® Comprehensive Diabetes Care			
	HbA1c Testing	Eye Exams	LDL-C Screening	Monitoring for Nephropathy
BEXAR	76.52%	42.30%	74.88%	77.48%
HARRIS	75.00%	35.51%	76.10%	79.18%
NUECES	80.50%	39.82%	77.90%	77.80%
TRAVIS	75.89%	41.09%	72.78%	78.62%

Reference: Table CDC

## **Women’s Preventive Care and Screenings**

### **Cervical Cancer Screening**

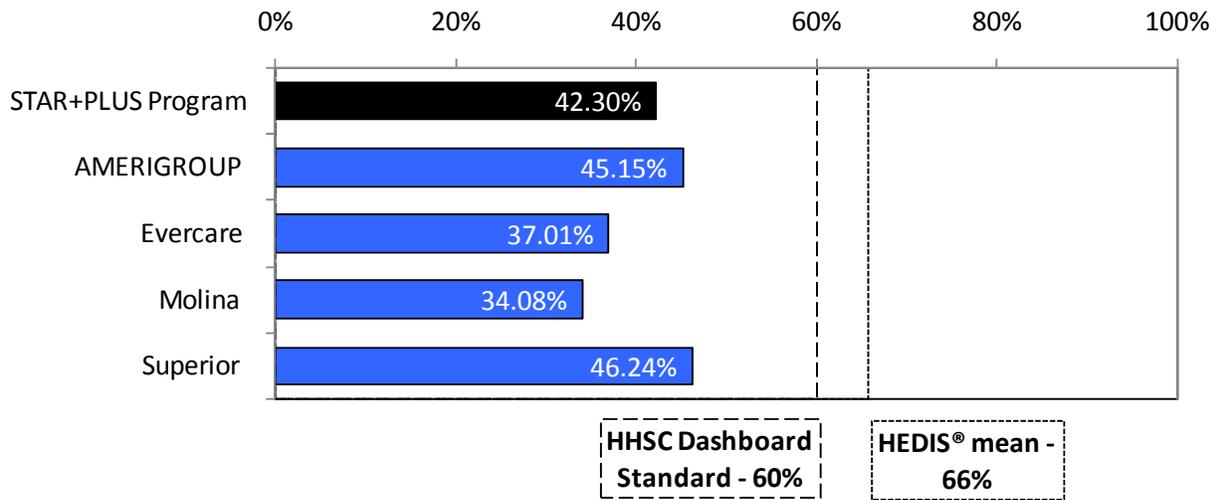
**Figure 20** provides results for the HEDIS® Cervical Cancer Screening measure, which represents the percentage of women between 21 and 64 years of age in the STAR+PLUS Program who received one or more Pap tests to screen for cervical cancer during the measurement period, distributed by MCO. **Figure 21** presents the results for this measure, by STAR+PLUS Service Area.

**The STAR+PLUS Program.** Of the 29,414 women eligible for this measure, 42 percent had a Pap test to screen for cervical cancer. The STAR+PLUS Program rate for cervical cancer screening is below the 10<sup>th</sup> percentile for Medicaid Managed Care Plans reporting to NCQA on this measure.

**STAR+PLUS MCOs.** Across the STAR+PLUS MCOs, the percentage of women screened for cervical cancer ranged from 34 percent in Molina to 46 percent in Superior (a difference in performance of 12 percentage points). None of the STAR+PLUS MCOs met the HHSC Performance Indicator Dashboard standard for this measure (60 percent).

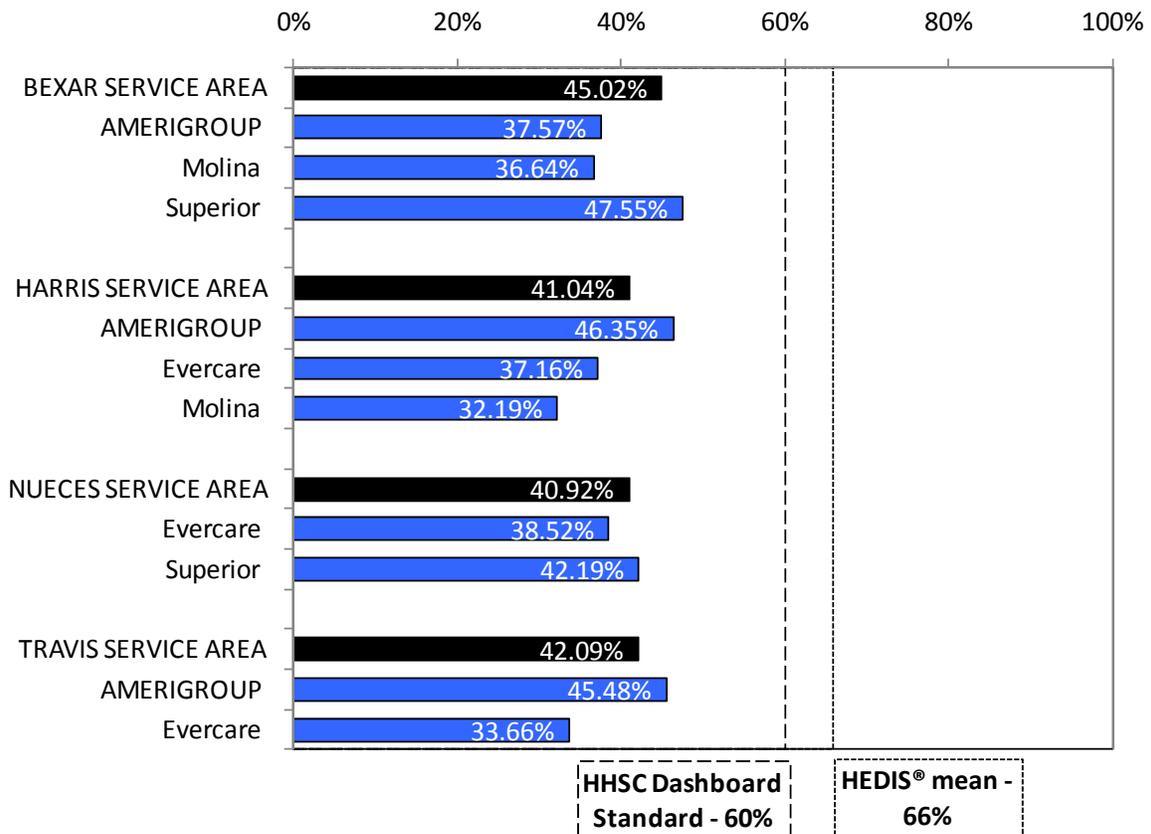
**STAR+PLUS Service Areas.** Performance on this measure was comparable across the STAR+PLUS Service Areas, but variable by MCOs operating within a particular Service Area. The largest difference in MCO rates of cervical cancer screening was in the Harris Service Area, ranging from 32 percent in Molina to 46 percent in AMERIGROUP (a 14 percentage point difference).

**Figure 20. HEDIS® Cervical Cancer Screening**



Reference: Table CCS

**Figure 21. HEDIS® Cervical Cancer Screening, by STAR+PLUS Service Area**



Reference: Table CCS

## Breast Cancer Screening

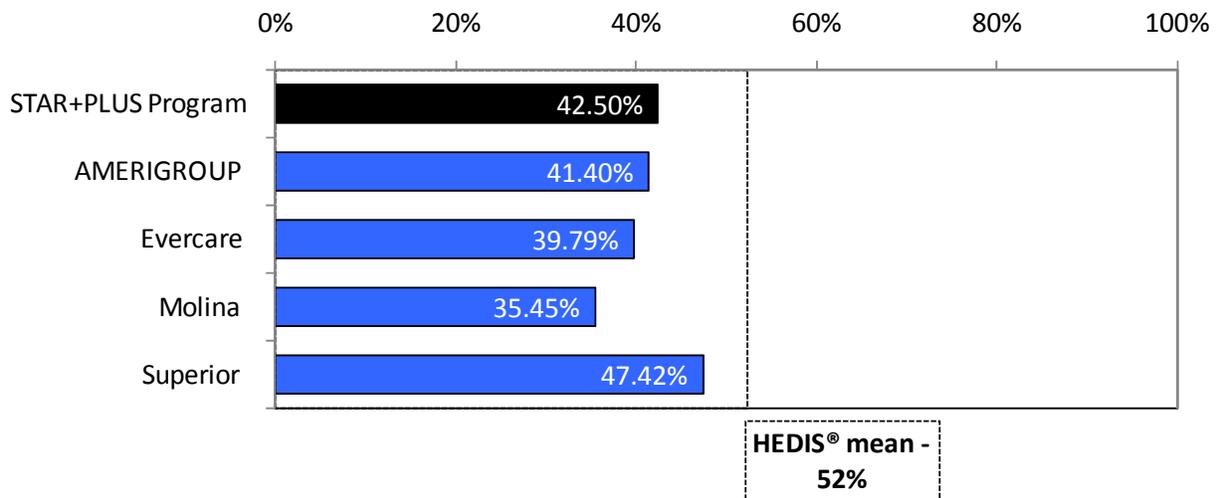
**Figure 22** provides results for the HEDIS® Breast Cancer Screening measure, which represents the percentage of women in STAR+PLUS who had a mammogram to screen for breast cancer during the measurement period. **Figure 23** provides the results for this measure, by STAR+PLUS Service Area.

**The STAR+PLUS Program.** Of the 17,585 women eligible for this measure, 43 percent had a mammogram screen for breast cancer. Overall, the STAR+PLUS program performed between the 10<sup>th</sup> and 25<sup>th</sup> percentile for Medicaid Managed Care Plans reporting to NCQA on this measure.

**STAR+PLUS MCOs.** Rates of mammogram screening ranged from a low of 35 percent in Molina to a high of 47 percent in Superior, with all of the STAR+PLUS MCOs performing below the HEDIS® mean of 52 percent.

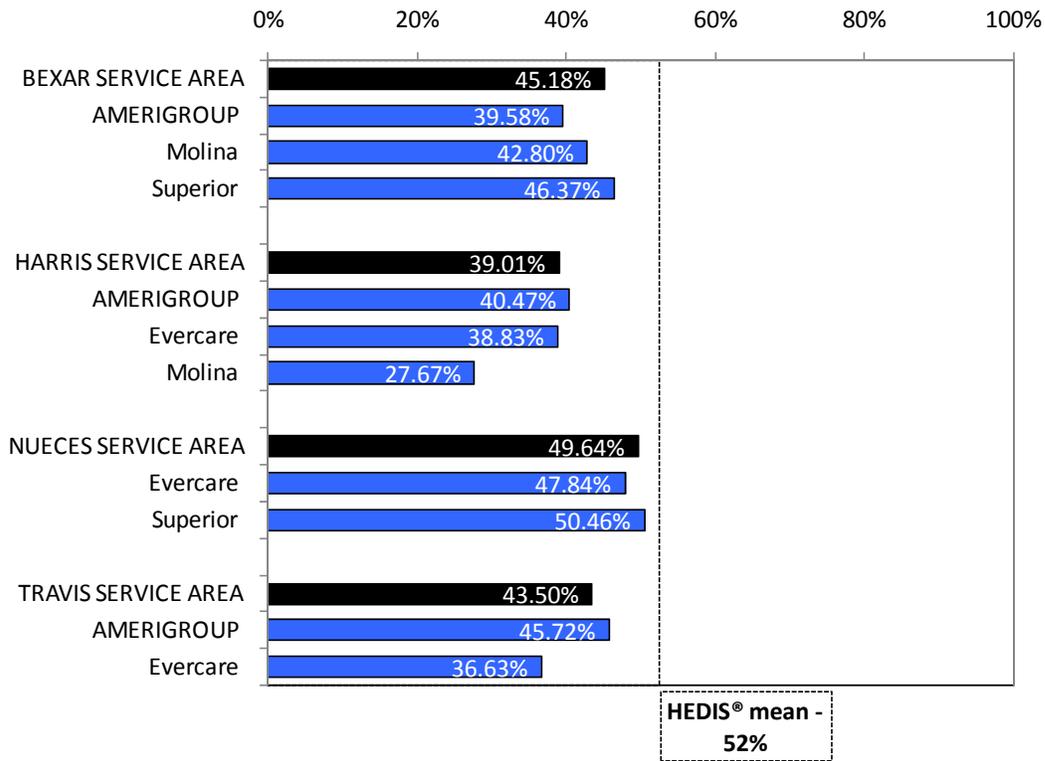
**STAR+PLUS Service Areas.** The Nueces Service Area had the highest rate of mammogram screening for breast cancer (50 percent), and the Harris Service Area had the lowest (39 percent), particularly for Molina members in this region (28 percent).

**Figure 22. HEDIS® Breast Cancer Screening**



Reference: Table BCS

**Figure 23. HEDIS® Breast Cancer Screening, by STAR+PLUS Service Area**



Reference: Table BCS

## ***Behavioral Health Care in STAR+PLUS***

### **Antidepressant Medication Management**

**Figure 24** provides the HEDIS® Antidepressant Medication Management (AMM) measure, which assesses the effectiveness of pharmacological management of major depression in individuals 18 years of age and older. **Figure 25** provides results for this measure by STAR+PLUS Service Area. This measure addresses both the acute and continuation phases of treatment:

- The *Effective Acute-Phase Treatment* measure shows the percentage of adults diagnosed with a new episode of major depression who were treated with an antidepressant medication and who remained on the medication for the entire 12 weeks of the acute treatment period.
- The *Effective Continuation-Phase Treatment* measure shows the percentage of adults diagnosed with a new episode of major depression who were treated with an antidepressant medication and who continued to take the medication for at least 180 days.

**The STAR+PLUS Program.** The results suggest that at least half of STAR+PLUS members with major depression are not receiving effective pharmacologic management for their disorder.

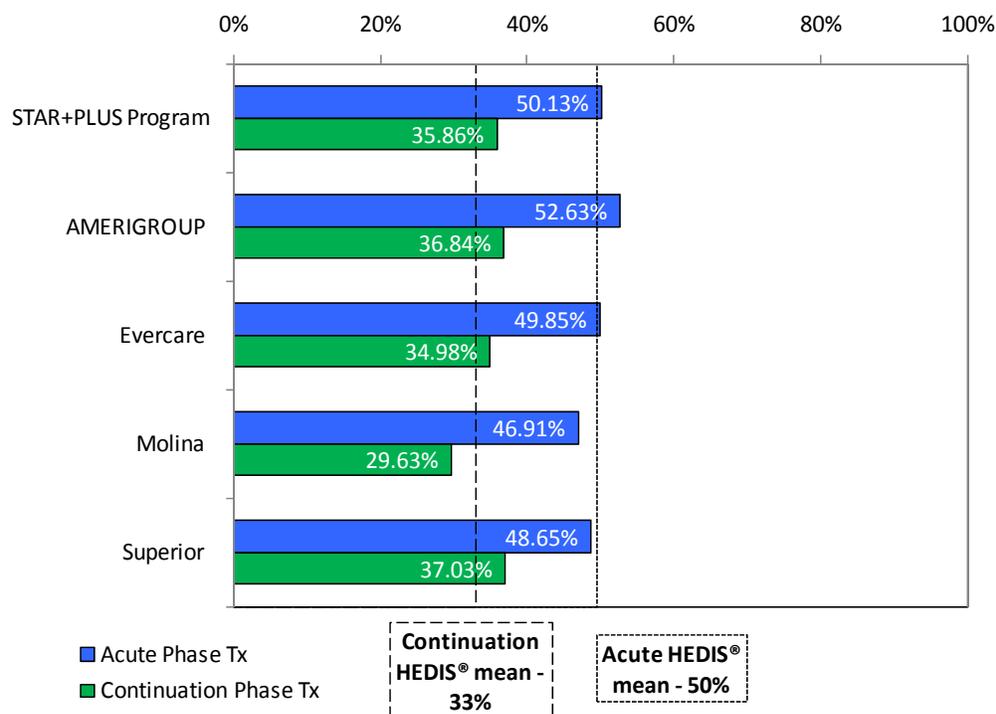
Only half of the adults in the STAR+PLUS program were effectively managed for major depression, remaining on antidepressant medication for at least 12 weeks during the acute phase of treatment (50 percent). Thirty-six percent continued to take antidepressant medication for at least six months (continuation phase of treatment).

Overall, the performance of the STAR+PLUS program in managing the antidepressant medication treatment of members with major depression was comparable to Medicaid Managed Care Plans reporting to the NCQA on this measure.

**STAR+PLUS MCOs.** MCO performance on this measure varied slightly (by between six and seven percentage points). The rate of members with major depression who remained on an antidepressant medication for 12 weeks ranged from 47 percent in Molina to 53 percent in AMERIGROUP. The rate of members with major depression who remained on an antidepressant medication for six months ranged from 30 percent in Molina to 37 percent in AMERIGROUP and Superior.

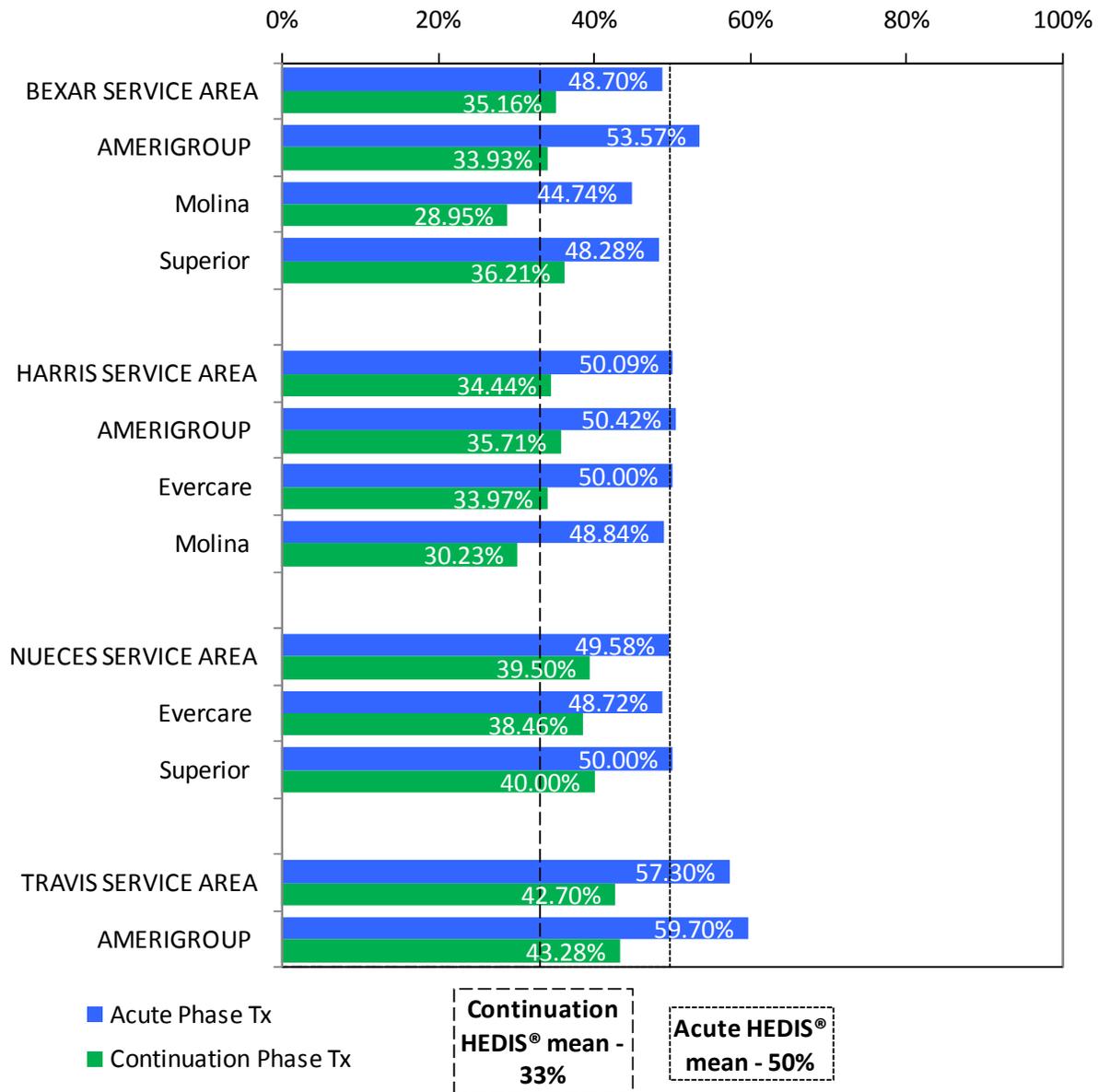
**STAR+PLUS Service Areas.** Members living in the Travis Service Area received slightly more effective pharmacologic management of major depression than members living in other regions of the State.

**Figure 24. HEDIS® Antidepressant Medication Management in STAR+PLUS**



Reference: Table AMM

**Figure 25. HEDIS® Antidepressant Medication Management, by STAR+PLUS Service Area**



Reference: Table AMM

**Follow-up Care after Hospitalization for Mental Illness**

**Figure 26** provides the percentage of STAR+PLUS program members six years of age or older who were hospitalized for mental illness and who had an outpatient visit, an intensive outpatient encounter, or a partial hospitalization with a provider during the measurement period, distributed by MCO. Two percentages are shown – one for follow-up within seven days of discharge, and

one for follow-up within 30 days of discharge. **Figure 27** provides results for this measure, distributed by STAR+PLUS Service Area.

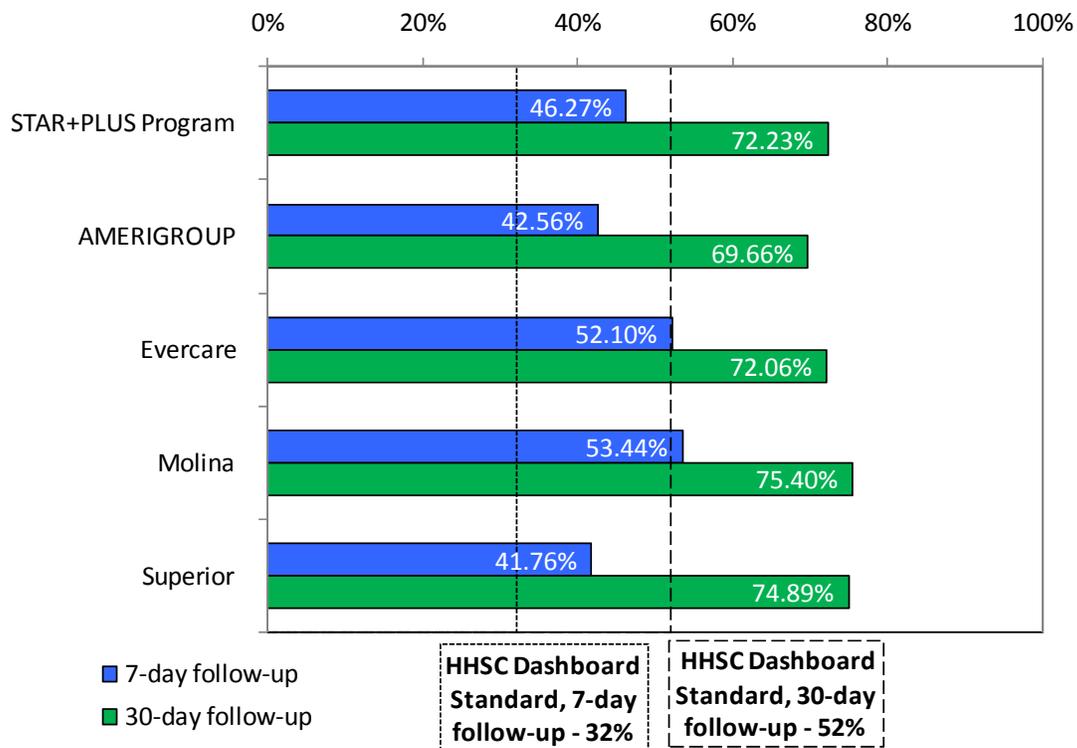
There were 4,418 STAR+PLUS members eligible for this measure.

**The STAR+PLUS Program.** Less than half of STAR+PLUS members hospitalized for mental illness (46 percent) had a follow-up visit with a provider within 7 days of discharge from the hospital. At the 30 day post-discharge period, a majority of these members (72 percent) had a follow-up visit with a provider.

**STAR+PLUS MCOs.** All MCOs met the HHSC Performance Dashboard standards of 32 percent for 7-day follow-up and 52 percent for 30-day follow-up.

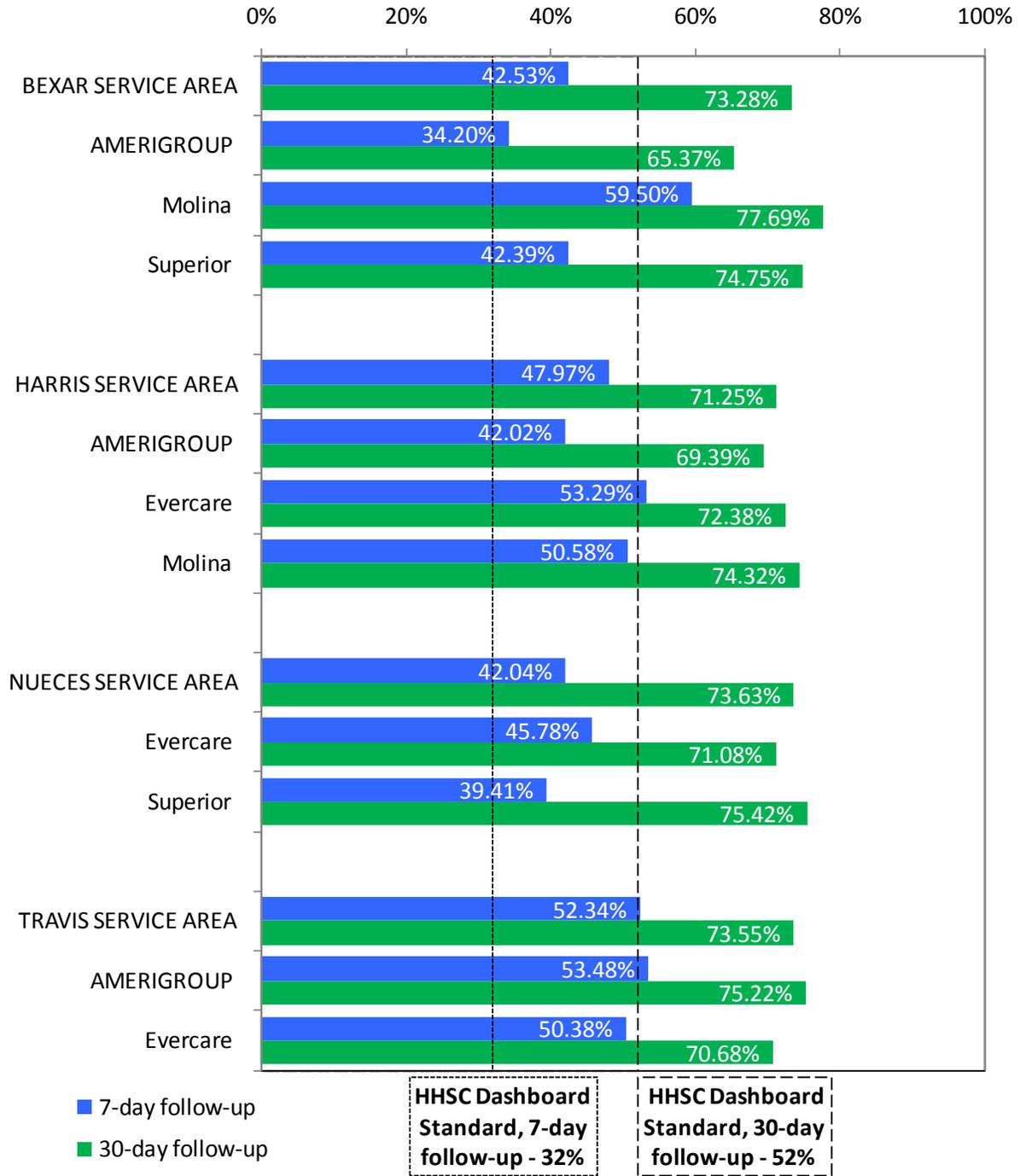
**STAR+PLUS Service Areas.** The Travis Service Area had the highest percentage of members who had follow-up care with a provider within 7 days of discharge after hospitalization for mental illness (52 percent). Both the Travis and Nueces Service Areas had the highest percentages of members who had follow-up care with a provider within 30 days of discharge after hospitalization for mental illness (74 percent).

**Figure 26. The Percentage of STAR+PLUS Members Receiving Follow-up Care within 7 and 30 Days After Hospitalization for Mental Illness**



Reference: Table FUH

**Figure 27. The Percentage of STAR+PLUS Members Receiving Follow-up Care within 7 and 30 Days After Hospitalization for Mental Illness, by Service Area**



Reference: Table FUH

## Readmission within 30 Days after an Inpatient Stay for Mental Health

The Readmission within 30 Days after an Inpatient Stay for Mental Health measure provides the percentage of members who were readmitted within 30 days following an inpatient stay for a mental health disorder. Mental health readmissions are frequently used as a measure of an adverse outcome, which potentially results from efforts to contain behavioral health care costs, such as reducing the initial length of stay.<sup>11</sup> For this measure, low rates of readmission indicate good performance.

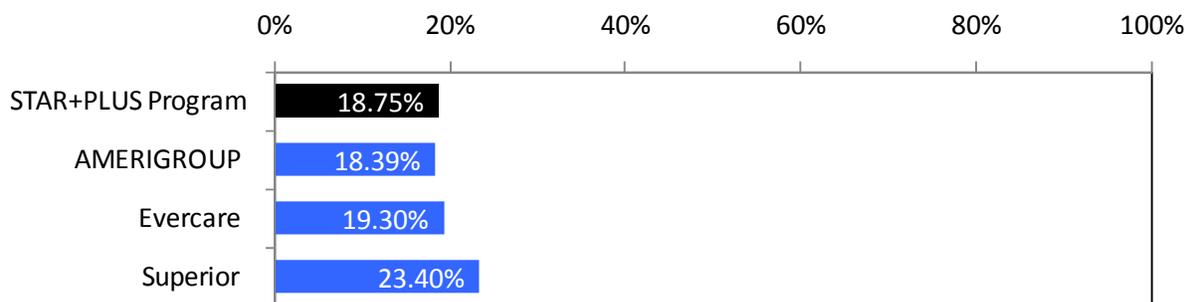
**Figures 28 and 29** provide the percentage of STAR+PLUS program members who were readmitted within 30 days following an inpatient stay for a mental health disorder, distributed by MCO. The figures depict the data separately for members 18 years of age and younger, and members 19 years of age and older. **Figure 30** provides the results for this measure for members 19 years of age and older, distributed by STAR+PLUS Service Area. Service Area rates are not provided for child and adolescent members (18 years of age and younger) due to low denominators.

**The STAR+PLUS Program.** One out of four STAR+PLUS adult members were readmitted to the hospital within 30 days following an inpatient stay for a mental health disorder (25 percent). The mental health readmission rate in the STAR+PLUS Program was slightly higher for adult members than for child and adolescent members (25 vs. 19 percent).

**STAR+PLUS MCOs.** Rates of mental health readmissions were comparable across the MCOs, especially for adult members.

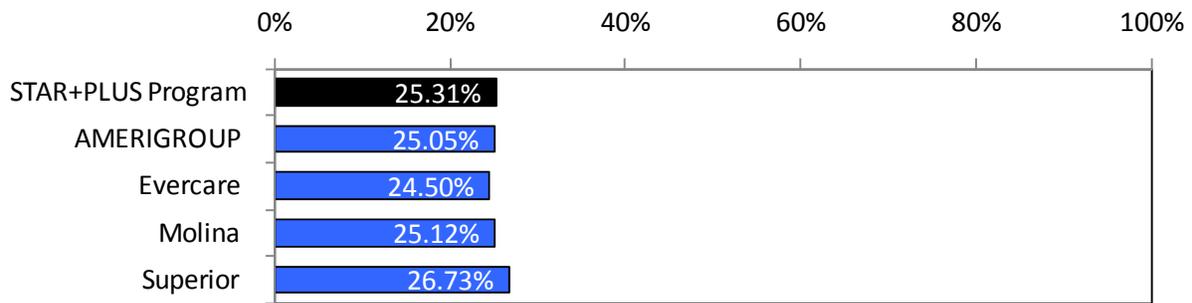
**STAR+PLUS Service Areas.** Mental health readmission rates for members 19 years of age and older ranged from 19 percent in the Nueces Service Area to 28 percent in the Bexar Service Area.

**Figure 28. The Percentage of STAR+PLUS Members (18 years of age and younger) Readmitted to the Hospital within 30 Days After an Inpatient Stay for Mental Health**



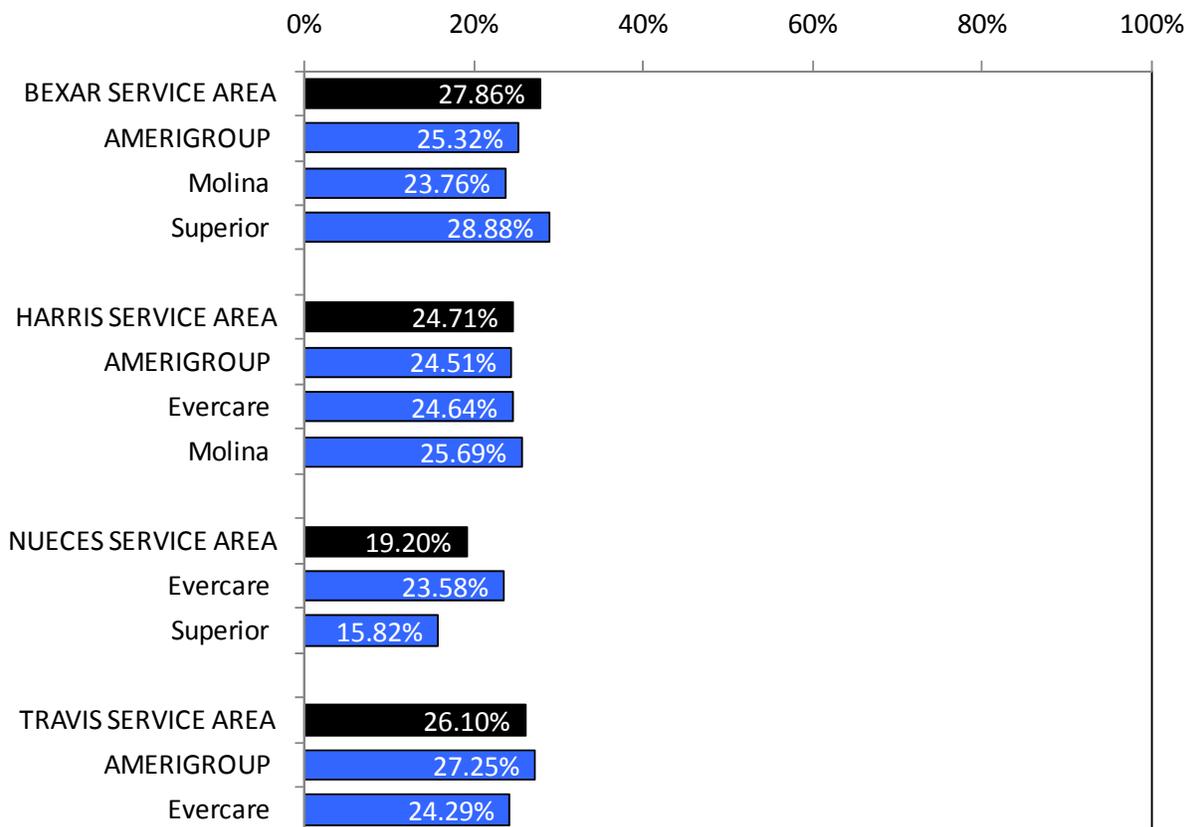
Reference: Table MHReadmit v2

**Figure 29. The Percentage of STAR+PLUS Adult Members (19+ Years Old) Readmitted to the Hospital within 30 Days After an Inpatient Stay for Mental Health**



Reference: Table MHReadmit v2

**Figure 30. The Percentage of STAR+PLUS Adult Members (19+ Years Old) Readmitted to the Hospital within 30 Days After an Inpatient Stay for Mental Health, by Service Area**



Reference: Table MHReadmit v2

## Appendix A: Detailed Methodology

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

A six-month time lag was used for the claims and encounter data. Prior analyses with Texas data showed that, on average, over 96 percent of claims and encounters are complete by that time period.

Information regarding the calculation of all measures included in this report can be found in the document "Quality of Care Measures Technical Specifications Report, July 2011."<sup>12</sup> This document, prepared by the Institute for Child Health Policy, provides specifications for HEDIS<sup>®</sup> and other quality of care measures.

Quality of care indicators in this report include: 1) The Healthcare Effectiveness Data and Information Set (HEDIS<sup>®</sup>) 2010 measures; 2) The Agency for Healthcare Research and Quality (AHRQ), Pediatric Quality Indicators (PQIs) and Prevention Quality Indicators (PDIs); and 3) measures developed by ICHP.

Rates for HEDIS<sup>®</sup> measures were calculated using National Committee for Quality Assurance (NCQA) certified software. In addition, an NCQA-certified auditor reviewed all of the results and provided letters of certification to the Institute for Child Health Policy. These letters and an official letter from NCQA providing their seal for the results are available from the Texas Health and Human Services Commission (HHSC).

Results for the HEDIS<sup>®</sup> measures for which the specifications were strictly followed are compared to other Medicaid programs. NCQA gathers and compiles data from Medicaid managed care plans nationally.<sup>13</sup> Submission of HEDIS<sup>®</sup> data to NCQA is a voluntary process; therefore, health plans that submit HEDIS<sup>®</sup> data are not fully representative of the industry. Health plans participating in NCQA HEDIS<sup>®</sup> reporting tend to be older, are more likely to be federally qualified, and are more likely to be affiliated with a national managed care company than the overall population of health plans in the United States.<sup>14</sup> NCQA reports the national results as a mean and at the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles. The Medicaid Managed Care Plans 2010 mean results are shown and labeled "HEDIS<sup>®</sup> Mean" in the figures.

At the request of the HHSC, the EQRO developed a methodology to allow for flexibility in the provider specialty codes when determining eligibility for HEDIS® measures. As in the prior reporting period (fiscal 2009), ICHP modified the NCQA specifications to lift provider constraints when determining eligibility for HEDIS® measures. Provider specialty codes are an important component for some HEDIS® measures and lifting the provider constraints may result in some rate inflation for these measures. For example, NCQA specifications require that a mental health provider be the provider of record for a beneficiary to be considered compliant with the HEDIS® measures for 7-day and 30-day follow-up after an inpatient mental health stay. The current methodology allows a visit with any provider to count toward compliance with the mental health follow-up measures.

The following measures rely on specific provider specialty codes, and are therefore affected by this change in methodology:

- Prenatal Care
- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
- Adolescent Well-Care Visits
- Follow-up After Hospitalization for Mental Illness

For these measures, the name HEDIS® has been removed from the titles as these measures do not adhere precisely to NCQA specifications, and it is likely that the results are inflated. Thus, the discussion of results for these measures will not include comparison to HEDIS® national Medicaid rates, derived from the Medicaid Managed Care Plans reporting to NCQA.

Pediatric Quality Indicators (PDIs) and Adult Prevention Quality Indicators (PQIs) developed by the Agency for Healthcare Research and Quality (AHRQ) were used to evaluate the performance of STAR+PLUS related to inpatient admissions for ambulatory care sensitive conditions (ACSCs). The AHRQ considers ACSCs “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”<sup>15</sup> The specifications used to calculate rates for these measures come from AHRQ’s PDI and PQI versions 4.2. Rates are calculated based on the number of hospital discharges divided by the number of people in the area (except for appendicitis and low birth weight). Unlike most other measures provided in this chart book, low quality indicator rates are desired as they suggest a better quality health care system outside the hospital setting.

Pediatric admissions for the following ACSCs are assessed: (1) Asthma; (2) Diabetes Short-Term Complications; (3) Gastroenteritis; (4) Perforated Appendix; and (5) Urinary Tract Infection. The age eligibility for these measures is up to age 17.

Adult admissions for the following ASCSs are assessed: (1) Diabetes Short-Term Complications; (2) Perforated Appendix; (3) Diabetes Long-Term Complications; (4) Chronic Obstructive Pulmonary Disease; (5) Hypertension; (6) Congestive Heart Failure; (7) Low Birth

Weight; (8) Dehydration; (9) Bacterial Pneumonia; (10) Urinary Tract Infection; (11) Angina without Procedure; (12) Uncontrolled Diabetes; (13) Adult Asthma; and (14) Rate of Lower Extremity Amputation among Patients with Diabetes. For these measures, adults are those individuals ages 18 or older.

In addition to the narrative and figures contained in this report, technical appendices were provided to HHSC that contain all of the data to support key findings.<sup>16</sup> The interested reader can review those for more details. The corresponding reference table is listed beneath each figure.

## Appendix B: AHRQ Quality Indicators

**Table B1. AHRQ Pediatric Quality Indicators**

<b>AHRQ Indicator Number</b>	<b>Indicator Name</b>	<b>Description</b>
PDI 14	Asthma Admission Rate	Number of admissions for long-term asthma per 100,000 population
PDI 15	Diabetes Short-term Complications Admission Rate	Number of admissions for diabetes short-term complications per 100,000 population
PDI 16	Gastroenteritis Admission Rate	Number of admissions for pediatric gastroenteritis per 100,000 population
PDI 17	Perforated Appendix Admission Rate	Number of admissions for perforated appendix as a share of all admissions for appendicitis within an area
PDI 18	Urinary Tract Infection Admission Rate	Number of admissions for urinary tract infection per 100,000 population

**Table B2. AHRQ Adult Prevention Quality Indicators**

<b>AHRQ Indicator Number</b>	<b>Indicator Name</b>	<b>Description</b>
PQI 1	Diabetes Short-term Complications Admission Rate	Number of admissions for diabetes short-term complications per 100,000 population
PQI 2	Perforated Appendix Admission Rate	Number of admissions for perforated appendix as a share of all admissions for appendicitis within an area
PQI 3	Diabetes Long-term Complications Admission Rate	Number of admissions for long-term diabetes per 100,000 population
PQI 5	Chronic Obstructive Pulmonary Disease Admission Rate	Number of admissions for COPD per 100,000 population
PQI 7	Hypertension Admission Rate	Number of admissions for hypertension per 100,000 population
PQI 8	Congestive Heart Failure Admission Rate	Number of admissions for CHF per 100,000 population

**Table B2 (continued)**

<b>AHRQ Indicator Number</b>	<b>Indicator Name</b>	<b>Description</b>
PQI 9	Low Birth Weight Rate	Number of low birth weight births as a share of all births in an area
PQI 10	Dehydration Admission Rate	Number of admissions for dehydration per 100,000 population
PQI 11	Bacterial Pneumonia Admission Rate	Number of admissions for bacterial pneumonia per 100,000 population
PQI 12	Urinary Tract Infection Admission Rate	Number of admissions for urinary tract infection per 100,000 population
PQI 13	Angina without Procedure Admission Rate	Number of admissions for angina without procedure per 100,000 population
PQI 14	Uncontrolled Diabetes Admission Rate	Number of admissions for uncontrolled diabetes per 100,000 population ( <i>Note: This indicator is designed to be combined with diabetes short-term complications.</i> )
PQI 15	Adult Asthma Admission Rate	Number of admissions for asthma in adults per 100,000 population
PQI 16	Rate of Lower Extremity Amputation Among Patients with Diabetes	Number of admissions for lower extremity amputation among patients with diabetes per 100,000 population

## Endnotes

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<sup>1</sup> ICHP (The Institute for Child Health Policy). 2011.<sup>a</sup> *Quality of Care Measures Technical Specifications Report, July 2011*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.

<sup>2</sup> The information that NCQA compiles for Medicaid Managed Care Programs can be viewed at [www.ncqa.org](http://www.ncqa.org).

<sup>3</sup> AHRQ (Agency for Healthcare Research and Quality). 2004. *AHRQ Quality Indicators—Guide to Prevention Quality Indicators: Hospital Admission for Ambulatory Care Sensitive Conditions*. Rockville, MD: AHRQ. Revision 4. (November 24, 2004). AHRQ Pub. No. 02-R0203.

<sup>4</sup> Liu, S. Y., and M. A. Clark. 2008. "Breast and cervical cancer screening practices among disabled women aged 40-75: Does quality of the experience matter?" *Journal of Women's Health* 17(8): 1321-1329.

<sup>5</sup> Yankaskas, B. C., P. Dickens, J. M. Bowling, M. P. Jarman, K. Luken, K. Salisbury, J. Halladay, and C. E. Lorenz. 2010. "Barriers to adherence to screening mammography among women with disabilities." *American Journal of Public Health* 100(5): 947-953.

<sup>6</sup> Gonzalez, R., J. F. Steiner, A. Lum, and P. H. Barrett. 1999. "Decreasing antibiotic use in ambulatory practice: Impact of a multidimensional intervention on the treatment of uncomplicated acute bronchitis in adults." *The Journal of the American Medical Association* 281(16): 1512-1519.

<sup>7</sup> Bodenheimer, T., E. H. Wagner, and K. Grumbach. 2002. "Improving primary care for patients with chronic illness." *The Journal of the American Medical Association* 288(14): 1775-1779.

<sup>8</sup> Bodenheimer, T., K. Lorig, H. Holman, and K. Grumbach. 2002. "Patient self-management of chronic disease in primary care." *The Journal of the American Medical Association* 306(10): 1055-1158.

<sup>9</sup> AHRQ (Agency for Healthcare Research and Quality). 2011. *AHRQ Quality Indicators—Pediatric Quality Indicator Comparative Data: Based on the 2008 Nationwide Inpatient Sample (NIS), Version 4.3*. Rockville, MD: AHRQ.

<sup>10</sup> AHRQ (Agency for Healthcare Research and Quality). 2011. *AHRQ Quality Indicators—Prevention Quality Indicator Comparative Data: Based on the 2008 Nationwide Inpatient Sample (NIS), Version 4.3*. Rockville, MD: AHRQ.

<sup>11</sup> Figueroa, R., J. Harman, and J. Engberg. 2004. "Use of claims data to examine the impact of length of inpatient psychiatric stay on readmission rates." *Psychiatric Services* 55(5): 560-565.

<sup>12</sup> ICHP, 2011.<sup>a</sup>

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<sup>13</sup> The information that NCQA compiles for Medicaid Managed Care Programs can be viewed at [www.ncqa.org](http://www.ncqa.org)

<sup>14</sup> Beaulieu, N.D., and A.M. Epstein. 2002. "National Committee on Quality Assurance Health-Plan Accreditation: Predictors, correlates of performance, and market impact." *Medical Care* 40 (4): 325-337.

<sup>15</sup> AHRQ, 2004.

<sup>16</sup> ICHP. 2011.<sup>b</sup> *Texas Medicaid Managed Care, STAR+PLUS, Quality of Care Report, Fiscal Year 2010: Technical Appendix*. Gainesville, FL: The Institute for Child Health Policy, University of Florida.