Executive Summary

The 2008 Annual Quality of Care Report provides an annual update of the quality of care provided to enrollees in the STAR+PLUS program in Texas. This update is for September 1, 2007, through August 31, 2008. Overall, enrollees in the STAR+PLUS program reported many positive results. Specifically, the STAR+PLUS program performed better than the state fiscal year 2008 HHSC Performance Indicator Dashboard standard in the following areas:

- Well-child visits in the 3rd-6th years of life (62 percent vs. 56 percent).
- Diabetic Nephropathy Care (81 percent vs. 41 percent).
- HbA1c Testing (72 percent vs. 70 percent).
- LDL-C Screening (71 percent vs. 65 percent).
- Follow-up within 7 days after hospitalization for mental illness (34 percent vs. 32 percent).
- Follow-up within 30 days after hospitalization for mental illness (64 percent vs. 52 percent).

Additionally, enrollees in the STAR+PLUS program received care at or above the national Healthcare Effectiveness Data and Information Set (HEDIS®) average in the following areas:

- Diabetic Nephropathy Care (81 percent vs. 74 percent).
- LDL-C Screening (71 percent vs. 71 percent).
- Follow-up within 30 days after hospitalization for mental illness (64 percent vs. 61 percent).

While high performance was achieved for many measures, for some measures performance was below the SFY 2008 HHSC Performance Indicator Dashboard standard:

- Adolescent well-care visit (35 percent vs. 38 percent).
- Cervical cancer screening (51 percent vs. 60 percent).
- Percent of Emergency Visits with a Primary Diagnosis of ACSC (37 percent vs. 32 percent).

It should also be noted that nearly all adult and pediatric STAR+PLUS program admission rates considerably exceeded national estimates reported by the Agency for Healthcare Research and Quality (AHRQ). These differences may be partly attributed to the fact that national rates are based on a general community population, while the STAR+PLUS program is primarily comprised of chronically ill or disabled individuals. Comparisons of selected conditions to the national estimates for admissions reported by AHRQ reveal:

- Adult inpatient admission rates for:
  - Chronic obstructive pulmonary disease (2,486 per 100,000 vs. 230 per 100,000 =11 times greater).
  - Hypertension (2,872 per 100,000 vs. 50 per 100,000 =57 times greater).
  - Congestive heart failure (3,340 per 100,000 vs. 489 per 100,000 =7 times greater).
  - Bacterial pneumonia (2,696 per 100,000 vs. 418 per 100,000 =6 times greater).
  - Angina without procedure (1,201 per 100,000 vs. 46 per 100,000 =26 times greater).
  - Uncontrolled diabetes (891 per 100,000 vs. 22 per 100,000 =41 times greater).
• Pediatric inpatient admission rates for:
  ● Asthma (715 per 100,000 vs. 181 per 100,000 =4 times greater).
  ● Urinary tract infections (243 per 100,000 vs. 53 per 100,000 =4 times greater).

Additionally, performance is less than the national HEDIS® average in the following areas:
• Adolescent well-care visit (35 percent vs. 42 percent).
• Cervical cancer screening (51 percent vs. 65 percent).
• HbA1c Testing (72 percent vs. 77 percent).
• Follow up within 7 days after hospitalization for mental illness (34 percent vs. 43 percent).
• Average cost of prescriptions per member per month ($297.39 vs. $37.80).
• Average number of prescriptions per member per year (42.53 vs. 10.3).

In the case of average cost and average number of prescriptions, the difference may again be attributed to the fact that the national rates developed by the AHRQ are based on a general community population. The STAR+PLUS population is comprised of individuals with chronic conditions and there is no limit to the number of monthly prescriptions in Medicaid Managed Care.

To address areas of less than desired performance noted above, Managed Care Operations has taken the following actions related to improving these rates:

**Internal Improvements**
1. Initiated a review of performance indicators targets for MCO performance measures to determine if the targets reflect current national quality assurance guidelines and are appropriate to the population served in STAR+PLUS.
2. Established analytical reviews, including trending of performance over time.
3. Established a process to share results of analytical reviews with managed care organizations and document actions taken to improve deficient performance.
4. Initiated quarterly performance management meetings with the External Quality Review Organization (EQRO) and HHSC staff that oversee contracts with MCOs to improve staff understanding and expertise.

**External Performance Gap Improvements**

5. Managed Care Operations, assisted by ICHP (the External Quality Review Organization) is implementing a plan to investigate program, MCO, individual beneficiary, and community factors that may be contributing to low performance in the following areas:
   ● Adolescent well-care visits.
   ● Cervical cancer screening.
   ● HbA1c Testing.
   ● Average cost of prescriptions per member per month.
   ● Average number of prescriptions per member per year.
This plan is being put in place to identify area of under-addressed needs in the following ways:

- Establish education and self-monitoring programs to reduce potentially avoidable admissions for diabetes.
- Establish outpatient monitoring improvement programs to reduce the percentage of emergency department visits involving a primary diagnosis of Ambulatory Care Sensitive Conditions (ACSCs). *This initiative in particular is important for STAR+PLUS, as many of the Adult Prevention Quality Indicators associated with inpatient admissions are tied directly to chronic conditions more common in elderly persons.*
- Establish educational programs to inform members about the importance of follow-up visits after hospitalization for mental illness.

Population groups for the focus for this investigation include:

- Adult and child enrollees with chronic health conditions.
- Individuals with one or more physical disabilities.
- Enrollees with serious mental illness (SMI) and substance use disorders (including those with dual-diagnoses).

In summary, the report highlights many areas of excellent or satisfactory performance. However, it also points to areas where performance needs to improve. For these areas, Managed Care Operations is establishing a plan to investigate the reasons for less than satisfactory performance and to work with managed care organizations to address those factors that will foster better performance in the future.

**Introduction**

**Purpose**

This report provides an annual update of the quality of care provided to enrollees in the STAR+PLUS Program in Texas. STAR+PLUS is a Texas Medicaid managed care program designed to provide health care, acute and long-term services and support through a managed care system. This update is for September 1, 2007 through August 31, 2008, covering State Fiscal Year (SFY) 2008. Results for the quality of care measures are presented at the individual managed care organization (MCO) and service delivery area (SDA) levels when sufficient data were available. When possible, comparisons to national-level results are provided. As requested by the Texas Health and Human Services Commission (HHSC), STAR+PLUS members dually enrolled in Medicaid and Medicare were excluded from this year’s analyses. Last year’s report (SFY 2007) included STAR+PLUS members dually enrolled in Medicaid and Medicare. Thus, comparisons of results between this year and last year should be made with caution, understanding that this year’s report is for the Medicaid population only.

Rates for the Healthcare Effectiveness Data and Information Set (HEDIS®) 2009 measures were calculated using National Committee for Quality Assurance (NCQA) certified software. HHSC approved the use of this software so that all HEDIS® results could be reported using a tool recognized by the NCQA. At HHSC’s request, the Institute for Child Health Policy (ICHP) developed a methodology to allow for flexibility in the provider specialty codes when determining eligibility for HEDIS® measures. As in the prior reporting period (SFY 2007), 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 seven-day and 30-day follow-up after an inpatient mental health stay. The current methodology allows any visit with a physician provider to count toward compliance with the mental health follow-up measures. The following HEDIS® measures rely on specific provider codes, and therefore are inflated by this change in methodology:

- HEDIS® Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life
- HEDIS® Adolescent Well-Care Visits
- HEDIS® Follow-Up after Hospitalization for Mental Illness

In the prior reporting period (SFY 2007), 12 months of data were not available for all health plans serving STAR+PLUS, and assessment of quality of care was limited to measures that had no minimum eligibility criteria. For the present report, one full year of data was available for all health plans, allowing for the calculation of the following measures:

- HEDIS® Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life
- HEDIS® Adolescent Well-Care Visits
- HEDIS® Cervical Cancer Screening
- HEDIS® Comprehensive Diabetes Care (Administrative Component Only)

This report does not include charts for hybrid measures that rely on medical record review because of unavailability of data. These measures include HEDIS® Comprehensive Diabetes Care (record review components) and HEDIS® Controlling High Blood Pressure. Results for these measures will be provided in an addendum as the data become available.

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 the claims and encounters are complete by that time period.

This chart book presents the following information:

1) Descriptive Results
   - Total Unduplicated Members
   - Total Unduplicated Members by Race/Ethnicity

2) AHRQ Prevention and Pediatric Quality Indicators
   - AHRQ Adult Prevention Quality Indicators (PQIs)
   - AHRQ Pediatric Quality Indicators (PQIs)

3) Quality of Care
• HEDIS® Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life
• HEDIS® Adolescent Well-Care Visits
• HEDIS® Cervical Cancer Screening
• HEDIS® Comprehensive Diabetes Care (Administrative Component Only)
• HEDIS® Follow-Up after Hospitalization for Mental Illness
• Readmission within 30 Days after an Inpatient Stay for Mental Health
• HEDIS® Outpatient Drug Utilization – Average Cost of Prescriptions per Member per Month
• HEDIS® Outpatient Drug Utilization – Average Number of Prescriptions per Member per Year
• Percent of Emergency Department Visits with a Primary Diagnosis of an Ambulatory Care Sensitive Condition

The charts provide results for the above listed indicators, distributed by MCO and by MCO/SDA, allowing for comparison of findings across the four health plans that serve the STAR+PLUS Program.

Data Sources and Measures

Three data sources were used to calculate the quality of care indicators: (1) member-level enrollment information, (2) member-level health care claims/encounter data, and (3) member-level pharmacy data. The enrollment files contain information about the member’s age, gender, the MCO in which the member is enrolled, and the number of months the member has been enrolled in the program. The member-level claims/encounter data contain 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, and refill information.

Information regarding the calculation of all measures included in this report can be found in the document “Quality of Care Measures Technical Report Specifications, October 2009.” This document, prepared by the Institute for Child Health Policy, provides specifications for HEDIS® and other quality of care measures.

Whenever possible, comparisons are provided to other Medicaid Programs, in addition to the overall Texas state mean. NCQA gathers and compiles data from Medicaid managed care plans nationally. Submission of HEDIS® data to NCQA is a voluntary process; therefore, health plans that submit HEDIS® data are not fully representative of the industry. Health plans participating in NCQA HEDIS® reporting tend to be older, are more likely to be federally qualified, and are more likely to be affiliated with a national managed care company than the overall population of health plans in the United States. NCQA reports the national results as a mean and at the 10th, 25th, 50th, 75th, and 90th percentiles for the participating plans. For comparison with the STAR+PLUS Program findings, the NCQA Medicaid Managed Care Plans 2008 mean results are shown and labeled.
“HEDIS® Mean” in the graphs. For measures that are non-HEDIS® quality of care indicators, comparisons are made to the HHSC 2008 Performance Indicator Dashboard standards. When appropriate, comparisons to the health plan’s performance in the prior year are provided, with the caveat that the populations are distinct, and therefore interpretations should be made with caution.

Indicators developed for the Agency for Healthcare Research and Quality (AHRQ) were used to evaluate the performance of STAR+PLUS MCOs related to inpatient admissions for various ambulatory care sensitive conditions (ACSCs). The AHRQ considers ACSCs “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.” The Quality Indicators use hospital inpatient discharge data and are measured as rates of admission to the hospital. Specifically, two sets of indicators were used in the analysis and are reported herein: Prevention Quality Indicators (PQIs) for adult enrollees and Pediatric Quality Indicators (PDIs) for child enrollees. The specifications used to calculate rates for these measures come from AHRQ’s PDI version 3.2 and PQI version 4.0. 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 of the health care system outside the hospital setting.

Adult admissions for the following ambulatory care sensitive conditions were assessed: (1) Diabetes Short-term Complications; (2) Diabetes Long-term Complications; (3) Chronic Obstructive Pulmonary Disease; (4) Hypertension; (5) Congestive Heart Failure; (6) Dehydration; (7) Bacterial Pneumonia; (8) Urinary Tract Infection; (9) Angina without Procedure; (10) Uncontrolled Diabetes; (11) Adult Asthma; and (12) Rate of Lower Extremity Amputation among Patients with Diabetes. Individuals age 18 or older were considered in the calculations for these measures. The denominators for both perforated appendix and low birth weight were below 30; therefore these measures are not reported this year.

For children, there are four quality indicators measuring pediatric admissions for the following ambulatory care sensitive conditions: (1) Asthma; (2) Diabetes Short-term Complications; (3) Gastroenteritis; and (4) Urinary Tract Infection. The age eligibility for these measures is up to age 17. The denominator for the perforated appendix measure was less than 30; therefore this measure is not reported this year.

In addition to the narrative and graphs contained in this chart book, technical appendices were provided to HHSC that contain all of the data to support key findings. As previously noted, many, but not all, of the quality of care indicator results are presented for each MCO. Some results were not displayed for each MCO: (1) to facilitate ease of presentation and understanding of the material, (2) because the findings were similar for each MCO, and/or (3) because the denominator for a measure was less than 30 (low denominator). However, all of the results are contained in the technical appendices. The interested reader can review those for more details. The corresponding reference table is listed beneath each graph.
Chart 1. Total Unduplicated Members

STAR+PLUS MCOs - August, 2008

STAR+PLUS Unduplicated Members = 73,425

<table>
<thead>
<tr>
<th>MCO</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>27,129</td>
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<tr>
<td>Evercare</td>
<td>21,630</td>
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<tr>
<td>Molina</td>
<td>6,421</td>
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<tr>
<td>Superior</td>
<td>18,245</td>
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</table>

Reference: Table STAR+PLUS Table 1
Note: The eligibility figures used in the chart are for August 2008.

Key Points:

1. Chart 1 provides the total number of unduplicated members in the STAR+PLUS Program during August 2008, distributed by MCO. During the measurement period, there were 73,425 unduplicated members in the STAR+PLUS Program.

2. The percentage of members in each health plan was: AMERIGROUP (37 percent), Evercare (29 percent), Superior (25 percent) and Molina (9 percent).

3. Across all health plans, females accounted for 55 percent and males accounted for 45 percent of STAR+PLUS members.

4. STAR+PLUS Program enrollees had a mean age of 41.5 (standard deviation = 16.7).
Chart 2. Total Unduplicated Members - SDA Breakout

STAR+PLUS MCOs - August, 2008

STAR+PLUS Unduplicated Members = 73,425

Key Points:

1. Chart 2 provides the total number of unduplicated members in the STAR+PLUS Program during August 2008, distributed by MCO/SDA group. There were 10 MCO/SDA groups and four SDAs in fiscal year 2008.

2. The three MCO/SDA groups with the largest number of members were AMERIGROUP – Harris (26 percent), Evercare – Harris (24 percent), and Superior – Bexar (19 percent). Evercare – Travis had the fewest members (2 percent).

Reference: Table STAR+PLUS Table 1
Note: The eligibility figures used in the chart are for August 2008.
3. At the SDA level, Harris had the largest number of members (56 percent), followed by Bexar (26 percent), Nueces (10 percent), and Travis (9 percent). In the Harris SDA, 90 percent of STAR+PLUS members were in either AMERIGROUP or Evercare health plans and only 10 percent were in Molina. In Bexar SDA, 72 percent of STAR+PLUS members were in Superior health plan.
Chart 3. Total Unduplicated Members by Race/Ethnicity

STAR+PLUS MCOs - August, 2008

STAR+PLUS Unduplicated Members = 73,425

Reference: Table STAR+PLUS Table 2
Note: The eligibility figures used in the chart are for August 2008.

Key Points:

1. Chart 3 provides the distribution of STAR+PLUS members by race/ethnicity for August 2008.

2. STAR+PLUS members are racially and ethnically diverse. The majority of enrollees (65 percent) were either Hispanic (33 percent) or Black, non-Hispanic (32 percent). White, non-Hispanics accounted for 27 percent of enrollees, followed by a small percentage of Asians (3 percent) and American Indians (0.3 percent). Six percent of members were of unknown or other race/ethnicity.
**Chart 4. Total Unduplicated Members by Race/Ethnicity and MCO**

**STAR+PLUS MCOs - August, 2008**

![Chart showing unduplicated members by race/ethnicity and MCO]

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>AMERIGROUP</th>
<th>Evercare</th>
<th>Molina</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Non-Hispanic</td>
<td>6,818</td>
<td>6,164</td>
<td>1,689</td>
<td>5,040</td>
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<td>Black Non-Hispanic</td>
<td>10,901</td>
<td>8,669</td>
<td>2,029</td>
<td>1,680</td>
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<tr>
<td>Hispanic</td>
<td>6,256</td>
<td>4,764</td>
<td>2,180</td>
<td>10,725</td>
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<tr>
<td>American Indian</td>
<td>79</td>
<td>65</td>
<td>15</td>
<td>48</td>
</tr>
<tr>
<td>Asian</td>
<td>1,157</td>
<td>678</td>
<td>111</td>
<td>105</td>
</tr>
<tr>
<td>Unknown/Other</td>
<td>1,918</td>
<td>1,290</td>
<td>397</td>
<td>647</td>
</tr>
</tbody>
</table>

**STAR+PLUS Unduplicated Members = 73,425**

**Reference: Table STAR+PLUS Table 2**

Note: The eligibility figures used in the chart are for August 2008.

**Key Points:**

1. Chart 4 provides the racial/ethnic distribution of STAR+PLUS members by MCO using August 2008 eligibility information.

2. Superior had the highest percentage of Hispanic members (59 percent), followed by Molina (34 percent), AMERIGROUP (23 percent), and Evercare (22 percent).

3. Evercare and AMERIGROUP had the highest percentage of Black, non-Hispanic members, each with 40 percent. Superior had the lowest percentage of Black, non-Hispanic members (9 percent).

4. Within each racial/ethnic group, 45 percent of Hispanic members were in Superior health plan, followed by AMERIGROUP (26 percent), Evercare (20 percent) and Molina (9 percent). Eighty-four percent of Black, non-Hispanic members were either in AMERIGROUP (47 percent) or Evercare (37 percent) health plans. For White, non-Hispanic members, 35 percent were in AMERIGROUP, 31 percent were in Evercare, 26 percent were in Superior and 9 percent were in Molina.
Reference: Table STAR+PLUS PQI09
Note: Rates are per 100,000 enrollees ages 18 and older except for perforated appendix which is per 100 admissions for appendicitis and low birth weight which is per 100 births.
Note: The denominators for both perforated appendix and low birth weight were below 30; therefore these measures are not reported this year.

Key Points:

1. Chart 5A presents results for five of the 12 AHRQ Adult Prevention Quality Indicators (PQIs) addressed in this report. The remaining seven PQIs are shown in Chart 5B. Key points for both charts are provided under Chart 5B.
Chart 5B. AHRQ Adult Prevention Quality Indicators by MCO

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Universe for all measures = 75,511

<table>
<thead>
<tr>
<th>Indicator</th>
<th>All STAR+PLUS MCO Mean</th>
<th>AMERIGROUP</th>
<th>Evercare</th>
<th>Molina</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dehydration</td>
<td>635.67</td>
<td>612.88</td>
<td>617.44</td>
<td>468.14</td>
<td>748.55</td>
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<tr>
<td>Bacterial Pneumonia</td>
<td>2696.30</td>
<td>2503.83</td>
<td>2987.91</td>
<td>2340.68</td>
<td>2735.90</td>
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<tr>
<td>Urinary Tract Infection</td>
<td>1311.07</td>
<td>1244.44</td>
<td>1355.79</td>
<td>1208.09</td>
<td>1386.40</td>
</tr>
<tr>
<td>Angina without Procedure</td>
<td>1201.15</td>
<td>986.58</td>
<td>1101.04</td>
<td>1011.78</td>
<td>1692.15</td>
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<tr>
<td>Uncontrolled Diabetes</td>
<td>891.26</td>
<td>1027.69</td>
<td>796.79</td>
<td>377.53</td>
<td>991.04</td>
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<tr>
<td>Adult Asthma</td>
<td>1373.31</td>
<td>1603.20</td>
<td>1057.86</td>
<td>1117.49</td>
<td>1523.46</td>
</tr>
<tr>
<td>Lower-extremity Amputation in Diabetes Patients</td>
<td>172.16</td>
<td>168.17</td>
<td>146.80</td>
<td>181.21</td>
<td>205.59</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS PQI09

Note: Rates are per 100,000 enrollees ages 18 and older.

Key Points:

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

2. Charts 5A and 5B provide rates of inpatient admissions for 12 ambulatory care sensitive conditions among adults in the STAR+PLUS Program, 18 years and older, distributed by MCO. PQIs are per 100,000 enrollees for all conditions except for perforated appendix and low birth weight (not included in this report). Table 1 describes each of the AHRQ PQIs shown in Charts 5A and 5B.

3. STAR+PLUS Program admission rates for all conditions considerably exceeded national estimates reported by the AHRQ. These differences may be partly attributed to the fact that national rates are based on a general community population, while the STAR+PLUS Program is primarily comprised of chronically ill or disabled individuals. It should also be noted that the AHRQ national estimates for PQIs are based on data collected in 2004 and are area-level indicators, including both commercial and Medicaid populations.

4. The highest rates of admissions across the STAR+PLUS MCOs were for congestive heart failure (3,340 per 100,000), hypertension (2,872 per 100,000) bacterial pneumonia (2,696 per 100,000), and chronic obstructive pulmonary disease (2,486 per 100,000).
5. Comparisons of selected conditions to the national estimates for admissions reported by AHRQ reveal:
   - Chronic obstructive pulmonary disease: 2,486 per 100,000 in STAR+PLUS compared to 230 per 100,000 nationally (~11 times greater).
   - Hypertension: 2,872 per 100,000 in STAR+PLUS compared to 50 per 100,000 nationally (~57 times greater).
   - Congestive heart failure: 3,340 per 100,000 in STAR+PLUS compared to 489 per 100,000 nationally (~7 times greater).
   - Bacterial pneumonia: 2,696 per 100,000 in STAR+PLUS compared to 418 per 100,000 nationally (~6 times greater).
   - Angina without procedure: 1,201 per 100,000 in STAR+PLUS compared to 46 per 100,000 nationally (~26 times greater).
   - Uncontrolled diabetes: 891 per 100,000 in STAR+PLUS compared to 22 per 100,000 nationally (~41 times greater).

Note: The STAR+PLUS population is comprised primarily of chronically ill or disabled individuals. The national rates for these conditions are based on a general community population which makes it difficult to determine comparable benchmarks without a comprehensive study. At the present time, there are no comparable benchmarks for each of the above conditions for this population.

6. PQIs varied slightly across the MCOs.
   - AMERIGROUP had the highest rate for diabetes short-term complications, hypertension, congestive heart failure, uncontrolled diabetes and adult asthma.
   - Evercare had the highest rate for chronic obstructive pulmonary disease, and bacterial pneumonia.
   - Superior had the highest rate for diabetes long-term complications, dehydration, urinary tract infection, angina without procedure, and lower-extremity amputation in diabetes patients.

7. While improved ambulatory care is needed for all conditions assessed by the AHRQ PQIs, the greatest need for improvement is for uncontrolled diabetes and hypertension. Disease management services have been shown to reduce emergency room visits and inpatient hospitalizations for individuals with chronic health problems. For example, one disease management intervention for Medicaid recipients that paired individuals with highly trained disease managers providing telephone health counseling was successful in increasing patient self-management skills and reducing ACSC-related hospitalizations. Another program implemented a community-based approach to disease management targeting Spanish-speaking individuals with chronic health conditions such as diabetes. This program held ongoing classes taught by peer leaders in community settings and emphasized a culturally-based approach to disease management education and training. At the conclusion of the program, improvements were found in overall health, health behavior, and self-efficacy, coupled with lower rates of hospitalization among Hispanic participants. HHSC may wish to examine the factors that increase self-management skills among STAR+PLUS members and include these practices in their disease management programs to reduce ACSC-related hospitalizations.

8. Successful disease management programs often address the co-morbidity of disease. Research has shown that the risk for hospitalization for those with diabetes increases with the presence of other conditions such as liver disease, alcohol and drug abuse, and cancer. All MCOs that contract with HHSC have disease management programs for specific diseases, including diabetes.
Table 1. Adult Prevention Quality Indicators

<table>
<thead>
<tr>
<th>AHRQ Indicator Number</th>
<th>Indicator Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQI 1</td>
<td>Diabetes Short-term Complications Admission Rate</td>
<td>Number of admissions for diabetes short-term complications per 100,000 population</td>
</tr>
<tr>
<td>PQI 2</td>
<td>Perforated Appendix Admission Rate</td>
<td>Number of admissions for perforated appendix as a share of all admissions for appendicitis within an area</td>
</tr>
<tr>
<td>PQI 3</td>
<td>Diabetes Long-term Complications Admission Rate</td>
<td>Number of admissions for long-term diabetes per 100,000 population</td>
</tr>
<tr>
<td>PQI 5</td>
<td>Chronic Obstructive Pulmonary Disease Admission Rate</td>
<td>Number of admissions for COPD per 100,000 population</td>
</tr>
<tr>
<td>PQI 7</td>
<td>Hypertension Admission Rate</td>
<td>Number of admissions for hypertension per 100,000 population</td>
</tr>
<tr>
<td>PQI 8</td>
<td>Congestive Heart Failure Admission Rate</td>
<td>Number of admissions for CHF per 100,000 population</td>
</tr>
<tr>
<td>PQI 9</td>
<td>Low Birth Weight Rate</td>
<td>Number of low birth weight births as a share of all births in an area</td>
</tr>
<tr>
<td>PQI 10</td>
<td>Dehydration Admission Rate</td>
<td>Number of admissions for dehydration per 100,000 population</td>
</tr>
<tr>
<td>PQI 11</td>
<td>Bacterial Pneumonia Admission Rate</td>
<td>Number of admissions for bacterial pneumonia per 100,000 population</td>
</tr>
<tr>
<td>PQI 12</td>
<td>Urinary Tract Infection Admission Rate</td>
<td>Number of admissions for urinary infection per 100,000 population</td>
</tr>
<tr>
<td>PQI 13</td>
<td>Angina without Procedure Admission Rate</td>
<td>Number of admissions for angina without procedure per 100,000 population</td>
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<td>PQI 14</td>
<td>Uncontrolled Diabetes Admission Rate</td>
<td>Number of admissions for uncontrolled diabetes per 100,000 population (Note: This indicator is designed to be combined with diabetes short-term complications.)</td>
</tr>
<tr>
<td>PQI 15</td>
<td>Adult Asthma Admission Rate</td>
<td>Number of admissions for asthma in adults per 100,000 population</td>
</tr>
<tr>
<td>PQI 16</td>
<td>Rate of Lower Extremity Amputation Among Patients with Diabetes</td>
<td>Number of admissions for lower extremity amputation among patients with diabetes per 100,000 population</td>
</tr>
</tbody>
</table>
Reference: Table STAR+PLUS PDI09
Note: Rates are per 100,000 enrollees up to 17 years of age. The denominator for the perforated appendix measure was less than 30; therefore this measure is not reported this year.

Key Points:

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

2. Chart 6 provides PDI rates for asthma, diabetes short-term complications, gastroenteritis, and urinary tract infection among children and adolescents in the STAR+PLUS Program, up to age 17, distributed by MCO. Rates are per 100,000 enrollees for all conditions in Chart 6. Table 2 describes each of the four AHRQ PDIs shown here.

3. STAR+PLUS Program admission rates for three of four conditions considerably exceeded national estimates reported by the AHRQ. These differences may be attributed to the fact that national rates are based on a general community population, while the STAR+PLUS Program is primarily comprised of chronically ill or disabled individuals. It should also be noted that the AHRQ national estimates for PDIs are based on...
data collected in 2004 and are area-level indicators, including both commercial and Medicaid populations. The STAR+PLUS Program rate for diabetes short-term complications (26 per 100,000) was slightly below the AHRQ’s national PDI rate (29 per 100,000).

4. The highest rate of hospital admissions for ACSC among children and adolescents in the STAR+PLUS Program were for asthma (715 per 100,000), followed by urinary tract infections (243 per 100,000) and gastroenteritis (210 per 100,000). Asthma admission rates in the STAR+PLUS Program were nearly four times greater than the national average of 181 per 100,000. Urinary tract infection admission rates in the program were more than four times greater than the national average of 53 per 100,000.

5. PDI rates varied considerably across the four MCOs.

   a. The asthma admission rate in Superior (1,380 per 100,000) was considerably higher than the STAR+PLUS Program average (715 per 100,000). Evercare had the lowest asthma admissions rate (369 per 100,000).

   b. The diabetes short-term complications admission rate was considerably higher in Superior (80 per 100,000) than the STAR+PLUS Program average (26 per 100,000). There were no admissions for diabetes short-term complications among children and adolescents in Evercare and Molina.

   c. Gastroenteritis admission rates were considerably greater than the STAR+PLUS Program average (210 per 100,000) in Molina (750 per 100,000).

   d. Urinary tract infection admission rates were highest in Molina (375 per 100,000) and lowest in AMERIGROUP (174 per 100,000).

Table 2. AHRQ Pediatric Quality Indicators

<table>
<thead>
<tr>
<th>AHRQ Indicator Number</th>
<th>Indicator Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDI 14</td>
<td>Asthma Admission Rate</td>
<td>Number of admissions for long-term asthma per 100,000 population</td>
</tr>
<tr>
<td>PDI 15</td>
<td>Diabetes Short-term Complications Admission Rate</td>
<td>Number of admissions for diabetes short-term complications per 100,000 population</td>
</tr>
<tr>
<td>PDI 16</td>
<td>Gastroenteritis Admission Rate</td>
<td>Number of admissions for pediatric gastroenteritis per 100,000 population</td>
</tr>
<tr>
<td>PDI 17</td>
<td>Perforated Appendix Admission Rate</td>
<td>Number of admissions for perforated appendix as a share of all admissions for appendicitis within an area</td>
</tr>
<tr>
<td>PDI 18</td>
<td>Urinary Tract Infection Admission Rate</td>
<td>Number of admissions for urinary infection per 100,000 population</td>
</tr>
</tbody>
</table>
Chart 7. HEDIS® Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Enrollees in Age Group = 992

<table>
<thead>
<tr>
<th>MCO</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>60.34%</td>
</tr>
<tr>
<td>Evercare</td>
<td>56.72%</td>
</tr>
<tr>
<td>Molina</td>
<td>70.18%</td>
</tr>
<tr>
<td>Superior</td>
<td>64.53%</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS W3409

Key Points:

1. Chart 7 provides the percentage of STAR+PLUS enrollees between three and six years old who received one or more well-child visits with a physician provider during the measurement period, distributed by MCO. Note that the HEDIS® measure specifies visits with a primary care practitioner. After lifting provider constraints, the results shown here are therefore slightly inflated, which should be taken into consideration when making comparisons with the national HEDIS® mean.

2. The STAR+PLUS Program overall (62 percent) and all MCOs performed above the SFY 2008 HHSC Performance Indicator Dashboard standard of 56 percent for this measure. The percentage of children between three and six years old having a well-child during this period ranged from 57 percent in Evercare to 70 percent in Molina.

3. Molina (70 percent) and Superior (65 percent) performed at or above the above the national HEDIS® mean (65 percent) for this measure.
Chart 8. HEDIS® Adolescent Well-Care Visits

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

<table>
<thead>
<tr>
<th>MCO</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>34.60%</td>
</tr>
<tr>
<td>Evercare</td>
<td>28.20%</td>
</tr>
<tr>
<td>Molina</td>
<td>47.28%</td>
</tr>
<tr>
<td>Superior</td>
<td>43.39%</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS AWC09

Key Points:

1. Chart 8 provides the percentage of STAR+PLUS enrollees 12 to 21 years old who received one or more comprehensive adolescent well-care visits with a physician provider during the measurement period, distributed by MCO. Note that the HEDIS® measure specifies visits with a primary care practitioner or OB/GYN practitioner. After lifting provider constraints, the results shown here are therefore slightly inflated, which should be taken into consideration when making comparisons with the national HEDIS® mean.

2. The STAR-PLUS Program (35 percent) performed below both the national HEDIS® mean (42 percent) and the SFY 2008 HHSC Performance Indicator Dashboard standard of 38 percent for adolescent well-care visits.

3. Superior (43 percent) and Molina (47 percent) were both above the national HEDIS® mean (42 percent) and the SFY 2008 HHSC Performance Indicator Dashboard standard (38 percent) for this measure.
4. These findings suggest a need for increased adolescent well-care visits, particularly in Evercare (28 percent), but also in AMERIGROUP (35 percent), each of which was below the national HEDIS® mean (42 percent) and the SFY 2008 HHSC Performance Indicator Dashboard standard (38 percent) for this measure.
**Chart 9. HEDIS® Cervical Cancer Screening**

**STAR+PLUS MCOs - September 1, 2007 to August 31, 2008**

<table>
<thead>
<tr>
<th>MCO</th>
<th>Mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>50.45%</td>
</tr>
<tr>
<td>Evercare</td>
<td>49.44%</td>
</tr>
<tr>
<td>Molina</td>
<td>37.16%</td>
</tr>
<tr>
<td>Superior</td>
<td>57.66%</td>
</tr>
</tbody>
</table>

**STAR+PLUS Eligible Enrollees = 27,790**

Reference: Table STAR+PLUS CCS09

**Key Points:**

1. Chart 9 provides the percentage of women between 21 to 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. It should be noted that HEDIS® specifications for this measure allow women to be numerator compliant if they received a Pap test in the measurement year or during the two years prior to the measurement year. Because only one and a half years of historical data are available for the expansion area and the new health plans (except in AMERIGROUP and Evercare – Harris), lower rates in STAR+PLUS are expected, which should be taken into consideration when comparing STAR+PLUS rates with the national HEDIS® mean.

2. Results varied by health plan, ranging from 37 percent of women receiving cervical cancer screening in Evercare to 58 percent in Superior. The STAR+PLUS program overall (51 percent) and all MCOs performed below the national HEDIS® mean (65 percent) and the HHSC Performance Indicator Dashboard standard (60 percent) for cervical cancer screening in women.
Chart 10. HEDIS® Cervical Cancer Screening – SDA Breakout

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Eligible Enrollees = 27,790

Reference: Table STAR+PLUS CCS09

Key Points:

1. Chart 10 presents results for the HEDIS® Cervical Cancer Screening measure, distributed by MCO/SDA.

2. None of the MCO/SDA groups were at or above the national HEDIS® mean of 65 percent for this measure. Only Superior – Bexar (61 percent) was above the HHSC Performance Indicator Dashboard standard of 60 percent for this measure. Performance on this measure for MCO/SDA groups ranged from 33 percent in Molina - Harris to 61 percent in Superior - Bexar.
3. At the SDA level, all four SDAs were below the national HEDIS® mean (65 percent) and the HHSC Performance Indicator Dashboard standard of 60 percent for cervical cancer screening. Performance on this measure for SDA groups ranged from 49 percent in Harris to 57 percent in Bexar.

4. HHSC may wish to address the performance of the STAR+PLUS Program on the cervical cancer screening measure. Women in the STAR+PLUS Program have lower rates of cervical cancer screening than would be expected based on national averages. It should be noted that STAR+PLUS rates for cervical cancer screening may be lower than expected because only one and a half years of historical data were available for the expansion area and the new health plans. National averages for cervical cancer screening are based on women receiving a Pap test in the measurement year or during the two years prior to the measurement year (three years total). Thus, the rates of cervical cancer screening among female members of STAR+PLUS should be interpreted with caution.

5. Routine cervical cancer screening reduces the incidence of and mortality from cervical cancer. A number of studies have shown that a woman’s health status plays a role in whether she seeks and receives routine cervical cancer screening.11-12 For example, women with diabetes are less likely to receive screening tests for cervical cancer than women without diabetes. Unfortunately, women with diabetes and other chronic medical conditions often are those women at greatest risk for various types of cancer.13 Similarly, obesity and cancer screening studies have consistently found that obesity is associated with decreased rates of cervical cancer screening.14 Reasons for why women with physical health problems access cervical cancer screening services at lower rates than their healthy peers are complex, multifaceted, and specific to medical conditions. It has been suggested that chronic health problems like diabetes require ongoing health care services that may supersede more preventative measures such as cancer screenings. There are few studies that have identified the factors that prevent cancer screening among women with health problems. Thus, HHSC may wish to further examine such barriers while potentially targeting female enrollees, particularly those with chronic health problems, for education about the importance of practicing preventative health and seeking routine cervical cancer screenings.
Chart 11. HEDIS® Comprehensive Diabetes Care (Administrative component only)

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Eligible = 13,329

<table>
<thead>
<tr>
<th></th>
<th>All STAR+PLUS MCO Mean</th>
<th>HEDIS® Mean</th>
<th>AMERIGROUP</th>
<th>Evercare</th>
<th>Molina</th>
<th>Superior</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Diabetic Nephropathy</td>
<td>80.94%</td>
<td>74.40%</td>
<td>80.14%</td>
<td>78.92%</td>
<td>84.78%</td>
<td>82.87%</td>
</tr>
<tr>
<td>% HbA1c Testing</td>
<td>72.23%</td>
<td>77.40%</td>
<td>71.51%</td>
<td>70.38%</td>
<td>66.57%</td>
<td>75.31%</td>
</tr>
<tr>
<td>% LDL-C Screening</td>
<td>70.77%</td>
<td>70.90%</td>
<td>71.25%</td>
<td>69.07%</td>
<td>63.73%</td>
<td>72.82%</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS CDC09

Key Points:

1. Chart 11 provides the percentage of STAR+PLUS Program enrollees 18 to 75 years of age with diabetes (type 1 and 2) who had medical attention for diabetic nephropathy, hemoglobin A1c (HbA1c) testing, and LDL-C screening during the measurement period, distributed by MCO. HEDIS® technical specifications for the Comprehensive Diabetes Care measures allow for the use of administrative and medical record review. Results shown in Charts 13 and 14 were calculated using administrative data only.

2. Enrollees with diabetes in the STAR+PLUS Program received care at or above the national HEDIS® means for diabetic nephropathy and LDL-C screening. The percentage of STAR+PLUS program members receiving diabetic nephropathy, HbA1c testing, and LDL-C screening exceeded the HHSC Performance Indicator Dashboard standards for each measure.

3. Among STAR+PLUS Program enrollees with diabetes, the program exceeded the national HEDIS® mean of 74 percent and the HHSC Performance Indicator Dashboard standard of 41 percent, with 81 percent of program enrollees monitored for diabetic nephropathy. In addition, all MCOs performed at or above the national HEDIS® mean and the HHSC Performance Indicator Dashboard standard for this measure.

4. The STAR+PLUS Program and all MCOs performed slightly below the national HEDIS® mean of 77 percent for HbA1c testing. However, AMERIGROUP, Evercare, and Superior exceeded the HHSC Performance Indicator Dashboard standard (70 percent) for this measure.
5. The STAR+PLUS Program performed comparably to the national HEDIS® mean of 71 percent for LDL-C screening. Among the four MCOs, AMERIGROUP and Superior exceeded the national HEDIS® mean, and Evercare and Molina performed below the national HEDIS® mean. Only Molina performed below the HHSC Performance Indicator Dashboard standard of 65 percent for this measure.
Chart 12. HEDIS® Comprehensive Diabetes Care (Administrative component only) – SDA Breakout

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Eligible = 13,329

Key Points:

1. Chart 12 presents results for the HEDIS® Comprehensive Diabetes Care measure, distributed by MCO/SDA.

2. The percentage of diabetics monitored for diabetic nephropathy ranged from 70 percent in Evercare – Nueces to 85 percent in Molina – Harris. With the exception of Evercare – Nueces, all MCO/SDAs performed at or above the national HEDIS® mean of 74 percent for the percentage of diabetics monitored for diabetic nephropathy. All MCO/SDA groups exceeded the HHSC Performance Indicator Dashboard standard of 41 percent for this measure.

3. Superior – Nueces (77 percent) was the only MCO/SDA group to reach the national HEDIS® mean of 77 percent for the percentage of diabetics receiving HbA1c testing. Seven of the 10 MCO/SDA groups performed at or above the HHSC Performance Indicator Dashboard standard (70 percent) for this measure. At the SDA level, none of the SDAs were above the national HEDIS® mean, but all were above the HHSC Performance Indicator Dashboard standard for this measure.

4. Three of the 10 MCO/SDA groups – AMERIGROUP – Harris, Superior – Bexar, and Superior – Nueces – performed above the national HEDIS® mean of 71 percent for the percentage of diabetics receiving LDL-C screening. With the exception of Molina – Harris and Evercare –
Travis, all MCO/SDA groups exceeded the HHSC Performance Indicator Dashboard standard (65 percent) for this measure. At the SDA level, Travis and Harris performed below the national HEDIS® mean. All SDAs exceeded the HHSC Performance Indicator Dashboard standard for this measure.
Chart 13. HEDIS® Follow-Up after Hospitalization for Mental Illness

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Mental Health Hospitalizations = 873

### Key Points:

1. Chart 13 provides the percentage of STAR+PLUS Program enrollees age six and older who were hospitalized for mental illness and who had an outpatient visit, an intensive outpatient encounter, or a partial hospitalization with a physician provider during the measurement period, 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. Rates for this measure are slightly inflated due to the lifting of provider constraints, which should be taken into consideration when comparing rates with the national HEDIS® means (which specify that follow-up occur with a mental health provider).

2. The STAR+PLUS Program performed lower than the national HEDIS® mean for Medicaid Managed Care Plans reporting to the NCQA on this measure at the seven-day follow-up period, and better than the national average at the 30-day follow-up period. Among STAR+PLUS enrollees hospitalized for mental illness, 34 percent received follow-up within seven days of discharge (compared with 43 percent nationally) and 64 percent received follow-up within 30 days of discharge (compared with 61 percent nationally). Additionally, the STAR+PLUS Program performed above the HHSC Performance Indicator Dashboard standards of 32 percent for seven-day follow-up and 52 percent for 30-day follow-up after hospitalization for mental illness.
3. Results for seven-day follow-up after hospitalization for mental illness were variable across MCOs. Only Molina (49 percent) was at or above the national HEDIS® mean for this measure. Two MCO/SDA groups – Molina and Evercare – were at or above the HHSC Performance Indicator Dashboard standard of 32 percent for this measure. The lowest-performing MCOs for seven-day follow-up after hospitalization for mental illness were AMERIGROUP and Superior, each at 31 percent.

4. All of the four health plans exceeded the national HEDIS® mean and the HHSC Performance Indicator Dashboard standard for 30-day follow-up, with Superior exceeding the national mean by almost eight percentage points.

5. Within the STAR+PLUS Program, the low rates of seven-day follow-up after hospitalization for mental illness warrant further attention. Some studies have found success with “bridging” interventions for mental health patients, ensuring follow-up care once individuals are released from the hospital.15 “Bridging” interventions involve making follow-up appointments for patients before they leave the hospital and providing them with reminders about their regular appointments.16 The Commonwealth Fund, in a brief report, provides recommendations for improving follow-up care after hospitalization for mental illness: (1) Begin outpatient planning during a hospital stay; (2) Discuss outpatient treatment with the patient’s ambulatory provider; (3) Help patients develop skills to reenter the community; and (4) Ensure that the inpatient staff continues to provide support to patients after discharge.17 HHSC may wish to consider these recommendations in future planning and programming of mental health services.
Chart 14. HEDIS® Follow-Up after Hospitalization for Mental Illness—SDA Breakout

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

<table>
<thead>
<tr>
<th>SDA Mean</th>
<th>Bexar</th>
<th>Harris</th>
<th>Nueces</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Days</td>
<td>32.64%</td>
<td>37.27%</td>
<td>23.14%</td>
</tr>
<tr>
<td>30 Days</td>
<td>69.01%</td>
<td>63.75%</td>
<td>61.16%</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS FUH09

Note: Molina-Bexar, Molina-Harris, AMERIGROUP-Travis and Evercare-Travis had denominators less than 30 for this measure; therefore, rates are not reported for these MCO/SDA groups. Eligible members are included in overall STAR+PLUS rates.

Key Points:

1. Chart 14 presents results for the HEDIS® Follow-Up after Hospitalization for Mental Illness measure, distributed by MCO/SDA. Rates for this measure are slightly inflated due to the lifting of provider constraints, which should be taken into consideration when comparing rates with the national HEDIS® means (which specify that follow-up occur with a mental health provider).

2. None of the MCO/SDA groups exceeded the national HEDIS® mean (43 percent) for seven-day follow-up after hospitalization for mental illness. However, three of the six MCO/SDA groups – Superior – Bexar (35 percent), AMERIGROUP – Harris (36 percent), and Evercare – Harris (37 percent) – performed above the HHSC Performance Indicator Dashboard standard (32 percent) on this measure. The lowest-performing MCO/SDA groups for this measure were AMERIGROUP – Bexar (15 percent), Superior – Nueces (22 percent), and Evercare – Nueces (26 percent).
3. At the SDA level, Bexar, Harris, and Nueces performed below the national HEDIS® mean on this measure. However, Bexar and Harris exceeded the HHSC Performance Indicator Dashboard standard of 32 percent for seven-day follow-up after hospitalization for mental illness.

4. With the exception of AMERIGROUP – Bexar (59 percent), all MCO/SDA groups performed at or above the national HEDIS® mean (61 percent) for 30-day follow-up after hospitalization for mental illness. Superior – Bexar had the highest 30-day follow-up rate of all MCO/SDA groups at 72 percent. All of the MCO/SDA groups exceeded the HHSC Performance Indicator Dashboard standard of 52 percent for 30-day follow-up after hospitalization for a mental illness.

5. At the SDA level, all (Bexar, Harris, and Nueces) performed above the national HEDIS® mean and the HHSC Performance Indicator Dashboard standard for 30-day follow-up after hospitalization for mental illness.
Key Points:

1. Chart 15 provides the percentage of STAR+PLUS Program enrollees who were readmitted within 30 days following an inpatient stay for mental health problems, distributed by MCO. Mental health readmissions are frequently used as a measure of an adverse outcome, which potentially result from efforts to contain behavioral health care costs such as reducing the initial length of stay. For this measure, low rates of readmission indicate good performance.

2. The percentage of STAR+PLUS Program members readmitted to the hospital after an inpatient mental health stay was 23 percent. There was little variation among health plans on this measure. Molina had the lowest readmission rate at 19 percent and Superior had the highest readmission rate at 25 percent.
Chart 16. Readmission within 30 Days after an Inpatient Stay for Mental Health – SDA Breakout

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

<table>
<thead>
<tr>
<th>SDA</th>
<th>Bexar</th>
<th>Harris</th>
<th>Nueces</th>
<th>Travis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>26.40%</td>
<td>21.10%</td>
<td>16.30%</td>
<td>24.60%</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS MHReadmit09

Key Points:

1. Chart 16 provides the percentage of STAR+PLUS Program enrollees who were readmitted within 30 days following an inpatient stay for mental health problems, distributed by MCO/SDA.

2. The highest-performing MCO/SDA groups (those with the lowest rates of readmission) were Superior – Nueces (15 percent) and Molina – Harris (16 percent). The MCO/SDA groups with the highest rates of readmission were Superior - Bexar (27 percent) and AMERIGROUP - Travis (26 percent).

3. At the SDA level, rates of readmission ranged from 16 percent in Nueces to 26 percent in Bexar. Bexar (26 percent) and Travis (25 percent) had rates of readmission higher than the STAR+PLUS program average (23 percent).
Chart 17. HEDIS® Outpatient Drug Utilization - Average Cost of Prescriptions per Member per Month

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Cost of Prescriptions = $58,950,065

Reference: Table STAR+PLUS ORX09

Key Points:

1. Chart 17 provides the average cost of prescriptions per STAR+PLUS member per month during the measurement period, distributed by MCO.

2. Prescription drug costs in all four MCOs serving STAR+PLUS were considerably higher than the national HEDIS® mean ($37.80). This difference may be attributed to the fact that the national rates developed by AHRQ are based on a general community population, while the STAR+PLUS population is comprised of individuals with chronic conditions.

3. Superior had the highest average cost of prescriptions per member per month at $352.07. Molina had the lowest average cost of prescriptions per member per month at $189.38.
Key Points:

1. Chart 18 provides the average cost of prescriptions per STAR+PLUS member per month during the measurement period, distributed by MCO/SDA.

2. Prescription drug costs in all ten MCO/SDA groups serving STAR+PLUS were considerably higher than the national HEDIS® mean ($37.80).

3. Superior – Bexar ($355.26) had the highest average cost of prescriptions per member per month, followed by Superior – Nueces ($345.20) and AMERIGROUP – Travis ($311.81). Molina – Bexar ($225.37) and Molina – Harris ($175.16) had the lowest average cost of prescriptions per member per month.
4. At SDA level, Travis had the lowest average cost of prescriptions per member per month at $271.86, and Bexar had the highest average cost at $331.50.
Chart 19. HEDIS® Outpatient Drug Utilization - Average Number of Prescriptions per Member per Year

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Number of Prescriptions = 702,527

<table>
<thead>
<tr>
<th>MCO</th>
<th>Number of Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>40.19</td>
</tr>
<tr>
<td>Evercare</td>
<td>42.10</td>
</tr>
<tr>
<td>Molina</td>
<td>26.51</td>
</tr>
<tr>
<td>Superior</td>
<td>50.64</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS ORX09

Key Points:

1. Chart 19 provides the average number of prescriptions per STAR+PLUS member per year during the measurement period, distributed by MCO.

2. The average number of prescriptions in all four MCOs exceeded the national HEDIS® mean (10.3). This difference may be attributed to the fact that the national rates developed by AHRQ are based on a general community population, while the STAR+PLUS population is comprised of individuals with chronic conditions.

3. Superior had the highest number of prescriptions per member during the measurement period at 50.6. Molina had the lowest number of prescriptions per member during the measurement period at 26.5.
Chart 20. HEDIS® Outpatient Drug Utilization - Average Number of Prescriptions per Member per Year - SDA Breakout

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

STAR+PLUS Number of Prescriptions = 702,527

Reference: Table STAR+PLUS ORX09

Key Points:

1. Chart 20 provides the average number of prescriptions per STAR+PLUS member per year during the measurement period, distributed by MCO/SDA.
2. The average number of prescriptions in all ten MCO/SDA groups exceeded the national HEDIS® mean (10.3). This difference may be attributed to the fact that the national rates developed by AHRQ are based on a general community population, while the STAR+PLUS population is comprised of individuals with chronic conditions.

3. Superior – Bexar (50.4) and Superior – Nueces (51.06) had the highest number of prescriptions per member per year. Molina – Bexar (34.38) and Molina – Harris (23.4) had the lowest number of prescriptions per member per year.

4. At SDA level, Travis had the lowest number of prescriptions per member per year (34.18) and Bexar had the highest number of prescriptions (47.5).

5. The distribution of average number of prescriptions per member per year is consistent with the distributions of average cost of prescriptions per member per month.
Chart 21. Percent of Emergency Department Visits with a Primary Diagnosis of an Ambulatory Care Sensitive Condition

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008            STAR+PLUS ED Visits = 61,916

<table>
<thead>
<tr>
<th>MCO</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>33.14%</td>
</tr>
<tr>
<td>Evercare</td>
<td>37.69%</td>
</tr>
<tr>
<td>Molina</td>
<td>37.20%</td>
</tr>
<tr>
<td>Superior</td>
<td>41.14%</td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS ACSC09

Key Points:

1. Chart 21 provides the percentage of emergency department visits among STAR+PLUS enrollees that were attributed to a primary diagnosis of an ambulatory care sensitive condition (ACSC), distributed by MCO. The denominator for this measure represents emergency department visits only. ACSCs are medical problems that are potentially treatable through proper outpatient monitoring and an effective community health care system. Therefore, admission of members with ACSCs to the emergency room may be considered an indication that outpatient monitoring and community health care systems are under-performing; they represent trips to the emergency room that could potentially have been prevented. For this measure, the higher the percentage, the lower the health plan performance.

2. Because this is not a HEDIS® measure, information for national comparisons is not available. The percentage of emergency department visits for an ACSC for the STAR+PLUS Program was 37 percent, with a range of 33 percent (AMERIGROUP) to 41 percent (Superior). All of the health plans were above the SFY 2008 HHSC Performance Indicator Dashboard standard of 32 percent for this measure. These findings suggest that there is a need to improve outpatient and ambulatory care in the STAR+PLUS Program in order to reduce unnecessary emergency room visits.
Chart 22. Percent of Emergency Department Visits with a Primary Diagnosis of an Ambulatory Care Sensitive Condition – SDA Breakout

STAR+PLUS MCOs - September 1, 2007 to August 31, 2008

<table>
<thead>
<tr>
<th>SDA</th>
<th>Bexar</th>
<th>Harris</th>
<th>Nueces</th>
<th>Travis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERIGROUP</td>
<td>38.73%</td>
<td>36.58%</td>
<td>42.66%</td>
<td>30.04%</td>
</tr>
<tr>
<td>Molina</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMERIGROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evercare</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMERIGROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superior</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMERIGROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bexar</td>
<td>32.45%</td>
<td></td>
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</tr>
<tr>
<td>Molina</td>
<td>39.38%</td>
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<tr>
<td>Superior</td>
<td>40.12%</td>
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<tr>
<td>AMERIGROUP</td>
<td>35.21%</td>
<td></td>
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</tr>
<tr>
<td>Harris</td>
<td>38.23%</td>
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<td></td>
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<tr>
<td>Evercare</td>
<td>35.95%</td>
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</tr>
<tr>
<td>Nueces</td>
<td>40.17%</td>
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</tr>
<tr>
<td>AMERIGROUP</td>
<td>43.80%</td>
<td></td>
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</tr>
<tr>
<td>Travis</td>
<td>29.33%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Evercare</td>
<td>32.37%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reference: Table STAR+PLUS ACSC09

Key Points:

1. Chart 22 provides the percentage of emergency department visits among STAR+PLUS enrollees that were attributed to a primary diagnosis of an ambulatory care sensitive condition (ACSC), distributed by MCO/SDA. The denominator for this measure represents emergency department visits only.

2. Three MCO/SDA groups – AMERIGROUP – Travis (29 percent), Evercare – Travis (32 percent), and AMERIGROUP – Bexar (32 percent) – had rates of emergency department visits for ACSCs at or below the SFY 2008 HHSC Performance Indicator Dashboard standard of 32.
percent. The lowest-performing MCO/SDA groups on this measure (those with the highest percentages) were Superior - Nueces (44 percent), Superior – Bexar (40 percent), and Evercare – Nueces (40 percent).

3. There was little variation among SDAs on this measure, ranging from 30 percent in Travis to 43 percent in Nueces. Bexar, Harris, and Nueces were above the SFY 2008 HHSC Performance Indicator Dashboard standard of 32 percent for this measure.

4. Rates of emergency department visits for ACSCs among certain MCO/SDA groups, particularly in Superior – Nueces, Superior – Bexar, and Evercare – Nueces warrant further efforts to reduce preventable emergency department visits. Studies have shown that decreasing emergency room visits and hospitalizations for chronic ACSCs is best achieved through continuity in primary care. Policies that encourage and help patients to concentrate their care with a single provider will potentially reduce preventable hospitalizations and decrease medical care costs.
Endnotes


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


6 Technical specifications for PQI and PDI can be viewed at [http://www.qualityindicators.ahrq.gov/pqi_overview.htm](http://www.qualityindicators.ahrq.gov/pqi_overview.htm).


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