North Carolina Community Care Networks, Inc.

FY 2017 Annual Quality Report
November 7th, 2017

Mr. Dave Richard  
Deputy Secretary for Medical Assistance  
North Carolina Department of Health and Human Services

Dear Mr. Richard:

Attached you will find NCCCN’s Annual Quality Report of Program Metrics/Measures for DMA’s primary care case management program for SFY 2017. I am pleased to report that program performance continues to be outstanding for DMA’s highest priority populations.

The report is organized into 4 sections:
1. Overall PCCM Program Performance  
2. Pediatric Measures  
3. Maternal Health Measures  
4. Behavioral Health Measures

Overall program performance is measured through claims and chart review measures across chronic conditions, population specific preventive care and utilization measures. The report displays 37 measures which include 11 primary care case management measures, 13 pediatric measures, 11 maternal health measures and two behavioral health measures – 14 are benchmarked against the 2015 NCQA HEDIS national Medicaid MCO average (mean).

Highlights of the report include:

**Primary Care Case Management**

- NCCCN continues to effectively manage cost and utilization for the enrolled population. Actual rates for our four Key Performance Indicators continue to outperform expected rates. Actual inpatient admissions are 28% below expected admissions and ED visits are 8.4% below expected.
- The program continues to perform exceptionally well in managing chronic conditions. Clinical measures for several chronic conditions including diabetes and hypertension exceed five of six HEDIS benchmarks for all reporting years.
Pediatrics
  - The program also outperforms in well-child visit rates, developmental screenings and annual dental visits. For the overall pediatric population, NCCCN is above HEDIS benchmarks for four of the six HEDIS measures.
  - For children in foster care, the rates for all six pediatric HEDIS measures exceed HEDIS benchmarks.
  - There has been marked improvement in adolescent preventive care over the last several years, including well visits, depression screening and immunizations.

Maternal Health
  - Approximately 80% percent of pregnant women in the Pregnancy Medical Home program undergo a comprehensive risk screening.
  - There has also been a decline in the unintended pregnancy rate and rate of elective deliveries before 39 weeks gestation.

Behavioral Health
  - The program performs better than the HEDIS mean on metabolic monitoring for children and adolescents taking antipsychotic medications and is steadily improving with managing antidepressant medications in the acute treatment phase.

Opportunities for Improvement
  - The annual quality review identifies several opportunities for improvement. These include asthma medication management, preventive care for adolescents, early entry to prenatal care and antidepressant medication management.

We look forward to reviewing the report with the NCCCN/DMA core team and continuing to work together to improve health outcomes and reduce the cost of care for Medicaid and NC Health Choice beneficiaries.

Regards,

Tom Wroth, MD, MPH
President and Chief Medical Officer
North Carolina Community Care Networks
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EXECUTIVE SUMMARY

The mission of North Carolina Community Care Networks, Inc. (NCCCN) is to improve the health and quality of life for all North Carolinians by building and supporting better community-based health care delivery systems. NCCCN is located in all 100 counties of the state. Our statewide infrastructure includes 14 networks and over 1,800 participating primary care medical homes and is augmented by the networks' partnerships with local health care delivery systems including hospitals, health departments, safety net providers, community-based organizations, community pharmacies and specialty practices. This creates interdisciplinary care teams to manage the care of enrolled beneficiaries.

We focus on care management strategies for our enrolled population and support of medical homes for our participating primary care providers using health analytics tools to target care to the right person, at the right time, in the right care setting. Each Medicaid and NC Health Choice (NCHC) beneficiary is linked to a primary care provider and medical home. NCCCN supports and builds capacity in those medical homes and targets beneficiaries for complex care management using population health data to manage cost, utilization and improve quality. Pediatrics, pharmacy, behavioral health and maternal health programs target specific subpopulations in addition to supporting care management and practice support functions.

As part of NCCCN’s commitment to continuous quality improvement, NCCCN quality measurement and assessment is used to stimulate and facilitate quality improvement efforts at NCCCN’s networks and medical homes and to help evaluate the performance of NCCCN as a whole. Quality is measured at the individual practice level, engaging providers in the QI process and by reporting on progress at the practice, county, network and statewide level. By focusing on continuous quality improvement, care delivery processes improve, resulting in fewer ED visits, impatient admissions, readmissions and reduced health care costs.

NCCCN has a long history of using data for decision making and quality improvement. Historically, we have produced results of our Key Performance Indicators (KPIs) and our Quality Measurement and Feedback (QMAF) measures (many are National Committee for Quality Assurance (NCQA) based measures). Both sets of measures are included in this report along with performance measures focusing on the pediatric, maternal health and behavioral populations. Many of these measures have been used for years to gauge program performance and overall health of our enrolled population.

NCCCN’s Annual Quality Report for DMA’s primary care case management program is organized into four sections:

1. Overall PCCM Program Performance
2. Pediatric Measures
3. Maternal Health Measures
4. Behavioral Health Measures

Overall program performance is measured through claims and chart review measures across chronic conditions, population specific preventive care and utilization measures. The report displays 37 measures which include 11 primary care case management measures, 13 pediatric measures, 11 maternal health measures and two behavioral health measures – 14 are benchmarked against the 2015 NCQA HEDIS national Medicaid MCO average (mean).
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Highlights of the report include:

Primary Care Case Management
- NCCCN continues to effectively manage cost and utilization for the enrolled population. Actual rates for our four Key Performance Indicators continue to outperform expected rates. Actual inpatient admissions are 28% below expected admissions and ED visits are 8.4% below expected.
- The program continues to perform exceptionally well in managing chronic conditions. Clinical measures for several chronic conditions including diabetes and hypertension exceed five of six HEDIS benchmarks for all reporting years.

Pediatrics
- The program also outperforms in well-child visit rates, developmental screenings and annual dental visits. NCCCN is above HEDIS benchmarks for four of the six HEDIS measures.
- For children in foster care, the rates for all six pediatric HEDIS measures exceed HEDIS benchmarks.
- There has been marked improvement in adolescent preventive care over the last several years, including well visits, depression screening and immunizations.

Maternal Health
- Approximately 80% percent of pregnant women in the Pregnancy Medical Home program undergo a comprehensive risk screening.
- There has also been a decline in the unintended pregnancy rate and rate of elective deliveries before 39 weeks gestation.

Behavioral Health
- The program performs better than the HEDIS mean on metabolic monitoring for children and adolescents taking antipsychotic medications and is steadily improving with managing antidepressant medications in the acute treatment phase.

Opportunities for Improvement
- The annual quality review identifies several opportunities for improvement:
  - Medication Management for People with Asthma – rates for children remain below the HEDIS mean which is the primary population for asthma care. More analysis into drivers of poor medication adherence and management are needed, as well as targeted interventions.
  - Well-Child Visits – rates for children ages 3 through 21 (encompassing three well-child visit measures) are below available HEDIS benchmarks, though steady improvement has been made since FY14. Children in foster care have much higher rates in each age group than non-foster care children. Interventions with Health Check Coordinators and visit reminders are needed to improve rates.
  - Timeliness of Prenatal Care – rates continue to be low in the Medicaid population. NCCCN will launch a statewide initiative in 2018 to improve these rates.
  - Antidepressant Medication Management – despite improvements since FY15, rates remain below the HEDIS mean. NCCCN is working to implement a multifaceted quality improvement initiative utilizing care management, primary care integration and pharmacy support to improve these rates in the acute phase of treatment.
The mission of North Carolina Community Care Networks, Inc. (NCCCN) is to improve the health and quality of life for all North Carolinians by building and supporting better community-based health care delivery systems. Our mission is accomplished through a statewide infrastructure of medical homes and community-based health care providers. NCCCN focuses on care management strategies for our enrolled population and support of medical homes for our participating primary care providers with using health analytics tools to target care to the right person, at the right time, in the right care setting. Since its inception, a fundamental principle of NCCCN has been “Quality First.” We believe that by focusing on quality, health outcomes improve, care delivery improves and costs go down.

The statewide infrastructure of NCCCN includes not only more than 1,800 participating primary care medical homes, 380 pregnancy medical homes, 8,000+ primary care providers and 1,700 maternity care providers, but also 14 NCCCN networks across the state that employ approximately 1,600 care managers, pharmacists, psychiatrists and clinical leadership to support population health management activities. Augmenting this infrastructure are the networks’ partnerships with local health care delivery systems including hospitals, health departments, safety net providers, community-based organizations and specialty practices, including mental health and substance abuse treatment entities to create interdisciplinary care teams to manage the care of enrolled beneficiaries. NCCCN has built its program on a “patient-centric care” approach that addresses the patient’s physical, social, emotional and behavioral health care needs.

History of North Carolina Community Care Networks

The origins of NCCCN date back to 1990 when, under Governor Jim Martin’s administration, a 12-county pilot was launched to provide “medical homes” for certain Medicaid beneficiaries as a means of addressing inappropriate emergency room (ER) utilization. Private foundations supported the early costs of the pilot; but as it proved its success and expanded into additional areas, ongoing financial support shifted to governmental resources (state and federal Medicaid dollars). DMA submitted a federal 1915(b) waiver in 1991 and again in 1998 to cover the costs of the program. In 2004, the federal Centers for Medicare and Medicaid Services (CMS) approved a request from DMA to shift this program from a 1915(b) waiver program to a program authorized by Medicaid State Plan. By 2007, NCCCN and its medical home model had become statewide and present in all 100 counties.

Primary Care Case Management Overview

NCCCN’s primary care case management (PCCM) program is carried out through two chief functions: care management and support of medical homes (hereafter referred to as practice support). Each Medicaid and NC Health Choice (NCHC) beneficiary is linked to a primary care provider and medical home. NCCCN supports and builds capacity in those medical homes and targets beneficiaries for complex care management using population health data to manage cost, utilization and improve quality. Pediatrics, pharmacy, behavioral health and maternal health programs target specific subpopulations in addition to supporting care management and practice support functions. NCCCN’s clinical programs are interconnected in order to address patient needs comprehensively and best meet the diverse needs of the populations served. All of these efforts are supported by population health analytics, evidence-based policies and a robust informatics platform that targets the right patients, at the right time, in the right care setting.
OVERVIEW

While each enrolled beneficiary may not require direct management by a network care manager, the services provided by NCCCN support a statewide infrastructure for all enrolled beneficiaries and intensive care management for those in greatest need. This infrastructure allows each of the 1.6 million enrolled beneficiaries’ claims history to be analyzed for risk and impactability.

NCCCN risk-stratifies patients by severity of illness and past utilization so as to identify higher-risk patients that would benefit from more intensive care management than those who are reached through disease management and/or population management. NCCCN identifies patients that are most “impactable” (likely to have a demonstrated return on investment). Those priority patient populations include:

- Beneficiaries in the hospital who need transitional care.
- Patients referred by the hospital emergency department (ED) or another provider.
- High-risk/high-cost patients who have spent more in hospital costs (admit/ED/readmit, including behavioral health) than expected compared to peers in their clinical risk group.

Support for Medical Homes

There are over 1,800 medical homes encompassing over 8,000 primary care providers within the NCCCN umbrella – which represent over 90 of the primary care providers in the state. Of our enrolled providers, more than 25% have achieved national recognition from the National Committee for Quality Assurance (NCQA) as a “patient centered medical home” or PCMH. North Carolina is a leader in the country in terms of the number of PCMH-recognized practices per capita.

Continuous Quality Improvement

As part of NCCCN’s commitment to continuous quality improvement, NCCCN has developed a Quality Strategy that incorporates all existing quality improvement and assessment tools into a comprehensive and cohesive framework. Overall, the NCCCN Quality Strategy has three domains of quality assessment: structure, processes and outcomes. Quality assessment and measurement is intended to stimulate and facilitate quality improvement (QI) efforts in NCCCN practices and local networks and to help evaluate the performance of the program as a whole.

Quality is measured at the individual practice level, engaging providers in the QI process and by reporting on progress at the practice, county, network and statewide level. Specific goals targeting cost effectiveness and quality of care are developed and revised annually. By focusing on continuous quality improvement, care delivery processes improve, resulting in fewer ED visits, inpatient admissions, readmissions and reduced health care costs.
OVERVIEW

Domains for Quality Assessment

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<th>Processes</th>
<th>Outcomes</th>
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<td><strong>Improvement Process:</strong> Statewide Clinical Priority/Quality Improvement Initiative</td>
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Structure

NCCCN’s structural measures define standards for network programs ensuring delivery of high quality care in accordance with our contractual and programmatic measure requirements. The structural measures are part of an Annual Network Assessment that gauges achievements and opportunities for performance improvement.

Processes

NCCCN process measures set efficiency expectations from the defined structure and provide implementation strategies for program implementation statewide. The processes are measured through care management rates, measures and standard timelines. These measures are reported through quarterly dashboards that display overall performance and highlight notable trends and opportunities for improvement. NCCCN has also developed a Patient Engagement Dashboard to allow for Network and statewide monitoring and improvement of care management referral, contact and engagement rates in near real-time.

Outcomes

NCCCN outcome measures indicate the quality of programs and demonstrate how well structure and processes are undergoing continuous improvement. Outcome measures include key performance indicators, quality measurement and feedback results and patient and provider satisfaction data. Outcome measures are reported as part of the continuous quality improvement strategy via the Annual Quality Report and operationalized through statewide initiatives.

Overall, NCCCN takes a collaborative and strategic approach to development, implementation, monitoring and review of its Quality Strategy. Continuous Quality Improvement encompasses three domains to be more efficient, cost effective and continuously improve our approach to providing high quality health care statewide.
NCCCN serves 1.6 million of North Carolina’s approximately 2 million Medicaid and NCHC beneficiaries. Over 1.1 million of the beneficiaries we serve are children, most with relatively few medical needs. However, the adult population includes many individuals with complex clinical and behavioral health needs, including aged, blind or disabled (ABD) beneficiaries. The ABD population is approximately 315,000 individuals. Over forty percent of ABD beneficiaries have at least one type of mental illness, developmental disability or substance abuse issue.
Total Medicaid and NC Health Choice Beneficiaries* and NCCCN Enrolled Beneficiaries

Medicaid and NC Health Choice Population

NCCCN Enrolled Beneficiaries

Total Population (Medicaid & Health Choice Beneficiaries) - Calculated Enrollment (NCCCN Enrolled Beneficiaries)
NCCCN POPULATION DEMOGRAPHICS

**NCCCN Enrollment by Age**

- 5-20 Years: 53%
- 0-4 Years: 20%
- 21-64 Years: 22%
- 65+ Years: 5%

**NCCCN Enrollment by Sex**

- Male: 46%
- Female: 54%
NCCCN POPULATION DEMOGRAPHICS

NCCCN Enrollment by Race/Ethnicity

- White: 42%
- African American: 36%
- Hispanic: 16%
- Asian/Pacific Islander: 2%
- Native American/Alaska: 2%
- Unknown: 2%

NCCCN Enrollment by Program Aid Groupings

- Non-Dual Child: 70%
- Non-Dual Adult: 10%
- Non-Dual ABD: 10%
- Dual: 10%
### CHRONIC CONDITION TYPES – NCCCN ENROLLEES

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<th>Patient Count</th>
<th>Percent of Patients</th>
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<td>No Conditions</td>
<td>1,023,992</td>
<td>64.2%</td>
</tr>
<tr>
<td>Behavioral Health Condition</td>
<td>262,726</td>
<td>16.5%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>174,261</td>
<td>10.9%</td>
</tr>
<tr>
<td>Chronic Pain Disorder</td>
<td>168,256</td>
<td>10.6%</td>
</tr>
<tr>
<td>Asthma</td>
<td>159,241</td>
<td>9.98%</td>
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<tr>
<td>Chronic GI Disease</td>
<td>111,591</td>
<td>7.00%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>89,855</td>
<td>5.63%</td>
</tr>
<tr>
<td>ADHD</td>
<td>72,851</td>
<td>4.57%</td>
</tr>
<tr>
<td>Developmental Disability</td>
<td>67,675</td>
<td>4.24%</td>
</tr>
<tr>
<td>Chronic Neurological Disease</td>
<td>53,842</td>
<td>3.38%</td>
</tr>
<tr>
<td>Depression</td>
<td>50,730</td>
<td>3.18%</td>
</tr>
<tr>
<td>COPD</td>
<td>46,461</td>
<td>2.91%</td>
</tr>
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<td>Anxiety</td>
<td>44,946</td>
<td>2.82%</td>
</tr>
<tr>
<td>Ischemic Vascular Disease</td>
<td>42,401</td>
<td>2.66%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>26,983</td>
<td>1.69%</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>23,791</td>
<td>1.49%</td>
</tr>
<tr>
<td>Cancer</td>
<td>20,418</td>
<td>1.28%</td>
</tr>
<tr>
<td>Schizophrenia or Schizoaffective Disorder</td>
<td>20,257</td>
<td>1.27%</td>
</tr>
<tr>
<td>Autism</td>
<td>13,148</td>
<td>0.82%</td>
</tr>
<tr>
<td>Dementia</td>
<td>12,661</td>
<td>0.79%</td>
</tr>
<tr>
<td>Congestive Heart Disease</td>
<td>11,689</td>
<td>0.73%</td>
</tr>
<tr>
<td>HIV</td>
<td>4,875</td>
<td>0.31%</td>
</tr>
<tr>
<td>History of Myocardial Infarction</td>
<td>4,240</td>
<td>0.27%</td>
</tr>
<tr>
<td>Sickle Cell</td>
<td>2,403</td>
<td>0.15%</td>
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### HEALTH COMPLEXITY – NCCCN CARE MANAGED POPULATION

- Multiple Chronic Conditions
- Behavioral Health Conditions
- NCCN Care Managed Population
Chronic Disease Distribution across NCCCN Enrolled Population

- 63% have no chronic conditions
- 16% have 1 chronic condition
- 10% have 2 chronic conditions
- 5% have 3 chronic conditions
- 3% have 4 chronic conditions
- 3% have 5 or more chronic conditions
Background/ Goals

North Carolina Community Care Networks, Inc. (NCCCN) is a statewide population management program founded on the Primary Care Case Management (PCCM) model. The model is carried out chiefly through two main functions: care management and practice support. These two functions are supported by health analytics infrastructure used for decision making throughout the organization. This includes the identification of patients with real-time data for appropriate care management interventions and evaluation of our primary care management program. The over-arching goals of the services provided by NCCCN are to improve the cost effectiveness and quality of care for our enrollees.

Care Management

NCCCN provides care management services to address the health care needs of Medicaid and North Carolina Health Choice beneficiaries to promote quality and cost-effective care. NCCCN care management programs apply systems and information to improve care and assist patients to become engaged in a collaborative process designed to manage medical, social and behavioral health conditions more effectively and improve outcomes.

Goals of NCCCN Care Management
- Maintain a model that focuses on patient engagement, empowerment and education.
- Using an interdisciplinary team, meet the needs of chronically ill members by reducing their vulnerability and changing the trajectory of the course of their chronic illness.
- Address social determinants of health that impact access to care and patient outcomes.
- Work with medical homes to promote treatment regimens that are aligned with evidence-based guidelines.
- Help medical homes design workflows that are patient-centered and focus on facilitation of behavior change and self-care while addressing emotional and social issues as well.
- Reduce fragmented care and facilitate communication across settings and providers.

Practice Support

Statewide, NCCCN contracts with more than 1,800 practices to provide a medical home for Medicaid and NCHC beneficiaries. The practice support program aims to strengthen and support the NCCCN provider network by deploying a collaborative practice support model that engages providers and practices, assisting them in achieving high quality, cost effective and patient centered care. This program supports providers and practices with tools, resources, coaching and a collaborative learning environment in which they can assess their performance and engage systematically in improvement activities using their own practice data and comparisons to others as benchmarks.

Goals of the NCCCN Practice Support
- Improve quality of care provided
- Improve patient experience
- Improve provider satisfaction
- Reduce/contain costs of care
- Reduce unnecessary hospital utilization
Current Programs

NCCCN care management programs were developed from a variety of evidence-based models using in-house experts in clinical practice, quality and data analytics. Care management programs are designed to provide specific care and services to specific populations. Those programs include:

- Complex Care Management
- Transitional Care
- Chronic Disease Care Management
- High-Risk Pregnancy
- Asthma
- Diabetes
- COPD
- Depression
- Sickle Cell
- Medication Management
- Foster Care Health and Wellness
- Pregnancy
- Preventative Care/Screening
- Health Coaching/Wellness initiatives

Network practice support teams provide a variety of services at the practice level. These medical home support activities and quality improvement work are driven by data to target and implement best practices for the providers and recipients to facilitate optimal outcomes. Practice support teams carry out the following activities:

- Assess and establish appropriate priorities and strategies to facilitate continuous improvement in quality of care.
- Focus strategies on provider and patient engagement, as well as a sharing of best practices.
- Analyze, interpret and communicate Quality Measurement and Feedback (QMAF), KPI and other data sets with practices.
- Assist practices with implementing QI initiatives and participating in NCCCN Program-wide quality improvement activities.
- Assist practices will achieving NCQA Patient Centered Medical Home recognition.
- Review quarterly DMA dashboard measures with network leadership and practices.
- Promote, coach, support and educate practices on the implementation of disease management strategies.
- Provide population management tools, clinical toolkits, quality measure reporting with peer comparison, QI coaching, workflow analysis.
- Support implementation of processes aimed to improve access to care, provide after-hours protocols, appropriate ED referral processes, timely PCP follow up after hospital discharge.

Targeted Population

NCCCN programs serve 1.6 million beneficiaries through enrollment in medical homes. Once a beneficiary is enrolled in a medical home, NCCCN uses data and provider referrals to identify beneficiaries in need of care management who are “impactable” – that is, most likely to benefit from care management interventions and yield better outcomes and savings. NCCCN has developed and honed its analytic capabilities to identify NCCCN enrollees who would benefit most from Complex Care Management and Transitional Care interventions through NCCCN’s unique “Impactability Score.” NCCCN’s impactability targeting strategy optimizes the care management return on investment (ROI). Characteristics and
utilization patterns of individual patients are considered to see if there are differences in outcomes when receiving interventions versus not.

Additional criteria for identifying patients who are eligible for NCCCN programs include:
- Patients referred by providers, ED and/or NCCCN Call Center
- Patients with one or more key target conditions (CHF, Diabetes, Ischemic Vascular Disease, Asthma, Sickle Cell or COPD)
- Children with complex medical needs and/or social needs
- Patients on high risk medications or who are at risk for polypharmacy or suboptimal adherence
- Pregnant women
- Children in Foster Care

The target population for practice support services includes all adult and pediatric primary care practices that are enrolled with NCCCN. These services also supports NCCCN priorities and network initiatives that may be program specific or broader in nature. There are currently more than 1,800 NCCCN enrolled primary care practices. More than 25% of our practices are NCQA Recognized PCMH practices.

Future Direction

- While NCCCN will continue to support all enrolled practices in improving quality and effectively managing populations, there is an important opportunity to support independent, rural and under-resourced practices. NCCCN practice support services can help practices prepare for upcoming changes resulting from Medicaid Reform, enabling them to provide high quality of care at lower costs with improved patient experience.
- In the fall of 2016, NCCCN began optimizing our nationally recognized Care Management program to enhance our service delivery throughout the state. By leveraging technology, NCCCN seeks to increase program standardization, maximize our current capabilities, and enhance our market opportunities.
- Opportunity exists to implement a statewide treatment support program for Medicaid beneficiaries immediately before, during and after completion of the hepatitis C treatment regimen. Based on the results of a pilot program currently being implemented at five NCCCN networks, expansion of the program statewide should receive consideration.
- NCCCN practice support services will build capacity in primary care practices to better care for those with behavioral health conditions. These interventions would include behavioral health integration and enhanced collaboration with behavioral health providers.
- As Medicaid Reform around long term services and supports (LTSS) gets underway there is opportunity for NCCCN to take on responsibility for this complex and vulnerable population. The locally-built care management infrastructure, as well as the statewide network of medical homes enables NCCCN to care for this complex population and to appropriately coordinate the services needed for individual to stay in the least restrictive care environment.
- Integration and use of enhanced NCCCN health information technology platform to better inform quality improvement priorities and intervention
**Measure description:** Total Medicaid spend per member per month

**Purpose:** Measure is used to evaluate the performance of the NCCCN program on the non-dual Medicaid population’s PMPM costs.

**Analysis:**
- Actual spend has remained stable over time, while the expected spend rate has increased over the same period, with a 6.27% difference between actual and expected in FY17.
- Expected rates are derived from weights based on average spend at the CRG/age/gender level for all non-dual Medicaid beneficiaries in the CY2012 baseline period. Once weights are calculated, they can be applied to any reporting period and rolled up into a case mix index to calculate expected spend.

**Intervention:**
- The Complex Care Management, the ED Super Utilizer and Transitional Care Management programs all contribute to lower PMPM costs.

**Footnotes:** FY 2017 Denominator N=16,414,631 member months • Data Source: Medicaid claims • Additional Notes: (1) Actual PMPM spend rates exclude pharmacy costs, capitation fees to behavioral health MCO’s, management fees paid to NCCCN networks and practices, capitation fees for PACE providers and capitation payments to MedSolutions. (2) Following the method used in Medicare Shared Savings programs, total spend is capped per person at the 99th percentile by program category (separately for ABD and non-ABD enrollees).
Measure description: ED visits per 1,000 member months

Purpose: Measure is used to evaluate the performance of the NCCCN program on the non-dual Medicaid population’s ED utilization rates.

Analysis:
- The actual rate has continued to stay below the expected rate, going from -9.5% in FY 2014 to -8.4% in FY 2017.
- Expected rates are derived from utilization benchmarks at the CRG level in the baseline period of CY 2011 and CY 2012.

Intervention:
- The ED Super Utilizer program focuses on redirecting care to more appropriate settings that meet patient needs more cost-effectively. Program provides a comprehensive health assessment, medication management, individualized care plan, patient education on urgent care and link to primary care provider.

Emergency Department Visits Per 1,000 Member Months

Footnotes: FY 2017 Denominator N=16,414,631 member months • Data source: Medicaid claims • Additional Notes: Actual ED rates include all non-behavioral health ED visits.
INPATIENT ADMISSIONS PER 1,000 MEMBER MONTHS
(NC Specific Measure)

Measure description: Inpatient admissions per 1,000 member months

Purpose: Measure is used to evaluate the performance of the NCCCN program on the non-dual Medicaid population’s inpatient utilization rates.

Analysis:
- The actual rate has remained stable while the expected rate has increased over the same period, with a -28.2% difference between actual and expected utilization in FY 2017.
- Expected rates are derived from utilization benchmarks at the CRG level in the baseline period of CY2011 and CY2012.

Intervention:
- The Transitional Care Management program uses “Impactability” scores to target recently discharged patients who are most likely to benefit from care management. Transitional care includes face-to-face encounters, medication management and follow-up with providers.

Footnotes: FY 2017 Denominator N=16,173,537 member months • Data Source: Medicaid claims • Additional Notes: Actual inpatient rates include all non-behavioral health acute admissions except for those incurred by women who delivered during the reporting year.
**POTENTIALLY PREVENTABLE READMISSIONS PER 1,000 MEMBER MONTHS**

(NC Specific Measure)

**Measure description:** Potentially preventable readmissions per 1,000 member months

**Purpose:** Measure is used to evaluate the performance of the NCCCN program on the non-dual Medicaid population’s potentially preventable readmission rates.

**Analysis:**
- The actual readmission rate has continued to drop over time while the expected rate continues to grow, showing the increasing benefit of transitional care.
- Actual potentially preventable readmission rates are calculated using the 3M™ Health Information System’s program for tagging readmissions that are clinically related and occur within 30 days of a previous index admission. Expected rates are derived from utilization benchmarks at the CRG level in the baseline period of CY 2011 and CY 2012.

**Intervention:**
- The Transitional Care Management program uses “Impactability” scores to target recently discharged patients who are most likely to benefit from care management. Transitional care includes face-to-face encounters, medication management and follow-up with providers.

**Footnotes:**
- FY 2017 Denominator N=16,414,631 member months
- Data Source: Medicaid claims
- Additional Notes: All behavioral health inpatient admissions are excluded.
MEDICATION MANAGEMENT FOR PEOPLE WITH ASTHMA
(HEDIS)

Measure description: The percentage of patients (ages 5-64) with a diagnosis of persistent asthma who were treated with appropriate medications during the treatment period. The reported rate is the percentage of patients who remained on asthma controller medication for at least 75% of the treatment period. [Note: Persistent asthma as defined in the HEDIS measure may identify people who do not in fact have persistent asthma and therefore may not need a controller medicine.]

Purpose: Asthma is a treatable, reversible condition that affects more than 25 million people in the United States. Appropriate medication management for patients with asthma could reduce the need for rescue medication—as well as the costs associated with ER visits, inpatient admissions and missed days of work or school. (Source: http://www.cdc.gov/vitalsigns/pdf/2011-05-vitalsigns.pdf)

Analysis:
- Results remain unchanged over last four years, but remain lower than the HEDIS average.
- Rates for ages 21-64 are above the HEDIS average.

Intervention:
- Share results with primary care practices and assist them with QI projects and provider education to improve adherence.
- Engage CPESN pharmacies to improve adherence rates.

Footnotes: FY 2017 Denominator N=21,481 (Ages under 21 n=19,315, Ages 21+ n=2,166) • Data Source: Medicaid claims • Benchmark Source: 2015 HEDIS national Medicaid MCO average
**Asthma Medication Ratio (HEDIS)**

**Measure description:** The percentage of patients (ages 5-64) with a diagnosis of persistent asthma who had a ratio of asthma controller medication to total asthma medications of 0.50 or greater during the measurement period.

**Purpose:** The Asthma Medication Ratio (AMR) is a measure to help providers assess the quality of asthma care received by their patients with persistent/chronic asthma. The AMR is the ratio of controller medication to total asthma medication used by a patient with asthma.

**Analysis:**
- Rates are stable over time and above the HEDIS mean.

**Footnotes:** FY 2017 Denominator N=20,309 (Ages under 21 n=18,094, Ages 21+ n=2,203) • Data Source: Medicaid and NCHC claims • Benchmark Source: 2015 HEDIS national Medicaid MCO average
COMPREHENSIVE DIABETES CARE: HEMOGLOBIN A1c (HbA1c) POOR CONTROL (>9.0%) (HEDIS)

Measure description: The percentage of patients (ages 18-75) with a diagnosis of diabetes whose Hemoglobin A1c (HbA1c) was greater than 9.0% (lower is better), indicating poor diabetes control.

Purpose: Diabetes is a chronic disease marked by high blood glucose due to the body's inability to make or use insulin. Left unmanaged, diabetes can lead to serious complications, including heart disease, stroke, hypertension, blindness, kidney disease, diseases of the nervous system and premature death. The HbA1C tests measures the level of blood glucose control over an approximate three month period.

Analysis:
- NCCCN performance is improving and remains much better than the HEDIS average.

Intervention:
- Share results with primary care practices and assist them with QI projects, provider education, patient self-management tools/resources.
- Provide patient lists for those whose HbA1c level is above 9% in order to close care gaps.

Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (Lower is better)

Footnotes: FY 2017 Denominator N=1,378 • Data Source: Chart review • Benchmark Source: 2015 HEDIS national Medicaid MCO average
COMPREHENSIVE DIABETES CARE: HEMOGLOBIN A1c (HbA1c) CONTROL (<8.0%) (HEDIS)

**Measure description:** The percentage of patients (ages 18-75) with a diagnosis of diabetes whose Hemoglobin A1c (HbA1c) was less than 8.0%, indicating good diabetes control.

**Purpose:** Diabetes is a chronic disease marked by high blood glucose due to the body’s inability to make or use insulin. Left unmanaged, diabetes can lead to serious complications, including heart disease, stroke, hypertension, blindness, kidney disease, diseases of the nervous system and premature death. The HbA1C test measures the level of blood glucose control over an approximate three month period.

**Analysis:**
- Consistent improvement over time and well above the HEDIS mean.

**Intervention:**
- Share results with primary care practices and assist them with QI projects, provider education, patient self-management tools.
- Utilize data to identify practices with lower performance and share best practices from higher performing practices.

**Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)**

Footnotes: FY 2017 Denominator N=1,378 • Data Source: Chart review • Benchmark Source: 2015 HEDIS national Medicaid MCO average
COMPREHENSIVE DIABETES CARE: BLOOD PRESSURE CONTROL (HEDIS)

Measure description: The percentage of patients (ages 18-75) with a diagnosis of diabetes whose blood pressure was below 140/90 mmHg.

Purpose: High blood pressure can lead to and make worse many complications of diabetes, including diabetic eye disease and kidney disease and is prevalent among people with diabetes.

Analysis: 
- Results show consistent improvement over time and maintaining performance above the HEDIS mean.

Intervention: 
- Share results with primary care practices and assist them with QI projects, provider education, patient self-management tools/resources, in effort to continue to improve.
- Utilize data to identify practices with lower performance and share best practices from higher performing practices.

Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent with Blood Pressure Control</th>
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<tr>
<td>FY15</td>
<td>64.8%</td>
</tr>
<tr>
<td>FY16</td>
<td>64.6%</td>
</tr>
<tr>
<td>FY17</td>
<td>67.6%</td>
</tr>
</tbody>
</table>

Footnotes: FY 2017 Denominator N=1,378 • Data Source: Chart review • Benchmark Source: 2015 HEDIS national Medicaid MCO average
**Measure description:** The percentage of patients (ages 18-85) with a diagnosis of hypertension whose blood pressure was well controlled based on the following criteria:

1. Patients (ages 18-59) whose blood pressure was below 140/90 mmHg
2. Patients (ages 60-85) with a diabetes diagnosis whose blood pressure was below 140/90 mmHg
3. Patients (ages 60-85) without a diabetes diagnosis whose blood pressure was below 150/90 mmHg

**Purpose:** Hypertension increases the risk of heart disease and stroke, which are the leading causes of death in the United States. Approximately one in three adults in the US, or about 70 million people, have high blood pressure, but only about half (52 percent) of these people have it under control. (Source: [http://www.cdc.gov/bloodpressure/about.htm](http://www.cdc.gov/bloodpressure/about.htm))

**Analysis:**
- NCCCN continues to improve year over year and performs better than the HEDIS mean.

**Intervention:**
- Share results with primary care practices and assist them with QI projects, provider education, tools to improve medication adherence.
- Work with practices to evaluate prescribing practices, utilize effective patient education strategies and assure appropriate referrals to care management and community resources.

**Footnotes:** FY 2017 Denominator N=1,889 • Data Source: Chart review • Benchmark Source: 2015 HEDIS national Medicaid MCO average
SMOKING STATUS AND CESSATION ADVICE
(NC Specific Measure)

**Measure description:** Percent of patients (ages 18-75) at the most recent office visit with a confirmed diagnosis of Ischemic Vascular Disease (IVD) and/or Diabetes whose smoking status was documented on the chart and evidence of receiving cessation advice.

**Purpose:** Smoking and tobacco use are the largest causes of preventable disease and death in the United States. Tobacco use causes disease in nearly every organ in the body. Smoking causes more than 480,000 deaths in the United States each year—41,000 deaths are caused by secondhand smoke. Approximately 42 million adults classified themselves as a smoker in 2012. (Sources: [http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf](http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf), [http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/))

**Analysis:**
- Results are consistent year over year and rates are high when compared to the health services research literature.

**Intervention:**
- Share results with primary care practices and assist them with QI projects, provider education, cessation resources, effective patient education strategies.
- Ensure appropriate referrals to Care Management and community resources.

**Smoking Status and Cessation Advice**

![Chart showing smoking status and cessation advice from FY15 to FY17. The percentages are 91.4%, 92.5%, and 91.7% respectively.](chart)

**Footnotes:** FY 2017 Denominator N=1,882 • Data Source: Chart review
Background/Goals

The NCCCN Pediatric Program focuses on the following three clinical areas with our local networks and primary care providers:

- **Early and Periodic Screening, Diagnostic and Treatment (EPSDT):** Well visits, vision & hearing, BMI percentile coding, lead screening, oral health, immunizations, & routine developmental/behavioral screening at all ages.
- **Mental Health Integration (social/emotional/developmental):** ADHD, maternal depression screening, adolescent depression screening, & social/emotional screenings (0-20 yrs.), trauma-informed care, and integration of MHPs in pediatric primary care
- **Children and Youth with Special Health Care Needs (CYSHCN):** Foster Care, Obesity, Asthma, Sickle Cell, Adolescent Transition to Adult Care.

The key functions of the NCCCN Pediatric Program are geared to support the work of local network staff and in effect, impact local delivery of care by primary care clinicians. The following are the key functions at the central office:

- **Identification:** Identify pediatric clinical priorities and define pediatric priority populations for care management.
- **Stewards of CMS Child Core Quality Measures:** Ongoing collaboration with DMA
- **Pediatric Quality Improvement:** Train pediatric QI staff on both QI principles and clinical content. Support network pediatric teams. In addition, provide training to Care Managers consistent with the clinical QI priorities for primary care clinicians (PCCs).
- **EPSDT:** NCCCN Pediatrics oversees the Health Check Coordinators and collaborates with DMA on the Health Check billing guide as well as standards for preventive care.
- **Pediatric EHR:** Practice support, help practices work with their vendors to close the gap in pediatric quality and function, promote reporting for quality improvement.
- **Convene State Workgroups:** Engage state partners and collaborate with NC Pediatric Society & NC Academy of Family Physicians to engage and support primary care practices that serve children.

Current Programs

**Health Check Coordination:** Oversee the Health Check Coordinators and assist with clinical priorities, facilitate work and synthesize annual reports into a single statewide report to DMA. This includes work to 1) increase rates of children receiving preventive health care visits consistent with the American Academy of Pediatrics recommendations, 2) improve the quality and comprehensive nature of visits such as routine screenings, and 3) collaborate with primary care managers in the coordination of care for CCNC Pediatric Priority Populations and CYSHCN.

**CC4C:** The Care Coordination for Children (CC4C) program focuses on children ages 0 to 5 who are at risk for poor outcomes due to toxic stress or other risk factors, including opioid exposure in utero. Early intervention with children with adverse childhood events leads to decreased long-term costs.

**ABCD:** The Assuring Better Child Health and Development (ABCD) convenes a cross sector State Advisory workgroup and a QI workgroup to facilitate early childhood screening (maternal depression, development, social-emotional development, autism, and social determinants of health).
**Fostering Health NC (FHNC):** A collaboration between NCCCN Pediatrics and the NC Pediatric Society, FHNC convenes a state workgroup that supports and guides collaboration among Department of Social Services (DSS), NCCCN networks and practices to establish a system for medical homes for children in foster care, consistent with AAP guidelines. This includes trauma-informed care, linkages to community resources and increased well visits.

**Sickle Cell:** NCCCN Pediatrics convenes a state cross-sector workgroup including the major academic center sickle cell clinics, the public health sickle cell program, emergency departments and NCCCN Call Center, care managers and practices to improve population management and outcomes for this population. This work not only involves pediatrics populations, but also adults.

**Primary Care Integration (PCI):** Support to practices that take care of children in implementing mental health competencies for primary care (Common Factors approach and Motivational Interviewing) and in developing collaborative/integrated care models with mental health professionals.

**Target Population**

Approximately 73% (over 1 million beneficiaries) of the Medicaid and NCHC population in North Carolina is under the age of 21 years. The Pediatric program specifically targets those recipients in early childhood, school-age and adolescents (0-20 year olds).

**Special Populations:**
- CC4C and Assuring Better Child health and Development (ABCD): ages 0-5
- Transition-Age Children and Youth with Special Healthcare Needs (CYSHN): ages 14-21
- Fostering Health NC: ages 0-21
- Patients with Sickle Cell Disease: ages 0-Adult
- Asthma: ages 0-21

**Future Direction**

- Maintain practice support, quality improvement coaching and care management aimed at the pediatric quality improvement indicators.
- Continue to support the reporting of Child Core Quality Measures to Center for Medicare and Medicaid Services (CMS).
- Incremental improvement in pediatric well-visit and well-visit component measures.
- Support the ongoing work of Fostering Health NC with the NC Pediatric Society.
- Sickle Cell-support implementation of sickle cell co-management guidelines by primary care providers and specialists. Expand ED referral process (via NCCCN Call Center) to care managers and the Public Health Sickle Cell Program.
- Continue to collaborate with Care Managers to address their clinical training needs via the monthly Pediatric Workgroup.
- Support quality reporting from Pediatric EHRs to close gaps.
- Further integration of CC4C into the Pediatric Program planning/activities, as well as identifying appropriate indicators for performance and quality.
- Regular Health Check Coordination Leads meeting/conference for planning and quality improvement, including annual report review at annual face-to-face meeting.
Measure description: The percentage of patients who had six or more well-child visits with a primary care provider during the first 15 months of life.

Purpose: Assessing physical, emotional and social development is important at every stage of life, particularly with children and adolescents. Behaviors established during childhood or adolescence, such as eating habits and physical activity, often extend into adulthood. A health care provider’s advice or guidance pertaining to health behaviors can have a significant impact.

Analysis:
- Rates have improved in FY17 and remain above the HEDIS average.
- There are multiple reasons why children entering foster care during this age range may have missed visits: child neglect, gaps in Medicaid enrollment, etc. Rates for the foster care population have increased since FY16 and are above the HEDIS mean.

Intervention:
- Strategize with Health Check Coordinators and practices on ways to promote well-child visits and to remind parents to bring children in for well-child visits.
- For children in foster care, continue to promote the American Academy of Pediatrics (AAP) enhanced well-visit schedule.

Footnotes: FY 2017 Denominator N=38,437 (Non-Foster Care n=37,831, Foster Care n=606) • Data Source: Medicaid claims • Benchmark Source: 2015 HEDIS national Medicaid MCO average • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
WELL-CHILD VISITS IN THE 3RD, 4TH, 5TH AND 6TH YEARS OF LIFE (HEDIS)

Measure description: The percentage of patients (ages 3-6) who had at least one well-child visit with a primary care provider during the measurement period.

Purpose: Assessing physical, emotional and social development is important at every stage of life, particularly with children and adolescents. Behaviors established during childhood or adolescence, such as eating habits and physical activity, often extend into adulthood. A health care provider’s advice or guidance pertaining to health behaviors can have a significant impact.

Analysis:
- Overall, rates are below the HEDIS average however rates for children in foster care are much higher than the HEDIS average.
- Children in foster care have a higher rate because of Fostering Health NC (a collaboration between NC Peds Society and NCCCN) quality improvement work with practices and local DSS.

Intervention:
- Strategize with Health Check Coordinators and practices on ways to promote well-child visits and to remind parents to bring children in for well-child visits.
- For children in foster care, continue to promote the American Academy of Pediatrics (AAP) enhanced well-visit schedule.

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

Well Child Visits in the 3rd, 4th, 5th and 6th Years of Life: Non-Foster Care

Well Child Visits in the 3rd, 4th, 5th and 6th Years of Life: Foster Care

Footnotes: FY 2017 Denominator N=209,808 (Non-Foster Care n=207,171, Foster Care n=2,637) • Data Source: Medicaid and NCHC claims • Benchmark Source: 2015 HEDIS national Medicaid MCO average • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
WELL-CHILD VISITS IN THE 7TH, 8TH, 9TH, 10TH AND 11TH YEARS OF LIFE
(NC Specific Measure)

Measure description: The percentage of patients (ages 7-11) who had at least one well-child visit with a primary care provider during the measurement period.

Purpose: Assessing physical, emotional and social development is important at every stage of life, particularly with children and adolescents. Behaviors established during childhood or adolescence, such as eating habits and physical activity, often extend into adulthood. A health care provider’s advice or guidance pertaining to health behaviors can have a significant impact.

Analysis:
- Overall rates are improving.
- Children in foster care have a higher rate because of Fostering Health NC (a collaboration between NC Peds Society and NCCCN) quality improvement work with practices and local DSS.

Intervention:
- Strategize with Health Check Coordinators and practices on ways to promote well-child visits and to remind parents to bring children in for well-child visits.
- For children in foster care, continue to promote the American Academy of Pediatrics (AAP) enhanced well-visit schedule to increase rates.

Well Child Visits in the 7th, 8th, 9th, 10th and 11th Years of Life

Footnotes: FY 2017 Denominator N=264,413 (Non-Foster Care n=261,747, Foster Care n=2,666) • Data Source: Medicaid and NCHC claims • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
**Measure description:** The percentage of patients (ages 12-21) who had at least one well-care visit with a primary care provider during the measurement period.

**Purpose:** Assessing physical, emotional and social development is important at every stage of life, particularly with children and adolescents. Behaviors established during childhood or adolescence, such as eating habits and physical activity, often extend into adulthood. A health care provider’s advice or guidance pertaining to health behaviors can have a significant impact.

**Analysis:**
- Overall rates are below the HEDIS average but improving over time.
- Rates for children in foster care are much higher than the HEDIS average.
- Children in foster care have a higher rate because of Fostering Health NC (a collaboration between NC Peds Society and NCCCN) quality improvement work with practices and local DSS.

**Intervention:**
- Strategize with Health Check Coordinators and practices on ways to promote well-child visits and to remind parents to bring children in for well-child visits.
- For children in foster care, continue to promote the American Academy of Pediatrics (AAP) enhanced well-visit schedule to increase rates.

**Footnotes:** FY 2017 Denominator N=322,708 (Non-Foster Care n=329,619, Foster Care n=3,089) • Data Source: Medicaid and NCHC claims • Benchmark Source: 2015 HEDIS national Medicaid MCO average • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
Measure description: The percentage of well-check visits for children 6-17 months and 31-66 months of age with a developmental screen during the measurement period.

Purpose: Developmental screening, promotion of healthy development, early identification and linkage to intervention services for young children during a critical window of opportunity. Screening, follow-up and connection to early intervention services can promote school success and reading proficiency in 3rd grade.

Analysis:
- High rates reflect high reliability for the screening process at pediatric and family practices and are among the highest in the nation.
- Through chart audits, linking children with the necessary resources after a positive screening is lower than the rate of screening.

Intervention:
- Working with practices on referral and linkage processes will be a priority.
- Work with DMA to add a modifier to determine which screenings have a positive result for better tracking.
- Continue to collaborate through the ABCD State Advisory Workgroup to enhance screening outcomes.

Footnotes: FY 2017 Denominator N=126,962 (Non-Foster Care n=124,952, Foster Care n=2,010) • Data Source: Medicaid and NCHC claims • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
Measure description: The percentage of children 18-30 months with at least one well-check visit during the measurement period who received appropriate Autism and Developmental screening.

Purpose: In North Carolina, autism spectrum disorder prevalence is 1 in 58 children. Evidence shows that better outcomes occur when children at risk are identified earlier (by age 2).

Analysis:
- Recent changes in coding for the screenings are effecting rates starting in FY16. This has temporarily affected the accuracy of claims data.
- Screening rates of children in foster care are comparable to rates of children not in foster care.
- Through chart audits, linking children with the necessary resources after a positive screening is lower than the rate of screening.

Intervention:
- Working with practices on referral and linkage processes will be a priority.
- Work with DMA to add a modifier to distinguish autism screenings from developmental screenings.

Autism/Developmental Screening (ABCD)

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<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
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<td>79.4%</td>
<td>71.4%</td>
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Autism/Developmental Screening (ABCD): Non-Foster Care

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<th>FY16</th>
<th>FY17</th>
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<tbody>
<tr>
<td>76.4%</td>
<td>79.3%</td>
<td>71.4%</td>
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Autism/Developmental Screening (ABCD): Foster Care

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<th>FY15</th>
<th>FY16</th>
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<tr>
<td>71.1%</td>
<td>78.7%</td>
<td>68.1%</td>
<td>59.4%</td>
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</table>

Footnotes: FY 2017 Denominator N=42,724 (Non-Foster Care n=42,488, Foster Care n=854) • Data Source: Medicaid claims • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
**School Age Developmental and Behavioral Screening**

**Measure description:** The percentage of well-child visits for patients (ages 6-10 years) where a developmental and behavioral screen was completed.

**Purpose:** To identify any emerging learning or behavioral issues in school age kids to address issues proactively.

**Analysis:**
- Rates are steadily improving over time due to QI efforts.
- Screening rates of children in foster care have improved faster than rates of children not in foster care due to Fostering Health NC efforts.

**Intervention:**
- Continue ongoing QI efforts with practices.

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**Footnotes:**
- FY 2017 Denominator N=94,701 (Non-Foster Care n=93,234, Foster Care n=1,467)
- Data Source: Medicaid and NCHC claims
- Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
**Measure description:** The percentage of well-check visits for children 12-20 years of age with a depression screening during the measurement period.

- **Purpose:** To identify adolescents who are at risk for depression, as well as to address the high rates of depression in this population and to meet the recommendation of Bright Futures and USPSTF. Routine screening for depression in adolescent aged children was officially recommended in the Bright Futures 4th Edition in 2017.

**Analysis:**
- CCNC Pediatrics, via an Adolescent Depression Screening Workgroup, developed a practice toolkit in 2015 followed by QI training for practices to begin this process. This is a new measure showing a positive trend in rates.
- Youth in foster care have slightly higher rates than the non-foster care children.

**Intervention:**
- Ongoing QI efforts with practices.
- Sharing of Adolescent Depression: Screening, Follow-up and Co-management Guidelines.

**Adolescent Depression Screening:**
- **Non-Foster Care**
  - FY15: 0.22%
  - FY16: 5.41%
  - FY17: 30.0%

- **Foster Care**
  - FY15: 0.41%
  - FY16: 7.04%
  - FY17: 33.2%

**Footnotes:** FY 2017 Denominator N=86,444 (Non-Foster Care n=85,355, Foster Care n=1,089) • Data Source: Medicaid and NCHC claims • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
**Measure description:** The percentage of patients (ages 2-3) who had at least one dental visit during the measurement period.

**Purpose:** Dental caries is one of the most common, preventable childhood diseases. Regular dental visits provide access to cleaning, early diagnosis and treatment, as well as education about caring for teeth to prevent problems.

**Analysis:**
- While only the 2-3 year old age range is reported, NCCCN rates are higher than HEDIS average across all age ranges.
- Because of major QI and Health Check Coordinator efforts for getting children to a dental home after they turn 1, the rate for the younger age groups showed improvement.
- Foster children have higher dental visit rates.

**Intervention:**
- Ongoing oral health workgroup (which includes representatives from Division of Medical Assistance and Division of Public Health).
- Ongoing QI efforts to promote dental homes for all children.

**Footnotes:** FY 2017 Denominator N=104,748 (Foster Care n=1,661, Non-Foster Care n=103,087) • Data Source: Medicaid and NCHC claims • Benchmark Source: 2015 HEDIS national Medicaid MCO average • Additional Notes: 1) Numerator definition deviates from HEDIS to exclude dental varnishing claims which often occur in primary care practices in North Carolina. 2) Foster care category includes children and youth who were in foster care at any point during the measurement period.
**Measure description:** The percentage of patients with at least 4 dental fluoride varnishing treatments during the first 42 months of life.

**Purpose:** Fluoride varnish is a dental treatment that can help prevent tooth decay. Evidence shows that children with 4 or more varnishings have the best outcomes.

**Analysis:**
- With the federal Children’s Health Insurance Program Reauthorization Act (CHIPRA) grant, over 130 new practices were trained on how to provide dental varnishings and continue to disseminate best practices across the pediatric provider community. Rates are steadily increasing as a result of continued promotion by Network Pediatric teams and Health Check Coordinators.

**Intervention:**
- Ongoing collaboration with DPH to train practices on how to apply varnishings.

### Footnotes:
- FY 2017 Denominator N=35,176 (Non-Foster Care n=34,695, Foster Care n=481)
- Data Source: Medicaid claims
- Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
**Measure description:** Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three H influenza type B (HiB); three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV) by their second birthday.

**Purpose:** Childhood vaccines protect children from a number of serious and potentially life-threatening diseases such as diphtheria, measles, meningitis, polio, tetanus and whooping cough, at a time when they are most vulnerable to disease. Immunizations are essential for disease prevention in the U.S. and are a critical aspect of preventive care for children. Vaccination coverage must be maintained in order to prevent a resurgence of vaccine-preventable diseases.

**Analysis:**
- Overall rates are above the HEDIS average.
- Rates for the foster care population have improved over time faster than the non-foster care population.

**Intervention:**
- With the NC Pediatric Society, the Public Health Immunization Branch and NCCCN, networks continue to promote immunization best practices to ensure there are no missed opportunities.

**Footnotes:**
- FY 2017 Denominator N=41,380 (Non-Foster Care n=40,693, Foster Care n=687)
- Data Source: North Carolina Immunization Registry (NCIR)
- Benchmark Source: 2015 HEDIS national Medicaid MCO average
- Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
Measure description: The percentage of adolescents 13 years of age who had one dose of meningococcal conjugate vaccine and one tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine by their 13th birthday.

Purpose: Receiving recommended vaccinations is the best defense against vaccine-preventable diseases, including meningococcal meningitis, tetanus, diphtheria and pertussis (whooping cough). These are serious diseases that can cause breathing difficulties, heart problems, nerve damage, pneumonia, seizures and even death.

Analysis:
- Rates have increased significantly each year and higher than HEDIS average starting in FY 2016.
- Youth in foster care have higher rates than youth not in foster care.
- Improvements in immunizations can be attributed in part to higher adolescent well visit rates.

Intervention:
- Continue promotion of vaccination to practices.
- With the NC Pediatric Society, the Public Health Immunization Branch and NCCCCN, networks continue to promote immunization best practices to ensure there are no missed opportunities.

Footnotes: FY 2017 Denominator N=39,808 (Non-Foster Care n=39,465 Foster Care n=343) • Data Source: North Carolina Immunization Registry (NCIR) • Benchmark Source: 2015 HEDIS national Medicaid MCO average • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
**IMMUNIZATIONS FOR ADOLESCENTS**

**(COMBINATION 2)**

**(HEDIS)**

**Measure description:** The percentage of adolescents 13 years of age who had one dose of meningococcal conjugate vaccine, one tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine and two doses of the human papillomavirus (HPV) vaccine by their 13th birthday.

**Purpose:** In addition to the other recommended immunizations for adolescents, the HPV vaccine protects adolescents against HPV, one of the most common sexually transmitted infections in the United States which can be spread even when the infected person does not show signs of infection. Certain types of HPV can cause oral and cervical cancer and cancer of the pharynx.

**Analysis:**
- Rates have improved significantly in FY17.
- Youth in foster care have higher vaccination rates when compared with the NCCCN population.

**Intervention:**
- Collaborate with QI efforts for HPV initiatives in which the NC Pediatric Society is already engaged.
- By improving adolescent well visit rates, it is possible to improve HPV vaccination rates.

**Immunizations for Adolescents**

**(Combination 2)**

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<tr>
<th>Year</th>
<th>Percent with 1 dose of meningococcal conjugate vaccine</th>
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<td>FY15</td>
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<th>Year</th>
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**Immunizations for Adolescents**

**(Combination 2):**

**Non-Foster Care**

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**Immunizations for Adolescents**

**(Combination 2):**

**Foster Care**

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<td>FY17</td>
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**Footnotes:** FY 2016 Denominator N=39,808 (Non-Foster Care n=39,465, Foster Care n=343) • Data Source: North Carolina Immunization Registry (NCIR) • Benchmark Source: 2015 HEDIS national Medicaid MCO average • Additional Notes: Foster care category includes children and youth who were in foster care at any point during the measurement period.
Background/Goals

The Pregnancy Medical Home (PMH) program, established by a State Plan Amendment in March 2011, was launched by NCCCN in April 2011. This triple-aim initiative is intended to improve the quality of care for pregnant Medicaid patients, improve birth outcomes and reduce health care costs, with a specific focus on the reduction of preterm birth.

The PMH model includes six core components:

1. **Statewide Provider Network**: There are currently more than 380 PMH practices and 2,000 individual PMH providers, with PMH practices in 94 of 100 counties. This represents 95% of practices that serve pregnant women with Medicaid.

2. **Standardized Risk Screening**: 80% of patients who receive care in a PMH are assessed using NCCCN’s standardized risk screening tool. The screening tool captures medical, obstetric and psychosocial risk factors associated with preterm birth, including several social determinants of health (education, race/ethnicity, food insecurity, unstable housing, domestic violence, substance abuse, tobacco use, pregnancy intendedness).

3. **Community-Based Care Management**: Pregnancy care management services are delivered by nurses and social workers from local entities (primarily local health departments) working in close collaboration with PMH providers. More than 50% of all pregnant Medicaid patients receive care management, with 16,000 receiving services at any given point in time.

4. **Local Clinical Leadership**: Each NCCCN network employs OB physician champions, opinion leaders from major academic centers, health systems, public health departments and urban and rural OB/GYN practices and OB nurse coordinators, who work together to offer the entire PMH provider community consistent messages, support and technical assistance.

5. **Care Pathways**: The PMH program promotes clinical best practices that reflect the most current evidence base in terms of strategies to prevent preterm birth. PMH Care Pathways, developed by NCCCN physician champions, are used to standardize care, promote best practices and set performance expectations across all PMH settings. Pathway topics focus on the management of pregnancy-related conditions and specific components of care.

6. **Informatics**: NCCCN uses Medicaid claims, birth certificates and risk screening data to produce metrics for DMA, local NCCCN networks, PMH practices and county-based pregnancy care management programs. Clinical quality measures reflect program priorities.

Current Programs

**Timeliness of prenatal care**: First trimester prenatal care affords the opportunity to provide medical and psychosocial interventions, such as progesterone therapy, management of diabetes and hypertension, or substance abuse treatment, that reduce the risk of a poor outcome. Early prenatal care also allows the patient to establish a relationship with a prenatal care and to accurately determine the due date. Late entry to prenatal care is associated with greater risk for poor pregnancy outcomes. NCCCN is undertaking a statewide initiative to address system-, provider- and patient-level drivers of timely entry to prenatal care, including developing a quality improvement initiative for PMH practices across all 14 networks to launch in January 2018.

**Unintended pregnancy**: Unplanned pregnancies are more likely to result in a poor birth outcome, such as preterm birth. PMH practices are working to ensure that each patient receives the contraceptive method
of her choice in the postpartum period to prevent a short interpregnancy interval, which also increases the risk of preterm birth. Priority is currently being given to two strategies: “same-day” access to long-acting reversible contraception, in which the patient receives the desired contraceptive method at the time of the postpartum visit, and inpatient access to a range of contraceptive methods, prior to discharge after giving birth.

Postpartum Care: After completing a yearlong quality improvement initiative in 2016 to increase the number of women who receive postpartum follow-up care, the PMH program continues to work with providers to ensure all Medicaid patients are seen for a timely postpartum visit. This work has included changing processes used to schedule the visit, such as allowing the patient to set up the visit prior to giving birth or to being discharged from the hospital, having patients return for follow-up care earlier in the postpartum period, and addressing patient-level barriers.

Target Population

Of the approximately 120,000 births that occur in North Carolina each year, 55,000 (46%) are to women with Medicaid coverage in pregnancy. This represents a significant increase over the past decade; in 2006, 38% of North Carolina births were to women with Medicaid coverage in pregnancy. Another major change has been an increase in the proportion of pregnant women who qualify for full Medicaid coverage, now 60% of the pregnant Medicaid population, while 40% are eligible for Medicaid coverage only during pregnancy and the postpartum period. An additional 7,900 births (6.5%) are to low-income women who qualify only for emergency Medicaid coverage for the delivery admission. These women are not part of the PMH target population because they do not have Medicaid coverage during the pregnancy or postpartum period. This population has decreased over the past decade, from a high of 13,000, or 10% of all NC births, in 2007.

Nearly 70% of pregnant women with Medicaid coverage have at least one risk factor identified on the PMH risk screening form. The most common risk factors are tobacco use, late entry to prenatal care, and presence of a chronic disease, such as hypertension or diabetes.

Future Direction

Maternal-Infant Impactability Score: A complex evaluation of pregnancy care management was completed in early 2017, which resulted in the development of the Maternal Infant Impactability Score (MIIS)
TIMELINESS OF PRENATAL CARE
(NC Specific Measure)

Measure Description: The percentage of pregnant patients who initiated prenatal care in the first trimester (before 14 completed weeks of gestation) among women who received care in a Pregnancy Medical Home.

Purpose: First trimester prenatal care is important because it allows for the identification of pregnancy complications, management of preterm birth risk factors, optimization of chronic disease management and establishment of a relationship with an obstetric care provider.

Analysis:
- Rates have been persistently low in the Medicaid population, though there was slight improvement in 2017.
- Primary drivers include waiting for processing of the Medicaid application, inconsistent use of presumptive eligibility coverage, provider capacity and patient-level factors.
- Rates are worse in urban centers than in rural settings, as OB/GYN offices in these locations are able to fill their panels with privately insured patients.

Intervention:
- Improved use of presumptive eligibility, expedient processing of Medicaid applications and improving the capacity of prenatal care providers to serve pregnant Medicaid patients in urban locations.
- Provider-level interventions include promoting the scheduling of 1st prenatal visits while the Medicaid application is pending and willingness to accept patients with presumptive eligibility coverage.
- NCCCN will launch a statewide initiative to improve the rate of first trimester care in 2018.

Footnotes: FY 2017 Denominator N=43,532 (Metropolitan n=30,422, Micropolitan n=11,134, Rural n=1,974) • Data Source: Medicaid claims and vital records • Additional Notes: Although there is a HEDIS measure for First Trimester Prenatal Care, this measure is not equivalent because it does not use the restrictive enrollment requirements of the HEDIS measure.
**Measure description:** The percentage of pregnant patients receiving care in a Pregnancy Medical Home who received standardized risk screening using the Pregnancy Medical Home risk screening form.

**Purpose:** The Pregnancy Medical Home risk screening form is the primary method to identify the pregnant Medicaid population in real time in order to target care management services to those at highest risk of preterm birth and to understand the prevalence of risk factors in the pregnant population.

**Analysis:**
- The majority (75-80%) of pregnant Medicaid beneficiaries who receive care in a PMH receive risk screening. African-American and Caucasian patients are screened at equal rates.
- Pregnant patients with Medicaid as secondary coverage may not be identified as a Medicaid patient at entry to prenatal care and therefore may not receive PMH risk screening.

**Intervention:**
- Barriers to risk screening include the turnover of providers and office staff in PMH practices. Frequent retraining is required to ensure consistency of risk screening. Current focus on improving timeliness of prenatal care should also drive improved risk screening rates as pregnant Medicaid beneficiaries are identified earlier in pregnancy.

**Footnotes:** FY 2017 Denominator N=45,186 (White n=22,151, African American n=16,612, Hispanic n=4,168, Asian n=1,086, Native American n=803) • Data Source: Medicaid claims, vital records and NCCCN's Care Management Information System (CMIS) • Additional Notes: Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
TOBACCO CESSATION COUNSELING RECEIVED DURING PREGNANCY
(NC Specific Measure)

Measure description: The percentage of patients who received tobacco cessation counseling during pregnancy among patients who reported current tobacco use on the Pregnancy Medical Home risk screening form.

Purpose: Tobacco cessation counseling using evidence-based techniques increases the likelihood that patients will reduce or stop using tobacco. Tobacco use in pregnancy increases the risk of preterm birth and low birth weight and exacerbates other complications, such as hypertension.

Analysis:
- Tobacco cessation counseling is measured using paid claims. However, few OB/GYNs routinely bill for the counseling they provide due to confusion over billing outside of the “global fee”. This results in a falsely-low rate of tobacco counseling.
- African American women are less likely to have paid claims for tobacco cessation counseling compared to white women.

Intervention:
- Prenatal care providers require additional training about the appropriate use of tobacco cessation counseling billing codes and technical assistance to improve their use of counseling techniques with African American pregnant patients.

Footnotes: FY 2017 Denominator N=6,571 (White n=4,559, African American n=1,667) • Data Source: Medicaid claims and vital records • Additional Notes: (1) Axis range has been adjusted for this measure. (2) Data points with a small n (numerator or denominator <30) have been suppressed. (3) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
**UNINTENDED PREGNANCY RATE**
(NC Specific Measure)

**Measure description:** The percentage of Pregnancy Medical Home patients who reported on the PMH risk screening form that their pregnancy was either mistimed or unwanted.

**Purpose:** Unintended pregnancy is more likely to result in a poor birth outcome, such as preterm birth or low birth weight.

**Analysis:**
- There has been a steady decline in the rate of unintended pregnancy since the launch of the Pregnancy Medical Home program.
- Improved rates of postpartum care appear to be contributing to the improvement.
- African American women are more likely to report that the pregnancy was unintended.

**Intervention:**
- Improved access to highly effective contraception appears to be helping to address the rate of unintended pregnancy. Pregnant women should receive timely postpartum care that includes access to comprehensive contraception options. Patients who lose Medicaid coverage following the pregnancy should be referred to DSS for evaluation of eligibility for family planning (Be Smart) coverage. Strategies to make highly effective contraception available to patients during the delivery admission to the hospital should be pursued.

**Footnotes:**
- FY 2017 Denominator N=35,256 (White n=17,397, African American n=13,087, Hispanic n=2,998, Asian n=767, Native American n=726)
- Data Source: Medicaid claims and vital records
- Additional Notes: Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
ELECTIVE DELIVERIES BEFORE 39 WEEKS OF GESTATION
(AC Specific Measure)

Measure description: The percentage of scheduled deliveries (induction of labor or cesarean delivery) among deliveries at 37 0/7 – 38 6/7 weeks of gestation among patients receiving care in a PMH without a medical indication for early delivery.

Purpose: Scheduling delivery, either induction of labor or cesarean, before 39 weeks of gestation in the absence of a medical indication for delivery is more likely to result in complications for the infant, including higher risk of respiratory distress and intensive care admission.

Analysis:
- North Carolina has been a national leader in reducing the number of scheduled deliveries before 39 weeks of gestation in the absence of a medical indication for delivery.
- Some medically-indicated deliveries may be inadvertently included in this measure since it is based on administrative claims, which overstates the true rate of elective deliveries.

Intervention:
- Establishing strong policies, monitoring local data and implementing best practices around the scheduling of deliveries in the absence of a medical indication. Patient education is also important to reduce demand for early delivery.

Elective Deliveries Before 39 Weeks of Gestation

<table>
<thead>
<tr>
<th>Year</th>
<th>White</th>
<th>African American</th>
<th>Hispanic</th>
<th>Asian/Pacific Islander</th>
<th>Native American/Alaskan Native</th>
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<tbody>
<tr>
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<td>7.1%</td>
<td>7.5%</td>
<td>6.9%</td>
<td>7.8%</td>
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<tr>
<td>FY15</td>
<td>8.1%</td>
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<td>FY16</td>
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<td>FY17</td>
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<td>11.2%</td>
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Footnotes: FY 2017 Denominator N=29,143 (White n=14,217, African American n=10,460, Hispanic n=2,916, Asian n=745, Native American n=563) • Data Source: Medicaid claims and vital records • Additional Notes: (1) Nationally available data for this measure are based on The Joint Commission and other entities which use medical record review. Comparisons to rates based on the use of administrative data only are not valid. (2) Axis range has been adjusted for this measure. (3) Data points with a small n (numerator or denominator <30) have been suppressed. (4) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
**Measure description:** The percentage of Pregnancy Medical Home patients who had a cesarean delivery among those who gave birth during the time period.

**Purpose:** Current cesarean delivery rates are higher than those recommended by national and international maternal health organizations. This results in increased health risks to both mothers and children, including the increasing risk of maternal mortality and severe morbidity with each additional cesarean delivery experienced by an individual patient.

**Analysis:**
- Cesarean delivery rates are equivalent for African American and white women and are lower among Hispanic women.
- Cesarean delivery rates are lower in the Medicaid population compared to the privately insured population and have decreased since the launch of the Pregnancy Medical Home program.

**Intervention:**
- Cesarean delivery rates will continue to improve if women enter pregnancy in optimal health, receive early prenatal care and if providers are supported to utilize practices that reduce the risk of cesarean delivery.

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**Cesarean Delivery Rate**

- **FY14:** 29.1%
- **FY15:** 29.7%
- **FY16:** 28.9%
- **FY17:** 29.3%

**Cesarean Delivery Rate: Race/Ethnicity**

- **White:**
  - **FY14:** 29.1%
  - **FY15:** 29.0%
  - **FY16:** 29.4%
  - **FY17:** 29.3%
- **African American:**
  - **FY14:** 50.6%
  - **FY15:** 50.0%
  - **FY16:** 50.5%
  - **FY17:** 51.5%
- **Hispanic:**
  - **FY14:** 23.8%
  - **FY15:** 23.7%
  - **FY16:** 23.4%
  - **FY17:** 23.0%
- **Asian/Pacific Islander:**
  - **FY14:** 21.2%
  - **FY15:** 21.1%
  - **FY16:** 21.3%
  - **FY17:** 21.4%
- **Native American/Alaskan Native:**
  - **FY14:** 30.8%
  - **FY15:** 31.0%
  - **FY16:** 50.8%
  - **FY17:** 50.0%

**Footnotes:** FY 2017 Denominator N=45,576 (White n=22,307, African American n=16,814, Hispanic n=4,181, Asian n=1,087, Native American n=817) • Data Source: Medicaid claims and vital records • Additional Notes: (1) Excludes births (n=13) where the mode of delivery is not known. (2) This is a measure of the overall cesarean delivery rate for the entire population. Existing national measures tend to look at the rate among low-risk, nulliparous women; therefore, comparison to published rates is not possible. (3) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
**Measure description:** The percentage of live births to patients receiving care in a Pregnancy Medical Home where the infant weighed less than 2,500 grams or 5.5 pounds at birth.

**Purpose:** Infants born at a low birth weight are at greater risk for infant mortality, short-term medical complications and long-term health and developmental challenges.

**Analysis:**
- There is a long term disparity in the rate of low birth weight, with rates persistently higher among African American women. The increase in the African American rate is reflective of a current national trend.
- The rate of low birth weight is lower among pregnant Medicaid patients who received care at a NCCCN Pregnancy Medical Home, compared to the general Medicaid population.

**Intervention:**
- Low birth weight is influenced by multiple factors both within and outside of the healthcare system and including multiple social determinants of health. Modifiable risk factors include early entry to prenatal care, optimal pregnancy spacing, nutritional status, substance use, tobacco use, management of existing chronic disease, identification and management of pregnancy complications and other factors.

**Footnotes:** FY 2017 Denominator N=45,581 (White n=22,313, African American n=16,810, Hispanic n=3,4,181, Asian n=1,089, Native American n=818) • Data Source: Medicaid claims and vital records • Additional Notes: (1) Axis range has been adjusted for this measure. (2) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
**Measure description:** The percentage of live births to patients receiving care in a Pregnancy Medical Home where the infant weighed less than 1,500 grams or 3.3 pounds at birth.

**Purpose:** Infants born at a very low birth weight are at risk of multiple serious medical complications and frequently require extended hospital stays in the intensive care unit. They are at elevated risk of a range of long-term health and developmental complications and are more likely to require complex medical care throughout the pediatric period and into adulthood.

**Analysis:**
- There is a long-term disparity in the rate of very low birth weight, with rates persistently higher among African American women. There has been a narrowing of the disparity since the launch of the PMH program.
- The rate of very low birth weight is lower among pregnant Medicaid patients who received care at a Pregnancy Medical Home.

**Intervention:**
- Modifiable risk factors include early entry to prenatal care, optimal pregnancy spacing, nutritional status, substance use, tobacco use, management of existing chronic disease, identification and management of pregnancy complications and other factors. Patients with a history of spontaneous preterm birth should be offered progesterone treatment to reduce the risk of having another low birth weight, preterm infant.

**Footnotes:** FY 2017 Denominator N=45,581 (White n=22,313, African American n=16,810, Hispanic n=4,181) • Data source: Medicaid claims • Additional Notes: (1) Axis range has been adjusted for this measure. (2) Data points with a small n (numerator or denominator <30) have been suppressed. (3) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
**POSTPARTUM VISIT RATE**

*(NC Specific Measure)*

**Measure description:** The percentage of Pregnancy Medical Home patients who received a comprehensive postpartum visit 14-60 days after giving birth.

**Purpose:** Postpartum care is important for follow up of pregnancy complications, management of chronic disease, provision of family planning services, supporting breastfeeding and the transition to well woman care.

**Analysis:**
- This rate is based on claims for the PMH postpartum incentive and underestimates the true postpartum visit rate due to challenges many practices have had with S0281 claims.
- Quality improvement activities with PMH practices in 2016-2017 drove the recent improvement in the postpartum visit rate.
- Patients living in rural counties are less likely to have a postpartum visit but rates are improving for patients in rural counties, as they are statewide.

**Intervention:**
- PMH practices have successfully utilized several strategies to increase the postpartum visit rate, such as scheduling the visit for 3-4 weeks postpartum, arranging the visit prior to delivery or hospital discharge and involving the care manager to address barriers to receiving postpartum care.

**Footnotes:**
- FY 2017 Denominator N=44,219 (Metropolitan n=30,812, Micropolitan n=11,405, Rural n=2,002)
- Data Source: Medicaid claims and vital records
- Additional Notes: Although there is a HEDIS measure of the Postpartum Visit Rate, this measure is not equivalent because it does not use the restrictive enrollment requirements of the HEDIS measure and because the timeframe for the postpartum visit is not equivalent to the HEDIS methodology.
POSTPARTUM CONTRACEPTION
(NC Specific Measure)

Measure description: The percentage of Pregnancy Medical Home patients who had a paid claim for a contraceptive method within 60 days of giving birth.

Purpose: Access to contraception in the postpartum period is important in preventing unintended pregnancy and short interpregnancy interval, defined as less than 18 months between delivery and becoming pregnant again. A pregnancy following a short interpregnancy interval is more likely to result in preterm birth.

Analysis:
- These rates are believed to underrepresent the true utilization of contraceptive methods in the postpartum period because they do not include those provided in the hospital, those patients already had on hand, or those for which there were billing issues.
- African American women are somewhat less likely to have a paid claim for a contraceptive method in the first 60 days after delivery.

Intervention:
- Improvement in the postpartum visit rate will result in improved rates of postpartum contraception. Access to postpartum contraception should be prioritized in the PMH setting.
- Recent changes to Physician Drug Program rates for contraception should improve access in 2017-2018.

Footnotes: FY 2017 Denominator N=44,219 (White n=21,880, African American n=16,146, Hispanic n=4,011, Asian n=1,052, Native American n=775) • Data Source: Medicaid claims and vital records • Additional Notes: (1) Includes patients with a paid claim for sterilization at the time of delivery or in the postpartum period. (2) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
POSTPARTUM UTILIZATION OF LONG-ACTING REVERSIBLE CONTRACEPTION
(NC Specific Measure)

Measure description: The percentage of Pregnancy Medical Home patients who received long-acting reversible contraception (LARC), including an intrauterine device or contraceptive implant, within 60 days of giving birth.

Purpose: Long-acting reversible contraceptive methods are as effective as sterilization at preventing unintended pregnancy but have the advantage of being reversible if the women decides to have more children in the future.

Analysis:
- African American women are somewhat less likely to receive a LARC device in the postpartum period, compared to Caucasian and Hispanic women.
- Optimal rates of postpartum LARC utilization are not known at this time.

Intervention:
- Access to postpartum LARC in the inpatient hospital setting at the time of delivery will improve utilization rates.

Footnotes: FY 2017 Denominator N=42,245 (White n=20,695, African American n=15,551, Hispanic n=3,897, Asian n=1,035, Native American n=721) • Data Source: Medicaid claims and vital records • Additional Notes: (1) Excludes patients with a paid claim for sterilization at the time of delivery or in the postpartum period. (2) Race/ethnicity unknowns are included in the total but excluded in the race/ethnicity breakout.
**BEHAVIORAL HEALTH OVERVIEW**

**Background/Goals**

In February 2010, the NCCCN Behavioral Health Integration Initiative (BHI) expanded upon NCCCN’s coordinated care efforts statewide through the integration of behavioral health services, including mental health and substance abuse, into NCCCN primary care practices across North Carolina. The BHI program is designed to adopt and implement best practices for the mental health, developmental disabilities and substance abuse populations; build the infrastructure to provide back-up care and consultation of the severe and persistent mental illness populations; coordinate and develop integrated systems of care in partnership with the LME/MCOs and other local specialty behavioral health providers; and work with primary care practices and state agencies to determine system changes necessary to support BHI.

NCCCN’s BHI program goals include:

- Improving healthcare outcomes for people with mental health (MH) and intellectual/developmental disabilities (I/DD)
- Accessible & responsive healthcare for people with MH & I/DD
- Decreased healthcare costs for people with SPMI & I/DD
- Improved Treatment of MH & I/DD conditions in primary care
- Supporting NCCCN care managers in addressing the unique needs of enrollees with I/DD

**Current Programs**

**Behavioral Health/Primary Care Integration:** Support development and refinement of a robust integrated care technical assistance program for primary care providers and Pregnancy Medical Homes.

- Provide education on evidence-based models of BH integration (Collaborative Care, SBIRT, Primary Care Behavioral Health)
- Assess practice readiness for integration and progress towards integration goals
- Quality improvement technical assistance that reflects the “big picture” of how integrated care fits with the practice’s goals
- Quality improvement support to ensure integrated care model fidelity
- Recruiting, matching, training, and supporting primary care/maternal health providers, psychiatrists, and behavioral health clinicians (BHCs) in the implementation of evidence-based models of integration
- Help with implementation and use of patient registries for Collaborative Care to support a population health approach
- Coordination of efforts with third-party utilization managers (like Medicaid LME-MCOs)

**Care Management (CM):** Enhanced CM and transitional CM, targeting patients with comorbid chronic conditions and BH needs

- CM Training
- Prioritize complex patients using health analytics
- Partnering with specialty BH

**Pharmacy:** Initiatives for improved management of BH medications

- Lipid and glucose screenings for patients’ prescribed/filled antipsychotic medications
- Targeted education and outreach with prescribers, pharmacists and patients
• Cost-effective Prescribing
• Opiate Safety/Harm Reduction
• Education and tools for psychotropic medication use in foster care population

**Target Population**

• Based on FY 2014 claims, 20% of Medicaid beneficiaries have a diagnosed behavioral health condition.
• 80% of Medicaid recipients with any mental health illness and 73% of Medicaid recipients with SPMI are enrolled in a NCCCN medical home. NCCCN PCPs see 78% of the behavioral health population, whereas the LME/MCO population cares for 48%. 35% of the Medicaid population seeks care in both systems.
• Of our care managed patients, 55% have a mental illness and 21% have a severe and persistent mental illness (schizophrenia, schizoaffective disorder, or bipolar disorder).

**Future Direction**

• Enhance BH integration efforts
• Educate and support BH Specialty system to co-manage patients
• Enhance co-management of I/DD populations
• Further enhance care management with analytics and training
• Provide patient-centered, whole-person transitional care
• Utilize the specialty pharmacy network (CPESN) for assistance in co-management and care coordination between primary care and specialty BH
• Consultation on BH prescribing for I/DD population
METABOLIC MONITORING FOR CHILDREN AND ADOLESCENTS ON ANTIPSYCHOTICS (HEDIS)

**Measure description:** The percentage of children and adolescents 1–17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.

**Purpose:** Antipsychotic medications can be effective in treating psychotic disorders in children and adolescents but can also increase the risk of developing serious and chronic metabolic conditions such as diabetes and hyperlipidemia. It is recommended that all patients taking antipsychotic medications have their glucose and lipids screened annually so that the prescriber can adjust, discontinue, or change antipsychotic medications if needed.

**Analysis:**
- Rates are steady over the past several years and above the HEDIS benchmark.
- Rates in foster care are above those in the non-foster care population.

**Intervention:**
- BH teams and network pharmacists will educate primary care providers on the importance of screening. In the case where the prescriber is in the BH specialty system, the BH team will assist with ongoing referral and coordination of care.
- CCNC continues to work with DMA to share patient-level data with LME-MCOs to improve monitoring of children and adolescents taking antipsychotics. A+ KIDS is also extremely valuable in enabling this monitoring.

**Footnotes:** FY 2017 Denominator N=12,008 (Non-Foster Care n=10,886, Foster Care n=1,122) • Data Source: Medicaid and NCHC claims

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**Metabolic Monitoring for Children and Adolescents on Antipsychotics**

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-Foster Care</th>
<th>Foster Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY14</td>
<td>31.5%</td>
<td>44.2%</td>
</tr>
<tr>
<td>FY15</td>
<td>30.6%</td>
<td>42.8%</td>
</tr>
<tr>
<td>FY16</td>
<td>31.2%</td>
<td>39.4%</td>
</tr>
<tr>
<td>FY17</td>
<td>32.8%</td>
<td>37.7%</td>
</tr>
</tbody>
</table>

**Metabolic Monitoring for Children and Adolescents on Antipsychotics:**

- **Non-Foster Care:**
  - FY14: 30.4%
  - FY15: 29.3%
  - FY16: 31.5%
  - FY17: 31.3%

- **Foster Care:**
  - FY14: 44.2%
  - FY15: 42.3%
  - FY16: 39.4%
  - FY17: 37.7%
**ANTIDEPRESSANT MEDICATION MANAGEMENT – EFFECTIVE ACUTE PHASE TREATMENT (HEDIS)**

**Measure description:** The percentage of patients 18 years of age and older with a diagnosis of major depression and were treated with antidepressant medication, and who remained on an antidepressant medication treatment. One of two rates are reported here:

a) **Effective Acute Phase Treatment.** The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).

**Purpose:** Effective management of depression requires medication compliance, proper monitoring of symptom management and identification and management of side effects. Optimal dosing and adherence to treatment during the acute phase can decrease the recurrence of depression.

**Analysis:**
- Slow but steady increase over past three years though below the HEDIS mean.
- No difference in rates based on age.

**Intervention:**
- Developing multifaceted QI intervention using care management, primary care integration, and pharmacy support

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**Antidepressant Medication Management - Effective Acute Phase Treatment**

- **Ages 5-20 years**
  - FY15: 39.1%
  - FY16: 41.7%
  - FY17: 42.8%

- **Ages 21-64 years**
  - FY15: 39.7%
  - FY16: 41.9%
  - FY17: 42.3%

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Footnotes: FY 2017 Denominator N=7,985 (Ages under 21 n=1,373, Ages 21+ n=6,586) • Data Source: Medicaid and NCHC claims
APPENDIX: DATA CAVEATS

General Data Information
- Four fiscal years of data are displayed for claims measures.
- Three calendar years of data are displayed for chart review measures. Chart reviews are completed by licensed clinical staff who review patient files for one calendar year.
- For claims measures, each NCCCN enrollee must be enrolled for 11 + months during the measurement period.
  - Each NCCCN enrollee must also be a Medicaid/NCHC beneficiary on the last month of the measurement period (e.g. June 2017).
- Some measures have an age range cutoff of 18 and other measures have an age range cutoff of 21. Typically HEDIS measures use age 18 as the age cutoff between children and adults. Since NCCCN has followed HEDIS specifications, we have followed the age specifications as well. For NC specific measures, however the age breakout typically goes to age 21.
- Claims Measures Runout for all fiscal years
  - Primary Care Case Management: September 26, 2017 checkwrite
  - Pediatrics: September 26, 2017 checkwrite
  - Maternal Health: paid dates include at least three months of paid dates after the end of each quarter
  - Behavioral Health: September 26, 2017 checkwrite
- Prior to FY 2014, NCCCN was able to remove beneficiaries from the data who were found to have other health insurance in addition to Medicaid coverage. However, starting in FY 2014, NCCCN no longer received information that allowed these beneficiaries to be excluded from the data, therefore their results are included. The number of beneficiaries that had other health insurance was approximately 53,000 or 6% of NCCCN enrollees in FY 2014.
- Claims data from FY 2014 was difficult to evaluate due to possible missing data from the change in vendors processing Medicaid and NCHC claims.

Demographic Data
- Sources: Medicaid and NCHC enrollment data, Medicaid and NCHC claims, Division of Medical Assistance’s WD7385 report
- Reporting Period: time period ending June 2017

NCCCN Enrolled Medicaid and NCNC Beneficiaries
- PMPM, ED Visit and Inpatient Visit measures exclude NCHC
- Maternal Health measures exclude NCHC, as they are not participants in the Maternal Health programs
- All other measures include NCHC where appropriate – NCHC enrolls children ages 6-18
Chart Review Sampling
- Patients are eligible for inclusion in the sample by meeting disease criteria during the 12-24 months prior to the date of sampling, with at least 11 months of Carolina Access enrollment during the 12 months prior to sampling. Charts are reviewed at the practice of the primary care provider assigned to the patient at the time of sampling. The presence of the disease must be confirmed by chart review.
- Patients with any of three qualifying conditions (DM, HF, or Ischemic Vascular Disease) are eligible for the sample. Sampled patients with multiple co-morbidities (including HTN) will be audited for all confirmed conditions.

Measure Filters
- Most measures are filtered by either age, race/ethnicity, geographic region or foster care status to show results from different segments of the populations.

HEDIS Benchmarks
- As of the publishing of this report, the most recent available NCQA HEDIS benchmark remains the 2015 Medicaid MCO Mean.

Unknown Data Points
- In all measures that are broken out by race/ethnicity, there is a small group of beneficiaries for whom race/ethnicity cannot be identified using available data sources. Individuals with unknown race or ethnicity make up less than 1% of the denominator in each measure. These individuals are included in the overall denominator for each year, but are not reported in the race/ethnicity breakout.

Categorization of Race/Ethnicity
- In all measures that are broken out by race/ethnicity, a hierarchy was used. The hierarchy is as follows:
  - Hispanic, Non-Hispanic [Caucasian or African American or Asian or Native American]

Small n
- Data points with a small n (numerator or denominator <30) have been suppressed. They have been suppressed for the following reasons: (1) Data points with less than 30 observations are statistically unreliable and should not be used to evaluate effectiveness. (2) All of the quality measures rely on Protected Health Information (PHI) to calculate results. Data points with a small n may be able to be identified. Therefore, in an abundance of caution, NCCCN has suppressed data to ensure compliance with HIPAA.
Primary Care Case Management

NCCCN’s Key Performance Indicators (KPI) are 4 key measures for evaluating the performance of the NCCCN program on the non-dual Medicaid population as a whole. KPIs include data from paid Medicaid claims for NCCCN enrolled non-dual Medicaid beneficiaries (NCHC beneficiaries are excluded). The measures are total Medicaid spend per member per month, emergency department visits per thousand member months, inpatient admissions per thousand member months and potentially preventable readmissions per thousand member months. In addition to reporting on the actual rates, we provide a benchmark for what would be expected given the illness burden, or case mix of the population we are serving during each report period. Rates are updated quarterly based on a rolling 12-month period and require a minimum of 90 days for claims payment. Only the five most recent rolling periods are reported.

Methodology for Calculating Expected Benchmarks
Non-dual Medicaid beneficiaries are assigned to Clinical Risk Groups (CRG) via 3M™ Health Information Systems Clinical Risk Grouper. CRG’s take all available claims data during a given one-year period and assign individuals to one of 1,075 mutually exclusive groups characterized by number and type of chronic conditions and associated severity. CRG’s allow NCCCN to make more equivalent comparisons between clinically similar patients.

Expected Spend. Resource intensity weights are generated at the CRG/age/gender level based on the average spend among all non-dual Medicaid beneficiaries during CY 2012. A total of 7 age bands are used: 0-2, 3-5, 6-18, 19-35, 36-50 and 51-65, resulting in over 15,000 CRG/age/gender strata. CRG/age/gender bands that had fewer than 10 members were rolled up to the CRG level. CRGs with less than 10 members were rolled up to the ACRG3 level. The same spending categories are excluded as described in the total Medicaid spend section. Because not all behavioral health services were capitated in CY 2012, we also removed behavioral costs that would have been managed by the BH-MCO’s had they been managing those services at the time. This allows for a more equivalent comparison when trending over-time. Additionally, we exclude non-NCCCN enrolled beneficiaries living in skilled nursing facilities during the report period (this remains true wherever we talk about all non-dual Medicaid beneficiaries going forward). Our rationale for excluding these individuals is because they are known to have particularly high costs yet aren’t eligible for NCCCN enrollment. Hence, weights that include these atypical beneficiaries would grossly overstate the expected benchmarks. Once individual weights are calculated, we apply them to the NCCCN enrollees within any given report period and aggregate up to the program level for an estimate of illness burden or case mix where 1.0 is equivalent to the case mix for all non-dual Medicaid beneficiaries in CY 2012 (with higher numbers reflecting greater clinical complexity). This case mix index is then multiplied by the average Medicaid spend for all non-dual Medicaid beneficiaries in CY 2012 to arrive at an expected value for that particular report period.

Expected Utilization. A similar approach is taken for calculating utilization benchmarks. However, because utilization occurs at a relatively low rate when looking at the population as a whole, we extended the baseline period to include both CY 2011 and CY 2012, providing us with two
years of data for generating more reliable estimates of benchmark utilization. Additionally, we calculated expected rates at the CRG level only when the CRG had a minimum of 100 person-years included. For CRG’s with fewer than 100 person-years we used aggregated CRGs to calculate expected rates.

**Correction Factor.** Some non-dual NCCCN enrollees (less than 1%) do not get assigned a CRG and so to account for these individuals, we include the average spend/utilization for these individuals in the expected line, weighted by their number of member months. Note that no correction has been applied to account for cost inflation over time.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Performance Indicator: Total Medicaid Spend Per Member Per Month</td>
<td>Although the total Medicaid spend is intended to capture total cost of care for NCCCN’s enrollees, there are some categories of spending for which we cannot accurately report. Specifically, we exclude capitation fees paid to Behavioral Health Managed Care Organizations for management of behavioral health services and pre-rebate pharmacy spend. We exclude these costs because the available data do not allow us to make accurate assessments of the true spend at the member level. Capitation fees are applied to all members on a per member per month basis regardless of actual service utilization. Approximately half of pharmacy spend is rebated, is disproportionately distributed across medications and the percent of pharmacy spend that gets rebated has increased in recent years, so the true cost of an individual’s pharmacy spend is unknown and overestimated by claims. Removing these two categories of spend removes approximately 39% of spend. In addition to these two spending categories, we also exclude management fees paid to NCCCN networks and practices, capitation payments for PACE providers and capitation payments to MedSolutions (however, the costs from the imaging encounters are included). Following the method used in Medicare Shared Savings programs, we capped total spend per person at the 99th percentile by program category (separately for ABD and non-ABD NCCCN enrollees).</td>
</tr>
<tr>
<td>Key Performance Indicator: ED Visits Per 1,000 Member Months</td>
<td>All ED visits are included except for behavioral health ED visits that have been removed from all reporting years. ED visits that happened on the same day for the same patient were counted separately.</td>
</tr>
<tr>
<td>Key Performance Indicator: Inpatient Admissions Per 1,000 Member Months</td>
<td>All acute inpatient admissions are included except for those incurred by women who delivered during the reporting year. Women who deliver during the reporting year are removed from all years for just the inpatient admission measures. Additionally, all behavioral health inpatient admissions are removed from all reporting years. Same-day transfers are not counted as a new inpatient admission.</td>
</tr>
<tr>
<td>Key Performance Indicator: Potentially Preventable Readmissions Per 1,000 Member Months</td>
<td>Potentially Preventable Readmissions use the 3M™ Health Information System’s program for tagging readmissions that are clinically-related and occur within 30 days of a previous index admission. All behavioral health inpatient admissions are excluded.</td>
</tr>
</tbody>
</table>
## APPENDIX: DATA SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
</tr>
</thead>
</table>
| **Medication Management for People with Asthma** | **Measure Description:** The percentage of patients (ages 5-64) with a diagnosis of persistent asthma who were treated with appropriate medications during the treatment period. The reported rate is the percentage of patients who remained on asthma controller medication for at least 75% of the treatment period.  

**Numerator Statement:** The number of patients who achieved a PDC* of at least 75% for their asthma controller medications during the measurement year. A higher rate is better.  

*PDC is the proportion of days covered by at least one asthma controller medication prescription, divided by the number of days in the treatment period. The treatment period is the period of time beginning on the earliest prescription dispensing date for any asthma controller medication during the measurement year through the last day of the measurement year.  

**Denominator Statement:** All patients 5–64 years of age as by the end of the measurement year with at least 11 months of Medicaid enrollment who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year:  
- At least one emergency department visit with asthma as the principal diagnosis  
- At least one acute inpatient claim/encounter with asthma as the principal diagnosis  
- At least four outpatient visits or observation visits on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events. Visit type need not be the same for the four visits.  
- At least four asthma medication dispensing events  

**Exclusions:**  
- Any diagnosis of Emphysema, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes/Vapors, Cystic Fibrosis and Acute Respiratory Failure at any time during the patient’s history through the end of the measurement period  
- Members who had no asthma controller medications dispensed during the measurement period  

**Data Source:** Medicaid claims  

**Measure Alignment:** NCQA HEDIS; NQF 1799 |
## APPENDIX: DATA SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
</tr>
</thead>
</table>
| **Asthma Medication Ratio** | **Measure Description:** The percentage of patients (ages 5-64) with a diagnosis of persistent asthma who had a ratio of asthma controller medication to total asthma medications of 0.50 or greater during the measurement period.  
**Numerator Statement:** The number of patients who had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.  
**Denominator Statement:** All patients 5–64 years of age by the end of the measurement year with at least 11 months of Medicaid enrollment who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year:  
- At least one emergency department visit with asthma as the principal diagnosis  
- At least one acute inpatient claim/encounter with asthma as the principal diagnosis  
- At least four outpatient visits or observation visits on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events. Visit type need not be the same for the four visits.  
- At least four asthma medication dispensing events  
**Exclusions:**  
- Any diagnosis of Emphysema, COPD, Obstructive Chronic Bronchitis, Chronic Respiratory Conditions Due to Fumes/Vapors, Cystic Fibrosis and Acute Respiratory Failure at any time during the patient’s history through the end of the measurement period  
- Members who had no asthma controller medications dispensed during the measurement period  
**Data Source:** Medicaid claims  
**Measure Alignment:** NCQA HEDIS; NQF 1800 |
| **Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (> 9.0%)** | **Measure Description:** The percentage of patients (ages 18-75) with a diagnosis of diabetes whose Hemoglobin A1c (HbA1c) was greater than 9.0% (lower is better), indicating poor diabetes control.  
**Numerator Statement:** The number of patients whose most recent HbA1c test value was documented within 1 year of the last office visit date and their HbA1c test value was > 9.0% Diabetes patients who did not have an HbA1c test are counted as "poor control". |
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<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
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<tbody>
<tr>
<td><strong>Denominator Statement:</strong> Patients 18-75 years of age by the end of the measurement year with at least 11 months of Medicaid enrollment who had a diagnosis of diabetes (type 1 or type 2) during the measurement year or the year prior to the measurement year.</td>
<td></td>
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<tr>
<td><strong>Exclusions:</strong></td>
<td></td>
</tr>
<tr>
<td>• Patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.</td>
<td></td>
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<tr>
<td>• Patients who did not have a diagnosis of diabetes, in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes in any setting, during the measurement year or the year prior to the measurement year.</td>
<td></td>
</tr>
<tr>
<td><strong>Data Source:</strong> Chart Review</td>
<td></td>
</tr>
<tr>
<td><strong>Measure Alignment:</strong> NCQA HEDIS; NQF 0059</td>
<td></td>
</tr>
<tr>
<td><strong>Comprehensive Diabetes Care:</strong> Hemoglobin A1c (HbA1c) Control (&lt; 8.0%)</td>
<td></td>
</tr>
<tr>
<td><strong>Measure Description:</strong> The percentage of patients (ages 18-75) with a diagnosis of diabetes whose Hemoglobin A1c (HbA1c) was less than 8.0%, indicating good diabetes control.</td>
<td></td>
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<tr>
<td><strong>Numerator Statement:</strong> The number of patients whose most recent HbA1c test value was documented within 1 year of the last office visit date and their HbA1c test value was &lt; 8.0% Diabetes patients who did not have an HbA1c test are counted as “poor control”.</td>
<td></td>
</tr>
<tr>
<td><strong>Denominator Statement:</strong> Patients 18-75 years of age by the end of the measurement year with at least 11 months of Medicaid enrollment who had a diagnosis of diabetes (type 1 or type 2) during the measurement year or the year prior to the measurement year.</td>
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<td>• Patients who did not have a diagnosis of diabetes, in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes in any setting, during the measurement year or the year prior to the measurement year.</td>
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<thead>
<tr>
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<tbody>
<tr>
<td><strong>Comprehensive Diabetes Care: Blood Pressure Control</strong></td>
<td>steroid-induced diabetes in any setting, during the measurement year or the year prior to the measurement year.</td>
</tr>
<tr>
<td><strong>Data Source:</strong></td>
<td>Chart Review</td>
</tr>
<tr>
<td><strong>Measure Alignment:</strong></td>
<td>NCQA HEDIS; NQF 0575</td>
</tr>
<tr>
<td><strong>Measure Description:</strong></td>
<td>The percentage of patients (ages 18-75) with a diagnosis of diabetes whose blood pressure was below 140/90 mmHg.</td>
</tr>
<tr>
<td><strong>Numerator Statement:</strong></td>
<td>Patients whose most recent blood pressure level was &lt;140/90 mm Hg during the measurement year.</td>
</tr>
<tr>
<td><strong>Denominator Statement:</strong></td>
<td>Patients 18-75 years of age by the end of the measurement year with at least 11 months of Medicaid enrollment who had a diagnosis of diabetes (type 1 or type 2) during the measurement year or the year prior to the measurement year.</td>
</tr>
<tr>
<td><strong>Exclusions:</strong></td>
<td>- Patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.</td>
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<td></td>
<td>- Patients who did not have a diagnosis of diabetes, in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes in any setting, during the measurement year or the year prior to the measurement year.</td>
</tr>
<tr>
<td><strong>Data Source:</strong></td>
<td>Chart Review</td>
</tr>
<tr>
<td><strong>Measure Alignment:</strong></td>
<td>NCQA HEDIS; NQF 0061</td>
</tr>
<tr>
<td><strong>Controlling High Blood Pressure</strong></td>
<td>The percentage of patients (ages 18-85) with a diagnosis of hypertension whose blood pressure was well controlled based on the following criteria:</td>
</tr>
<tr>
<td></td>
<td>4) Patients (ages 18-59) whose blood pressure was below 140/90 mmHg</td>
</tr>
<tr>
<td></td>
<td>5) Patients (ages 60-85) with a diabetes diagnosis whose blood pressure was below 140/90 mmHg</td>
</tr>
</tbody>
</table>
### APPENDIX: DATA SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
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</thead>
</table>
| 6) Patients (ages 60-85) without a diabetes diagnosis whose blood pressure was below 150/90 mmHg | **Numerator Statement:** The number of patients in the denominator whose most recent BP is adequately controlled during the measurement year based on the above criteria.  
**Denominator Statement:** Patients 18-85 years of age by the end of the measurement year with at least 11 months of Medicaid enrollment who had a diagnosis of hypertension during the measurement year.  
**Exclusions:**  
- Patients with evidence of end-stage renal disease (ESRD) on or prior to the end of the measurement year. Documentation of dialysis or renal transplant also meets the criteria for evidence of ESRD.  
- Patients with a diagnosis of pregnancy during the measurement year.  
- Patients who had an admission to a nonacute inpatient setting during the measurement year.  
**Data Source:** Chart Review  
**Measure Alignment:** NCQA HEDIS; NQF 0018 |
| Smoking Status and Cessation Advice | **Measure Description:** Percent of patients (ages 18-75) at the most recent office visit with a confirmed diagnosis of Ischemic Vascular Disease (IVD) and/or Diabetes whose smoking status was documented on the chart and evidence of receiving cessation advice.  
**Numerator Statement:** Patients whose smoking status was documented within the past year, and if the patient was identified as a smoker, cessation of smoking was recommended.  
**Denominator Statement:** Patients 18-75 years of age by the end of the measurement year with at least 11 months of Medicaid enrollment who had a diagnosis of ischemic vascular disease (IVD) or diabetes during the measurement year.  
**Exclusions:** none  
**Data Source:** Chart Review |
## APPENDIX: DATA SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Well-Child Visits in the First 15 Months of Life</strong></td>
<td><strong>Measure Description:</strong> The percentage of patients who had six or more well-child visits with a primary care provider during the first 15 months of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator Statement:</strong> Children who received six well-child visits with a PCP during their first 15 months of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Children 15 months of age with 13 months of Medicaid enrollment between 31 days and 15 months of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> none</td>
</tr>
<tr>
<td></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
</tr>
<tr>
<td></td>
<td><strong>Measure Alignment:</strong> NCQA HEDIS; NQF 1392</td>
</tr>
<tr>
<td><strong>Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life</strong></td>
<td><strong>Measure Description:</strong> The percentage of patients (ages 3-6) who had at least one well-child visit with a primary care provider during the measurement period.</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator Statement:</strong> Children who received at least one well-child visit with a PCP during the measurement year.</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Children ages 3-6 years of age with at least 11 months of Medicaid enrollment during the measurement year.</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> none</td>
</tr>
<tr>
<td></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
</tr>
<tr>
<td></td>
<td><strong>Measure Alignment:</strong> NCQA HEDIS; NQF 1516</td>
</tr>
<tr>
<td>Metric</td>
<td>Notes and Definitions</td>
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<td>------------------------------------------------------------------------</td>
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</tr>
</tbody>
</table>
| **Well-Child Visits in the Seventh, Eighth, Ninth, Tenth and Eleventh Years of Life** | **Measure Description:** The percentage of patients (ages 7-11) who had at least one well-child visit with a primary care provider during the measurement period.  
**Numerator Statement:** Children who received at least one well-child visit with a PCP during the measurement year.  
**Denominator Statement:** Children ages 7-11 years of age with at least 11 months of Medicaid enrollment during the measurement year.  
**Exclusions:** none  
**Data Source:** Medicaid claims  
**Measure Alignment:** none |
| **Adolescent Well-Care Visits**                                         | **Measure Description:** The percentage of patients (ages 12-21) who had at least one well-care visit with a primary care provider during the measurement period.  
**Numerator Statement:** Adolescents who received at least one well-child visit with a PCP during the measurement year.  
**Denominator Statement:** Children ages 12-21 years of age with at least 11 months of Medicaid enrollment during the measurement year.  
**Exclusions:** none  
**Data Source:** Medicaid claims  
**Measure Alignment:** NCQA HEDIS |
| **Early Childhood Developmental Behavioral Screening (ABCD)**           | **Measure Description:** The percentage of well-check visits for children 6-17 months and 31-66 months of age with a developmental screen during the measurement period. |
# APPENDIX: DATA SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
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</thead>
<tbody>
<tr>
<td><strong>Numerator Statement:</strong> ABCD/Developmental Screenings (CPT: 96110) that occurred during a well-child visit in the measurement year. <strong>Note:</strong> If more than one Screen was reported at a visit, only count 1 screen. <strong>Denominator Statement:</strong> Children between the ages of 6-15 and 36-66 months (see age breakdown below) at the time of the visit with at least 11 months of Medicaid enrollment during the measurement year. - 6 month well-child visit: Age range 6-8 months - 12 month well-child visit: Age range 12-15 months - 36, 48, 60 month well-child visits: Age range 36-66 months. <strong>Exclusions:</strong> none. <strong>Data Source:</strong> Medicaid claims. <strong>Measure Alignment:</strong> none.</td>
<td></td>
</tr>
<tr>
<td><strong>Autism/Developmental Screening (ABCD)</strong></td>
<td><strong>Measure Description:</strong> The percentage of children 18-30 months with at least one well-check visit during the measurement period who received appropriate Autism and Developmental screening. <strong>Numerator Statement:</strong> Children with at least one developmental screen during their well-child visit (WCV) as indicated by the following criteria: During the two visits, children should receive at least one developmental screen and 2 autism screens. - If the child attends both WCVs, an appropriately screened child would show 3 or 4 96110s. - If the child only attended the first visit (age is 18m&lt; and &lt;24m), an appropriately screened child would show 1 or 2 96110s. - If the child only attended the second visit (age is 24m&lt; and &lt;30m) an appropriately screened child must have 2 96110s. <strong>Denominator Statement:</strong> Children 18-30 months of age with at least 11 months of Medicaid enrollment during the measurement year who had at least one well-child visit.</td>
</tr>
</tbody>
</table>
### APPENDIX: DATA SPECIFICATIONS

<table>
<thead>
<tr>
<th>Metric</th>
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</thead>
<tbody>
<tr>
<td><strong>School Age Developmental and Behavioral Screening</strong></td>
<td><strong>Measure Description:</strong> The percentage of well-child visits for patients (ages 6-10 years) where a developmental and behavioral screen was completed.</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator Statement:</strong> Developmental and Behavioral/Social-Emotional Screening (CPT: 96127) that occurred during a well-child visit.</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Children 6-10 years of age with at least 11 months of Medicaid enrollment during the measurement year who had at least one well-child visit.</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> none</td>
</tr>
<tr>
<td><strong>Adolescent Depression Screening</strong></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
</tr>
<tr>
<td></td>
<td><strong>Measure Definition:</strong> none</td>
</tr>
<tr>
<td><strong>Measure Description:</strong> The percentage of well-check visits for children 12-20 years of age with a depression screening during the measurement period.</td>
<td></td>
</tr>
<tr>
<td><strong>Numerator Statement:</strong> Depression screening (CPT: 96127, Social-Emotional Screening) that occurred during a well-child visit.</td>
<td></td>
</tr>
<tr>
<td><strong>Denominator Statement:</strong> Adolescents 12-20 years of age with at least 11 months of Medicaid enrollment during the measurement year who had at least one well-child visit.</td>
<td></td>
</tr>
<tr>
<td><strong>Exclusions:</strong> none</td>
<td></td>
</tr>
<tr>
<td><strong>Data Source:</strong> Medicaid claims</td>
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<tr>
<td>Metric</td>
<td>Notes and Definitions</td>
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</tr>
<tr>
<td><strong>Annual Dental Visits</strong></td>
<td><strong>Measure Description:</strong> The percentage of patients (ages 2-3) who had at least one dental visit during the measurement period.</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator Statement:</strong> Patients who had one or more dental visits with a dental practitioner during the measurement year.</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Children 2-3 years of age with at least 11 months of Medicaid enrollment during the measurement year.</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> Dental fluoride varnishings done at PCP office are excluded.</td>
</tr>
<tr>
<td></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
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<tr>
<td></td>
<td><strong>Measure Alignment:</strong> NCQA HEDIS; NQF 1388</td>
</tr>
<tr>
<td><strong>Dental Topical Fluoride Varnishing</strong></td>
<td><strong>Measure Description:</strong> The percentage of patients with at least 4 dental fluoride varnishings treatments during the first 42 months of life.</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator Statement:</strong> Four or more dental fluoride varnishings recorded since birth.</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Children who turned 42 months of age with at least 36 months of Medicaid enrollment since birth.</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> none</td>
</tr>
<tr>
<td></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
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<td></td>
<td><strong>Measure Alignment:</strong> none</td>
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<thead>
<tr>
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</thead>
</table>
| **Childhood Immunization Status**     | **Measure Description:** Percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three H influenza type B (HiB); three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV) by their second birthday.  
**Numerator Statement:** Children who received the recommended vaccines by their second birthday.  
**Denominator Statement:** Children 2 years of age with at least 11 months of Medicaid enrollment during the measurement year.  
**Exclusions:** Exclude children who had a contraindication for a specific vaccine from the denominator for all antigen rates.  
**Data Source:** North Carolina Immunization Registry (NCIR)  
**Measure Alignment:** NCQA HEDIS; NQF 0038 |
| **Immunizations for Adolescents**     | **Measure Description:** The percentage of adolescents 13 years of age who had the recommended immunizations by their 13\textsuperscript{th} birthday.  
\hspace{1cm} Combination 1: One dose of meningococcal conjugate vaccine and one tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine  
\hspace{1cm} Combination 2: One dose of meningococcal conjugate vaccine, one tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine and two doses of the human papillomavirus (HPV) vaccine  
**Numerator Statement:** Adolescents who received the recommended vaccines by their 13\textsuperscript{th} birthday.  
**Denominator Statement:** Adolescents 13 years of age with at least 11 months of Medicaid enrollment during the measurement year.  
**Exclusions:** Exclude adolescents who had a contraindication for a specific vaccine from the denominator for all antigen rates.  
**Data Source:** North Carolina Immunization Registry (NCIR) |
### APPENDIX: DATA SPECIFICATIONS

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<tr>
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<tr>
<td><strong>Timeliness of Prenatal Care</strong></td>
<td><strong>Measure Alignment:</strong> NCQA HEDIS; NQF 1407</td>
</tr>
<tr>
<td><strong>Measure Description:</strong> The percentage of pregnant patients who initiated prenatal care in the first trimester (before 14 completed weeks of gestation) among women who received care in a Pregnancy Medical Home.</td>
<td></td>
</tr>
<tr>
<td><strong>Numerator Statement:</strong> Patients who entered care in the 1st trimester based on date of entry to prenatal care on the birth certificate.</td>
<td></td>
</tr>
<tr>
<td><strong>Denominator Statement:</strong> Unduplicated by pregnancy, patients attributed to a PMH practice where date of entry to prenatal care is known on the birth certificate.</td>
<td></td>
</tr>
<tr>
<td><strong>Exclusions:</strong> none</td>
<td></td>
</tr>
<tr>
<td><strong>Data Source:</strong> Medicaid claims and vital records</td>
<td></td>
</tr>
<tr>
<td><strong>Measure Alignment:</strong> none</td>
<td></td>
</tr>
<tr>
<td><strong>Risk Screening During Pregnancy</strong></td>
<td><strong>Measure Alignment:</strong> none</td>
</tr>
<tr>
<td><strong>Measure Description:</strong> The percentage of pregnant patients receiving care in a Pregnancy Medical Home who received standardized risk screening using the Pregnancy Medical Home risk screening form.</td>
<td></td>
</tr>
<tr>
<td><strong>Numerator Statement:</strong> Pregnancies where a PMH risk screen was performed during pregnancy and entered into CMIS.</td>
<td></td>
</tr>
<tr>
<td><strong>Denominator Statement:</strong> Unduplicated by pregnancy, patients attributed to a PMH practice.</td>
<td></td>
</tr>
<tr>
<td><strong>Exclusions:</strong> none</td>
<td></td>
</tr>
<tr>
<td><strong>Data Source:</strong> Medicaid claims, vital records and NCCCN’s Care Management Information System (CMIS)</td>
<td></td>
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<tr>
<td><strong>Measure Alignment:</strong> none</td>
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## APPENDIX: DATA SPECIFICATIONS

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<tr>
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</thead>
</table>
| Tobacco Cessation Counseling Received During Pregnancy | **Measure Description:** The percentage of patients who received tobacco cessation counseling during pregnancy among patients who reported current tobacco use on the Pregnancy Medical Home risk screening form.  
**Numerator Statement:** Patients with any claims during the pregnancy for procedure codes 99406 or 99407 AND risk screen indicates current smoker.  
**Denominator Statement:** Unduplicated by pregnancy, patients attributed to a PMH practice AND risk screen indicates current smoker.  
**Exclusions:** none  
**Data Source:** Medicaid claims and vital records  
**Measure Alignment:** none |
| Unintended Pregnancy Rate | **Measure Description:** The percentage of Pregnancy Medical Home patients who reported on the PMH risk screening form that their pregnancy was either mistimed or unwanted.  
**Numerator Statement:** Patients who did not intend to be pregnant now or in the future based on risk screening information.  
**Denominator Statement:** Unduplicated by pregnancy, patients attributed to a PMH practice with a risk screen in CMIS.  
**Exclusions:** none  
**Data Source:** Medicaid claims and vital records  
**Measure Alignment:** none |
### Elective Deliveries Before 39 Weeks of Gestation

**Measure Description:** The percentage of scheduled deliveries (induction of labor or cesarean delivery) among deliveries at 37 0/7 – 38 6/7 weeks of gestation among patients receiving care in a PMH without a medical indication for early delivery.

**Numerator Statement:** Patients delivered between 37 and 38+6 without going into labor naturally and without a medical indication for delivery.

**Denominator Statement:** Unduplicated by pregnancy, patients attributed to a PMH practice where gestational age at delivery is >= 37 weeks and <39 weeks and there are no indications on the birth certificate justifying an elective delivery before 39 weeks gestation.

**Exclusions:** none

**Data Source:** Medicaid claims and vital records

**Measure Alignment:** none

### Cesarean Delivery Rate

**Measure Description:** The percentage of Pregnancy Medical Home patients who had a cesarean delivery among those who gave birth during the time period.

**Numerator Statement:** Pregnancies that ended in cesarean delivery.

**Denominator Statement:** Births attributed to a PMH practice where mode of delivery is known.

**Exclusions:** none

**Data Source:** Medicaid claims and vital records

**Measure Alignment:** none

### Low Birth Weight

**Measure Description:** The percentage of live births to patients receiving care in a Pregnancy Medical Home where the infant weighed less than 2,500 grams or 5.5 pounds at birth.
<table>
<thead>
<tr>
<th>Metric</th>
<th>Notes and Definitions</th>
</tr>
</thead>
</table>
| **Very Low Birth Weight**   | **Measure Description:** The percentage of live births to patients receiving care in a Pregnancy Medical Home where the infant weighed less than 1,500 grams or 3.3 pounds at birth.  
  **Numerator Statement:** Births with a birth weight <1500 grams. This measure is a subset of the measure of Low Birth Weight Infants.  
  **Denominator Statement:** Births attributed to a PMH practice where birthweight is not missing.  
  **Exclusions:** none  
  **Data Source:** Medicaid claims and vital records  
  **Measure Alignment:** none |
| **Postpartum Visits**       | **Measure Description:** The percentage of Pregnancy Medical Home patients who received a comprehensive postpartum visit 14-60 days after giving birth.  
  **Numerator Statement:** Patients with a S0281 claim within 14 and 60 days after delivery.  
  *(Postpartum visits are measured using the S0281 code for the PMH postpartum incentive payment. Due to challenges many practices have experienced with this code, the reported rate is a significant underrepresentation of the true number of postpartum visits. Additionally, postpartum visits provided by non-PMH practices are not captured using this method.)* |
**APPENDIX: DATA SPECIFICATIONS**

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<tbody>
<tr>
<td>Postpartum visits may occur up to 60 days post-delivery; thus postpartum visit data requires additional claims runout not yet available for the most recent quarter.</td>
<td></td>
</tr>
<tr>
<td>Denominator Statement: Unduplicated by pregnancy, patients attributed to a PMH practice.</td>
<td></td>
</tr>
<tr>
<td>Exclusions: none</td>
<td></td>
</tr>
<tr>
<td>Data Source: Medicaid claims</td>
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</tr>
<tr>
<td>Measure Alignment: none</td>
<td></td>
</tr>
<tr>
<td><strong>Postpartum Contraception</strong></td>
<td>Measure Description: The percentage of Pregnancy Medical Home patients who had a paid claim for a contraceptive method within 60 days of giving birth.</td>
</tr>
<tr>
<td>Numerator Statement: Patients with a contraceptive claim within 0-60 days after delivery (includes claims with sterilization).</td>
<td></td>
</tr>
<tr>
<td>Denominator Statement: Unduplicated by pregnancy, patients attributed to a PMH practice where sterilization claims were not found in the postpartum period.</td>
<td></td>
</tr>
<tr>
<td>Exclusions: none</td>
<td></td>
</tr>
<tr>
<td>Data Source: Medicaid claims</td>
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<tr>
<td>Measure Alignment: none</td>
<td></td>
</tr>
<tr>
<td><strong>Postpartum Utilization of Long-Acting Reversible Contraception</strong></td>
<td>Measure Description: The percentage of Pregnancy Medical Home patients who received long-acting reversible contraception (LARC), including an intrauterine device or contraceptive implant, within 60 days of giving birth.</td>
</tr>
<tr>
<td>Numerator Statement: Patients with an IUD or implant insertion claim within 0-60 days after delivery (excludes claims with sterilization).</td>
<td></td>
</tr>
<tr>
<td>Metric</td>
<td>Notes and Definitions</td>
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<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Unduplicated by pregnancy, patients attributed to a PMH practice where sterilization claims were not found in the postpartum period.</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> none</td>
</tr>
<tr>
<td></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
</tr>
<tr>
<td></td>
<td><strong>Measure Alignment:</strong> none</td>
</tr>
<tr>
<td>Metabolic Monitoring for Children and Adolescents on Antipsychotics</td>
<td><strong>Measure Description:</strong> The percentage of children and adolescents 1–17 years of age who had two or more antipsychotic prescriptions and had metabolic testing.</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator Statement:</strong> Children and adolescents who received glucose and cholesterol tests during the measurement year.</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator Statement:</strong> Children and adolescents 1-17 years of age with at least 11 months of Medicaid enrollment during the measurement year who had ongoing use of antipsychotic medication (at least two prescriptions).</td>
</tr>
<tr>
<td></td>
<td><strong>Exclusions:</strong> none</td>
</tr>
<tr>
<td></td>
<td><strong>Data Source:</strong> Medicaid claims</td>
</tr>
<tr>
<td></td>
<td><strong>Measure Alignment:</strong> NCQA HEDIS; NQF 2800</td>
</tr>
</tbody>
</table>
| Antidepressant Medication Management | **Measure Description:** The percentage of patients 18 years of age and older with a diagnosis of major depression and were treated with antidepressant medication, and who remained on an antidepressant medication treatment. One of two rates are reported here:  
  a) **Effective Acute Phase Treatment.** The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks). |
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator Statement:</strong></td>
<td>Patients who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment.</td>
</tr>
<tr>
<td><strong>Denominator Statement:</strong></td>
<td>Patients 18 years of age and older with at least 11 months of Medicaid enrollment with a diagnosis of major depression and were newly treated with antidepressant medication.</td>
</tr>
</tbody>
</table>
| **Exclusions:** | **•** Patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.  
• Patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.  
• Patients who filled a prescription for an antidepressant 105 days prior to the IPSD. |
| **Data Source:** | Medicaid claims |
| **Measure Alignment:** | NCQA HEDIS; NQF 0105 |