



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

Texas Medicaid Primary Care Case Management (PCCM) Program Quality of Care Report

Contract Year 2012

Measurement Period:

January 1, 2011 through December 31, 2011

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

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

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Executive Summary

Introduction

This report provides an annual update of the quality of care provided to members in the Primary Care Case Management (PCCM) Program for the State of Texas, prepared by the Institute for Child Health Policy (IHP) at the University of Florida, the External Quality Review Organization (EQRO) for Texas Medicaid Managed Care.

This update is for January 1, 2011 to December 31, 2011, covering calendar year 2011.

Methodology

This report presents results for the following sets of quality of care indicators:

1. The Healthcare Effectiveness Data and Information Set (HEDIS[®]) 2011 measures;
2. The Agency for Healthcare Research and Quality (AHRQ), Pediatric Quality Indicators (PDIs) and Prevention Quality Indicators (PQIs); and
3. A measure developed by IHP.

Data sources used to calculate the quality of care indicators include member-level enrollment information, member-level health care claims/encounter data, and member-level pharmacy data.

On March 1, 2012, the PCCM program was phased out, and PCCM members were transitioned to Medicaid Managed Care. Most of the PCCM rural counties now form the STAR Medicaid Rural Service Area (MRSAs), which has three geographic regions: West Texas, Central Texas, and Northeast Texas. In this report, PCCM members living in what is now the Hidalgo service area primarily comprise a fourth “Other Counties” category, and the STAR and STAR+PLUS programs now provide services to members in these areas.¹ Results for each quality of care measure are provided at the program level and for each of these four regional groups.

PCCM Membership – December 2011

Number of members: 804,327

Mean age: 11.3 years

Sex	Percent of Members
Female	52.6%
Male	47.4%

Race/ethnicity	Percent of Members
Hispanic	61.6%
Black, non-Hispanic	9.5%
White, non-Hispanic	20.6%
Asian	0.4%
American Indian	0.2%
Unknown	7.6%

Summary of Findings

Children's Health and Preventive Care

- On average, 95 percent of children and adolescents had good access to providers.
- Utilization of preventive care varied by age and regional group:
 - 70 percent of infants had at least six well-child visits.
 - A larger percentage of children than adolescents had a preventive care visit (81 vs. 66 percent).

Women's Health Care

- Four out of five pregnant women had timely prenatal care, and 58 percent had a sufficient number of prenatal care visits.
- After giving birth, 57 percent of new mothers had a postpartum visit.
- Less than half of women had preventive screenings for chlamydia and cervical cancer.

Care for Respiratory Conditions

- Greater than 90 percent of children and adolescents received appropriate treatment for asthma, compared to between 74 and 78 percent of adults.
- Fifty-five percent of children were tested for Strep and given an antibiotic for pharyngitis.
- One in five children were inappropriately given an antibiotic to treat an upper respiratory infection.

Diabetes Care

- Approximately three out of four adult members with diabetes were appropriately monitored for diabetes, including having HbA1 testing, LDL-C screening, and monitoring of kidney disease.
- Only 42 percent of adult members with diabetes had an eye exam.

Behavioral Health Care

- Half of children diagnosed with ADHD were seen for follow-up within 30 days of beginning medication treatment, and approximately two-thirds received long-term follow-up and management of their condition.
- One in three adults diagnosed with depression took an antidepressant for at least six months.
- Among members hospitalized for a behavioral health condition, 39 percent had an outpatient follow-up within seven days of discharge, and 72 percent had an outpatient follow-up within 30 days of discharge.

- The mental health readmission rate within 30 days was slightly higher for adult PCCM members than for child and adolescent PCCM members (15 vs. 10 percent).

Emergency Department (ED) Use and Inpatient Admissions

- Generally, adults used the ED at a higher rate than children. Among child members, those less than one year old had the highest rate of ED use.
- The most common pediatric conditions for which children were hospitalized were gastroenteritis and asthma.
- Among adults, COPD was the most common condition for which members were hospitalized. Inpatient admission rates in PCCM for COPD and for the short-term complications associated with diabetes were more than twice the national rates for these conditions.

Recommendations

For each domain listed below, the EQRO recommends that Texas HHSC and/or Managed Care Organizations (MCOs) in the STAR Medicaid Rural Service Area (MRSA), as well as the Hidalgo service area, monitor low-performing measures to ensure that they improve over time through Medicaid Managed Care. Potentially successful strategies for low-performing measures identified in this report are described in the table below.

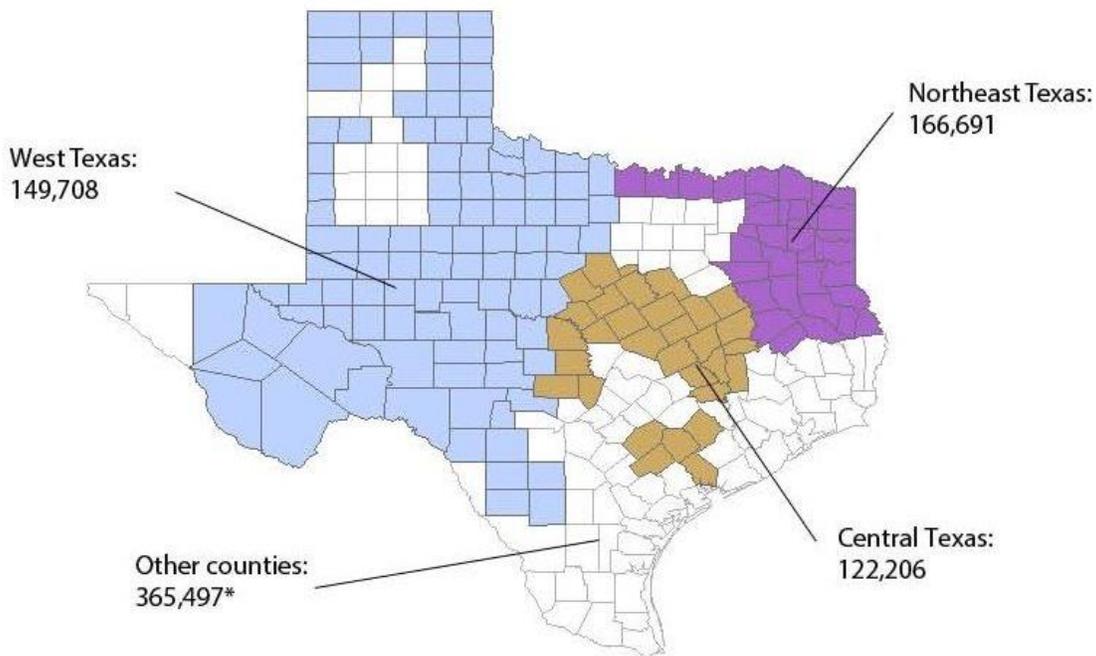
Domain	Recommendations	Rationale
Women’s Health	<p>Assess network adequacy for OB/GYN providers in former PCCM regions. In addition, assess women’s access to routine appointments, and provider availability during early morning, evening, and weekend hours.</p> <p>Conduct hospital visits with new mothers before discharge to assist with scheduling postpartum visits and transportation.</p> <p>For preventive screenings, MCOs should target women who are overdue for their Pap test and mail them reminders along with educational materials about the importance of regular check-ups. MCOs should also give providers lists of women in their panel who have not had a Pap test and encourage follow-up with these members.</p>	<p>Access to and utilization of women’s health services needs improvement.</p> <p>One in five pregnant women in PCCM did not receive timely prenatal care, and 42 percent did not have the expected number of prenatal care visits.</p> <p>Forty-three percent did not have a post-partum visit.</p> <p>More than half of women were not screened for cervical cancer or chlamydia.</p>

Domain	Recommendations	Rationale
Treatment of Respiratory Conditions in Children	<p>Conduct drug utilization review to identify high prescribers of antibiotics and provide physician training to allow more effective treatment decisions for children with pharyngitis and upper respiratory conditions.</p> <p>Examples of effective interventions to reduce inappropriate antibiotic prescribing include:</p> <ul style="list-style-type: none"> • Training providers in the use of an interactive booklet to facilitate primary care consultations for childhood respiratory tract infections.^{2,3} • A physician behavior-change strategy that includes guideline dissemination, small-group education, updates, educational materials, and prescribing feedback, targeting the treatment of children age two to six years old.⁴ 	<p>PCCM pediatric providers may be overprescribing antibiotics for sore throat and upper respiratory conditions. Forty-five percent of children with pharyngitis and an antibiotic prescription were not given a Strep test.</p> <p>In addition, one in five children were inappropriately given an antibiotic to treat an upper respiratory infection.</p>
Behavioral Health Care	<p>MCOs should work with network hospitals to ensure that members admitted for a mental health condition are scheduled for an outpatient visit with a mental health provider within seven days of discharge from the hospital. Case management staff should remind them of their appointment and to ensure the member has transportation to and from the appointment.</p>	<p>Improve timely outpatient follow-up for members who were hospitalized for a mental health condition. Less than 40 percent of members had a visit with a provider within seven days of discharge from the hospital following a mental health stay.</p>
Diabetes Care in Adults	<p>Identify providers with higher rates of compliance with established protocols for diabetes management (i.e., higher rates of recommended testing and members with good diabetes control) and give recognition to these providers through newsletters and other mechanisms, encouraging members with diabetes to consider provider performance when selecting physicians.</p> <p>Identify members who are noncompliant with diabetes measures and send targeted, specific reminders to members and providers regarding the need for diabetes monitoring and testing.</p>	<p>The rate of potentially avoidable inpatient stays for diabetes short-term complications was twice the national average.</p> <p>Adult members also had lower rates of eye exams, HbA1c testing, and medical attention for diabetic nephropathy.</p>

Introduction and Purpose

This report provides an annual update of the quality of care provided to members in the Primary Care Case Management (PCCM) Program for the State of Texas, prepared by the Institute for Child Health Policy at the University of Florida, the External Quality Review Organization (EQRO) for Texas Medicaid Managed Care. This update is for January 1, 2011 to December 31, 2011, covering calendar year 2011.

On March 1, 2012, the PCCM Program was phased out, and PCCM members were transitioned to Medicaid Managed Care. Most of the PCCM rural counties now form the STAR Medicaid Rural Service Area (MRSA), which has three geographic regions: West Texas, Central Texas, and Northeast Texas. In this report, PCCM members living in what is now the Hidalgo service area comprise a fourth “Other Counties” category, and the STAR and STAR+PLUS programs now provide services to members in these areas.⁵ Results for each quality of care measure are provided at the program level and for each of these four regional groups. Because PCCM members had not transitioned to managed care during the measurement period of this report, these areas are instead labeled according to their Texas regional group (Central Texas, Northeast Texas, West Texas, and Other Counties). For more detailed information on the counties that represent each distinct region in this report, please refer to **Appendix B**.



*The “Other Counties” category represents the Hidalgo service area.⁶

This report provides descriptive information about the PCCM population, and evaluation of members' access to care, utilization of services, and effectiveness of preventive care and treatment at the program level and by Texas regional group. Results for the following quality of care measures are presented in this report:

- **Children's Health and Preventive Care** – *Children and Adolescents' Access to Primary Care Practitioners, Well-Child Visits in the First 15 Months of Life, Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life, and Adolescent Well-Care Visits.*
- **Women's Health Care** – *Frequency of Ongoing Prenatal Care, Prenatal and Postpartum Care, HEDIS[®] Cervical Cancer Screening, and HEDIS[®] Chlamydia Screening in Women.*
- **Care for Respiratory Conditions** – *HEDIS[®] Appropriate Testing for Children with Pharyngitis, HEDIS[®] Appropriate Treatment for Children with Upper Respiratory Infection, and HEDIS[®] Use of Appropriate Medications for People with Asthma.*
- **Diabetes Care** – *HEDIS[®] Comprehensive Diabetes Care.*
- **Behavioral Health Care** – *Follow-up Care for Children Prescribed ADHD Medication, HEDIS[®] Antidepressant Medication Management, Follow-up after Hospitalization for Mental Illness, and Readmission within 30 days after an Inpatient Stay for Mental Health.*
- **Emergency Department Use and Inpatient Admissions** – *HEDIS[®] Ambulatory Care, and AHRQ Pediatric Quality Indicators (PDIs) and Adult Prevention Quality Indicators (PQIs).*

Methodology

Data Sources

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, 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.

Quality Measures

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

Rates for HEDIS[®] 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 EQRO. 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[®] measures for which the specifications were strictly followed are compared to other Medicaid programs nationally. 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.⁷ NCQA reports the national results as a mean and at the 10th, 25th, 50th, 75th, and 90th percentiles. The Medicaid Managed Care Plans 2011 mean results are shown and labeled “HEDIS[®] 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 certain HEDIS[®] measures. As in the prior reporting period (SFY 2010), ICHP modified the NCQA specifications to lift provider constraints when determining eligibility for these 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:

- Children and Adolescents’ Access to Primary Care Practitioners
- Well-Child Visits in the First 15 Months of Life
- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
- Adolescent Well-Care Visits
- Frequency of Prenatal Care
- Timeliness of Prenatal Care
- Follow-up Care for Children Prescribed ADHD Medication

- 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 likely inflate the results. Thus, the discussion of results for these measures will not include comparison to HEDIS[®] 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 the performance of PCCM 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.”⁸ The specifications used to calculate rates for these measures come from AHRQ’s PDI and PQI versions 4.2. Rates are area-based, and calculated as the number of hospital discharges per 100,000 population except for rates of perforated appendix (per 100 admissions for appendicitis) and low birth weight (per 100 live births). 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 ambulatory care sensitive conditions (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.

Information regarding the calculation of all measures included in this report can be found in the document “Quality of Care Measures Technical Specifications Report, August, 2012.”⁹ This document, prepared by the Institute for Child Health Policy, provides specifications for HEDIS[®] and other quality of care measures.

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.¹⁰ The interested reader can review those for more details.

The PCCM Population

There were 804,327 members enrolled in PCCM in December 2011. Females were more numerous than males in the PCCM membership (53 vs. 47 percent). The average age of members was 11.3 years (SD = 12.1), with over half of members younger than 10 years of age (57 percent). Only 13 percent of the membership was older than 20 years of age.

The majority of members were Hispanic (62 percent), 21 percent were White, non-Hispanic, and 10 percent were Black, non-Hispanic. Race/ethnicity was unknown for approximately eight percent of the membership.

Table 1. Demographic Characteristics of PCCM Members

	N	%
PCCM members	804,327	-
Female	422,687	52.6
Male	381,640	47.5
Age		
Birth to 4 years old	254,833	31.7
5 to 9 years old	199,876	24.9
10 to 14 years old	149,309	18.6
15 to 20 years old	98,698	12.3
21+ years old	101,611	12.6
Race-ethnicity		
Hispanic	495,705	61.6
White, non-Hispanic	165,674	20.6
Black, non-Hispanic	76,750	9.5
Asian	3,231	0.4
American Indian	1,672	0.2
Unknown	61,295	7.6

Note. Numbers and percentages are from December 2011 enrollment data.

Access to Care

Children and Adolescent's Access to Primary Care Practitioners

Children and adolescents need access to primary care practitioners in order to receive the care that is necessary for their health and well-being.¹¹ However, many children and adolescents do not have access to a primary care practitioner.^{12,13} It is important to identify the children and adolescents who experience barriers to primary care to ensure that they receive the health care services they need.

Figures 1 through 4 present results for the Children and Adolescents' Access to Primary Care Practitioners (CAP) measure, which provides the percentage of children and adolescents in PCCM who had a visit with a provider during the measurement period, distributed by age. Rates are presented separately for four age groups: 12 to 24 months old, 25 months to six years old, seven to 11 years old, and 12 to 19 years old.

Children and adolescents in PCCM had good access to providers. The percentage of members who had a visit with a provider was:

- 99 percent for members 12 to 24 months old.
- 92 percent for members 25 months to six years old.
- 96 percent for members seven to 11 years old.
- 96 percent for members 12 to 19 years old.

Figure 1. Children and Adolescents' Access to Providers – 12 to 24 Months

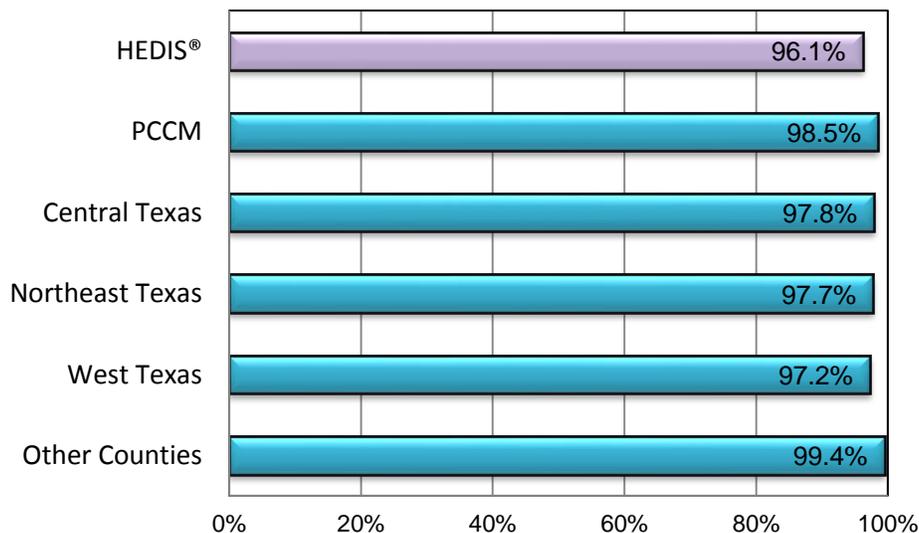


Figure 2. Children and Adolescents' Access to Providers – 25 Months to Six Years Old

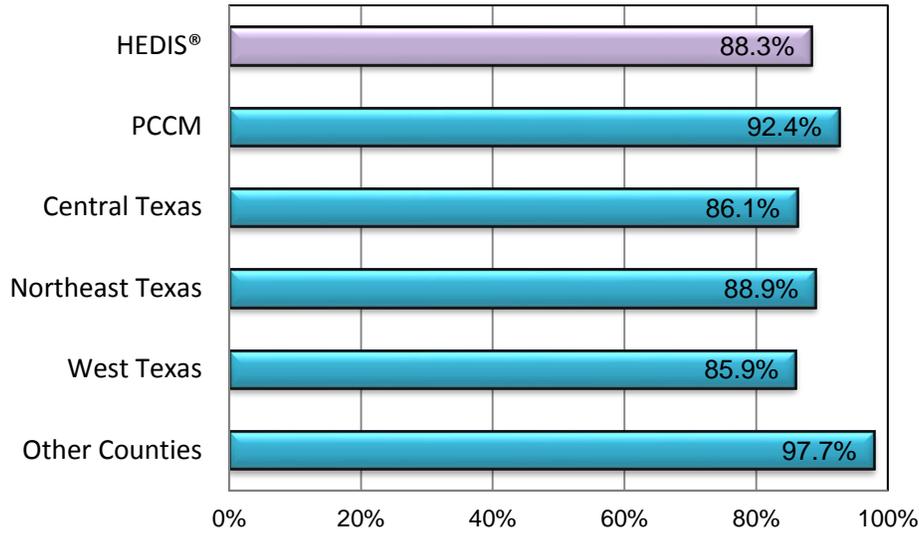
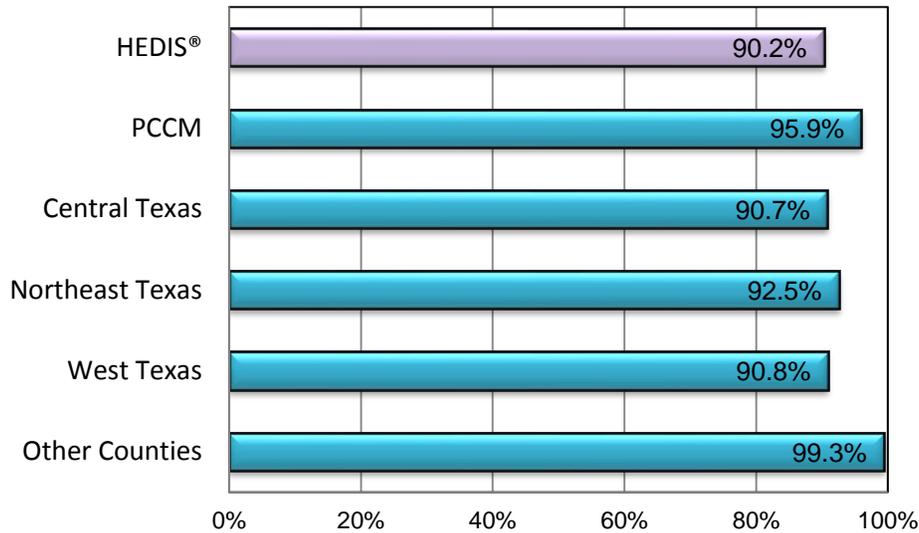
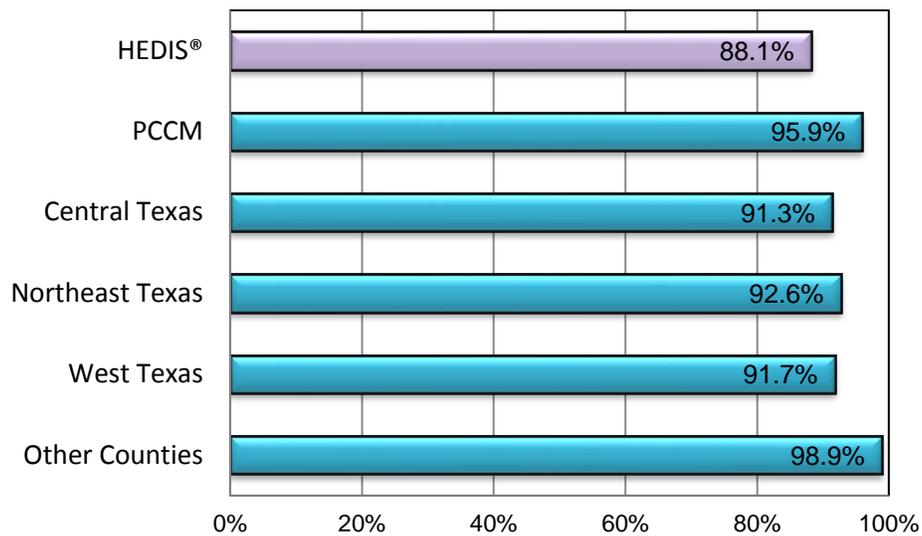


Figure 3. Children and Adolescents' Access to Providers – Seven to 11 Years Old



Note. For the measure “Children and Adolescents’ Access to Primary Care Practitioners,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with a PCP. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

Figure 4. Children and Adolescents' Access to Providers – 12 to 19 Years Old



Utilization of Children's Preventive Care

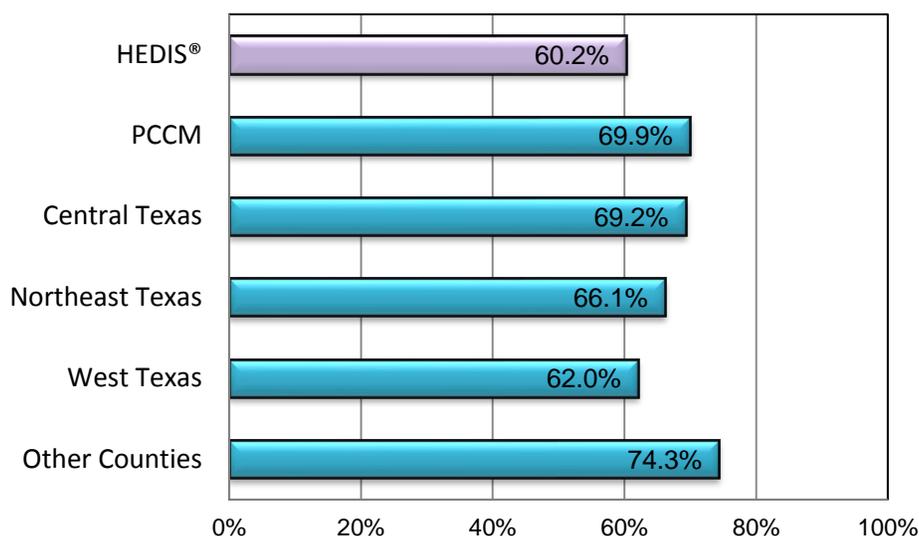
Well-Child Visits in the First 15 Months of Life

Pediatric well-child visits are an effective way to monitor a child's health and development.¹⁴ Well-child visits foster the identification of childhood illnesses and developmental delays; furthermore, they provide the opportunity for early intervention at a crucial point in the child's life.¹⁵ The American Academy of Pediatrics recommends six well-child visits in the first year of life.¹⁶

Figure 5 provides results for the Well-Child Visits in the First 15 Months of Life (W15) measure, which represents the percentage of PCCM members who turned 15 months old during the measurement year and who had six or more well-child visits with a provider during their first 15 months of life.

Seventy percent of PCCM members had six or more well-child visits in the first 15 months of life, with rates ranging from 62 percent in West Texas to 74 percent in other PCCM counties.

Figure 5. Well-Child Visits in the First 15 Months of Life



Note. For the measure “Well-Child Visits in the First 15 Months of Life,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with a PCP. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

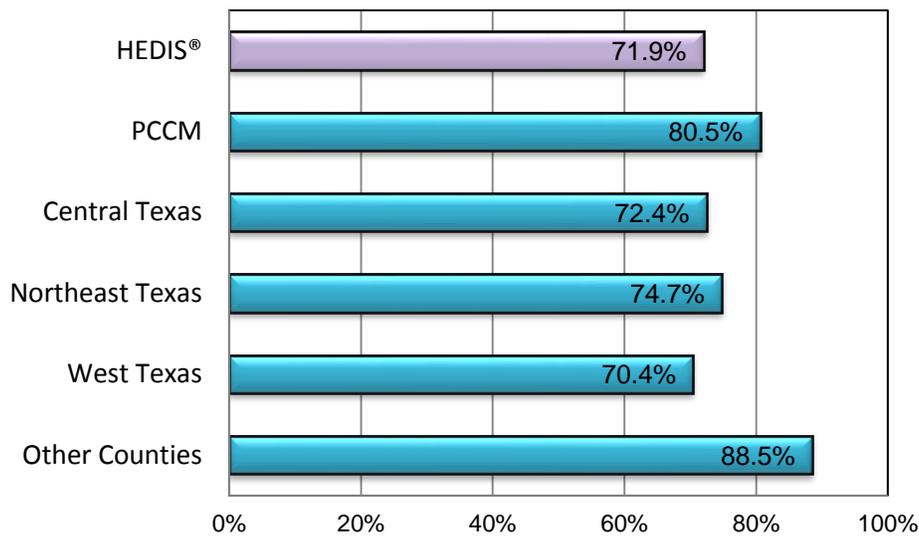
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

Pediatric well-child visits are an effective way to monitor a child’s health and development. Well-child visits foster the identification of childhood illnesses and developmental delays; furthermore, they provide the opportunity for early intervention at a crucial point in the child’s life.¹⁷ The American Academy of Pediatrics recommends an annual well-child visit for children three to six years of age.¹⁸

Figure 6 provides results for the Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34) measure, which represents the percentage of PCCM members between three and six years old who received one or more well-child visits with a provider during the measurement period.

Eighty-one percent of children in PCCM between the ages of three and six years old had at least one well-child visit during the measurement period. Rates of well-child visits for members three to six years old varied by geographic region of the State, ranging from 70 percent in West Texas counties to 89 percent in other PCCM counties.

Figure 6. Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life



Note. For the measure “Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with a PCP. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

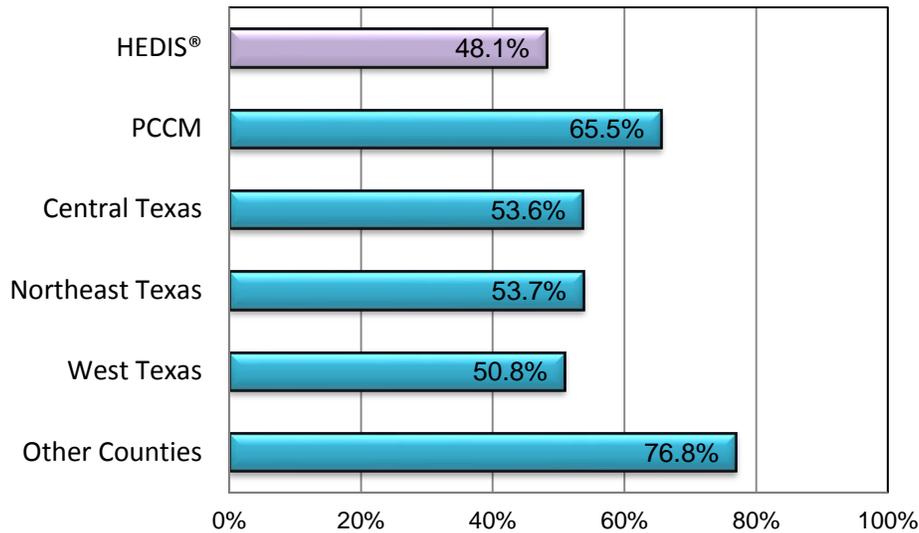
Adolescent Well-Care Visits

Adolescents face a variety of health problems, typically caused by tobacco use, alcohol or drug use, risky sexual behaviors, unhealthy diets, and lack of physical exercise.¹⁹ Adolescents need preventive services to identify and help those who are at risk. The American Medical Association recommends that adolescents have at least one well-care visit per year to address the biomedical and psychosocial aspects of health.²⁰

Figure 7 provides results for the Adolescent Well-Care Visits (AWC) measure, which represents the percentage of PCCM members 12 to 21 years old who received one or more comprehensive adolescent well-care visits with a provider during the measurement period.

Approximately two-thirds of adolescents in PCCM (66 percent) had a well-care visit during the measurement period. In the Central, Northeast, and West Texas counties, between 51 and 54 percent of adolescents had a well-care visit, compared to 77 percent in other PCCM counties.

Figure 7. Adolescent Well-Care Visits



Note. For the measure “Adolescent Well-Care Visits,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with a PCP. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

Women’s Health

Frequency of Ongoing Prenatal Care

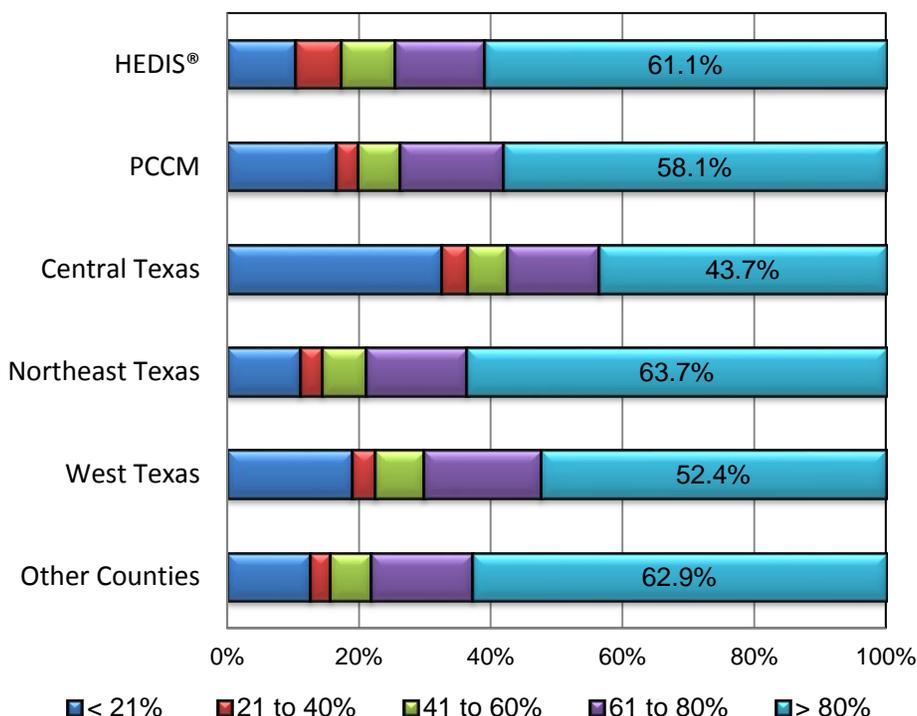
Pregnancy can lead to a number of serious complications, including gestational diabetes, hemorrhage, and low birth weight.²¹ Prenatal care gives providers the opportunity to screen for health conditions and educate the mother on associated risk factors, which can improve the health of both mother and child.²² The American College of Obstetricians recommends a minimum of eleven routine prenatal care visits. A study of prenatal visits in a Medicaid population found that only 62 percent of women met the goal of receiving more than 80 percent of the recommended number of visits.²³ Thus, it is important to assess the percentage of women who fulfill the guidelines for prenatal care.

Figure 8 provides the results for the Frequency of Ongoing Prenatal Care (FPC) measure, which examines women’s use of prenatal care services relative to the recommended guidelines of the American College of Obstetricians and Gynecologists for frequency/scheduling of prenatal care. The FPC measure tracks women who had a live delivery in the past year to determine the percentage of recommended prenatal visits they had (the ratio of observed to expected prenatal care visits).

The results are presented as the percentage of members who received less than 21 percent, 21 to 40 percent, 41 to 60 percent, 61 to 80 percent, and more than 80 percent of the number of expected prenatal care visits.

There were 44,754 live births to women in PCCM during the measurement period. Fifty-eight percent of women in PCCM had adequate prenatal care, as indicated by having more than 80 percent of expected prenatal care visits. The frequency of prenatal care was particularly low in Central Texas, with less than half of women receiving the recommended number of prenatal visits (44 percent).

Figure 8. Frequency of Ongoing Prenatal Care



Note. For the measure “Frequency of Prenatal Care,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with an OB/GYN practitioner or a midwife. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

Prenatal and Postpartum Care

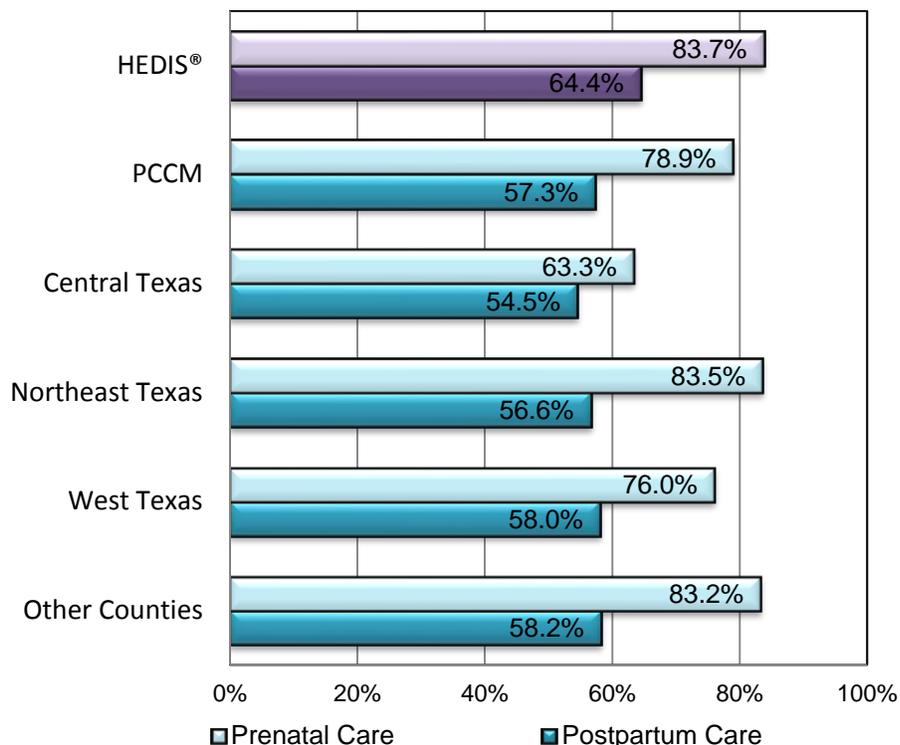
Timely prenatal and postpartum screening provides the opportunity to screen for health conditions that affect the mother and child during and after pregnancy. Depression, diabetes, and anemia are all prenatal and postpartum conditions that can lead to adverse consequences if they are not detected early.^{24,25} The American College of Obstetricians and the American Pregnancy Association recommend a prenatal evaluation within the first trimester and a postpartum evaluation on or between 21 days and 56 days after delivery.²⁶

Figure 9 provides the percentage of live birth deliveries among women who received prenatal care in their first trimester or within 42 days of enrollment in PCCM, and/or who had a postpartum visit on or between 21 days and 56 days after delivery.

There were 44,754 live births to women in PCCM during the measurement period. Seventy-nine percent of pregnant women in PCCM received timely prenatal care, within the first trimester or within seven weeks of enrollment in PCCM. The PCCM prenatal care rate was below the HEDIS® mean of 84 percent, at approximately the 25th percentile nationally. Rates of timely prenatal care ranged from a low of 63 percent in Central Texas counties to 84 percent in Northeast Texas counties.

Fifty-seven percent of new mothers had a postpartum visit between three and eight weeks after giving birth, compared to 64 percent of women nationally. Rates of postpartum care across the regional groups were comparable, and were below the national 25th percentile.

Figure 9. Prenatal and Postpartum Care



Note. For the measure “Prenatal and Postpartum Care (PPC),” ICHP followed all of the HEDIS® technical specifications for calculating the sub-measure “Prenatal Care” except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with an OB/GYN practitioner or a midwife. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

Cervical Cancer Screening

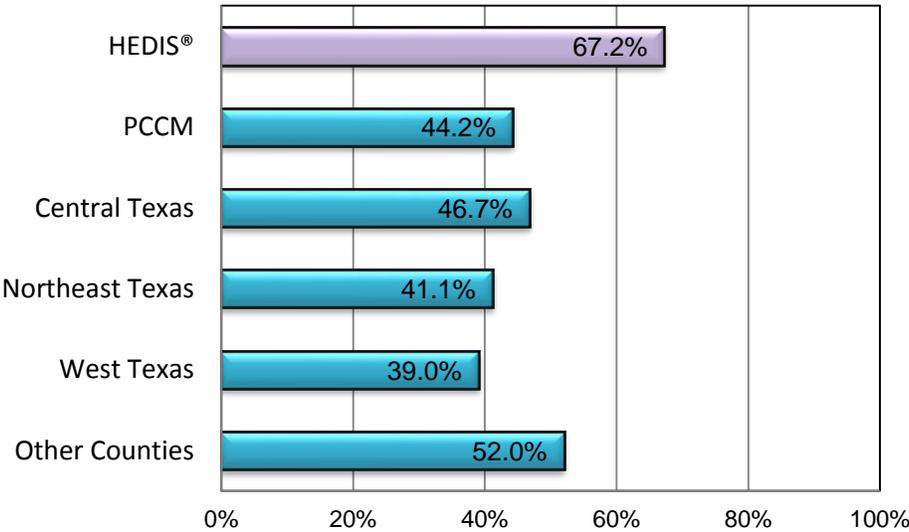
Twelve thousand women in the United States are diagnosed with cervical cancer each year. Pap tests are an effective way to detect cervical cancer, and have helped to reduce the prevalence of cervical cancer by 67 percent in the past 30 years.²⁷ In addition, women who receive Pap tests and detect cancer early have a survival rate of nearly 100 percent. The U.S. Preventive Services Task Force recommends that women 21 to 64 years old have a Pap test every three years.²⁸ Despite this, 17 percent of adult women under 65 years of age have not had a Pap test in the past three years.²⁹

Figure 10 provides results for the HEDIS[®] Cervical Cancer Screening (CCS) measure, which represents the percentage of women between 21 and 64 years of age in the PCCM Program who received one or more Pap tests to screen for cervical cancer during the measurement period.

Forty-four percent of women in PCCM were screened for cervical cancer, compared to 67 percent of women nationally. The PCCM cervical cancer screening rate was below the 10th percentile for Medicaid Managed Care Plans reporting to the NCQA on this measure.

Screening for cervical cancer was low across all PCCM regional groups in Texas, ranging from 39 percent in West Texas counties to 52 percent in other PCCM counties.

Figure 10. HEDIS[®] Cervical Cancer Screening



Chlamydia Screening

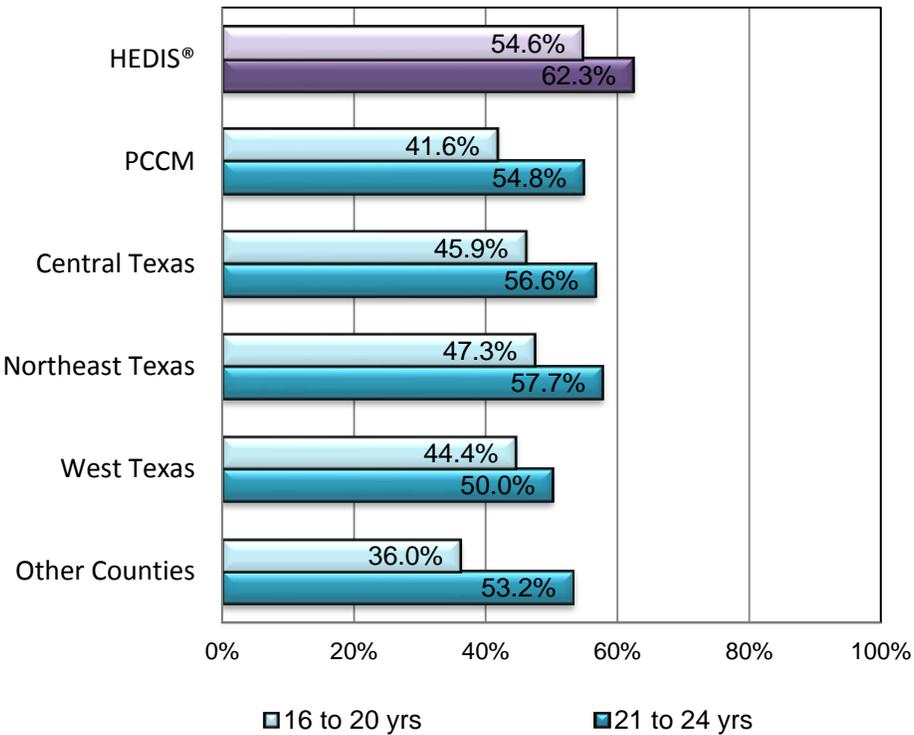
In the United States, over one million people are diagnosed with Chlamydia annually.³⁰ Furthermore, approximately two million cases go undiagnosed and untreated each year. Chlamydia can lead to a number of serious health problems if not treated properly. Chlamydia often causes Pelvic Inflammatory Disease (PID), which damages a woman’s fallopian tubes and causes infertility in 20 percent of cases.³¹ In pregnant women, chlamydia causes pregnancy complications and can lead to premature birth.³² Chlamydia is detected through a simple urine test and is treated with a course of antibiotics. If more women were screened annually for chlamydia, the long-term effects of the disease would be prevented.³³ The CDC recommends annual screening for Chlamydia in all sexually active women aged 25 years or younger.³⁴

The HEDIS® Chlamydia Screening (CHL) measure provides the percentage of female members between 16 and 24 years old who were identified as sexually active and who had at least one test for Chlamydia during the measurement period. **Figure 11** shows the percentage of female PCCM members 16 to 20 years old and 21 to 24 years old who had a chlamydia screening.

Rates of chlamydia screening were higher for female members 21 to 24 years old than for female members 16 to 20 years old (55 vs. 42 percent).

For both age cohorts, the rate of chlamydia screening in PCCM was below the average rate for Medicaid Managed Care Plans reporting to the NCQA on this measure.

Figure 11. HEDIS® Chlamydia Screening



Care for Respiratory Conditions

Appropriate Use of Medications for Asthma

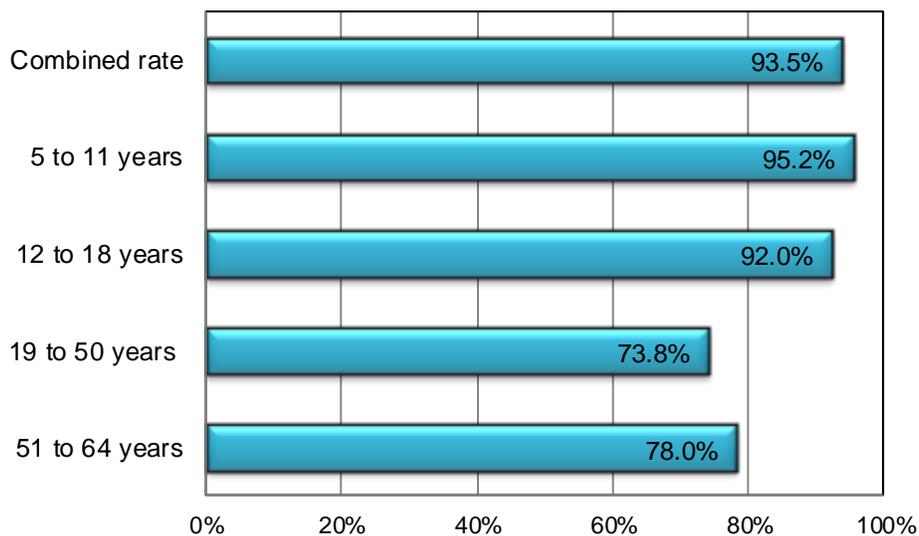
Approximately 25 million people in the United States have asthma. In 2007, 13 million people experienced asthma attacks, which can lead to emergency department visits or hospitalizations. In addition, asthma attacks caused about 10.5 million missed school days per year for children and 14.2 million missed work days for adults.³⁵ Appropriate medication management of asthma can control symptoms and reduce the occurrence of adverse events due to asthma attacks.³⁶

The HEDIS[®] Use of Appropriate Medications for People with Asthma (ASM) measure provides the percentage of members who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement period. **Figure 12** provides the percentage of PCCM members who were appropriately prescribed medication for asthma by age group. **Table 2** presents results for this measure by age and regional group.

Overall, 94 percent of PCCM members with asthma were appropriately treated for their condition. The PCCM rate for this measure was above the national average of 88 percent, at approximately the 90th percentile among the Medicaid Managed Care Plans reporting to the NCQA on this measure.

A higher percentage of children and adolescents in PCCM received appropriate treatment for persistent asthma than adults. Ninety-five percent of children and 92 percent of adolescents with asthma were appropriately prescribed medication, compared to 74 percent of adults 19 to 50 years old and 78 percent of adults 51 to 64 years old.

Figure 12. HEDIS[®] Use of Appropriate Medications for Asthma



The percentage of PCCM members receiving appropriate treatment for asthma varied across regional groups by:

- 4 percentage points among members 5 to 11 years old.
- 7 percentage points among members 12 to 18 years old.
- 22 percentage points among members 19 to 50; ranging from a low of 66 percent in West Texas counties to 88 percent in other PCCM counties.

Table 2. HEDIS® Use of Appropriate Medications for Asthma by Age Cohort and Regional Group

	HEDIS	PCCM	Central Texas	NE Texas	West Texas	Other Counties
Combined rate	88.4%	93.5%	88.9%	92.6%	91.2%	95.4%
5 to 11 years old	91.8%	95.2%	91.9%	95.0%	95.0%	95.9%
12 to 18 years old	-	92.0%	87.5%	91.3%	89.3%	94.6%
19 to 50 years old	-	73.8%	76.0%	69.2%	65.5%	88.2%
51 to 64 years old	-	78.0%	LD	LD	73.3%	LD

Note. HEDIS® 2011 provides a combined mean for 12 to 50 year olds, which is 85.8 percent.

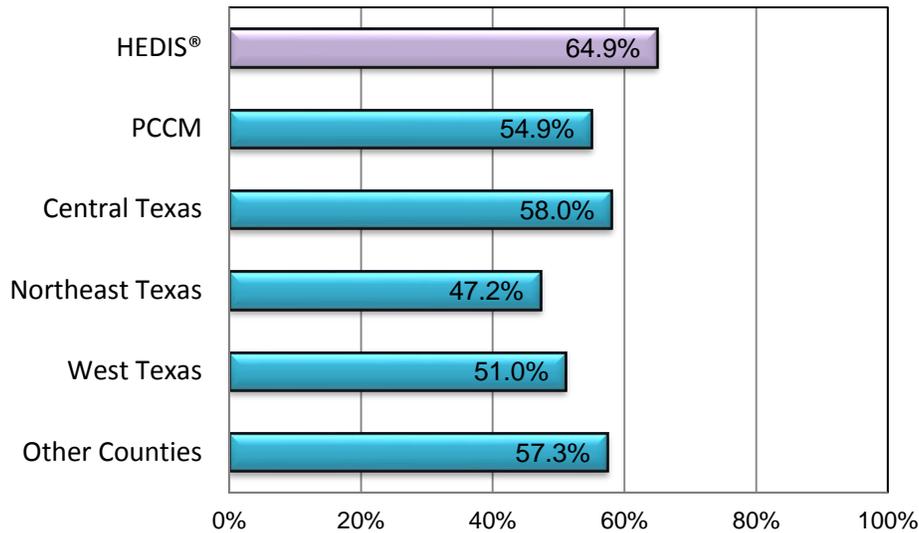
Appropriate Testing for Children with Pharyngitis

Approximately 15 to 30 percent of pharyngitis cases in children are bacterial and can be treated with antibiotics. In contrast, the vast majority of pharyngitis cases (70 to 85 percent) are viral and should not be treated with antibiotics. Despite this, antibiotics are over-prescribed for pharyngitis, which can lead to drug resistant bacterial strains.³⁷ A laboratory test is necessary to identify the whether the pharyngitis is viral or bacterial, and to determine whether antibiotics are an appropriate treatment.³⁸

Figure 13 provides results for the HEDIS® Appropriate Testing for Children with Pharyngitis (CWP) measure, which represents the percentage of children two to 18 years of age in the PCCM Program who were diagnosed with pharyngitis, dispensed an antibiotic, and received a group A streptococcus test for the episode.

Fifty-five percent of children in PCCM diagnosed with pharyngitis and given an antibiotic also received a Strep Test from their provider. The PCCM rate was below the HEDIS® mean for this measure (55 vs. 65 percent), at approximately the 25th percentile for Medicaid Managed Care Plans reporting to the NCQA.

Figure 13. HEDIS® Appropriate Testing for Children with Pharyngitis



Appropriate Treatment for Children with Upper Respiratory Infection

Children typically experience six to eight upper respiratory infections (URIs) each year. URIs are infections of the upper respiratory tract and include laryngitis, pharyngitis, otitis media, and the common cold.³⁹ Most URIs are viral and should not be treated with antibiotics. Despite this, antibiotics are prescribed as a treatment in 68 percent of respiratory infection cases, leading to an increase in drug-resistant bacteria.⁴⁰ The Center for Disease Control and the American Academy of Pediatrics recommend against antibiotic prescriptions for most types of URIs, including otitis media, rhinitis, viral pharyngitis, cough, and bronchitis.⁴¹

Figure 14 provides the HEDIS® Appropriate Treatment for Children with Upper Respiratory Infections (URI) measure, which is the percentage of children three months to 18 years of age who received a diagnosis of upper respiratory infection (URI) and who were not dispensed an antibiotic prescription. Pediatric clinical guidelines do not recommend antibiotic treatment for most upper respiratory infections. Thus, high percentages on this measure indicate good performance.

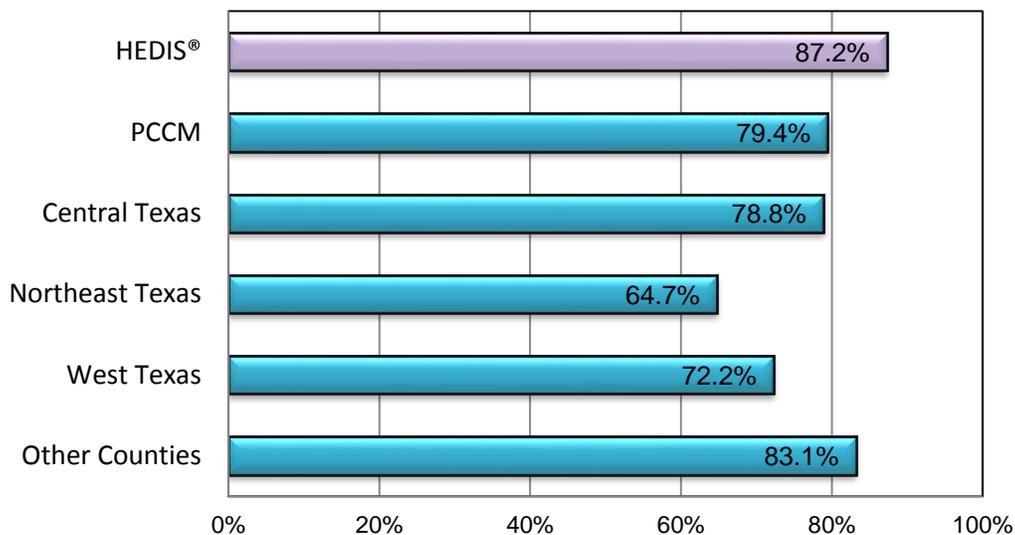
Seventy-nine percent of children in PCCM were appropriately treated for an upper respiratory infection, and not prescribed an antibiotic, compared to 87 percent of children in Medicaid Managed Care Plans reporting to the NCQA on this measure. The PCCM rate for this measure was at the 10th percentile nationally.

Another way to state the above results is that one in five children in PCCM were inappropriately prescribed an antibiotic for an upper respiratory condition (21 percent).

There was variation in the appropriate treatment of upper respiratory conditions in children across the PCCM geographic areas ranging from 65 percent in the Northeast counties to 83

percent in other PCCM counties. In the Northeast counties, one in three children were given an antibiotic for an upper respiratory infection (35 percent).

Figure 14. HEDIS® Appropriate Treatment for Children with Upper Respiratory Infection



Diabetes Care

Diabetes is a lifelong disease that can lead to serious complications, such as blindness and kidney damage. In addition, diabetes makes it more difficult to control blood pressure and cholesterol, which can lead to heart attacks or strokes.⁴² In order to effectively manage these complications, the American Diabetes Association recommends that diabetics have their hemoglobin, blood pressure, and cholesterol screened, as well as to have an eye examination annually. Diabetics should also receive screening and medical attention for nephropathy.⁴³ The monitoring and treatment of complications arising from diabetes can reduce the adverse effects of these conditions.⁴⁴

Figures 15 through 18 provide results for the HEDIS® Comprehensive Diabetes Care (CDC) measure, which is the percentage of PCCM members 18 to 75 years of age with diabetes (type 1 and 2) who had *hemoglobin A1c (HbA1c) testing, eye exams, LDL-C screening, 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.

Among the 8,698 PCCM members with type 1 or 2 diabetes eligible for this measure:

- 76 percent had Hemoglobin A1c (HbA1c) testing
- 74 percent had LDL-C Screening
- 70 percent had kidney disease (nephropathy) monitored
- 42 percent had an eye exam (retinal) performed.

For each diabetes sub-measure, the PCCM rate was below the average rate reported to the NCQA by Medicaid Managed Care Plans nationally.

Figure 15. HEDIS® Comprehensive Diabetes Care – HbA1c Testing

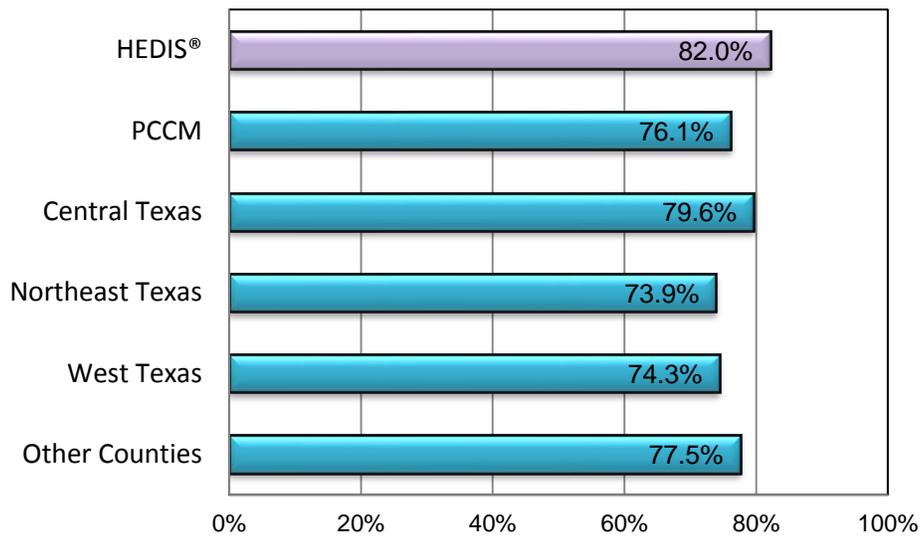


Figure 16. HEDIS® Comprehensive Diabetes Care – Eye Exams

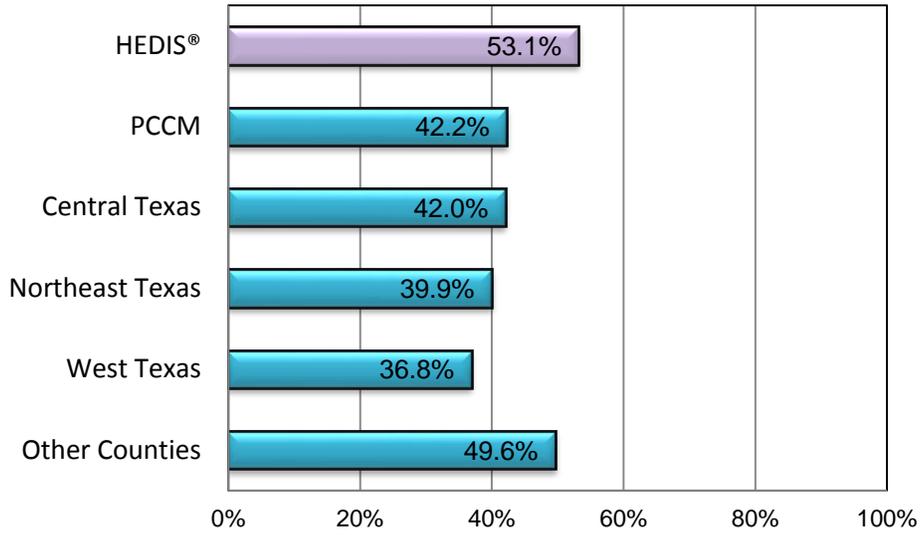


Figure 17. HEDIS® Comprehensive Diabetes Care – LDL-C Screening

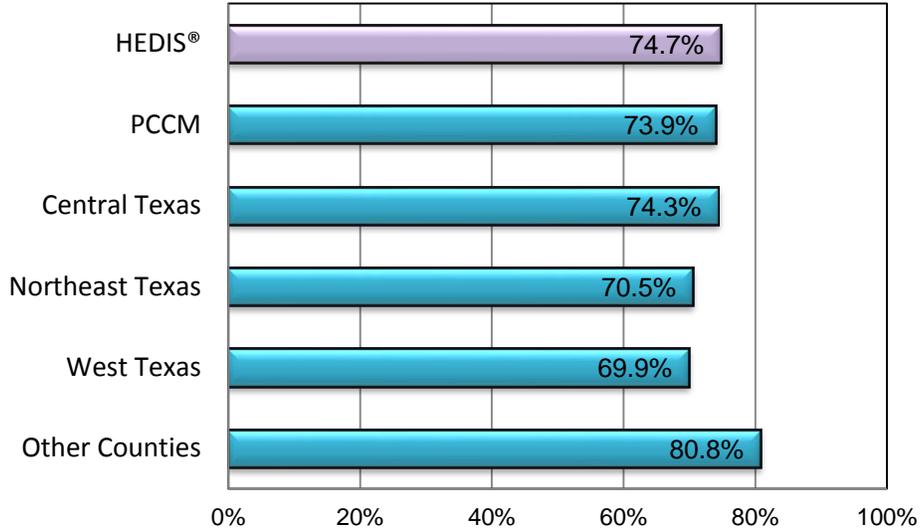
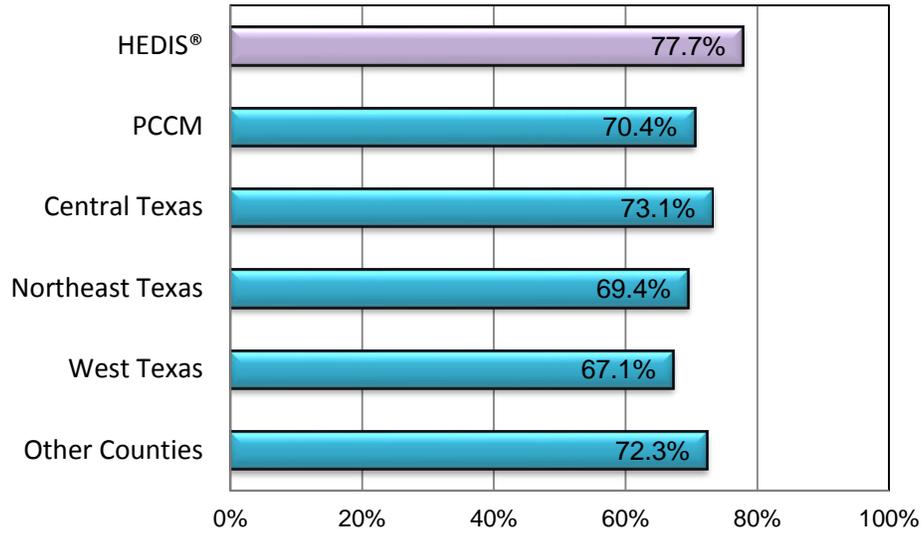


Figure 18. HEDIS® Comprehensive Diabetes Care – Monitoring for Nephropathy



Behavioral Health Care

Follow-up for Children Prescribed ADHD Medication

Over five million children in the United States have Attention Deficit Hyperactivity Disorder (ADHD), which is a problem with inattentiveness or impulsivity that can affect a child's functioning^{45,46} Children with this disorder often have trouble socializing with other children, experience difficulties with school work, and are more prone to injuries due to impulsive behavior.^{47,48} Medication is an effective primary treatment for ADHD. However, children prescribed medication should be monitored to ensure that they are receiving the care they need. Specifically, the AAP recommends follow up visits at regular intervals to assess the effectiveness of pharmacological treatment and to adjust the treatment plan accordingly.⁴⁹ Children who attend follow-up visits and adhere to medication treatment show an improvement in symptoms and are less likely to experience adverse events such as emergency department visits.^{50,51}

Figure 19 presents results for the Follow-Up Care for Children Prescribed ADHD Medication (ADD) measure, which provides the percentage of children six to 12 years of age and newly

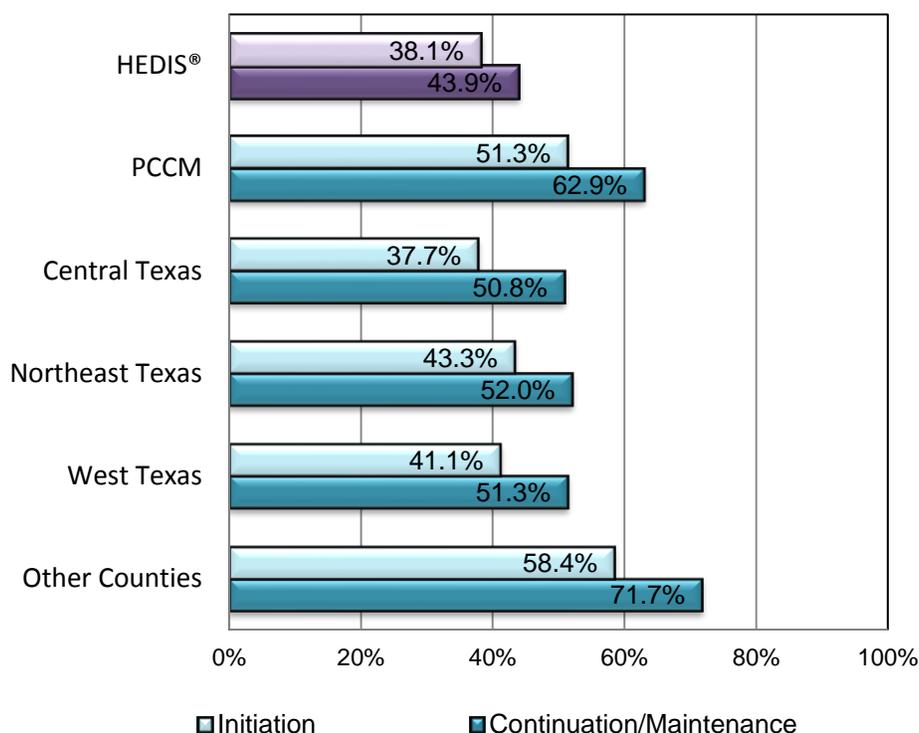
diagnosed with ADHD, who received follow-up care during the measurement period. Two separate rates are reported:

- 1) The *Initiation Phase* shows the percentage of children with an ambulatory prescription dispensed for ADHD medication who had a follow-up visit with a provider within 30 days after beginning medication treatment; and
- 2) The *Continuation and Maintenance Phase* shows the percentage of children with an ambulatory prescription dispensed for ADHD medication who continued taking the medication for at least 210 days (30 weeks), and who had at least two follow-up visits with the provider within nine months after the initiation phase ended.

Half of children (51 percent) newly diagnosed with ADHD had a follow-up visit within 30 days after beginning medication treatment (N = 4,381). Sixty-three percent of children continued to take ADHD medication for 30 weeks and had at least two follow-up visits within nine months (N = 1,024).

ADHD follow-up care varied by PCCM regional group, with the lowest rates observed in Central, Northeast, and West Texas counties. Almost half of children with ADHD who were living in these areas did not receive adequate long-term follow-up for their condition.

Figure 19. Follow-up Care for Children Prescribed ADHD Medication



Note. For the measure “Follow-Up Care for Children Prescribed ADHD Medication,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of

this measure, visits must occur with a prescribing practitioner. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

Effective Pharmacologic Management of Major Depression

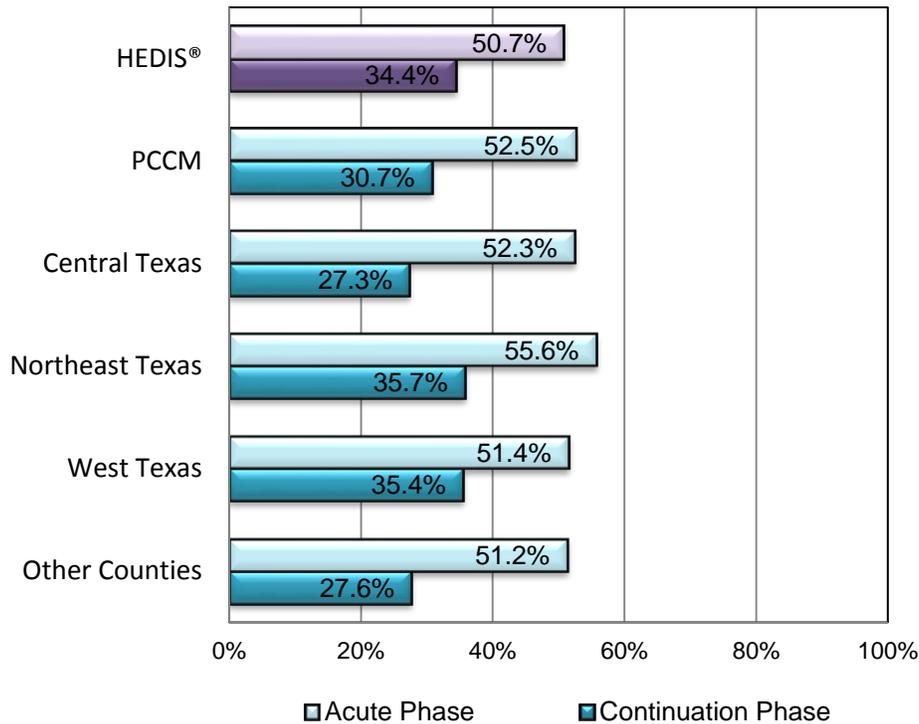
Approximately 15 million adults in the United States suffer from depression.⁵² Depression impairs an individual's quality of life and is a leading cause of disability. In addition, people who have depression are at an increased risk of suicide if they do not undergo treatment.⁵³ Medication is recognized as an effective treatment for depression.⁵⁴ Medication is administered during the acute and continuation phases of treatment, which are meant to cause remission of the disease and prevent relapse. It is often necessary to stay on medication to maintain its therapeutic effect. Because half of patients stop medication prematurely, it is necessary to assess the percentage of patients who stay on antidepressant medication for the duration of the treatment period.⁵⁵

Figure 20 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. 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 that were treated with an antidepressant medication and 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 that were treated with an antidepressant medication and who continued to take the medication for at least 180 days.

There were 981 PCCM adult members with a new episode of major depression that were eligible for this measure during the measurement period. Among these members, 53 percent took an antidepressant for three months (Acute phase of treatment). A smaller percentage continued to take an antidepressant for at least six months (31 percent) during the Continuation phase of treatment.

Figure 20. HEDIS® Antidepressant Medication Management



Follow-up After Hospitalization for Mental Illness

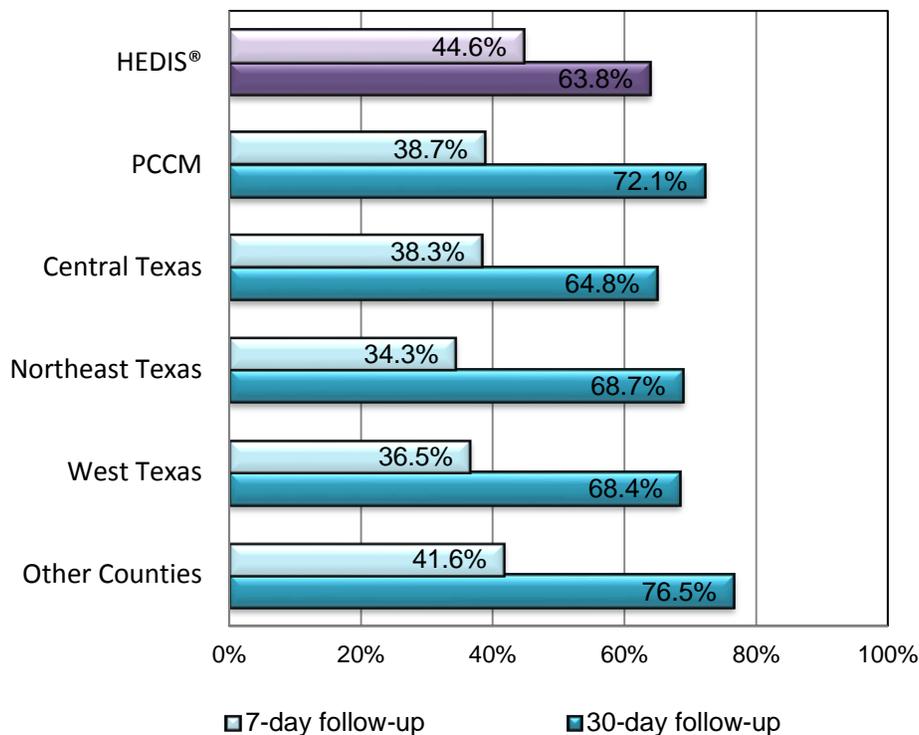
Over 26 percent of people in the United States are diagnosed with a mental health disorder each year.⁵⁶ A study conducted in 2007 found that approximately two million adults were hospitalized for mental health disorders.⁵⁷ Furthermore, another study found that only 16 percent of patients hospitalized for mental health disorders receive follow-up care, and 13 percent of patients are readmitted within six months of discharge.⁵⁸ Patients have a lower probability of being readmitted to the hospital if they are in contact with a mental health provider after being discharged from the hospital.⁵⁹ The American Psychiatric Association recommends that patients with mental health disorders have access to treatment following hospitalization.⁶⁰

Figure 21 provides the percentage of PCCM 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. Two percentages are shown – one for follow-up within seven days of discharge, and one for follow-up within 30 days of discharge.

There were 6,227 members eligible for this measure. Among these members, 39 percent had a follow-up visit within seven days of discharge, and 72 percent had a follow-up visit within 30 days of discharge following hospitalization for mental illness.

In PCCM, the seven day outpatient follow-up rate was below the rate of 45 percent for Medicaid Managed Care Plans reporting to NCQA for this measure.

Figure 21. Follow-up After Hospitalization for Mental Illness



Note. For the measure “Follow-Up After Hospitalization for Mental Illness,” ICHP followed all of the HEDIS® technical specifications except the practitioner requirement. HEDIS® specifies that to count towards the numerator of this measure, visits must occur with a mental health practitioner. HHSC requested the practitioner requirements be removed for this measure, so visits with any provider were included when calculating compliance rates. Therefore, PCCM rates for this measure are likely inflated.

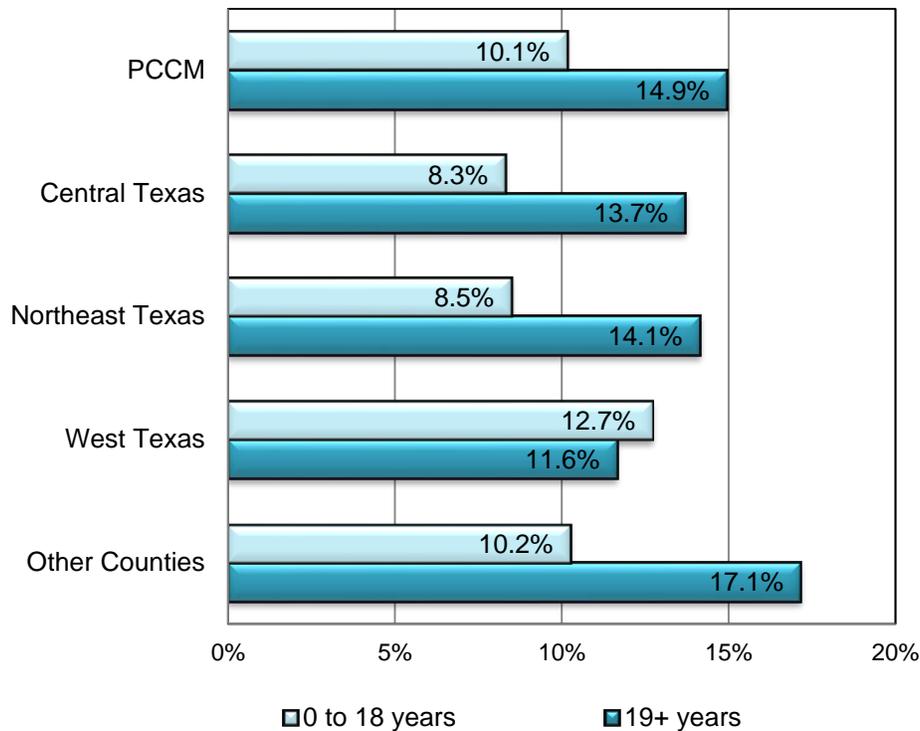
Readmission within 30 Days after an Inpatient Stay for Mental Health

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.⁶¹ For this measure, low rates of readmission indicate good performance.

Figure 22 provides the percentage of PCCM members who were readmitted within 30 days following an inpatient stay for a mental health disorder, by age of members: 0 to 18 years old and members 19 years of age and older.

The mental health readmission rate was slightly higher for adult PCCM members than for child and adolescent PCCM members (15 vs. 10 percent).

Figure 22. Readmission within 30 Days after an Inpatient Stay for Mental Health



Emergency Department Use and Inpatient Admissions

In 2007, approximately 117 million visits were made to emergency departments in the United States. Of those visits, nearly 25 percent were covered by Medicaid or SCHIP.⁶² Emergency departments are becoming increasingly overcrowded, which causes delays in treatment, decreased quality of care, and poor patient outcomes.⁶³ Use of emergency departments for non-urgent conditions may reflect an issue with access to primary care. A study found that access to a primary care physician reduced emergency department use by twenty percent.⁶⁴ Better access to primary sources of care can reduce emergency department visits and improve quality of care.

Emergency Department Utilization

Table 3 provides results for the HEDIS® Ambulatory Care (AMB) measure, showing the rate of ED visits per 1,000 member months in the PCCM Program, distributed by age group and Service Area.

Overall, PCCM members had 54 ED visits per 1,000 member months during the measurement period.

The rate of ED visits was highest among the following age cohorts in PCCM:

- 110 per 1,000 member months for members 20 to 44 years old
- 96 per 1,000 member months for members 45 to 64 years old
- 91 per 1,000 member months for members less than one year of age.

PCCM had lower ED utilization rates than Medicaid Managed Care Plans nationally among members 19 years of age and younger. However, ED utilization in the Central, Northeast, and West counties exceeded national rates for every age cohort listed in **Table 3**.

Table 3. HEDIS® Ambulatory Care Emergency Department Utilization

	HEDIS®	PCCM	Central Texas	NE Texas	West Texas	Other Counties
All ages	62.0	53.9	70.4	79.3	70.1	35.1
< 1 year old	91.1	90.5	114.7	124.8	108.3	63.7
1 to 9 years old	49.2	45.6	59.9	67.4	58.6	30.5
10 to 19 years old	41.4	35.5	46.1	55.2	50.3	22.7
20 to 44 years old	101.1	109.8	126.1	141.9	124.5	78.9
45 to 64 years old	78.0	95.7	102.7	115.7	112.1	68.4

Note. Rates are per 1,000 member months.

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 ACSCs 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.

AHRQ Pediatric Quality Indicators

Table 4 provides PDI rates for asthma, diabetes short-term complications, gastroenteritis, urinary tract infections, and perforated appendix among children and adolescents in the PCCM Program, up to 17 years of age.

Among PDIs calculated, the highest rate of pediatric inpatient admissions in PCCM was for gastroenteritis, and the lowest was for diabetes short-term complications.

PDI rates in PCCM were below national rates for asthma and diabetes short-term complications.

PCCM exceeded the national rates for gastroenteritis and urinary tract infection, primarily because of higher rates in other PCCM counties.

Table 4. AHRQ Pediatric Quality Indicators

	AHRQ	PCCM	Central Texas	NE Texas	West Texas	Other Counties
Asthma	123.2	112.4	129.5	104.9	133.5	103.6
Diabetes Short-term Complications	28.1	23.0	24.5	33.0	30.8	16.8
Gastroenteritis	104.6	168.0	62.1	81.8	118.3	243.9
Perforated Appendix	28.7	31.3	33.9	33.9	27.8	31.0
Urinary Tract Infection	42.8	76.4	42.1	25.8	59.7	109.2

Note. Rates are per 100,000 members, except for Perforated Appendix, which is per 100 admissions for appendicitis.

AHRQ Prevention Quality Indicators

Tables 5 through 7 provide PQI rates of inpatient admissions for ACSCs associated with heart and/or lung disease, diabetes, and other conditions (e.g., urinary tract infection and dehydration) among adults in the PCCM Program, 18 years or older.

Among the PQIs calculated, the highest rate of adult inpatient admissions in PCCM was for COPD at 1084 per 100,000 members. The COPD inpatient admission rate in PCCM was nearly twice the national rate.

The second and third highest rates of inpatient admissions among the PQIs calculated were for bacterial pneumonia (189 per 100,000) and congestive heart failure (180 per 100,000); however these rates were below the corresponding national rates.

Table 5. AHRQ Prevention Quality Indicators – Heart and Lung Disease

	AHRQ	PCCM	Central Texas	NE Texas	West Texas	Other Counties
COPD/Asthma in Older Adults	578.4	1083.6	1248.8	1401.8	1342.1	727.0
Bacterial Pneumonia	361.6	188.7	247.7	300.6	183.1	118.4
Congestive Heart Failure	400.0	179.6	229.4	275.8	165.7	123.3
Hypertension	62.1	53.9	84.9	60.1	55.9	39.2
Asthma in Younger Adults	59.8	51.0	72.0	73.3	76.6	23.3
Angina without Procedure	25.0	11.7	9.2	12.4	13.5	11.4

Note. Rates are per 100,000 members.

Rates of inpatient admissions in PCCM were above the national rates for three out of four diabetes-related conditions listed in **Table 6**. The rate of inpatient admissions for diabetes short-term complications was twice the national rate in PCCM (121 vs. 62 per 100,000), and was three times the national rate in Northeast Texas. In addition, the rate of inpatient admissions for uncontrolled diabetes was twice the PCCM rate and three times the national rate in West Texas.

Table 6. AHRQ Prevention Quality Indicators – Diabetes

	AHRQ	PCCM	Central Texas	NE Texas	West Texas	Other Counties
Diabetes Short-term Complications	61.7	120.6	130.8	192.7	167.7	63.7
Diabetes Long-term Complications	128.7	135.2	172.0	164.4	185.0	87.4
Uncontrolled Diabetes	23.1	31.7	41.3	28.3	67.5	14.7

Low-extremity Amputation in Patients w/Diabetes	17.5	10.6	11.5	17.7	9.6	7.4
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Note. Rates are per 100,000 members.

PCCM inpatient admission rates for other conditions such as urinary tract infection, dehydration, perforated appendix, and low birth weight were below the corresponding national rates. Due to low denominators, the inpatient admissions rate for perforated appendix could not be calculated for the Central, Northeast, and West Texas counties.

Table 7. AHRQ Prevention Quality Indicators – Other Conditions

	AHRQ	PCCM	Central Texas	NE Texas	West Texas	Other Counties
Urinary Tract Infection	206.4	143.2	158.3	152.1	150.3	130.7
Dehydration	176.2	94.0	126.2	118.5	102.1	67.8
Perforated Appendix	28.2	16.9	LD	LD	LD	11.8
Low Birth Weight	6.1	5.4	6.6	5.7	5.4	4.9

Note. Rates are per 100,000 members, except for Low Birth Weight (which is per 100 live births) and Perforated Appendix (which is per 100 admissions for appendicitis).

Summary Points and Recommendations

In December of 2011, there were 804,327 individuals enrolled in the PCCM Program. The average age of members was 11 years old, with approximately one in three members younger than five years old. Almost two-thirds of members were Hispanic.

Children’s Health and Preventive Care

Children and adolescents in PCCM had good access to providers, with an average of 95 percent visiting a provider during the measurement period. Greater than 60 percent of children

and adolescents in PCCM also received preventive care. Rates of preventive care varied by member age:

- 66 percent of adolescent members had a well-care visit.
- 70 percent of members had six or more well-child visits in the first 15 months of life.
- 81 percent of children three to six years old had a well-child visit.

Rates of preventive care differed by PCCM regional group. For example, the percentage of adolescent members who had a well-care visit was highest in the “other” PCCM counties (77 percent), and lowest in the West, Central, and Northeast counties (between 51 and 54 percent).

Women’s Health Care

Across measures of women’s health, PCCM rates were below national averages for Medicaid Managed Care Plans:

- 79 percent of women had access to prenatal care in the first trimester (or within seven weeks after joining the health plan).
- 58 percent had the recommended number of prenatal care visits as determined by the American College of Obstetricians and Gynecologists.
- 57 percent had a postpartum visit.

Members living in Central Texas had lower access to timely prenatal care and fewer prenatal care visits than their PCCM counterparts in other areas of the State.

Access to and use of preventive screenings among women in PCCM was also low:

- 44 percent of women 16 to 64 years old were screened for cervical cancer; and
- 42 percent of women 16 to 20 years old and 55 percent of women 21 to 24 years old were screened for chlamydia.

Care for Respiratory Conditions

The vast majority of children and adolescents with asthma in PCCM received appropriate medication to treat their condition (95 and 92 percent). Adults were less likely than children and adolescents to receive quality treatment for asthma, with approximately 1 in 4 not getting appropriate medication to treat their asthma.

With regard to other respiratory conditions, such as sore throats and colds, pediatric care in PCCM could be improved. The findings indicate that physicians in PCCM over-prescribed antibiotics for children with these respiratory conditions:

- 45 percent of children did not receive appropriate testing for sore throat (pharyngitis) before being prescribed an antibiotic.
- Approximately one in five children were dispensed an antibiotic for an upper respiratory infection.

The PCCM Program performance on these measures was at or below the 25th percentile nationally.

Diabetes Care

Care for type 1 and type 2 diabetes in PCCM varied by the Comprehensive Diabetes Care sub-measure, with approximately three out of four members having Hemoglobin A1c (HbA1c) testing and LDL-C screening; 70 percent being monitored for kidney disease; and 42 percent having an eye exam. Compared to Medicaid Managed Care Plans, PCCM rates of HbA1c testing, LDL-C screening, and eye exams were between the 10th and 25th percentiles nationally, suggesting the need to improve the management of diabetes among PCCM members in all regional groups, and particularly in West Texas counties.

Behavioral Health Care

The quality of behavioral health care provided to members in PCCM varied by condition, type of care and treatment, and geographic region.

Among children newly diagnosed with ADHD and dispensed medication:

- Half had a follow-up visit within 30 days of initiating medication treatment.
- 63 percent continued to take medication for at least seven months and visited their provider at least two times within nine months.

Rates of ADHD follow-up care varied by 20 percentage points across PCCM counties, with children receiving considerably less follow-up care and management of ADHD if they lived in the West, Central, and Northeast Texas counties, than in other PCCM counties.

Among adults diagnosed with a new episode of major depression and prescribed an antidepressant:

- 53 percent took an antidepressant for three months; and
- 31 percent continued to take an antidepressant for at least six months.

Rates of antidepressant use among members with major depression were generally comparable across PCCM regional groups, with slightly higher antidepressant use observed among members living in counties in Central Texas.

Among PCCM members who were hospitalized for a mental health condition, the majority did not have an outpatient follow-up visit with seven days of discharge from the hospital (61 percent). By 30 days post-discharge, approximately three out of four members had seen a provider for an outpatient follow-up (72 percent).

The rate of readmission to the hospital within 30 days following a mental health stay was slightly higher for adult PCCM members than for child and adolescent PCCM members (15 vs. 10 percent).

Potentially Preventable ED Use and Inpatient Admissions

Overall, ED use in PCCM for potentially preventable conditions was lower than national averages for Medicaid Managed Care Plans. However, ED use in the West, Central and Northeast counties exceeded national averages within each age cohort.

The highest rate of potentially preventable ED visits in PCCM was observed for:

- Members 20 to 44 years old (110 per 1,000 member months);

- Members 45 to 64 years old (96 per 1,000 member months); and
- Members less than one year old (91 per 1,000 member months).

The most common potentially preventable conditions for which children in PCCM were hospitalized (among the PDIs calculated in this report) were:

- Gastroenteritis (168 per 100,000 members);
- Asthma (112 per 100,000 members); and
- Urinary tract infection (76 per 100,000 members).

The most common potentially preventable conditions for which adults in PCCM were hospitalized (among the PQIs calculated in this report) were:

- COPD/Adult asthma (1,084 per 100,000 members);
- Bacterial pneumonia (189 per 100,000 members);
- Congestive heart failure (180 per 100,000 members);
- Urinary tract infection (143 per 100,000 members);
- Diabetes long-term complications (135 per 100,000 members); and
- Diabetes short-term complications (121 per 100,000 members).

The inpatient admission rates for both COPD and diabetes short-term complications were approximately twice the AHRQ national averages. Across all PQI inpatient admissions, rates were generally higher in Central, Northeast, and West Texas counties than in other PCCM counties.

Recommendations

For each domain listed below, the EQRO recommends that Texas HHSC and/or Managed Care Organizations (MCOs) in the STAR Medicaid Rural Service Area (MRSA), as well as the Hidalgo service area, monitor low-performing measures to ensure that they improve over time through Medicaid Managed Care. Potentially successful strategies for low-performing measures identified in this report are shown in the table below.

Domain	Recommendations	Rationale
Women's Health	<p>Assess network adequacy for OB/GYN providers in former PCCM regions. In addition, assess women's access to routine appointments, and provider availability during early morning, evening, and weekend hours.</p> <p>Conduct hospital visits with new mothers before discharge to assist with scheduling postpartum visits and transportation.</p>	<p>Access to and utilization of women's health services needs improvement.</p> <p>One in five pregnant women in PCCM did not receive timely prenatal care, and 42 percent did not have the expected number of prenatal care visits.</p> <p>Forty-three percent did not</p>

Domain	Recommendations	Rationale
	<p>For preventive screenings, MCOs should target women who are overdue for their Pap test and mail reminders along with educational materials about the importance of regular check-ups. MCOs should also give providers lists of women in their panel who have not had a Pap test and encourage follow-up with these members.</p>	<p>have a post-partum visit. More than half of women were not screened for cervical cancer or chlamydia.</p>
<p>Treatment of Respiratory Conditions in Children</p>	<p>Conduct drug utilization review to identify high prescribers of antibiotics and provide physician training to allow more effective treatment decisions for children with pharyngitis and upper respiratory conditions.</p> <p>Examples of effective interventions to reduce inappropriate antibiotic prescribing include:</p> <ul style="list-style-type: none"> • Training providers in the use of an interactive booklet to facilitate primary care consultations for childhood respiratory tract infections.^{65,66} • A physician behavior-change strategy that includes guideline dissemination, small-group education, updates, educational materials, and prescribing feedback, targeting the treatment of children age two to six years old.⁶⁷ 	<p>PCCM pediatric providers may be overprescribing antibiotics for sore throat and upper respiratory conditions. Forty-five percent of children with pharyngitis and an antibiotic prescription were not given a Strep test.</p> <p>In addition, one in five children were inappropriately given an antibiotic to treat an upper respiratory infection.</p>
<p>Behavioral Health Care</p>	<p>MCOs should work with network hospitals to ensure that members admitted for a mental health condition are scheduled for an outpatient visit with a mental health provider within seven days of discharge from the hospital. Case management staff should contact patients the day after discharge to remind them of their appointment and to ensure the member has transportation to and from the appointment.</p>	<p>Improve timely outpatient follow-up for members who were hospitalized for a mental health condition. Less than 40 percent of members had a visit with a provider within seven days of discharge from the hospital following a mental health stay.</p>
<p>Diabetes Care in Adults</p>	<p>Identify providers with higher rates of compliance with established protocols for diabetes management (i.e., higher rates of recommended testing and members with</p>	<p>The rate of potentially avoidable inpatient stays for diabetes short-term complications was twice the</p>

Domain	Recommendations	Rationale
	<p>good diabetes control) and give recognition to these providers through newsletters and other mechanisms, encouraging members with diabetes to consider provider performance when selecting physicians.</p> <p>Identify members who are noncompliant with diabetes measures and send targeted, specific reminders to members and providers regarding the need for diabetes monitoring and testing.</p>	<p>national average.</p> <p>Adult members also had lower rates of eye exams, HbA1c testing, and medical attention for diabetic nephropathy.</p>

Appendix A: AHRQ Quality Indicators

Table A1. AHRQ Pediatric Quality Indicators

AHRQ Indicator Number	Indicator Name	Description
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 A2. AHRQ Adult Prevention Quality Indicators

AHRQ Indicator Number	Indicator Name	Description
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 A2 (continued)

AHRQ Indicator Number	Indicator Name	Description
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 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

Appendix B: Texas Counties by Regional Group

Central Texas

Bell, Blanco, Bosque, Brazos, Burleson, Colorado, Comanche, Coryell, DeWitt, Erath, Falls, Freestone, Gillespie, Gonzales, Grimes, Hamilton, Hill, Jackson, Lampasas, Lavaca, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Somervell, Washington

Northeast Texas

Anderson, Angelina, Bowie, Camp, Cass, Cherokee, Cooke, Delta, Fannin, Franklin, Grayson, Gregg, Harrison, Henderson, Hopkins, Houston, Lamar, Marion, Montague, Morris, Nacogdoches, Panola, Rains, Red River, Rusk, Sabine, San Augustine, Shelby, Smith, Titus, Trinity, Upshur, Van Zandt, Wood

West Texas

Andrews, Archer, Armstrong, Bailey, Baylor, Borden, Brewster, Briscoe, Brown, Callahan, Castro, Childress, Clay, Cochran, Coke, Coleman, Collingsworth, Concho, Cottle, Crane, Crockett, Culberson, Dallam, Dawson, Dickens, Dimmit, Donley, Eastland, Ector, Edwards, Fisher, Foard, Frio, Gaines, Glasscock, Gray, Hall, Hansford, Hardeman, Hartley, Haskell, Hemphill, Howard, Irion, Jack, Jeff Davis, Jones, Kent, Kerr, Kimble, King, Kinney, Knox, La Salle, Lipscomb, Loving, Martin, Mason, McCulloch, Menard, Midland, Mitchell, Moore, Motley, Nolan, Ochiltree, Oldham, Palo Pinto, Parmer, Pecos, Presidio, Reagan, Real, Reeves, Roberts, Runnels, Schleicher, Scurry, Shackelford, Sherman, Stephens, Sterling, Stonewall, Sutton, Taylor, Terrell, Throckmorton, Tom Green, Upton, Uvalde, Val Verde, Ward, Wheeler, Wichita, Wilbarger, Winkler, Yoakum, Young, Zavala

Other Counties

The "Other Counties" category primarily includes PCCM members who transitioned to the STAR or STAR+PLUS programs in the Hidalgo service area.⁶⁸ The PCCM counties that now form the Hidalgo service area are Cameron, Duval, Hidalgo, Jim Hogg, Maverick, McMullen, Starr, Webb, Willacy, and Zapata.

Endnotes

¹ The “Other Counties” category may also include members who lived near the boundaries of established Medicaid service areas.

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