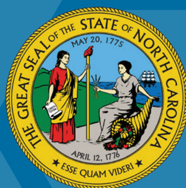
NC MEDICAID

ANNUAL QUALITY REPORT

DECEMBER 2020



NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Division of Health Benefits

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EXECUTIVE SUMMARY

North Carolina's Medicaid program (NC Medicaid) is committed to advancing high-value care, improving population health, engaging and supporting beneficiaries and providers, promoting health equity and establishing a sustainable program with predictable costs.

This report assesses NC Medicaid's 2016-2019 performance on quality measures related to the three aims and associated goals identified in the NC Medicaid Managed Care Quality Strategy.[1] This vision for an innovative, whole-person, well-coordinated system of care is distilled into three central aims: 1) **Better Care Delivery**, 2) **Healthier People and Communities** and 3) **Smarter Spending**.

NC Medicaid's Managed Care Quality Strategy was designed using this, and other historical performance data to evaluate high quality of care as well as areas where a stronger focus is needed to improve outcomes and population health. The Quality Strategy measures are aligned with key DHHS initiatives including the Opioid Action Plan, the Early Childhood Action Plan, the Perinatal Health Strategic Plan, the Maternal Health Strategic Plan (in development) and Healthy North Carolina 2030 to support a unified approach to continued improvement.

A key objective in the Quality Strategy is to reduce health disparities and **promote health equity**. NC Medicaid currently stratifies quality measures by race, ethnicity, county, gender, age, primary language and disability to analyze significant differences or disparities among groups. Evaluation of disparity analysis has enabled targeted quality and population health improvements through partnered programs and initiatives. In future reports, measures will be stratified by Health Plan and plan population as well (i.e. Behavioral Health and Intellectual/Developmental Disability (I/DD) Tailored Plan members, etc.). Each year NC Medicaid will set goals for closing gaps between groups in quality performance and create financial incentives for plans to outperform historical goals.

Central to NC Medicaid's effort to improve quality, care delivery and health outcomes is a commitment to address the social and environmental factors that directly impact health outcomes and cost, and promoting "Healthy Opportunities" for North Carolinians. To effectively address these challenges, NC Medicaid is utilizing data and embedding strategies to promote Healthy Opportunities into its Medicaid program through screening, identification and mapping of unmet health-related resource needs, as well as a statewide coordinated care network (NCCARE360).

NC Medicaid will work with Health Plans[2], Local Management Entities – Managed Care Organizations (LME-MCOs), Primary Care Case Management (PCCM) entities and providers to focus on ensuring significant improvements in quality performance year over year.

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[1] *NC Medicaid Managed Care Quality Strategy https://files.nc.gov/ncdma/documents/Quality_Strategy_4.5.19.v2.pdf April 18, 2019.*
[2] *In this document, references to "Prepaid Health Plans" or "health plans" also include Tailored Plans.*

Summary of NC Medicaid Quality Performance 2019

The central aims provide a compass to drive performance within targeted goals and objectives. The summary of performance for 2019 by Quality Strategy Aims and Goals highlight both areas of strengths as well as opportunities for improvement.

AIMS	GOALS	OVERALL PERFORMANCE
AIM 1: Better Care Delivery. Make health care more person-centered, coordinated and accessible.	**GOAL 1:** Ensure appropriate access to care	★★
	GOAL 2: Drive patient-centered, whole-person care	★★
AIM 2: Healthier People, Healthier Communities. In collaboration with community partners improve the health of North Carolinians through prevention, better treatment of chronic conditions and better behavioral health care.	**GOAL 3:** Promote wellness and prevention	★★
	GOAL 4: Improve chronic condition management	★
	GOAL 5: Work with communities to improve population health	★★
AIM 3: Smarter Spending. Pay for value rather than volume, incentivize innovation and ensure appropriate care.	**GOAL 6:** Pay for value	★★

★★★ Performance across all measures in the group was **ABOVE** the national median.

★★ Performance across all measures in the group was **AROUND** the national median.

★ Performance across all measures in the group was **BELOW** the national median.

Aim 1: Better Care Delivery. Make health care more person-centered, coordinated and accessible.

Goal 1 is to Ensure Appropriate Access to Care. NC Medicaid has performed consistently well on the *Percentage of Eligibles Who Received Preventive Dental Services (PDENT-CH)*. Unfortunately, on the medical front, *Child and Adolescent Well-Care Visits* for ages 0-15 months and 3-6 years are slightly below national median. A focused effort with community partners and providers was initiated in 2020 to improve rates of well-child visits and will continue into 2021.

Goal 2 is to Drive Patient-Centered, Whole-Person Care. *Initiation and Engagement of Alcohol and Other Drug Dependence (AOD) Treatment (Total Rates)* indicates consistent performance improvement in line with or slightly higher than national average while *Follow-up After Mental Health Hospitalization* saw a slight increase from 2018, it remains consistently lower than the national median.

Aim 2: Healthier People and Communities. In collaboration with community partners, Improve the health of North Carolinians through prevention, better treatment of chronic conditions and better behavioral health care.

Goal 3A is to Promote Wellness and Prevention-Children's Health. *Immunizations for Adolescents (Combination 2)* although below the national median, increased significantly from 2016-2019. *Childhood Immunization Status (Combination 10)* for ages 0-2 years increased from 2018-2019, but still fell below the national median.

Goal 3B is to Promote Wellness and Prevention-Women's Health. *Chlamydia Screening in Women (Total Rate)* shows screenings in keeping with the national median. *Timeliness of Prenatal Care* is an identified area for improvement related to data reliability and improved capture as well as quality of care.

Goal 4 is to Improve Chronic-condition Management. *Asthma Medication Ratio (Total Rate)* maintains performance at higher than the national median. An area for improvement is *Diabetes (Hemoglobin A1C) Testing*; where rates are consistently lower than the national average.

Goal 5 is to Work with Communities to Improve Population Health. The rate for *Concurrent Use of Prescription Opioids and Benzodiazepines* has favorably declined year over year from 2017. *Adult BMI Assessment and Weight Assessment and Counseling for Nutrition and Physical Activity for Children/ Adolescents* performance is below median largely due to data reliability and inconsistent capture.

Aim 3: Smarter Spending. Pay for value rather than volume, incentivize innovation and ensure appropriate care.

Goal 6 is to Pay for Value[3]. Key Prevention Quality Indicators are mixed. *Gastroenteritis Admission Rate* is above the national median and we see continued improvement with the *Asthma in Older Adults Admission Rate* above the national median however, *Heart Failure Admission Rate* is below. *Plan All-Cause Readmissions* indicates average readmission rates around the national median with slightly lower than expected readmissions[4] for 2019.

The Department has identified several opportunities to expand and build upon the interventions to transform and drive quality improvements within its NC Medicaid Managed Care program. Recognizing the importance of continuous quality improvement, goals, objectives and measures will be modified as needed to drive continued improvement, especially in the areas of greatest opportunity and need.

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[3] *Lower rates are better for all measures under Goal 6.*
[4] *The observed to expected rate is .93, i.e., 93 for every 100 expected readmissions.*

INTRODUCTION

NC Medicaid is committed to advancing high-value care, improving population health, engaging and supporting beneficiaries and providers, promoting health equity and establishing a sustainable program with predictable costs.

This report assesses NC Medicaid's 2016-2019 performance on quality measures related to the three aims and associated goals identified in the Medicaid Quality Strategy.[5] This vision for an innovative, whole-person, well-coordinated system of care is distilled into three central aims: 1) Better Care Delivery, 2) Healthier People and Communities and 3) Smarter Spending.

NC Medicaid's Quality Strategy and measures are aligned with key DHHS initiatives, including the Opioid Action Plan, the Early Childhood Action Plan, the Perinatal Health Strategic Plan, the Maternal Health Strategic Plan (in development) and Healthy North Carolina 2030.

A key objective in the Quality Strategy is to reduce disparities and **promote health equity**. NC Medicaid currently stratifies quality measures by race, ethnicity, county, gender, age, primary language and disability to allow for analysis of significant differences or disparities among groups. In future reports, measures will be stratified by plan population as well (i.e. Behavioral Health I/DD Tailored Plan members, etc.). NC Medicaid monitors this data to identify disparities, and – based on data over time – develop targeted quality improvement interventions and/or strategies to promote health equity. Goals for closing gaps in quality performance among groups will be developed annually.

NC Medicaid will also produce an annual Health Equity Report. This report will provide a comprehensive overview and deeper analysis of stratified data; review targeted efforts to provide equitable care; and summarize areas of care where disparities have improved, persisted or emerged. For this report, certain figures are included to illustrate quality measures stratified by race, ethnicity, language and geography in cases where there are persistent differences among groups.

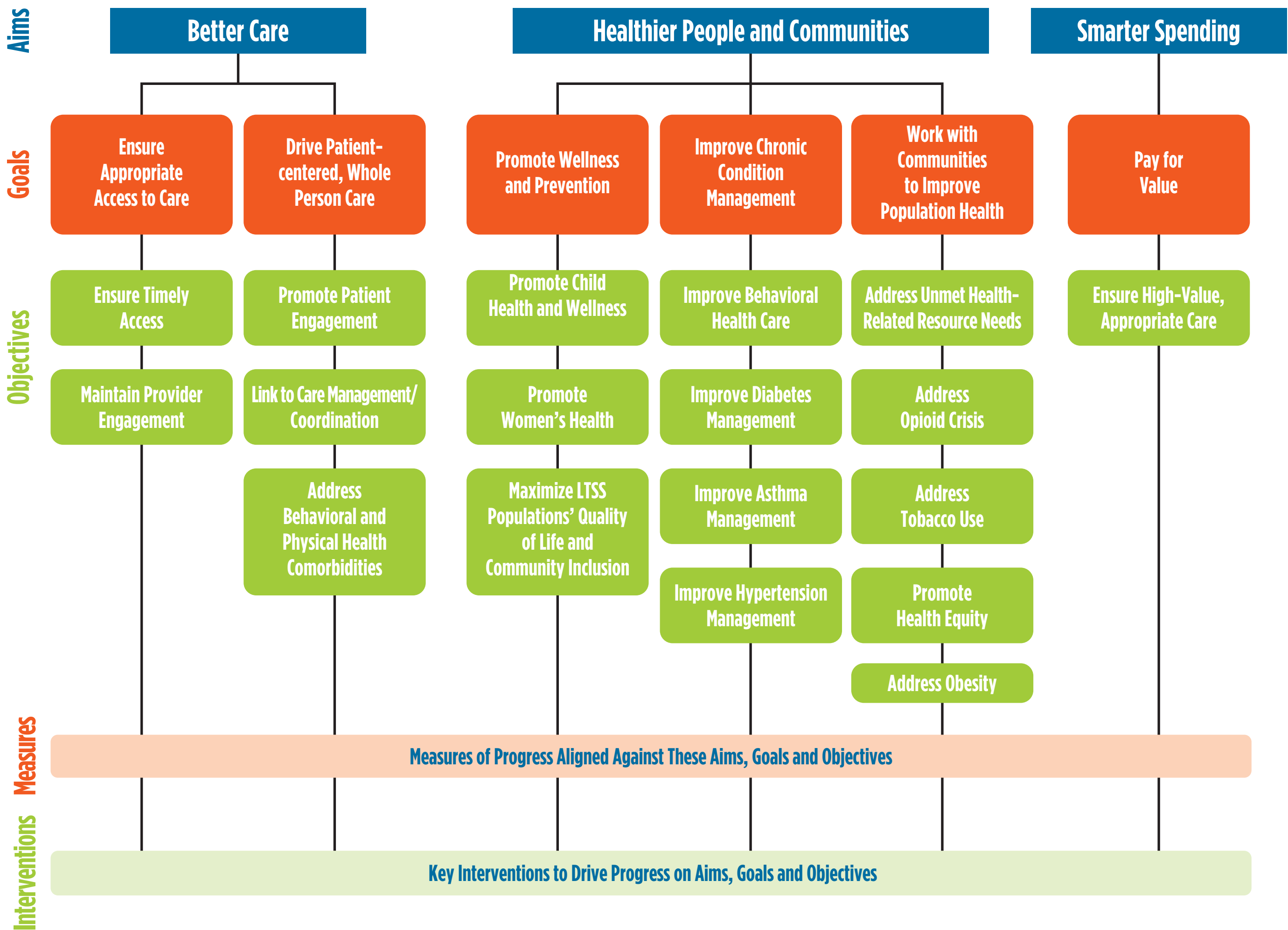
Central to NC Medicaid's effort to improve quality, care delivery and health outcomes is a commitment to address the social and environmental factors that directly impact health outcomes and cost as well as promoting "Healthy Opportunities" for North Carolinians. To effectively address these challenges, NC Medicaid is embedding promotion strategies for Healthy Opportunities into its Medicaid program.

[5] *NC Medicaid Managed Care Quality Strategy https://files.nc.gov/ncdma/documents/Quality_Strategy_4.5.19.v2.pdf April 18, 2019.*

NC Medicaid Quality Strategy

Two foundational documents provide information on the Department's quality vision and how it will be implemented in managed care. In April 2019, the Department released the NC Medicaid Managed Care Quality Strategy[6] and accompanying Technical Specifications Manual[7]. The Quality Strategy outlines the Department's goals for accessible, high quality care and smarter spending and describes plans for achieving those goals. The Quality Strategy Framework is structured around three central aims: 1) Better Care Delivery, 2) Healthier People, Healthier Communities and 3) Smarter Spending. These aims are depicted in Figure 1.

Figure 1. Overview of the Quality Strategy Framework



How the Department will assess and reward health plan quality and accountability for achieving goals set forth in the Quality Strategy is outlined in detail in the Technical Specifications Manual. The Manual includes the specific quality measures Standard health plans (Standard Plans) are required to report in the first year of NC Medicaid Managed Care (Year 1).

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[6] *NC Medicaid Managed Care Quality Strategy https://files.nc.gov/ncdma/documents/Quality_Strategy_4.5.19.v2.pdf April 18, 2019.*
[7] *Quality Management Technical Specifications, https://files.nc.gov/ncdma/documents/NC-Medicaid-Managed-Care-Quality-Measurement-Technical-Specifications-Public.pdf, April 18, 2019.*

Quality Accountability Across NC Medicaid Health Plans

This report offers context for select measures by providing an overview of NC Medicaid's recent performance and quality improvement programs, both across years and compared to national medians as well as organized by the goals outlined in the Quality Strategy. NC Medicaid will use these measures for health plan (PHP and PCCM) quality reporting, quality improvement programs and performance improvement projects. Measure lists for Standards Plans, Behavioral Health I/DD Tailored Plans, the Eastern Band of Cherokee Indians (EBCI) Tribal Option and Community Care of North Carolina (CCNC) are listed in Appendix B.

The EBCI Tribal Option, the first of its kind in the country, is set to launch July 2021. The EBCI Tribal Option will coordinate all medical, behavioral health and pharmacy services for North Carolina's approximately 4,000 Tribal Medicaid beneficiaries, including monitoring the quality of services offered. The EBCI Tribal Option will report a quality measure set to NC Medicaid which will be aligned to drive quality improvement and operational excellence for the beneficiaries they serve.

In July 2022, Behavioral Health I/DD Tailored Plans will launch and their quality performance will be reflected in subsequent years' Annual Quality Report.

NC Medicaid will continue current work with LME-MCOs, PCCM entities, CCNC and providers to improve quality performance year over year. Measure performance in this report reflects quality improvement program efforts of LME-MCOs and CCNC over the past four years.

NC Medicaid intends to publish this report about the state of quality and health equity annually. The report will highlight improvements and note areas of opportunity. Once the transition to NC Medicaid Managed Care is complete, the report will also include health plan (PHP and PCCM) performance relative to targets for many of the measures. NC Medicaid expects health plans to ensure that improvements in quality are distributed broadly with no group of beneficiaries left behind. Over time, NC Medicaid will update its quality goals and the measures used to assess them to ensure continued progress.

REPORT METHODOLOGY

The quality measures are selected from national sources of health care industry performance measures. These sources include:

1) The Health Care Effectiveness Data and Information Set (HEDIS®), a widely used set of performance measures developed and maintained by the National Committee for Quality Assurance (NCQA).
2) Core sets of health care quality measures for Children's Health Insurance Program (CHIP) and for adults enrolled in Medicaid, which are developed and maintained by the Center for Medicaid and CHIP Services (CMCS);
3) Measures of patient experience with health care, collected through the HEDIS and Consumer Assessment of Healthcare Providers and Systems (CAHPS) program established by the Agency for Healthcare Research and Quality (AHRQ); and
4) Public health measures developed and maintained by the Centers for Disease Control and Prevention (CDC), Pharmacy Quality Alliance and other state public health sources.

For the purpose of this report, measures selected from HEDIS will be referred to as HEDIS measures and those selected from other sources as non-HEDIS measures. Measures are organized based on the goal they reflect; some measures are associated with more than one goal and may be listed in multiple tables in the report. Selected measures are also displayed in charts and described further in the text below.

Data Sources

In alignment with the sources for the quality measures, several data sources were used to calculate the performance rates associated with each measure. Most measures in this report are calculated from Medicaid fee-for-service claims and include populations that received services during Calendar Years (CY) 2016 through 2019. Other data sources include responses to the CAHPS survey, CDC's Behavioral Risk Factor Surveillance System (BRFSS) and state and national registries.

For this report, where available, NCQA's Quality Compass data are used to compare North Carolina's Performance in 2019 to the national Medicaid median (50th percentile). Quality Compass calculates national percentile benchmarks by health plan.[8] This information is provided as a tool for examining quality improvement and benchmarking plan performance. Due to proprietary restrictions on the use of Quality Compass national rates, North Carolina's performance against the national median is displayed with one-, two- and three-star indicators.[9] Star indicators are used for national performance comparison where a standard deviation and comparison are feasible. National median rates and symbol indicators are provided in the tables where a star indicator is not feasible.

[8] *Quality Compass provides national 5th, 10, 25th, 33.33rd, 50th, 66.67th, 75th, 90th, and 95th percentiles.*

[9] *The Department has chosen to use an icon-based approach because Quality Compass only allows for the publication of precise numbers for 15 measures. The 15 measures for which the Department has chosen to publish national medians are strategically placed in figures and tables throughout the document.*

NC Medicaid is developing targeting methodology that considers statewide and regional performance, national state Medicaid benchmarks and persistent quality measure rate disparities. Targets for all applicable measures will be published in future versions of this report.

How to Read the Performance Rates

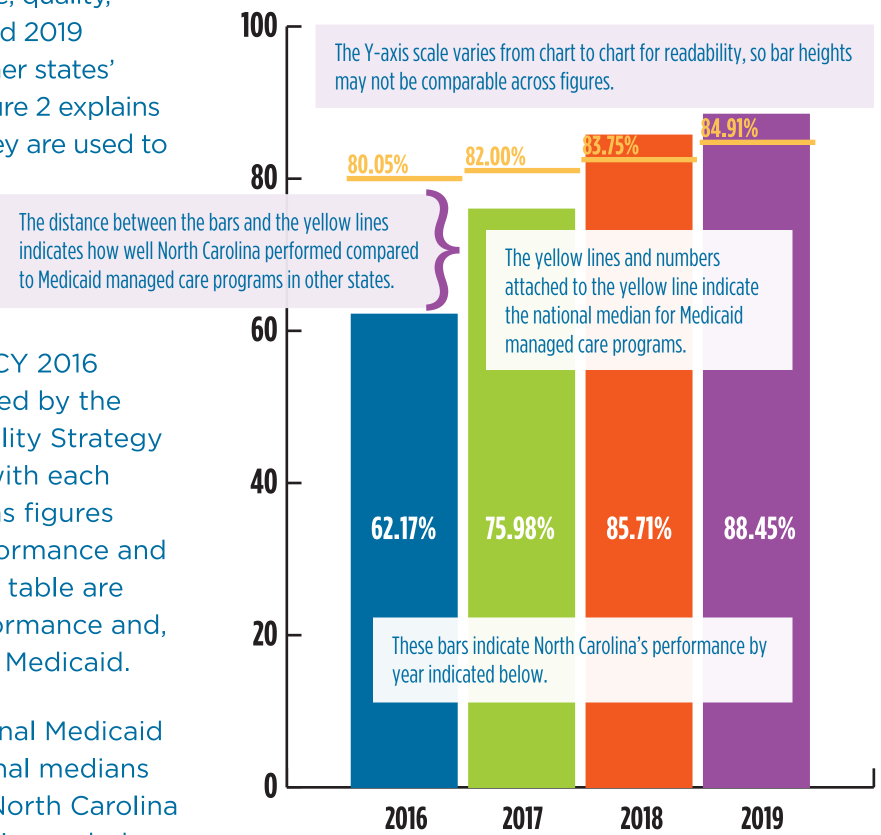
North Carolina's performance against national rates is indicated as follows:

★★★	North Carolina's 2019 performance was greater than one standard deviation above the national median.
★★	North Carolina's 2019 performance was within one standard deviation of the national median.
★	North Carolina's 2019 performance was greater than one standard deviation below the national median.
◇	Star indicator not feasible due to limitations of calculation and national comparison availability

How to Read the Charts in This Report

This report contains charts depicting NC Medicaid's performance on select measures of care, quality, and utilization in CY 2016, 2017, 2018 and 2019 as compared to the performance of other states' Medicaid managed care programs. Figure 2 explains the elements of each chart and how they are used to interpret NC Medicaid's performance.

Figure 2. Example Chart



NC Medicaid Quality Performance 2016-2019

The presentation of North Carolina's CY 2016 through 2019 performance is structured by the three central aims outlined in the Quality Strategy document and the goals associated with each aim. The section, subsections, contains figures and tables for each goal and the performance and associated measures. Each figure and table are accompanied by a discussion of performance and, where applicable, implications for NC Medicaid.

The 2019 rates are compared to national Medicaid medians. While comparisons to national medians are useful for assessing areas where North Carolina excels and areas where improvement is needed, it should be noted that performance can vary for reasons that are not related to care delivery. These reasons may include differences in data collection practices, methodology for documenting discrete data fields in electronic health records and billing documentation inconsistencies.

Aim 1: Better Care • Goal 1: Ensure Appropriate Access to Care

One of the Department's goals for NC Medicaid Managed Care is to ensure appropriate access to health care services. Access to care is essential to promote and maintain health, manage, and prevent disease and promote health equity. Access to primary care helps ensure enrollees have an appropriate point of entry for screening, treatment and preventive services and can help direct patients to the appropriate level of care, reducing unnecessary Emergency Department (ED) utilization.[10]

NC Medicaid Quality measures related to ensuring appropriate access to care and their associated performance are listed in Table 1.

Table 1: Goal 1 – Ensure Appropriate Access to Care

Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Adolescent Well-Care Visit (AWC)	40.76	41.49	41.74	43.4	★
Children and Adolescents' Access to Primary Care Practitioners (CAP)					
12-24 months of age	96.01	96.46	96.42	97	★★
25 months – 6 years old	88.4	88.75	88.55	89	★★
7-11 years old	91.44	91.51	91.42	92	★★
12-19 years old	88.18	88.31	88.45	89	★★
Percentage of Eligibles Receiving at least One Initial or Periodic Screen[11]	52.9	51.42	51.61	52.98	–
Percentage of Eligibles Who Received Preventive Dental Services (PDENT-CH)[12]	50.6	51	51.4	52.1	◊ 49.1[13]
Well-Child Visits in the First 15 Months of Life – 6 or More Visits	59.38	62.52	64.99	65.71	★★
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	69.25	69.88	70.14	70.48	★★
Customer Service[14] (Health Plan gave necessary information/help)	–	–	89.84	83.3	★
Getting Care Quickly (Illness/Injury, Non-Urgent)	–	–	84.22	80.8	★★
Getting Needed Care (Access to Care, Tests, Treatment & Specialists)	–	–	82.99	82	★★
Rating of All Health Care (Experience getting appointments and needed information)	–	–	48.6	57.9	★
Rating of Specialist Seen Most Often (Appointments as soon as needed)	–	–	64.8	67.8	★

[10] *Basu S, Phillips RS. Reduced Emergency Department Utilization after Increased Access to Primary Care. PLoS Med. 2016;13(9):e1002114. Published 2016 Sep 6. doi:10.1371/journal.pmed.1002114*

[11] *Calculated from the CMS 416 reports. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html*

[12] *CMS Medicaid Scorecard 2018. https://www.medicaid.gov/state-overviews/scorecard/eligibles-who-received-preventative-dental-services/index.html*

[13] *CMS Medicaid Scorecard 2018. https://www.medicaid.gov/state-overviews/scorecard/eligibles-who-received-preventative-dental-services/index.html*

[14] *The reported rates for* Customer Service, Getting Care Quickly, Getting Needed Care, Rating of Health Plan, Rating of All Health Care, Rating of Personal Doctor, and Rating of Specialist Seen Most Often, Coordination of Care, Flu Vaccinations for Adults ages 18 and Older, and Medical Assistance with Smoking and Tobacco Use Cessation *are results from NC Medicaid's 2018 and 2019 Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey. National rates came from Quality Compass® 2019. Results for 2016 and 2017 are not available because North Carolina did not have a vendor to administer the CAHPS survey until 2018.*

Access for Children and Adolescents

For children and adolescents, access to primary care is of particular importance. Consistent and continued well visits allow providers to monitor growth and development at recommended intervals as well as ensure immunization opportunities for anticipatory guidance and age-appropriate screening. Charts 1, 2 and 3 highlight North Carolina's performance on children and adolescents' access to primary care and well visits.

As noted in Chart 1, North Carolina is closely aligned with national performance on measures of access to primary care for pediatric and adolescent populations. Through ongoing primary care practice support for identifying gaps in well care and immunizations, timeliness of important developmental screens and management of chronic conditions and care management. Access to primary care for enrollees ages 12-19 remains slightly below the national median, which underscores the importance of continued focus on access to care in this age group through the transition to NC Medicaid Managed Care. Charts 2 and 3 assess the extent children receive the age-appropriate number of well-child visits.

Chart 1. Children and Adolescents' Access to Primary Care – *this chart illustrates the percent of children and adolescents that had at least one visit with a primary care practitioner (PCP) for 2017, 2018, and 2019.*

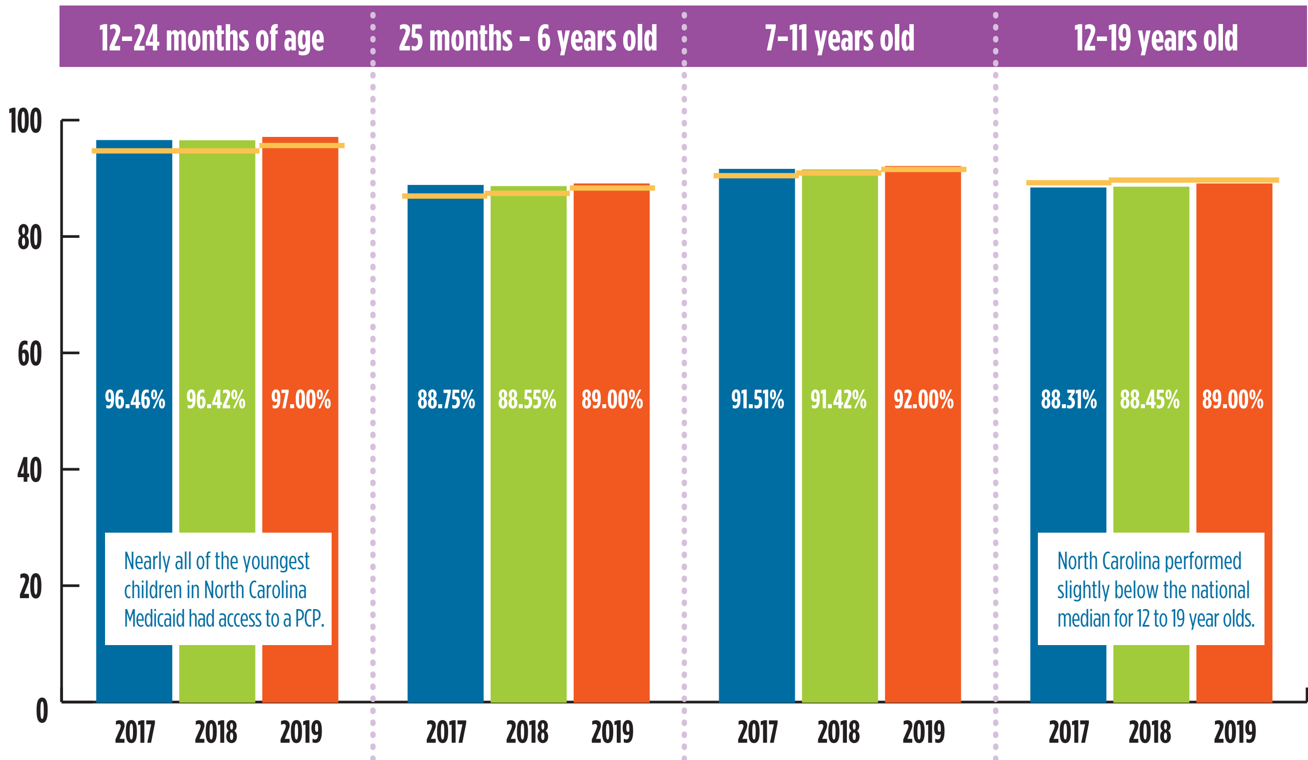


Chart 2. Well-Child Visits in First 15 Months of Life (6+ Visits) – *This chart illustrates, for 2016 through 2019, the proportion of children in NC Medicaid that had at least six well-child visits during their first 15 months of life.*

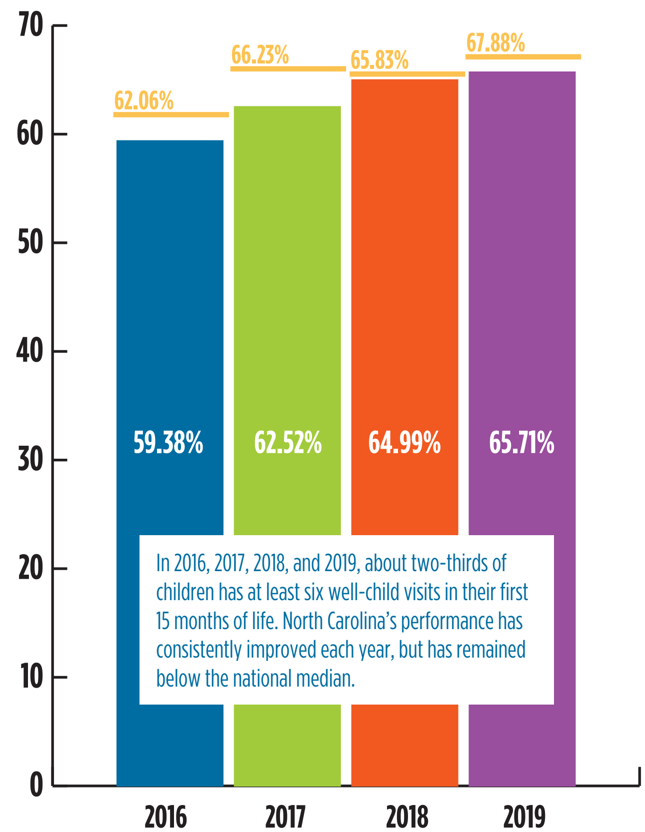
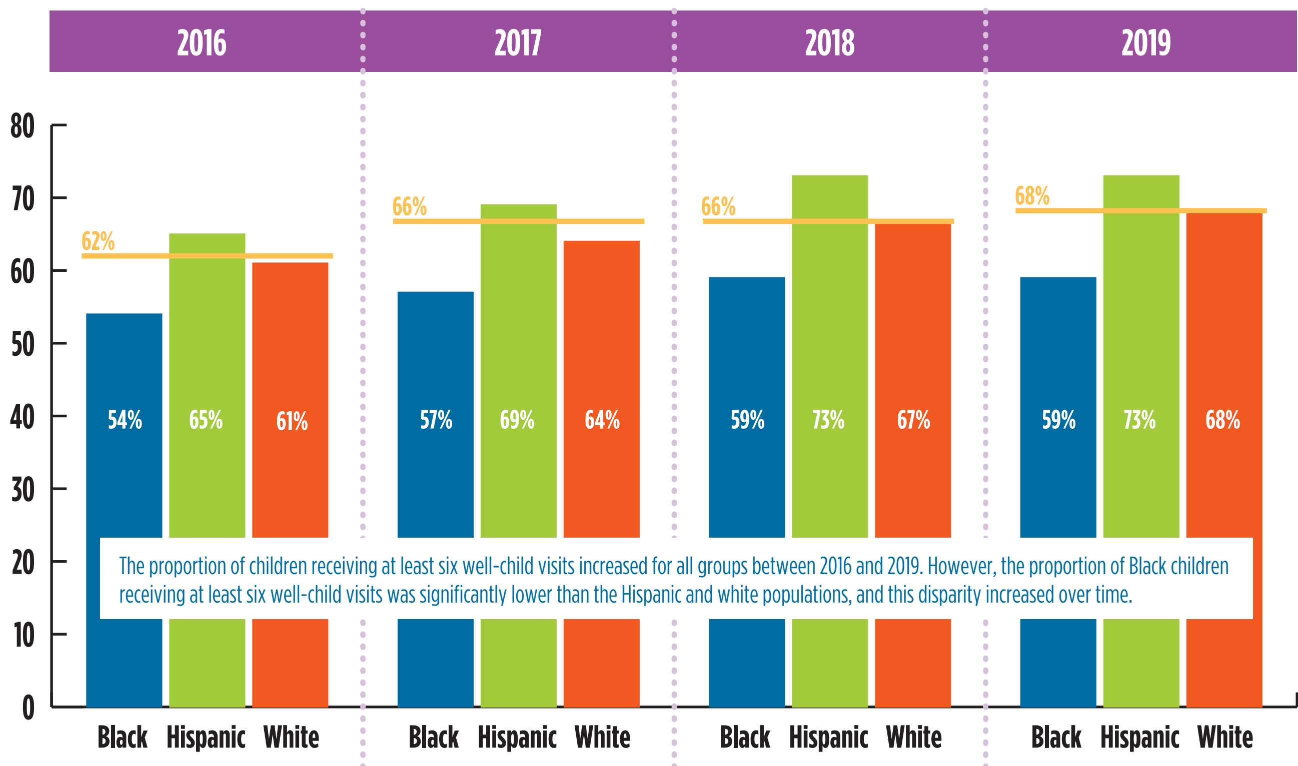


Chart 3. Well-Child Visits in First 15 Months of Life (6+ Visits) – *This chart compares, for 2016 through 2019, the rates at which NC Medicaid enrolled children had at least six well-child visits during their first 15 months of life by race/ethnicity.*[15]



[15] *Subpopulations with fewer than 5,000 beneficiaries in the numerator were excluded from the analysis.*

Chart 4. Well-Child Visits in the Third to Sixth Years of Life – *This chart illustrates the proportion of three- to six- year-olds in NC Medicaid that had at least one annual well-child visit for 2016 through 2019.*

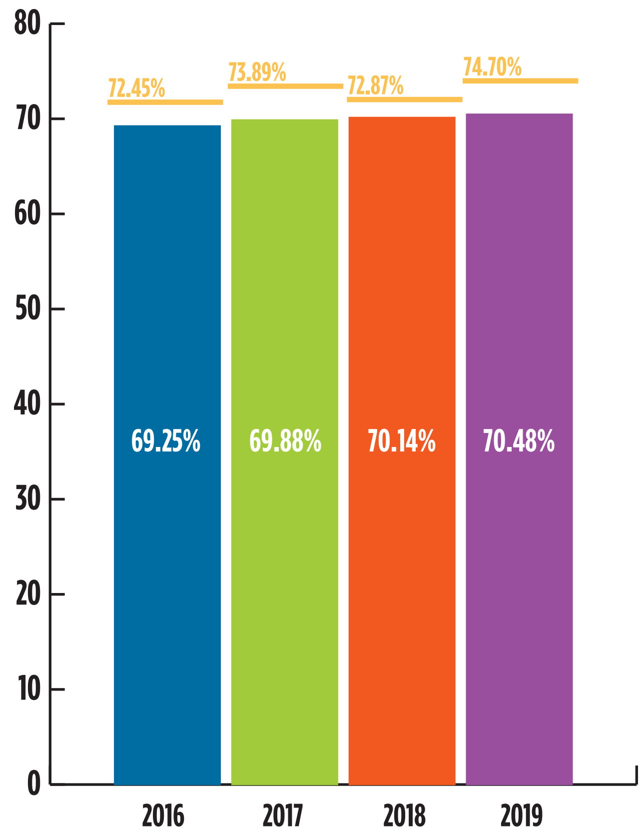
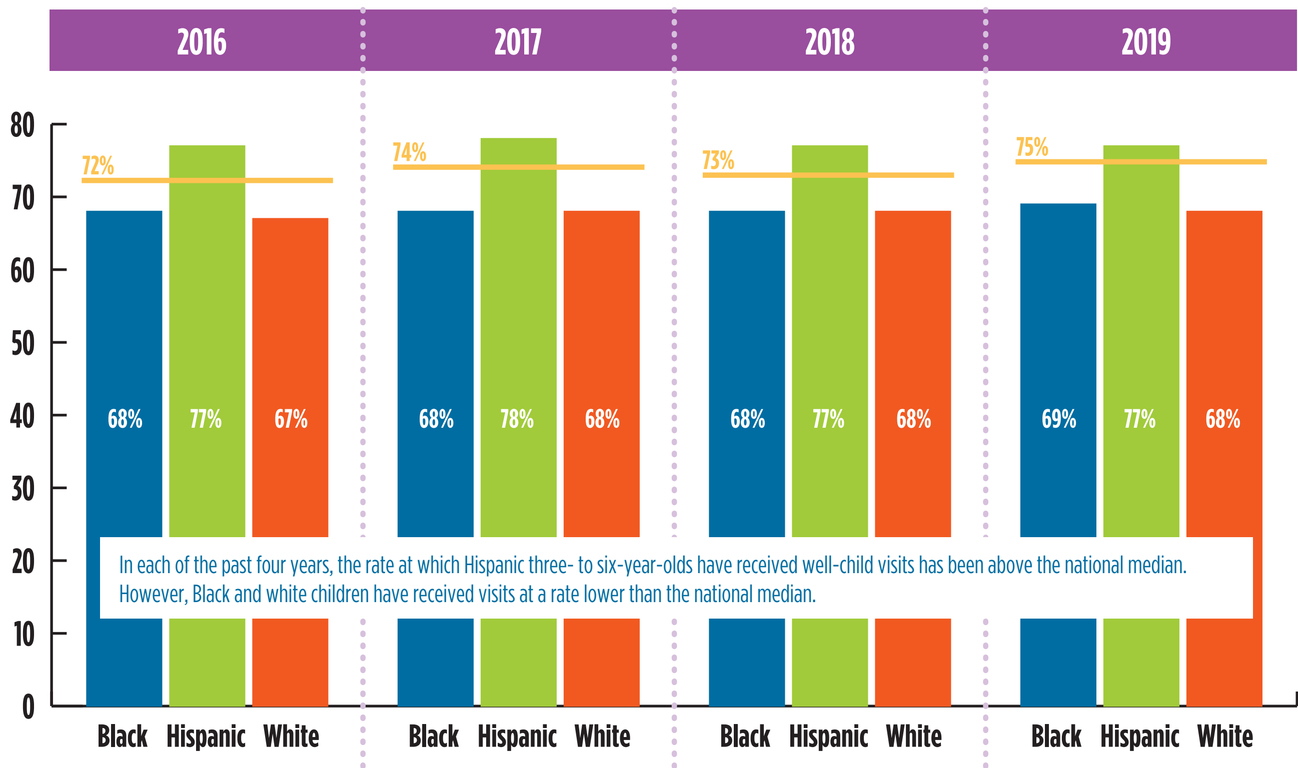


Chart 5. Well-Child Visits in the Third to Sixth Years of Life – *This chart illustrates the proportion of three- to six-year-olds in NC Medicaid that had at least one annual well-child visit for 2016 through 2019 by race/ethnicity.*[16]



[16] *Subpopulations with fewer than 8,500 beneficiaries in the numerator were excluded from the analysis.*

In 2020, North Carolina Department of Health and Human Services (DHHS) engaged stakeholders through an advisory group supporting a statewide **Keeping Kids Well**[17] campaign to address well-child visits and immunization rates. DHHS partnered with CCNC and North Carolina Area Health Education Centers (AHEC) to develop a strategic, coordinated approach to improve well-child visits and immunization rates through provider and beneficiary interventions aimed at the decline in rates as a result of COVID-19, as well as improve performance and access to care. Beneficiaries and families are engaged through care management while practice support for providers recommends best practices for improvement. Interim results indicate gaps in care have not increased with some improvement as of early 2021. The campaign continues through the first half of 2021, with continued interventions through transition to managed care for care gaps. Closing gaps between groups remains a focus in quality performance each year with plans create financial incentives for health plans that outperform historical goals.

Perception of Access for Adults

Rates in Table 1 for *Customer Service, Getting Care Quickly, Getting Needed Care, Rating of All Health Care and Rating of Specialist Seen Most Often* are based on the CAHPS survey of adult Medicaid beneficiaries. The CAHPS survey provides information about beneficiaries' experience and satisfaction with their health care. The results are based on the percentage of respondents that indicated they were satisfied with their health care.

The *Customer Service, Getting Care Quickly, Getting Needed Care* rates represent the proportion of respondents that answered 'Always' or 'Usually' to the respective question, e.g. 'In the last six months, when you needed care right away, how often did you get care as soon as you needed?'. NC Medicaid performs around the national median on these measures but realizes the importance of continued performance monitoring on these measures during and after the transition to managed care.

The *Rating of All Health Care and Rating of Specialist Seen Most Often* rates represent the proportion of respondents that responded with an eight, nine or ten on a ten-point scale, e.g., *'Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last six months?'*. With North Carolina's current performance under the national median for these measures, it not only highlights an area for improvement but one that will need close attention under managed care.

Goal 2: Drive Patient-centered, Whole-person Care

Table 2 outlines the measures intended to assess the delivery of patient-centered, whole-person care. Although North Carolina's performance on many measures is not significantly different from national rates, the state's performance on measures related to coordination of physical and behavioral health care indicates an opportunity for improvement. Currently, LME-MCOs are held accountable for improving rates on several of these measures, most notably *Follow-up after Mental Health Hospitalization* where there has been some improvement over time. In the future, all Medicaid Health Plans will be accountable for performance improvement measures of coordinated care.

[17] *Keeping Kids Well Program Special Bulletin.* https://www.communitycarenc.org/keeping-kids-well

Table 2: Goal 2 - Drive Patient-centered, Whole-person Care

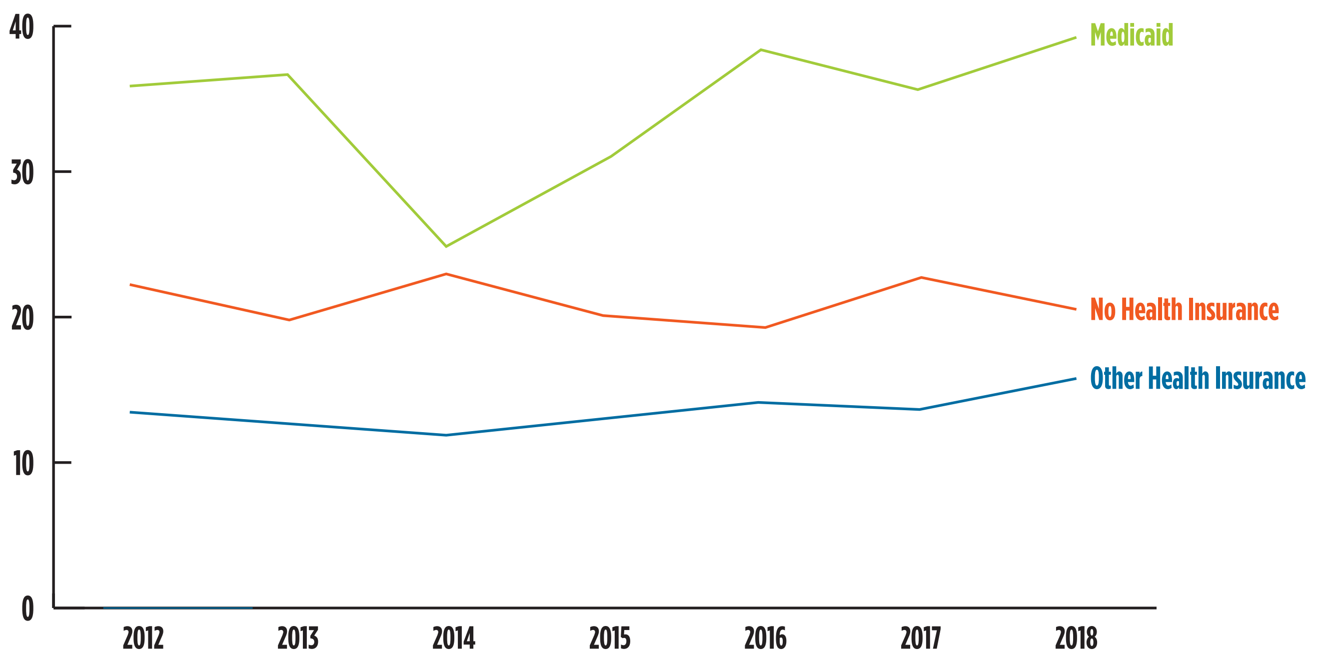
Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Antidepressant Medication Management					
Acute Phase	55	55	55	58	★★
Continuation Phase	39	38.6	39	39	★★
Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who are Using Antipsychotic Medications (SSD)	78.39	79.13	78.73	79.72	★★
Follow-Up After Hospitalization for Mental Illness (Total Rates)					
7-Day Follow-up	26.29	27.5	28.3	29.48	★★
30-Day Follow-up	45.9	47.06	46.67	49.41	★★
Follow-Up After Hospitalization for Mental Illness (Age 18 and older)					
7-Day Follow-up	—	—	38.5	37.49	★★
30-Day Follow-up	—	—	52.9	52.94	★★
Follow-Up for Children Prescribed ADHD Medication (Both Rates)					
Initiation Phase	42.95	43.09	49.71	50.11	★★
Continuation and Maintenance (C&M) Phase	53.9	55.25	60.28	63.54	★★
Follow-Up After ED Visit for Mental Illness (Total)					
7-Day Follow-up	—	—	44.61	45.93	★★
30-Day Follow-up	—	—	60.18	61.11	★★
Follow-Up After ED Visit for Alcohol and Other Drug Dependence (Total)					
7-Day Follow-up	—	—	15.24	14.83	★★
30-Day Follow-up	—	—	22.10	21.83	★★
Initiation and Engagement of Alcohol and Other Drug (AOD) Dependence Treatment (Both Rates)					
Age 13-17 years: Initiation of AOD Treatment	32.53	32.06	37.76	37	★★
Age 18+ years: Initiation of AOD Treatment	38.66	40.88	44.23	47	★★
Total Rate: Initiation of AOD Treatment	38.23	40.31	43.51	46.21	★★
Age 13-17 years: Engagement of AOD Treatment	14.21	11.55	14.29	13	★★
Age 18+ years: Engagement of AOD Treatment	15.4	16.23	18	19	★★
Total Rate: Engagement of AOD Treatment	15.32	15.93	17.7	18.62	★★
Use of First Line Psychosocial Care for Children and Adolescents on Antipsychotics	46	49	50.75	52.09	★★
Rating of Personal Doctor (CAHPS Survey – Clearly explained things, was attentive and respectful and informed about care received from other providers)	—	—	67.4	69.9	★

Coordinated, Whole-person Care

Individuals with behavioral health needs often have comorbid physical conditions requiring medical care. Clinical evidence and best practices from other states suggest integration and better coordination of physical and behavioral health care can significantly improve the quality of care received.[18] Integration of mental and physical health care in NC Medicaid has been a focus through adolescent, maternal, and social/emotional screenings and provider support for appropriate management for depression and other behavioral health conditions. Through the transformation of its Medicaid delivery system, the Department seeks to advance a coordinated, whole-person system of care across all delivery models.

As the data in Chart 6 suggests, Medicaid beneficiaries report more "Poor Mental Health Days" than other groups with statistical significance in years 2012, 2013, 2016 and 2018; including those with no health insurance. As indicated in Chart 7 the beneficiary population projected to be in Behavioral Health I/DD Tailored Plans is more likely to have at least one chronic physical health condition.

Chart 6. Poor Mental Health Days by Insurance Type[19] – *This chart illustrates, for the Medicaid, no health insurance, and other health insurance populations, the estimated percent of North Carolina adults with eight or more poor mental health days per month from 2012 to 2018. The estimates are based on respondents who answered eight or more days to the BRFSS question – 'Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?'.*

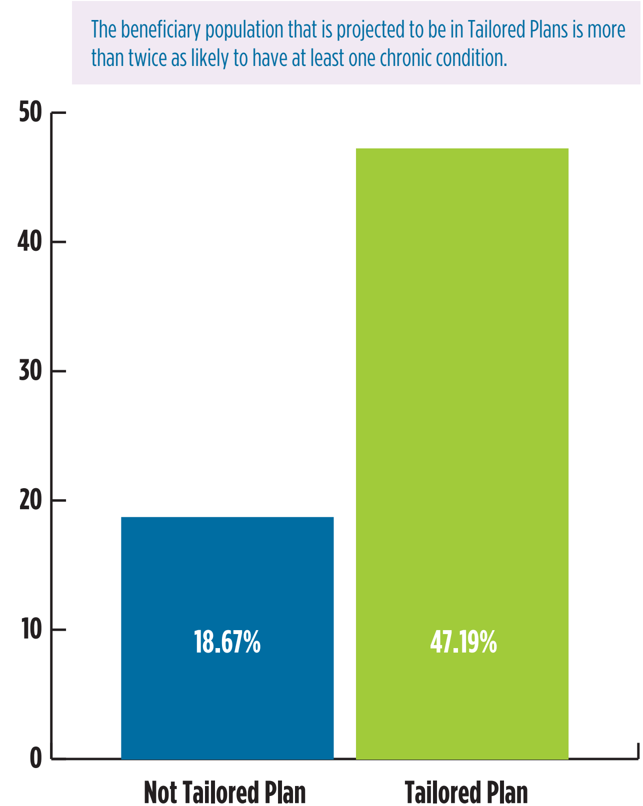


[18] *Hwang et al. Effects of integrated delivery system on cost and quality. Am J Managed Care. 2013;19(5):e175-e184*

[19] *North Carolina Department of Health and Human Services. BRFSS Data for Adults in North Carolina Enrolled in Medicaid. https://schs.dph.ncdhhs.gov/data/brfss/medicaid/*

[20] *Trends cannot be extended through 2019 as 2019 BRFSS results are broken into different categories, 8-29 days and 30 days. https://schs.dph.ncdhhs.gov/data/brfss/medicaid/docs/Medicaid_2019_tables.pdf*

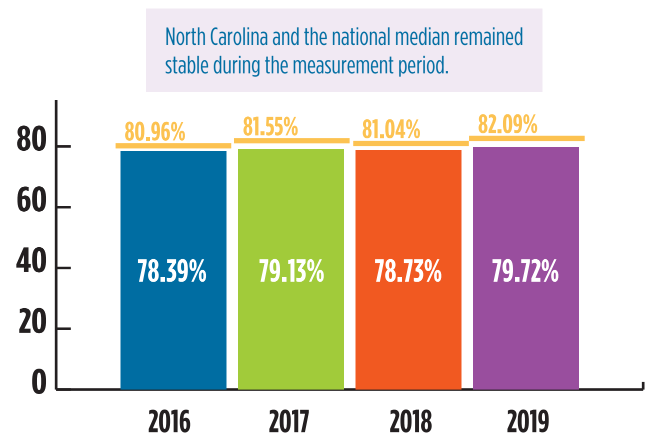
Chart 7. Population projected to be in a Behavioral Health I/DD Tailored Plan that at Least One Chronic Physical Health Condition – *This chart compares the proportion of individuals in Behavioral Health I/DD Tailored Plans with one or more chronic physical health condition(s) to individuals not in Behavioral Health I/DD Tailored Plans who have one or more chronic physical health condition(s).*



Diabetes and Schizophrenia

In 2018, 15% of adults in NC Medicaid had been diagnosed with diabetes compared to 9% of North Carolina adults with other health insurance.[21] The prevalence of diabetes is higher among individuals with schizophrenia; 3.49% of beneficiaries without a schizophrenia diagnosis have a diabetes diagnosis, while 29.02% of beneficiaries with a schizophrenia diagnosis have a diabetes diagnosis. Antipsychotic treatments for schizophrenia can impair glucose regulation, increasing diabetes risk or worsening glycemic control for current diabetics.[22] Given the increased risk, regular diabetes screening and metabolic monitoring for individuals with schizophrenia is particularly important. North Carolina's performance on diabetes screening for this population is close to the national median (see Chart 8).

Chart 8. Diabetes Screening for People with Schizophrenia or Bipolar Disorder – *This chart illustrates the proportion of 18 to 64-year-olds in NC Medicaid with schizophrenia or bipolar disorder who were dispensed an antipsychotic medication and received a diabetes screening during the measurement year.*

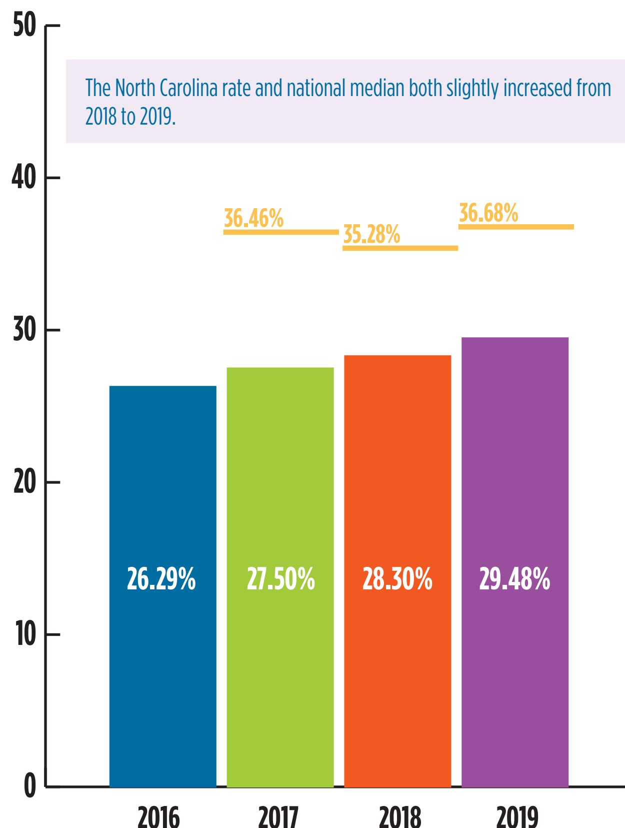


[21] North Carolina Center for Health Statistics, https://schs.dph.ncdhhs.gov/data/brfss/medicaid/docs/Medicaid_2018_tables.pdf, 2018.

[22] Newcomer JW et al. Abnormalities in Glucose Regulation During Antipsychotic Treatment of Schizophrenia. Arch Gen Psychiatry. 2002;59(4):337–345. doi:10.1001/archpsyc.59.4.33

Timely Care for Mental Health and Substance Use Disorders. For individuals hospitalized for mental illness, follow-up services are critical in monitoring mental wellbeing, detecting potential medication problems and preventing readmissions. The state's performance on provision of follow-up services is below the national median (Chart 9). Chart 10 shows performance around both initiation and engagement of substance use disorder treatment, an area where NC Medicaid shows sustained improvement over the past four years.

Chart 9. Follow-up After Hospitalization for Mental Illness – *This chart shows, for 2016, through 2019, the percentage of beneficiaries six years and older who were hospitalized for treatment of mental illness and received a follow-up visit with a mental health practitioner within seven days of discharge.*



Map 1. Follow-up After Hospitalization for Mental Illness – *This map shows for each county in North Carolina the 2019 percentage of beneficiaries six and older who were hospitalized for treatment of mental illness and received a follow-up visit with a mental health practitioner within 30 days of discharge.* Information for counties with 10 or fewer beneficiaries represented in the measure has been suppressed.*

By stratifying the rate by county, key areas are identified for targeted analysis and intervention. The shading on Map 1 represents counties' 2019 rates for *Follow-up After Hospitalization for Mental Illness (30 days)*, with red indicating lower rates and blue indicating higher rates. Dot size represents the number of NC Medicaid beneficiaries in counties' denominator for the measure. As indicated on the map, there were significant geographic disparities in the proportion of beneficiaries who received a follow-up visit with a mental health practitioner within 30 days of discharge.

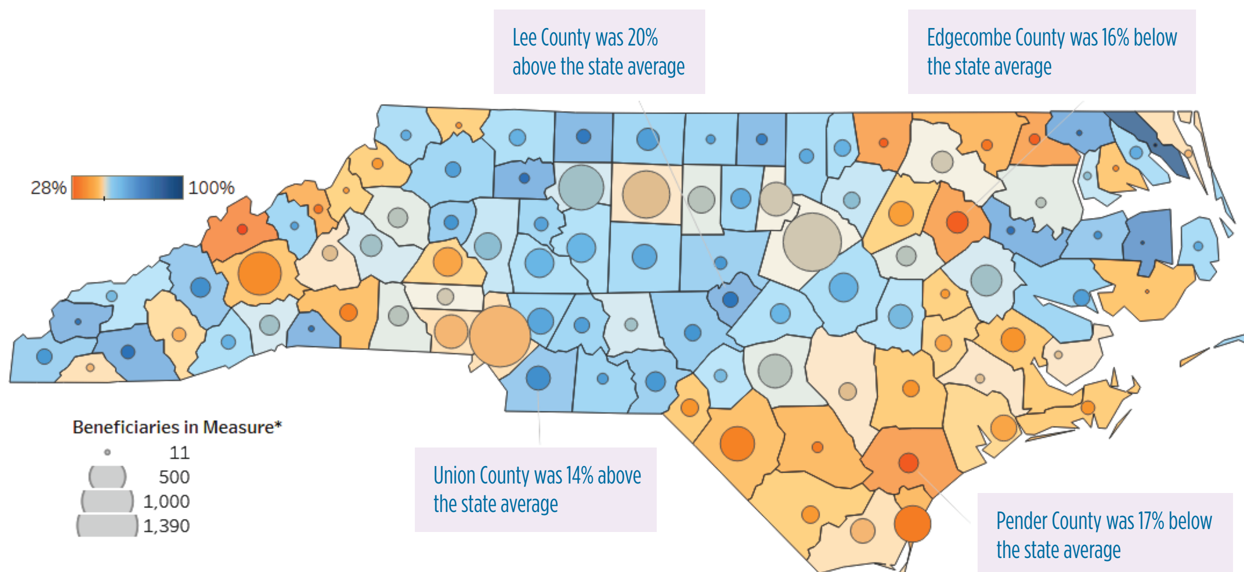
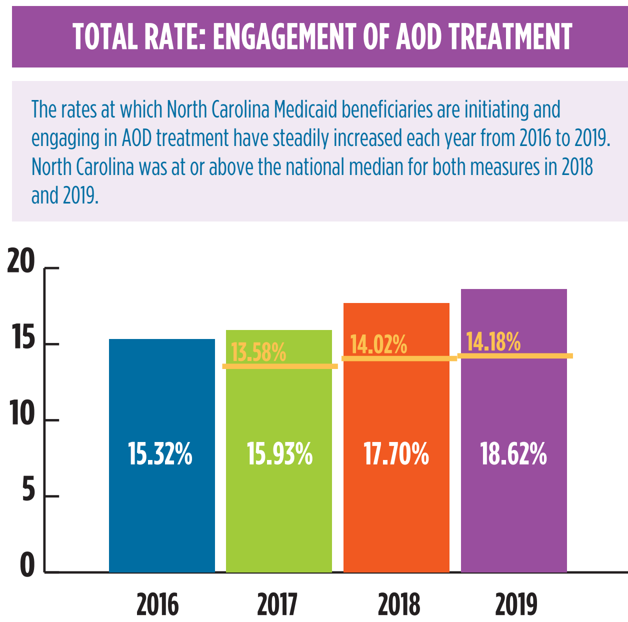
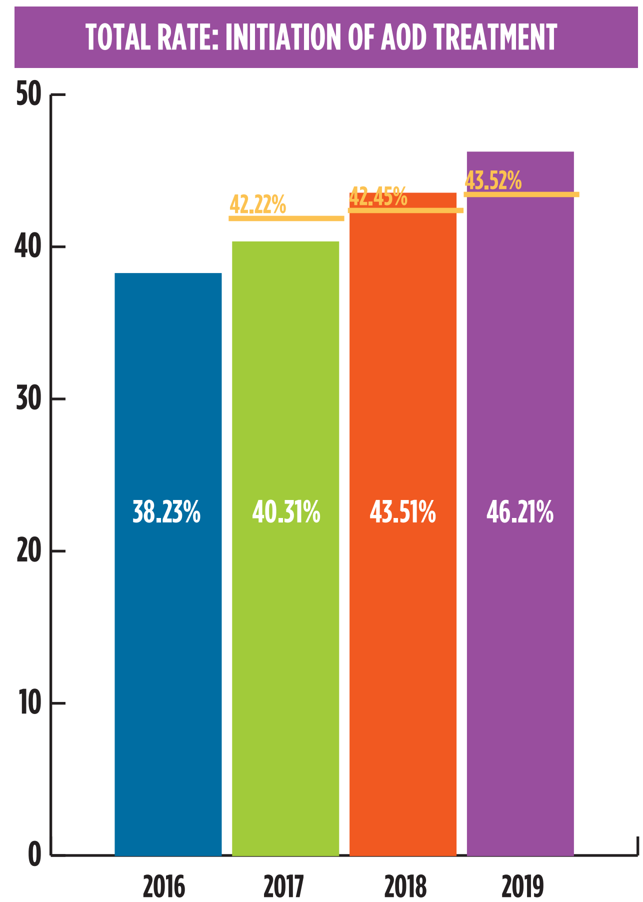
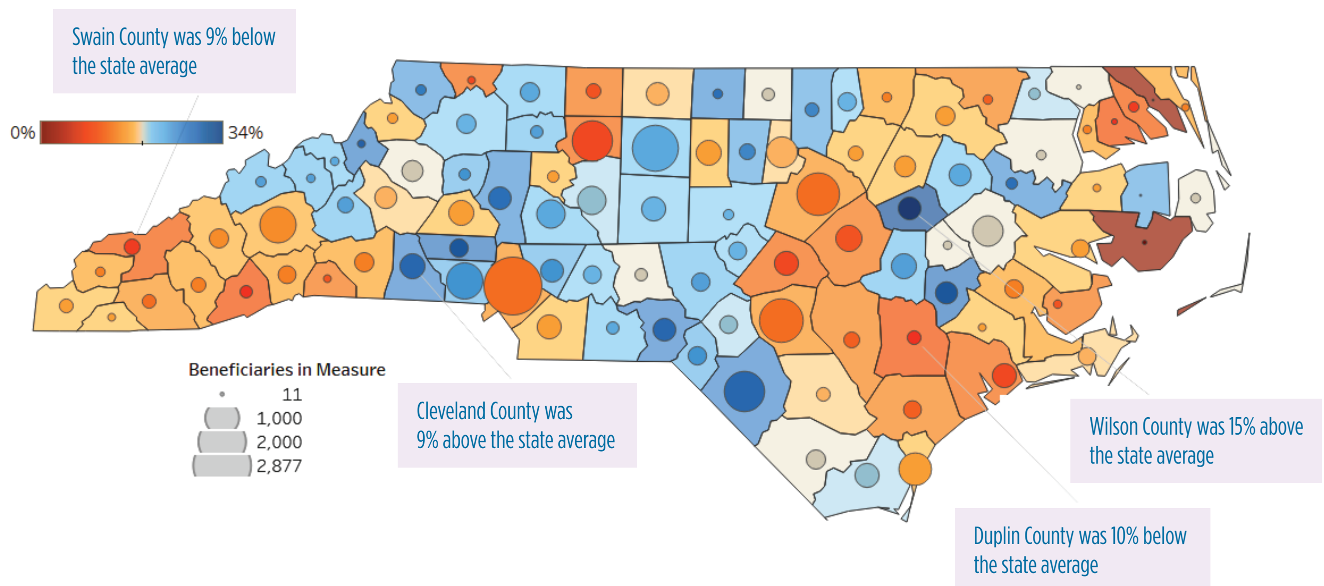


Chart 10. Initiation and Engagement of Alcohol and Other Drug Dependence (AOD) Treatment (Total Rates) – *This chart shows the percentage of beneficiaries for 2016 through 2019 the percentage of beneficiaries who; 1) initiated treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis, and 2) initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.*





Map 2. Engagement of AOD Treatment (Total Rate) –
This map illustrates the rate at which beneficiaries in 2019 initiated AOD treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit for all 100 North Carolina counties.



Map 2 illustrates the importance of measure stratification. From a statewide perspective, NC Medicaid is performing above the national median, but the stratified rates show significant variance in performance at the county level. The shading on Map 2 represents counties' 2019 rates for Engagement of Alcohol and Other Drug Dependence Treatment (Total Rate), with red indicating lower rates and blue indicating higher rates. Dot size represents the number of NC Medicaid beneficiaries in counties' denominator for the measure. As indicated on the map, there were significant geographic disparities in the proportion of beneficiaries who initiated AOD treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.

Aim 2: Healthier People and Communities • Goal 3: Promote Wellness and Prevention

As of 2020, more than 85% of the state's Medicaid beneficiaries were either adult women or children under the age of 21.[23] Given the size of these populations, women and children's health over the life course is critical to the overall health of North Carolina's Medicaid population. NC Medicaid's quality areas of priority focus on these populations through the program's quality of care and improvement initiatives including the Pregnancy Medical Home[24] program, Care Coordination for Children[25] and care management through CCNC. These programs engage providers through evidence-based care guidance, support increased capacity to identify and manage beneficiaries and provide care management for improved quality of care and health outcomes.

The Department will continue its partnership with and the University of North Carolina at Chapel Hill (its Department of Pediatrics in the School of Medicine), The Perinatal Quality Collaborative of North Carolina (PQCNC). In the past several years, PQCNC identified key opportunities for improvement to the hospital and community-based perinatal care and has executed time-limited statewide quality initiatives to capitalize on these opportunities. DHHS continues to partner with PQCNC to develop and execute perinatal quality improvement initiatives to share best practices, promote health equity, reduce unnecessary variations in care, encourage partnership with families and patients and optimize resources.

Recognizing the immense progress and importance these aligned partnerships offer is essential to the improvement in health outcomes for these populations, NC Medicaid will continue to focus on women and children's health through managed care as well as continued alignment with its Early Childhood Action Plan, Perinatal Health Strategic Plan, Maternal Health Strategic Plan (in development) and other local, regional, state and national initiatives.

A. Promote Wellness and Prevention – Children's Health

Table 3 indicates North Carolina's performance on select measures associated with promoting wellness and prevention in children. Overall, North Carolina's performance on *Immunization and Weight Assessment and Counseling for Nutrition and Physical Activity* allowed opportunity for improvement with current performance improvement through the Keeping Kids Well campaign[26]. On dental measures, North Carolina is on par with the national median.

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[23] *Medicaid and NC Health Choice Annual Report for State Fiscal Year 2017, available at: https://files.nc.gov/ncdma/documents/AnnualReports/AnnualReport_SFY2017_20171230.pdf Adult female Medicaid enrollment from KFF Insurance Coverage of Women 19-64, available at: https://www.kff.org/other/state-indicator/nonelderly-adult-women/*

[24] *Pregnancy Medical Home. https://www.communitycarenc.org/what-we-do/clinical-programs/pregnancy-medical-home*

[25] *Care Coordination for Children. https://www.ncdhhs.gov/infant-plan-safe-care/care-coordination-for-children*

[26] *Keeping Kids Well Program Special Bulletin. https://www.communitycarenc.org/keeping-kids-well*

North Carolina's low performance on *Weight Assessment and Counseling for Nutrition and Physical Activity* can be explained in part by a lack of consistent documentation and Medicaid coverage for the related services. North Carolina recently added coverage for diagnosis codes associated with *Weight Assessment and Counseling for Nutrition and Physical Activity* to address these gaps.

Table 3: Goal 3A - Promote Wellness and Prevention – Children's Health

Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Ambulatory Care: ED Visits Ages 0-19 (Per 1000)	—	45.70	45.53	46.83	◊ 43.6[27]
Childhood Immunization Status (Combination 10)[28]	32.81	34.16	30.29	35.02	★★
DTaP	75.23	77.37	74.12	77.62	★★
IPV	90.18	92.42	87.82	92.00	★★
MMR	91.46	91.09	89.45	90.93	★★
HiB	87.40	89.26	86.09	88.92	★★
Hepatitis B	91.91	94.1	84.56	93.6	★★
VZV	91.20	91.03	88.96	90.69	★★
Pneumococcal Conjugate	76.37	79.11	76.22	79.16	★★
Hepatitis A	82.31	82.89	82.56	84.22	★★
Rotavirus	71.77	73.81	72.22	74.55	★★
Influenza	45.42	45.9	44.70	45.34	★★
Follow-Up After Hospitalization for Mental Illness (Ages 6-17 years)					
7-Day Follow-up	—	—	15.8	15.49	★
30-Day Follow-up	—	—	23	22.84	★
Immunizations for Adolescents (Combination 2)[29]					
Combination 2 Rate	15.62	21.67	28.89	31.55	★★
Combination 1 Rate	57.94	72.26	83.91	86.26	★★
Meningococcal	62.17	75.98	85.71	87.89	★★
Tdap (Tetanus, Diphtheria, Acellular Pertussis)	76.83	82.33	87.52	89.25	★★
HPV (Human Papillomavirus)	23.95	26.19	30.91	33.27	★★

[27] *CMS Scorecard 2018. https://www.medicaid.gov/state-overviews/scorecard/ambulatory-care-emergency-department-visits/index.html*

[28] *Combination 10 includes DTaP, IPV, MMR, HiB, HepB, VZV, PCV, HepA, RV and Influenza vaccinations.*

[29] *Combination 2 includes at least one meningococcal conjugate vaccine within a date of service on or between the beneficiary's 11th and 13th birthdays, plus at least one Tdap vaccine with a date of service on or between the beneficiary's 10th and 13th birthdays, and at least two HPV vaccines with different dates of service on or between the beneficiary's 9th and 13the birthdays, with at least 146 days between the first and second dose of the HPV vaccine, or at least three HPV vaccines with different dates of service on or between the beneficiaries 9th and 13th birthdays.*

[30] *Combination 1 includes at least one meningococcal conjugate vaccine within a date of service on or between the beneficiary's 11th and 13th birthdays, plus at least one Tdap vaccine with a date of service on or between the beneficiary's 10th and 13th birthdays.*

[31] *Federal Fiscal Year 2019 Form CMS-416 report Federal Fiscal Year 2019. Calculated national rate from lines 1b and 9. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html.*

[32] *CMS Medicaid Scorecard 2018. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html*

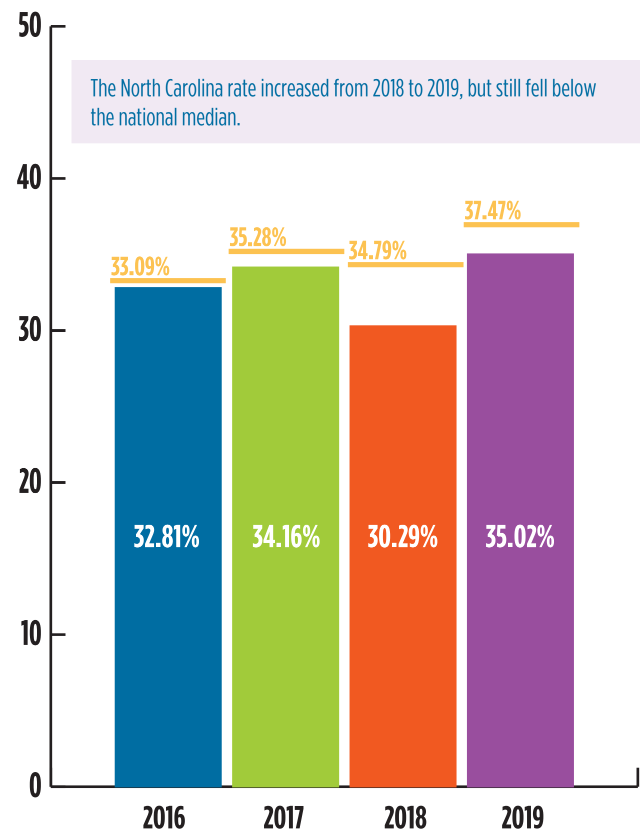
[33] *Federal Fiscal Year 2019 Form CMS-416 report Federal Fiscal Year 2019. Calculated national rate from lines 1b and 12b. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html.*

Percentage of Eligibles Receiving at least One Initial or Periodic Screen	**52.9**	**51.42**	**51.61**	**52.98**	◊ **51.61**[31]
Percentage of Eligible Beneficiaries Who Received Preventive Dental Services (PDENT-CH)[32]	50.6	51	51.4	52.1	◊ 45.86[33]
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (the total of all ages for each of the 3 rates)[34]					
Total BMI Percentile documentation	28.9	34.19	38.44	42.56	★
Total Counseling for Nutrition	10.42	15.27	17.93	21.06	★
Total Counseling for Physical Activity	0.85	1.2	2.23	5.2	★
Well-Child Visits in the First 15 Months of Life – 6 or More Visits	59.38	62.52	64.99	67.71	★★
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	69.25	69.88	70.14	70.48	★★

Immunizations

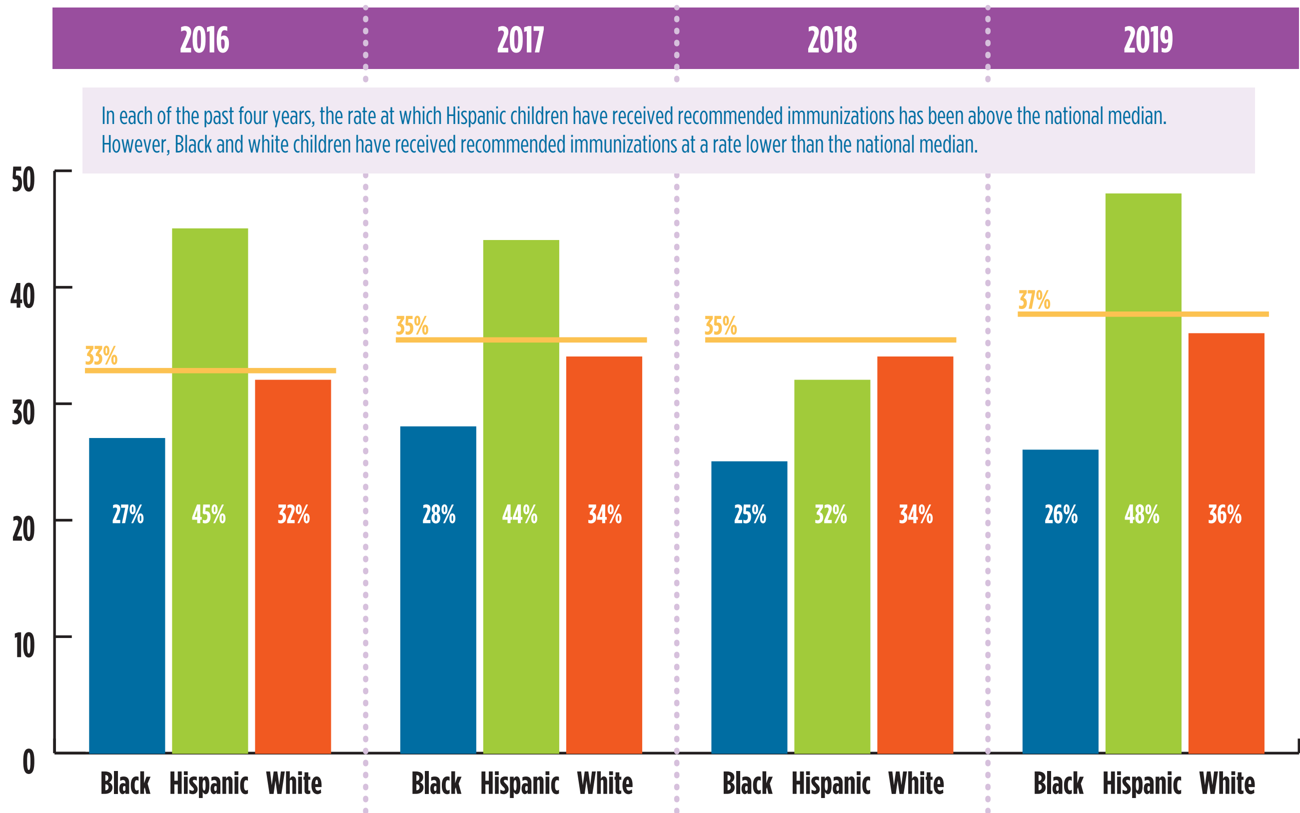
Child and adolescent immunizations promote health and wellness among pediatric populations by preventing serious illness and complications from disease.

Chart 11. Childhood Immunization Status (Combination 10) – *This chart illustrates, for 2016 through 2019, the proportion of children in NC Medicaid who received immunization combination 10 by their second birthday.*

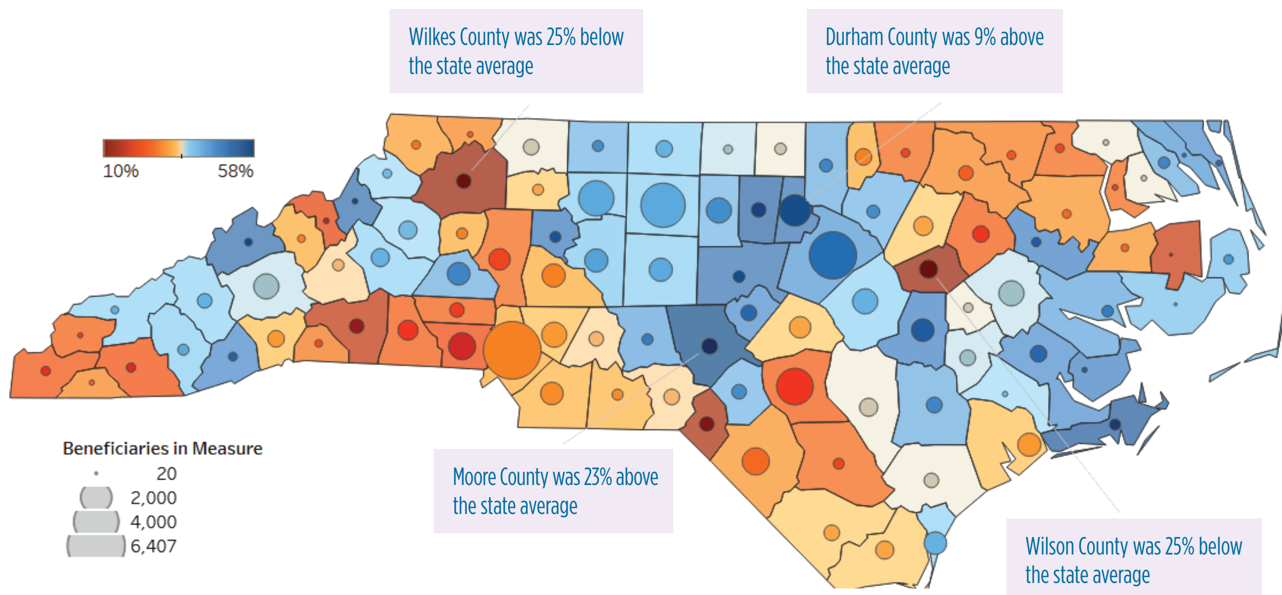


[34] *North Carolina's performance on this measure may be affected by billing documentation as not all providers document such services consistently. Better data would be available in provider electronic health records (EHRs).*

Chart 12. Childhood Immunization Status (Combination 10) – *This chart illustrates, for 2016 through 2019, the proportion of children in NC Medicaid who received immunization combination 10 by their second birthday by race/ethnicity.*[35]



Map 3. Childhood Immunization Status (Combination 10) – *This map illustrates, for each North Carolina county, the 2019 proportion of children in Medicaid who received immunization combination 10 by their second birthday.*



[35] *Subpopulations with fewer than 2,000 beneficiaries in the numerator were excluded from the analysis.*

The shading on Map 3 represents counties' 2019 rates for Childhood Immunization Status (Combination 10), with red indicating lower rates and blue indicating higher rates. Dot size represents the number of NC Medicaid beneficiaries in counties' denominator for the measure. As illustrated on the map, there were significant geographic disparities in the proportion of children in Medicaid who received immunization combination 10 by their second birthday.

Chart 13. Immunizations for Adolescents (Combination 2) – *This chart illustrates, for 2016 through 2019, the proportion of 13 year-olds in NC Medicaid who received immunization combination two by their 13th birthday.*

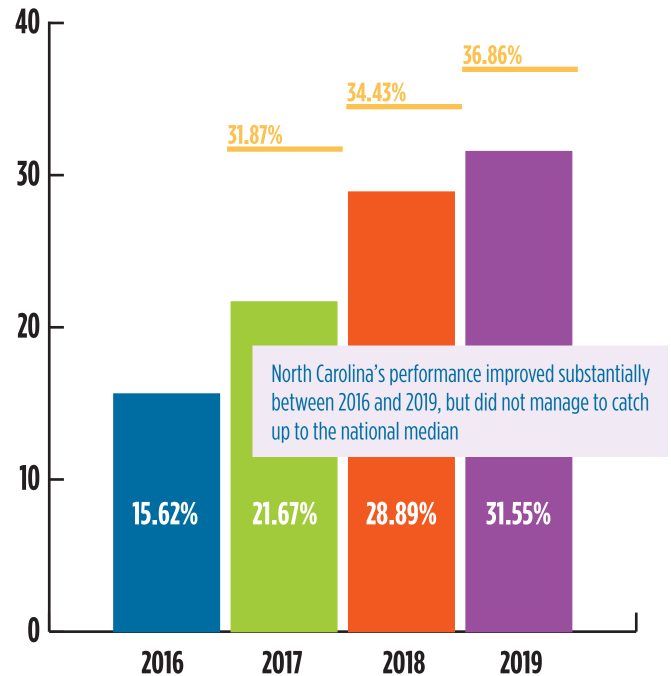
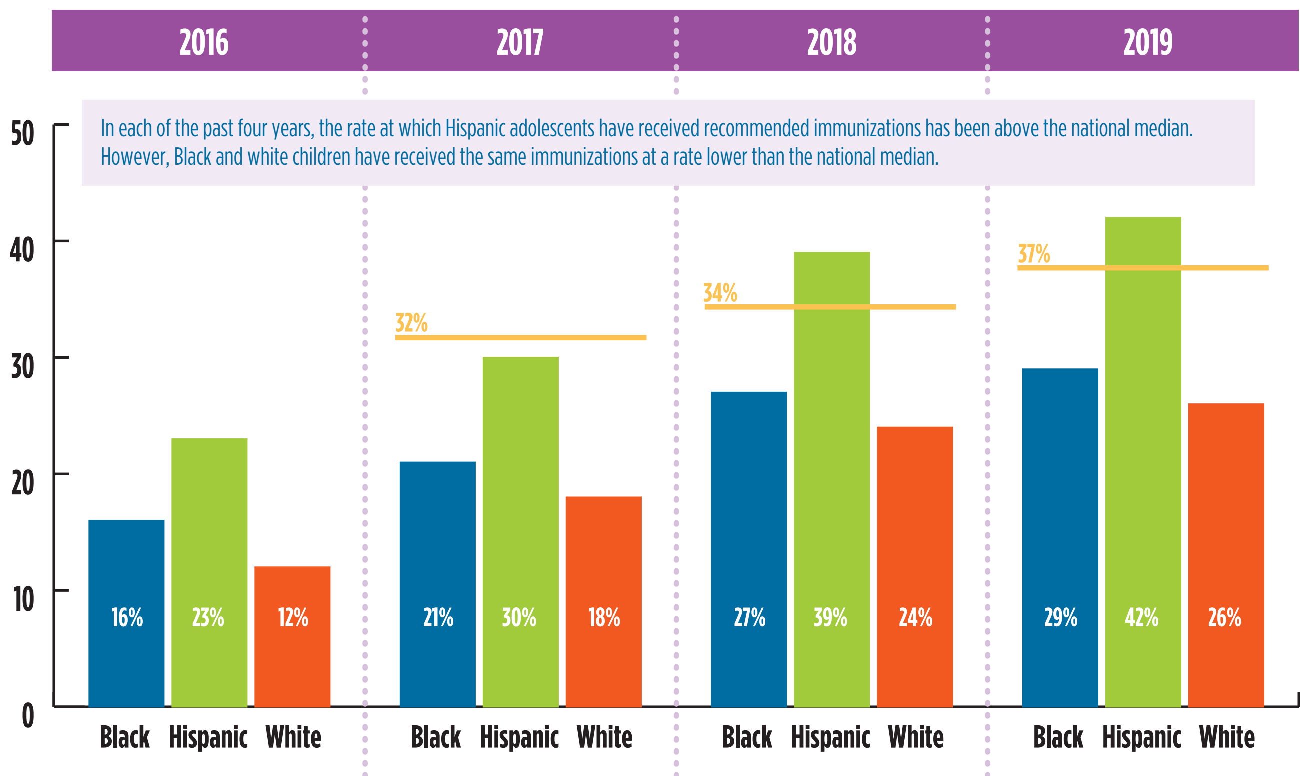


Chart 14. Immunizations for Adolescents (Combination 2) – *This chart illustrates, for 2016 through 2019, the proportion of 13 year-olds in NC Medicaid who received immunization combination two by their 13th birthday by race/ethnicity.*[36]



[36] *Subpopulations with fewer than 1,000 beneficiaries in the numerator were excluded from the analysis.*

B. Promote Women's Health –Prevention and Maternal Health

North Carolina's performance on select measures associated with women's health are displayed in Table 4. These measures look at preventative care for all women as well as prenatal, antenatal and postpartum care.

The pregnancy intendedness measures have no national or state comparison rates, but serve as helpful indicators that care drives better maternal health and infant outcomes. For measures with state and national comparisons, North Carolina performed either or on par with, or lower than the national rates; utilizing HEDIS technical specifications.

Measure rates suggest that North Carolina performed significantly below the national median in *Timeliness of Prenatal Care*. While this provides an opportunity for North Carolina to improve its timeliness of prenatal care, it is also an opportunity to assess the extent in which providers are accurately documenting prenatal visits. As an alternative, the pregnant Medicaid population can be identified using one or more claims with a pregnancy diagnosis code and then capturing other claims for pregnancy-related labs and radiology procedures that happen near the time of a visit, which indicate that a pregnancy visit most likely took place. Performance rates for Prenatal and Postpartum care calculated using this method are significantly higher as displayed in Table 4.

The Pregnancy Medical Home program was established by a State Plan Amendment in 2001 to improve quality of care and health outcomes for pregnant Medicaid women and infants. The program, led by CCNC, has seen birth outcomes and quality of care steadily improve through provider support, screening for high-risk pregnancies, evidence-based care and care management.[37] To ensure continued progress towards improved maternal health and birth outcomes, the Department will continue to monitor timeliness of pre- and post-natal care and explore ways to improve outcomes through the Pregnancy Management Program and Care Management for High-Risk Pregnant Women program.

Table 4: Goal 3B - Promote Wellness and Prevention – Women's Health

Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Breast Cancer Screening	49.67	46.76	43.64	41.35	★
Cervical Cancer Screening	52.44	49.83	46.47	43.82	★
Chlamydia Screening	58.19	58.2	57.86	58.22	★★
Contraceptive Care for Postpartum Women: Most & Moderately Effective Methods (Ages 15-20) CCP[38]					
3 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)	5.5	3.6	7.9	9	N/A
60 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)	41.1	47	48.4	46	N/A
3 Days Postpartum Rate 2 (LARC)[39]	1.2	0.5	1.9	3.6	N/A
60 Days Postpartum Rate 2 (LARC)	16.4	21.1	18.9	18	N/A

[37] *Pregnancy Medical Home. https://www.communitycarenc.org/what-we-do/clinical-programs/pregnancy-medical-home*

[38] *Experts in the fields of family planning and reproductive justice concur that there is value in measuring contraceptive use, but not in conjunction with a benchmark. Use of a benchmark could suggest that there is a 'correct' rate of contraceptive use, even though contraception is a preference-sensitive choice. The State will be using the performance information on contraceptive measures to assess areas in the state where enrollees may have contraceptive access issues.*

[39] *LARC - Long Acting Reversible Contraceptives.*

Measure					
Contraceptive Care: Most & Moderately Effective Methods (Ages 21-44) CCP					
3 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)	13.2	10.8	15	15	N/A
60 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)	38.4	43.7	44.4	43.2	N/A
3 Days Postpartum Rate 2 (LARC)	0.6	0.3	0.75	2.2	N/A
60 Days Postpartum Rate 2 (LARC)	11	14.9	12.5	13	N/A
Percentage of Low Birthweight Births[40]	8.9	9.1	9.2	9.4	◇ 8.2
Prenatal and Postpartum Care (Both Rates)					
Timeliness of Prenatal Care (HEDIS)	37.66	36.92	36.37	35.53	★
Postpartum Care (HEDIS)	59.03	59.36	58.89	68.77	★★
Timeliness of Prenatal Care[41] (HEDIS-like)	—		77.48		
Postpartum Care (HEDIS-like)	—		71.36		
Rate of Screening for Pregnancy Risk	78.2	78	77.9	77.5	N/A

Health Screening for Women

Screening helps improve health outcomes as early detection can lead to a greater range of treatment options and can ultimately lower health care costs.[43] NC Medicaid breast and cervical cancer screening rates have been below the national median for several years.

Women who are already enrolled in health care coverage have a greater likelihood of early screening and detection. It is possible that some screening is not accurately captured by Medicaid claims data as many young women will alternate between Family Planning Medicaid, private coverage and no coverage. This makes it particularly difficult to track cervical cancer screenings.

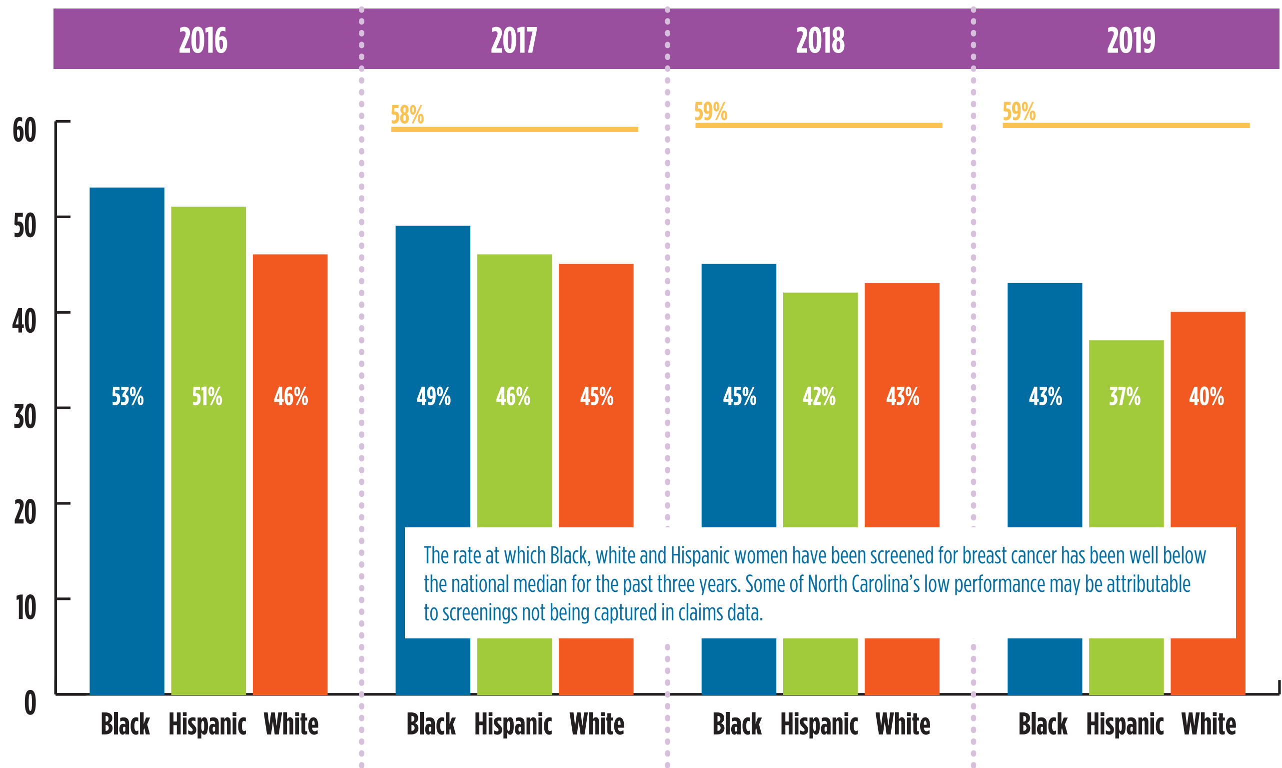
[40] *The Department is finalizing specifications for the Percentage of Low Birthweight Births measure specific to Medicaid populations at a Health Plan level.*

[41] *We believe this rate is artificially low. One of the reasons for artificially low rate is that the majority of NC Medicaid providers use bundled billing for reimbursement. Those bundled rates do not allow us to capture the first date or prenatal care.*

[42] *Obstetrics providers are paid an incentive rate to perform a uniform Pregnancy Risk Screening. This rate reflects the % of Obstetric providers performing the screening over year.*

[43] *American Cancer Society. 2017. "American Cancer Society Recommendations for the Early Detection of Breast Cancer." https://www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/american-cancer-society-recommendations-for-the-early-detection-of-breast-cancer.html.*

Chart 15. Breast Cancer Screening – *This chart illustrates, for 2016 through 2019, women 50–74 years of age who had at least one mammogram to screen for breast cancer in the past two years by race/ethnicity.*[44]



Maternal Health and Birth Outcomes

NC Medicaid beneficiaries account for more than 55% of all deliveries in North Carolina.[45] Women's preconception, interconception and maternal care is essential to improving women and children's health and birth outcomes. Health care visits prior to- and early in pregnancy help promote safe deliveries and address potential risks for both mothers and babies. Similarly, health care visits in the weeks after delivery allow providers to screen for- and treat potential postpartum care needs, such as postpartum depression or physical complications.

Low Birth Weight

NC Medicaid has solicited input from local experts to develop a low birth weight measure specific to the Medicaid population at a plan level, a first-of-its-kind effort in the nation. DHHS will assess health plan efforts to reduce low birth weight and monitor this measure as part of larger efforts to improve prenatal care and birth outcomes across DHHS in alignment with the Early Childhood Action Plan goal of *Healthy Babies*.

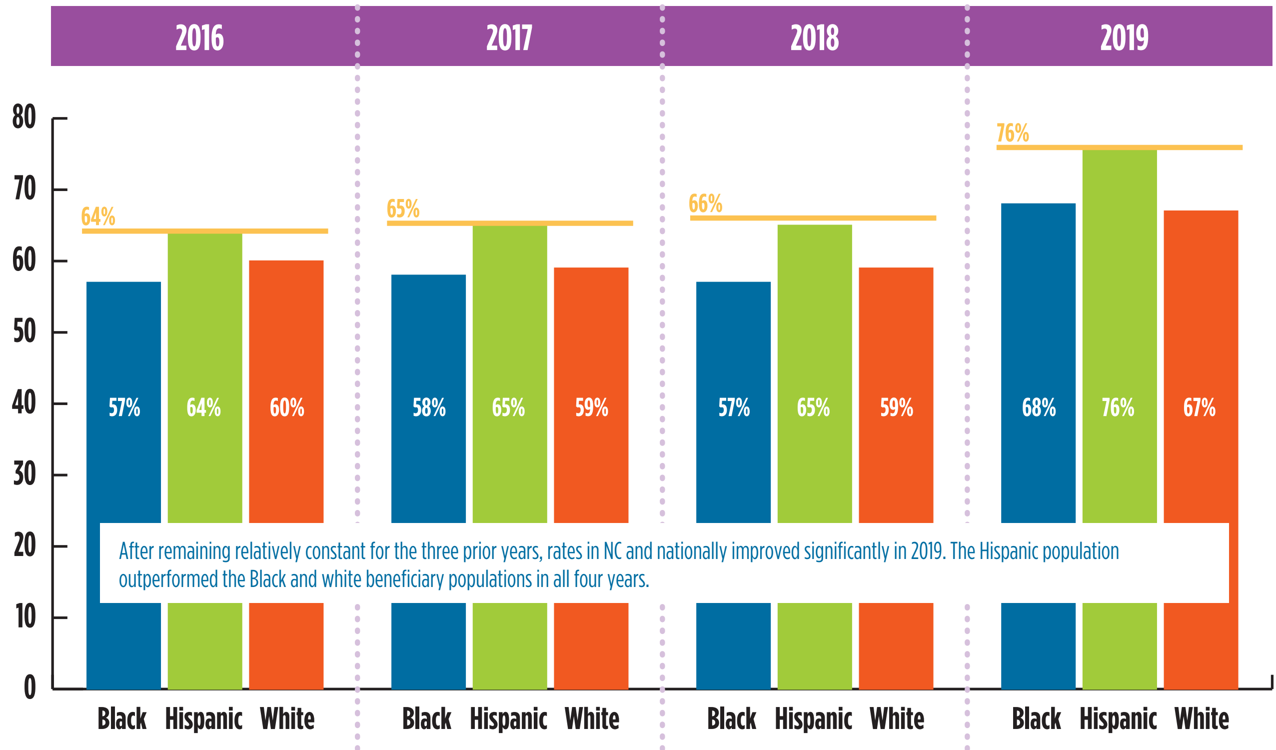
Timeliness of Prenatal Care

Low birth weight and infant mortality are driven by multiple complex factors and systems over the life course. Women already in a system of care with health coverage are more likely to receive care earlier. As of 2018, North Carolina ranked eleventh among states for the lowest birth weight infants, and 13th among states for highest rate of infant mortality.

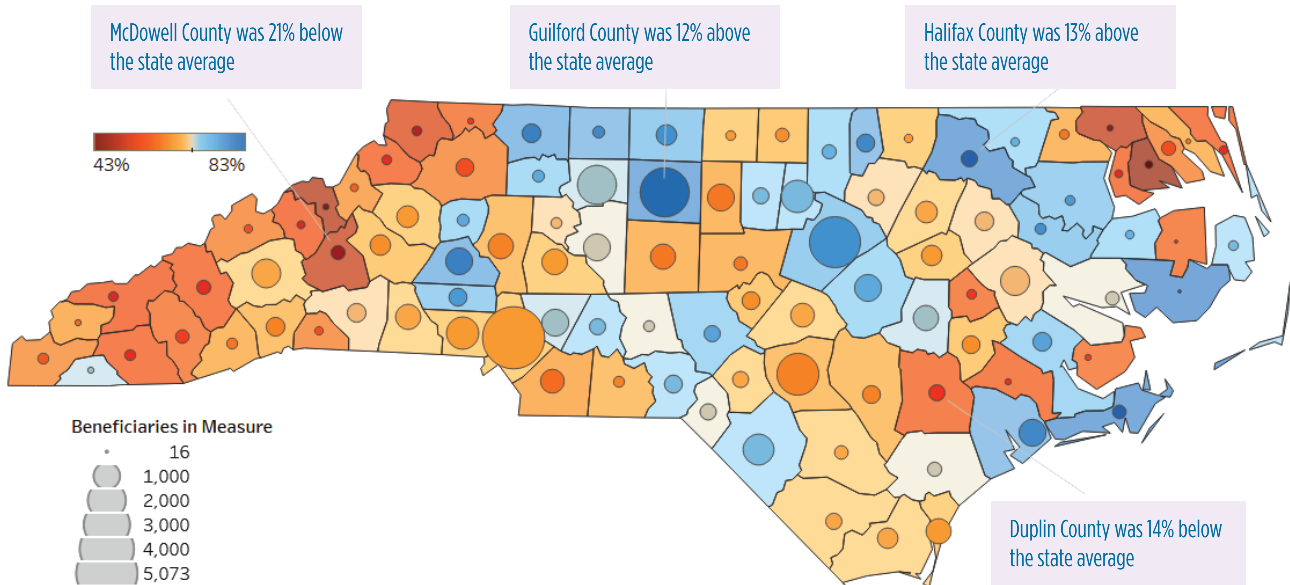
[44] *Smaller subgroups were excluded from the analysis.*

[45] *The 55 percent stated here includes 7 percent of births that were covered by emergency Medicaid but did not have access to prenatal care through Medicaid https://schs.dph.ncdhhs.gov/schs/births/matched/2016/all.html.*

Chart 16. Postpartum Care – *This chart illustrates, for 2016 through 2019, the proportion of deliveries that had a postpartum visit on or between 21 and 56 days after delivery by race/ethnicity.*[46]



Map 4. Postpartum Care – *This map illustrates, for each county in North Carolina, the 2019 proportion of Medicaid deliveries that had a postpartum visit on or between 21 and 56 days after delivery.*



The shading on Map 4 represents counties' 2019 rates for Timeliness of Postpartum Care, with red indicating lower rates and blue indicating higher rates. Dot size represents the number of NC Medicaid beneficiaries in counties' denominator for the measure. As the map illustrates, there were significant geographic disparities in the proportion of Medicaid deliveries that had a postpartum visit on or between 21 and 56 days after delivery--particularly in the northeastern part of the state.

[46] *Subpopulations with fewer than 3,000 beneficiaries in the numerator were excluded from the analysis.*

Moving Forward

NC Medicaid is an active partner on the *Perinatal System of Care Task Force*, convened by the NC Institute of Medicine in collaboration with the Division of Public Health (DPH). This task force is focused on addressing potential barriers and other system issues that impact access to care. NC Medicaid is also actively engaged as part of the DPH-led collation of individuals with lived experiences, health systems, providers, prepaid health plans and community-based programs developing a *Maternal Health Strategic Plan* focused on improving maternal health outcomes. Through both initiatives, Medicaid will analyze drivers of birth and maternal health outcomes and identify interventions for change with health plans and providers.

Goal 4: Improve Chronic Condition Management

As of 2018, over 40% of North Carolina's Medicaid beneficiaries had one or more chronic conditions.[47] When not managed appropriately, chronic conditions can be debilitating and even life threatening.

Women with poorly managed chronic health conditions tend to have poor maternal and birth outcomes. NC Medicaid is particularly focused on improving management of the chronic diseases with the greatest impact on Medicaid beneficiaries, including diabetes, cardiovascular disease, chronic obstructive pulmonary disease (COPD) and asthma.

Table 5 provides North Carolina's recent performance on select measures associated with improving chronic condition management. North Carolina's performance in this area provides an opportunity for improvement either in care or documentation of care provided so that the Department can better track care and the quality of care provided.

Table 5: Goal 4 - Improve Chronic Condition Management

Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Asthma Medication Ratio (Total Rate)	62.97	63.5	64.53	65.30	★★
Hemoglobin A1c (HBA1c) Testing	77.71	77.35	75.71	74.76	★
Plan All-Cause Readmissions - Observed to expected ratio	—	0.82	0.82	0.93	◊ 0.83
PQI-01: Diabetes Short-Term Complication Admission Rate	19.26	23.1	24.4	27.8	★★ 19.1[48]
PQI-05: COPD or Asthma in Older Adults Admission Rate	94.37	103.4	71.91	92.7	★★ 71.9[49]
PQI-08: Heart Failure Admission Rate	39.19	42.57	40.79	43.5	★★ 26.4[50]

[47] *NC Medicaid BRFSS Results, 2018, available at: https://schs.dph.ncdhhs.gov/data/brfss/medicaid/docs/Medicaid_2018_tables.pdf*

[48] *Star rating from 2018 Rates percentage as 2019 not yet available. CMS Adult Health Care Quality Measures https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-health-care-quality-measures/index.html*

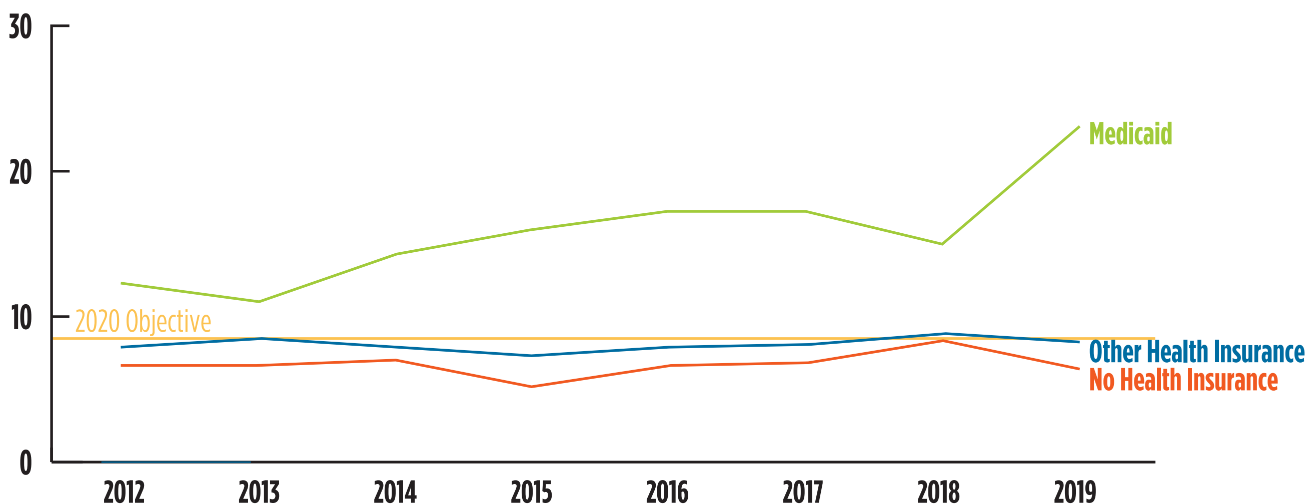
[49] *Star rating from 2018 Rates percentage as 2019 not yet available. CMS Adult Health Care Quality Measures https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-health-care-quality-measures/index.html*

[50] *Star rating from 2018 Rates percentage as 2019 not yet available. CMS Adult Health Care Quality Measures rate for 2018 https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-health-care-quality-measures/index.html*

Diabetes

In the last decade, the percentage of NC Medicaid beneficiaries with **diabetes** has increased from 10- to more than 15%. This is consistent with national trends in diabetes prevalence. (Chart 17).[51, 52] As the data in Chart 17 suggests, Medicaid beneficiaries report having been diagnosed with diabetes more than other groups with statistical significance in years 2014, 2015, 2016, 2017 and 2019; including those with no health insurance. North Carolina also has high rates of diabetes risk factors, including obesity. As of 2018, 65% of adults in NC Medicaid were either overweight or obese.[53]

Chart 17. Diabetes by Insurance Type[54] – *This chart illustrates, for the Medicaid, no health insurance and other health insurance populations, the estimated percent of North Carolina adults with diabetes from 2012 to 2019. The estimates are based on respondents who answered 'Yes' to the BRFSS Question - 'Has a doctor, nurse, or other health professional ever told you that [...] you have diabetes?'.*



If not properly managed, diabetes can lead to serious complications, including blindness, kidney failure and heart disease, particularly in people with other comorbidities such as hypertension, which affects around one third of North Carolina adults.[55] North Carolina's rate of HbA1c testing, which is used to assess diabetes management, is consistently lower than the national median (Chart 18).

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[51] *NC Medicaid BRFSS Results - https://schs.dph.ncdhhs.gov/data/brfss/medicaid/*

[52] *Centers for Disease Control and Prevention, Diabetes Long Term Trends, available at: https://www.cdc.gov/diabetes/statistics/slides/long_term_trends.pdf*

[53] *NC Medicaid 2018 BRFSS Results - https://schs.dph.ncdhhs.gov/data/brfss/medicaid/docs/Medicaid_2018_tables.pdf*

[54] *North Carolina Department of Health and Human Services. BRFSS Data for Adults in North Carolina Enrolled in Medicaid. https://schs.dph.ncdhhs.gov/data/brfss/medicaid/*

[55] *CDC. 2014. "National diabetes statistics report: estimates of diabetes and its burden in the United States, 2014." Atlanta, GA: U.S. Department of Health and Human Services. Available at: https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf*

Chart 18. HbA1c Testing – *This chart illustrates, for 2016 through 2019, the proportion of individuals ages 18 to 75 in NC Medicaid with diabetes who received an HbA1c test.*

During each of the measurement years, almost a quarter of individuals in North Carolina Medicaid who had diabetes did not receive an HbA1c test. These tests provide critical information about blood glucose control and overall disease management. North Carolina's performance on this measure was well below the national median.

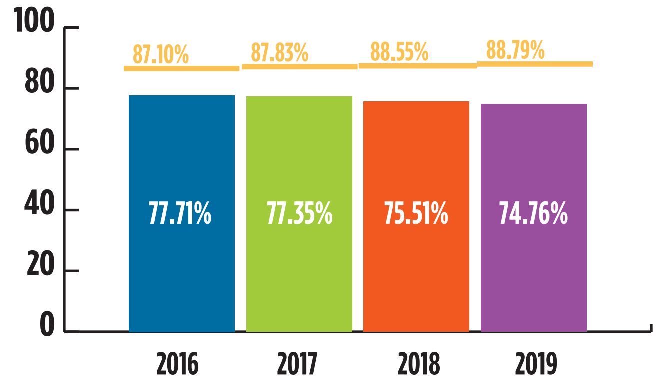


Chart 19. HbA1c Testing Age Group Disparities – *This chart illustrates, for 2018 and 2019, the proportion of individuals ages 18 to 75 in NC Medicaid with diabetes who received an HbA1c test by age group.*

	15-18 years	19-20 years	21 years	22-24 years	25-34 years	35-44 years	45-54 years	55-64 years
2018	77%	67%	57%	54%	66%	70%	77%	84%
2019	81%	66%	57%	53%	64%	68%	76%	83%

The orange line represents North Carolina's overall rate

North Carolina beneficiaries between the ages of 19 and 34 are having their HbA1c tested at lower rates compared to beneficiaries in other age groups. Given Medicaid's age-based eligibility criteria, individuals in these age groups may have different experiences maintaining coverage and accessing care.

To encourage improvement in diabetes care, the Department will monitor both testing and outcomes (HbA1c control) for enrollees with diabetes.

The HbA1c poor control measure, which is included in the set of Year 1 Standard Plan Measures, will allow the Department to better assess not only the rate of testing, but also the effectiveness of diabetes management efforts and underscores the importance of addressing diabetes and its risk factors.

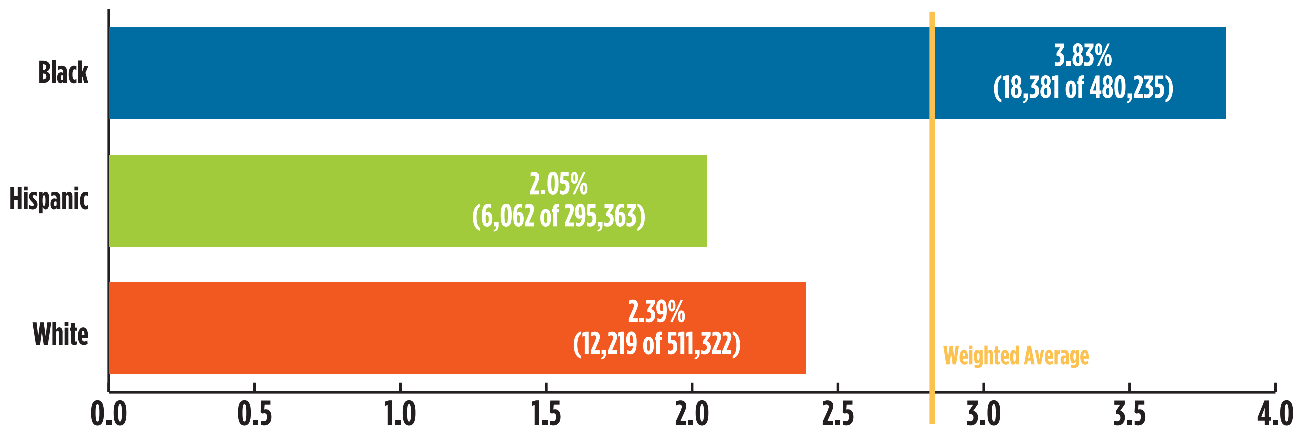
HbA1c Reporting

HbA1c results provide the most direct insight into diabetes control and are important in assessing and monitoring the quality of diabetes care in NC Medicaid. Recognizing providers face challenges in reporting this measure, the Department will work with providers and PHPs to implement a consistent reporting process.

Asthma

As of 2017, 15% of children in North Carolina had received an asthma diagnosis at some point during their lifetime.[56] The prevalence of pediatric asthma is highest among minority populations. Black and Hispanic/Latinx children are, respectively, 1.5 and 1.2 times more likely to receive an asthma diagnosis than white children.[57] When not properly managed, asthma can be significantly detrimental to a child's physical and emotional wellbeing. In 2017, 20% of children with asthma in North Carolina had at least one asthma-related ED or urgent care visit. The CDC identifies asthma as one of the leading causes of absenteeism for students in grades K-12.[58, 59]

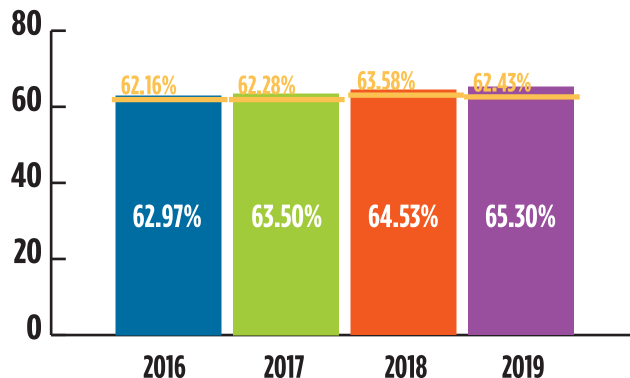
Chart 20. Asthma Prevalence – *This chart illustrates, as of October 2020, the proportion of beneficiaries ages 0 to 20 with an asthma diagnosis by race/ethnicity.*



The percentage of NC Medicaid enrollees with asthma who are being managed with medications that promote long-term control of the disease, rather than simply relieving exacerbations, is at the national median rate (Chart 21).

Chart 21. Asthma Medication Ratio (Total population) – *This chart illustrates, for 2016 through 2019, the proportion of people with an asthma diagnosis in NC Medicaid who used the appropriate ratio of long-term to quick-relief medications.*

North Carolina's performance has consistently improved each year, leaving the state about three points above the national median.



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56 *North Carolina 2017 CHAMP Survey Results, available at: https://schs.dph.ncdhhs.gov/data/champ/201617/k11q01.html*

57 *North Carolina 2018 Minority Health Report, available at: https://schs.dph.ncdhhs.gov/SCHS/pdf/MinorityHealthReport_Web_2018.pdf*

58 *North Carolina 2017 CHAMP Survey Results, available at: https://schs.dph.ncdhhs.gov/data/champ/201617/k11q03.html*

59 *Centers for Disease Control and Prevention. CDC Healthy Schools- Asthma in Schools, available at: https://www.cdc.gov/healthyschools/asthma/index.htm*

Goal 5: Work with Communities to Improve Population Health

NC Medicaid envisions PHPs serving as active partners in improving community health and anticipates that many health plan activities will help advance population health goals set forth in the Healthy North Carolina 2030 plan, including addressing Opioid Misuse, Tobacco Use and Obesity. In line with this vision, the Department has identified several public health objectives where health plan engagement will be critical.

Table 6 outlines select measures identified to support this goal. Performance on these measures is mixed; providing opportunities for improvement.

Table 6: Goal 5 - Work with Communities to Improve Population Health

Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Adult BMI Assessment[61]	21.63	27.32	32.23	34.43	★
Concurrent use of Prescription Opioids and Benzodiazepines *(lower is better)*	—	20	19.4	14.86	—
Use of Opioids at High Dosage in Persons Without Cancer *(lower is better)*	—	—	3.4	2.84	◊ 6.4[62]
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (the total of all ages for each of the 3 rates)[63]					
Total BMI Percentile Documentation	28.9	34.19	38.44	42.56	★
Total Counseling for Nutrition	10.42	15.27	17.93	21.06	★
Total Counseling for Physical Activity	0.85	1.2	2.23	5.2	★
Advising Smokers and Tobacco Users to Quit[64]	—	—	72.2	77.9-	★★
Medical Assistance with Smoking and Tobacco Use Cessation – Discussing Cessation Medications	—	—	44.4	48.1	★★
Medical Assistance with Smoking and Tobacco Use Cessation – Discussing Cessation Strategies	—	—	47.2	49.0	★★

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60 *North Carolina Institute of Medicine Annual Report, http://nciom.org/wp-content/uploads/2017/09/Annual-ReportFINAL.pdf.*

61 *North Carolina's performance on this measure may be affected by billing documentation as not all providers document such services consistently. See discussion on page 20.*

62 *CMS Medicaid Scorecard 2018. https://www.medicaid.gov/state-overviews/scorecard/opioid-use-at-high-dosage-without-cancer/index.html*

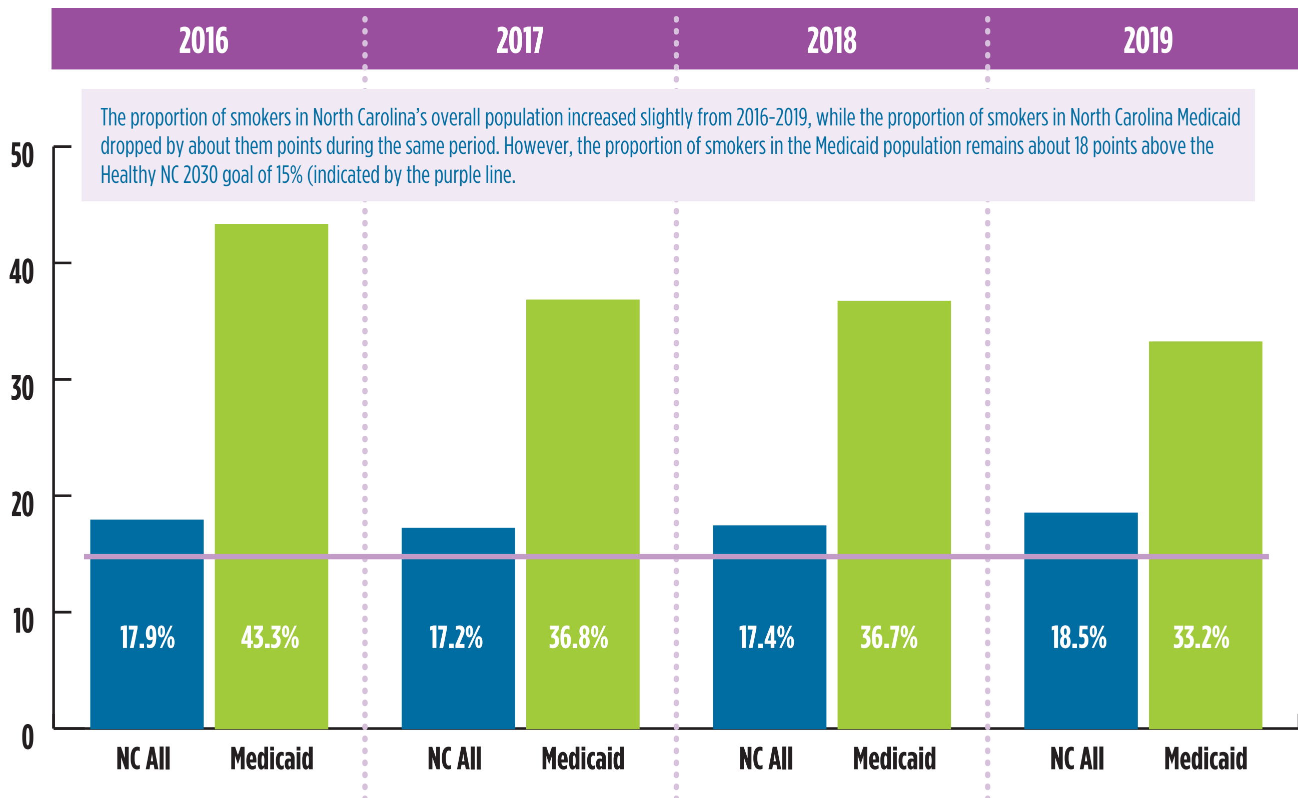
63 *North Carolina's performance on this measure may be affected by billing documentation as not all providers document such services consistently. See discussion on page 20.*

64 *The reported rates for Advising Smokers and Tobacco User to Quit, Discussing Cessation Medications, Discussing Cessation Strategies are results from NC Medicaid's 2019 CAHPS survey. National rates came from Quality Compass® 2019. Results for 2016 and 2017 are not available because North Carolina did not have a vendor to administer the CAHPS survey until 2018.*

Tobacco Use

Chart 22 shows current rates of smoking among North Carolina's Medicaid population. While these rates have fallen, they are still above the Healthy People 2030 target. Efforts to reduce smoking and tobacco use may also improve North Carolina's birth outcomes, as smoking during pregnancy can lead to preterm birth and low birth weight. NC Medicaid has incorporated the QuitlineNC and requirements for a Tobacco Cessation Action Plan into contracts with health plans.

Chart 22. Percentage of Adults Who Are Current Smokers – *This chart illustrates, for 2016, 2017, 2018 and 2019, the proportion of North Carolina adults, both in Medicaid and in the population at large, who indicated they were current smokers. Lower rates indicate few smokers, the Healthy NC 2030 goal is to reduce tobacco use rates to 15%.*[65]

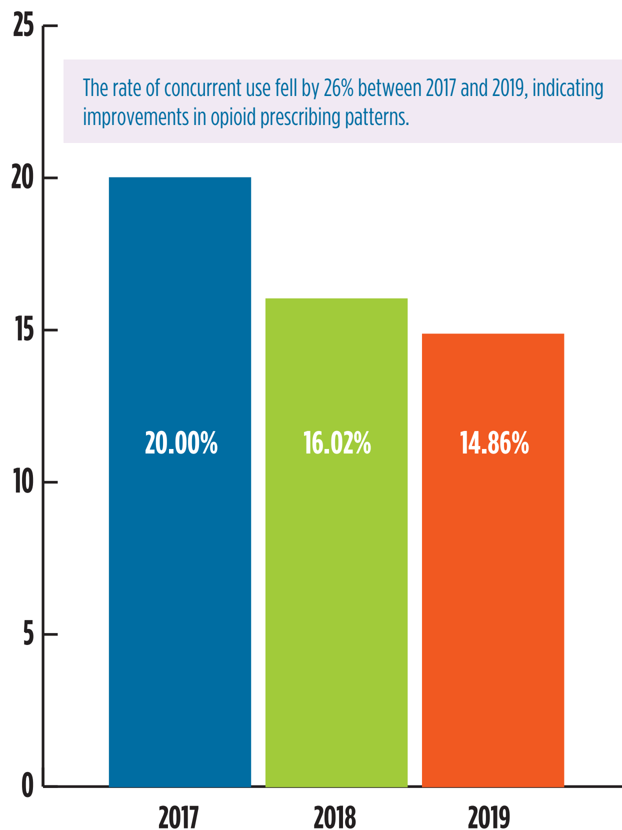


[65] *North Carolina Department of Health and Human Services. BRFSS Data for Adults in North Carolina Enrolled in Medicaid.* *https://schs.dph.ncdhhs.gov/data/brfss/medicaid/*

Opioid Misuse

In the last decade, the opioid epidemic has taken a significant toll on North Carolina's communities. In 2018, there were more than 6,700 ED visits and more than 1,700 deaths from opioid overdose.[66] Since 2010, the rate of opioid-related deaths in North Carolina has nearly doubled.[67] Opioid prescribing patterns can exacerbate trends in both opioid overdoses and opioid-related deaths. For example, concurrent use of opioids and benzodiazepines can place individuals at increased risk of potentially fatal respiratory depression.[68] NC Medicaid is an active partner in the Department's Opioid Action Plan. As illustrated in the Chart 23, NC Medicaid's pharmacy policy changes have led to improvement in opioid prescribing patterns over the last two years.

Chart 23. Concurrent Use of Prescription Opioids and Benzodiazepines - *This chart illustrates, for 2017, 2018 and 2019, the proportion of NC Medicaid beneficiaries who received and filled an opioid prescription during the respective year who were also prescribed and filled a benzodiazepine with at least one day overlap in the prescriptions. Lower rates are preferred for this measure as they might indicate more appropriate prescribing patterns.*



[66] *NC Department of Health & Human Services. NC Opioid Action Plan Data Dashboard 2019. https://injuryfreenc.shinyapps.io/OpioidActionPlan/*

[67] *National Institute on Drug Abuse. North Carolina Opioid Summary. February 2018. Available at: https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/north-carolina-opioid-summary*

[68] *The Centers for Medicaid and Medicaid Services. Concurrent Use of Opioids and Benzodiazepines in a Medicare Part D Population. May 2016. Available at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Concurrent-Use-of-Opioids-and-Benzodiazepines-in-a-Medicare-Part-D-Population-CY-2015.pdf*

Aim 3: Smarter Spending • Goal 6: Pay for Value

The measures in Table 7 include a series of pediatric and prevention indicators used to measure avoidable or preventable inpatient hospitalizations for adults and children. The rates for these measures are calculated per 100,000 population instead of percentages. **A lower rate in these measures indicates a better performance.**

Table 7: Goal 6 - Pay for Value

Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
PDI-14: Asthma Admission Rate[69]	103.01	98.75	93.81	90.3	◊ 80.57[70]
PDI-15: Diabetes Short-Term Complications Admission Rate	39.88	44.59	40.09	40.87	◊ 25.09
PDI-16: Gastroenteritis Admission Rate	23.55	24.65	21.59	27.37	◊ 36.26
PDI-18: Urinary Tract Infection Admission Rate	24.14	22.83	17.17	20.07	◊ 20.55
PQI-01: Diabetes Short-Term Complication Admission Rate	12.2	23.38	24.43	27.8	★★ 19.1[71]
PQI-05: COPD or Asthma in Older Adults Admission Rate	94.37	103.4	71.91	92.7	★★ 71.9
PQI-08: Heart Failure Admission Rate	39.1	42.57	40.79	43.5	★★ 26.4
PQI-15: Asthma in Younger Adults Admission Rate	2.08	2.39	1.45	7.74	★★ 6.1
Plan All-Cause Readmissions	—	.82	.82	.93	◊ .83
Total Cost of Care[72]	—	—	—	—	—

Avoidable and Preventable Utilization

NC Medicaid has mixed performance on measures of potentially avoidable and preventable utilization. While asthma rates show slight improvement over time, there is little improvement and, in some cases, a decline in performance (more potentially preventable utilization) around heart failure and diabetes utilization measures.

The measures above do not represent absolute classifications; that is, in every category of hospitalizations and ED visits some utilization could have been avoided with improved access to high-quality primary care and outpatient therapies, while some roots more to disease state and other complicating factors. In addition, individuals captured in this measure result from small sample sizes, leading to some heightening in the rates.

[69] *The rates presented for PDI-14, PDI-15, PDI-16, PDI-18, PQI-01, PQI-05, PQI-08, and PQI-15 represent potentially avoidable hospitalizations per 100,000 population.*

[70] *Instead of the stars used for HEDIS measures, PDI and PQI national comparisons are reported as hospitalizations per 100,000 population.*

[71] *National Medians for PQI-01, PQI-05, PQI-08, PQI-15 and Plan All-Cause Readmissions were drawn from CMS Adult Health Care Quality Measures for 2018 (2019 medians not yet published) https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-health-care-quality-measures/index.html*

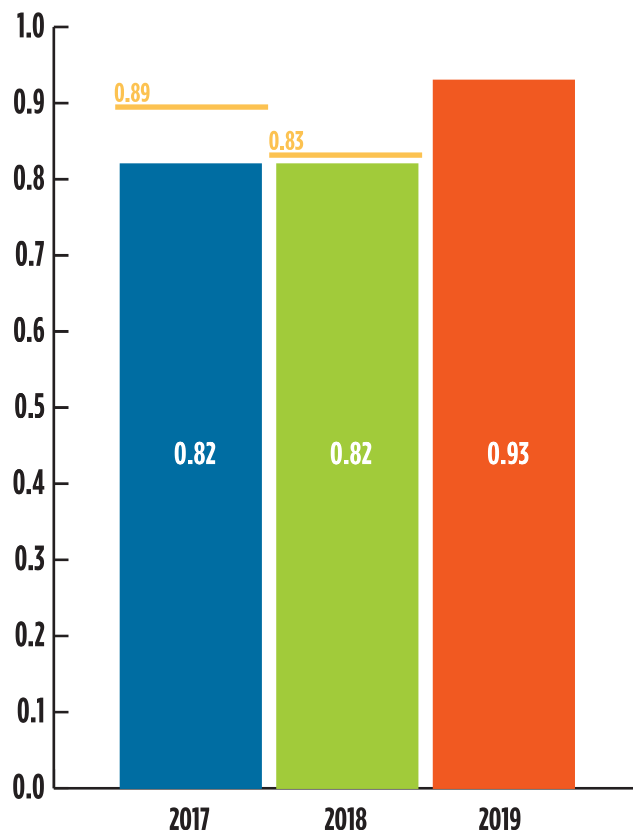
[72] *DHB is still finalizing its approach to measuring Total Cost of Care. This rate will be available in future reports.*

For these reasons, NC Medicaid will track these measures at the level of large populations (health plans) along with relative measures related to appropriate control of specific chronic conditions, to understand general trends and root cause analysis for special and common cause variances over time. NC Medicaid will not use these measures in determining whether and how individual hospitalizations or ED visits should be managed at this time.

Readmission Rates

Readmission rates (and the associated spending) can be addressed through high-quality transition and aftercare efforts including ensuring beneficiaries have follow-up primary and specialist visits as well as appropriate medication reconciliation and management. Currently NC Medicaid rates are trending in the wrong direction and although favorably less expected readmissions, performance remains slightly higher than the national Medicaid median rate.

Chart 24. Plan All Cause Readmissions Observed to Expected Ratio - *This chart illustrates, for 2017, 2018 and 2019, for beneficiaries 18 to 64 years of age, the number of inpatient stays during the measurement year that were followed by an unplanned readmission for any diagnosis within 30 days. The Observed/ Expected Ratio is calculated as the ratio of the observed to expected readmissions. Lower rates are better. Rates below 1 indicate that there were fewer readmissions than expected given the case mix.*[73]



Looking Ahead

The physical health and pharmacy delivery systems in North Carolina are currently fee-for-service. To ensure that payments to providers are increasingly focused on population health outcomes, appropriateness of care and other measures of value, rather than on a fee-for service basis, NC Medicaid has encouraged the accelerated adoption of value-based payment (VBP) arrangements between health plans and providers.

NC Medicaid will increasingly tie payment to value and has developed strategic interventions that promote new care delivery models (such as Advanced Medical Homes), drive payment innovations and address non-medical drivers of health. Overall, the goal is for NC Medicaid to buy health by focusing payment on the key primary drivers of health and rewarding health outcomes at the provider and health plan level. By doing so, NC Medicaid hopes to see lower rates of avoidable spending (inpatient utilization and readmissions), better beneficiary outcomes and smarter spending.

[73] *National Medians Plan All-Cause Readmissions were drawn from CMS Adult Health Care Quality Measures for 2018 (2019 medians not yet published) https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-health-care-quality-measures/index.html*

MOVING FORWARD: CONTINUOUS QUALITY IMPROVEMENT IN NC MEDICAID

Each year the Department will release an updated Quality Strategy as well as lists of measures NC Medicaid is tracking and the subsets of measures that serve as accountability sets for health plans (PHPs and PCCM). NC Medicaid will ask for public feedback, in addition to feedback from the Quality Subgroup of the Medical Care Advisory Committee (MCAC)[74] and NC Medicaid's internal Quality and Health Outcomes Committee (QHO).

NC Medicaid will report quality performance publicly wherever feasible and appropriate, as an important step in promoting high-quality care and encouraging stakeholder awareness of NC Medicaid's quality performance. NC Medicaid will publish reports to apprise the public of performance and promote transparency in the overall quality of the Medicaid system. These reports will include:

- Annual Quality Measures at State and Health Plan Levels. In future versions of this report, NC Medicaid will share PHP and PCCM-level rates for the quality measures to facilitate comparison among plans. Beneficiaries and the public should have access to a reliable report on how plans are performing on specific elements.
- Health Equity Report. NC Medicaid will assess disparities in care and outcomes across demographics and publish a report summarizing areas of care in which disparities have improved, persisted or developed.
- Provider Survey Results. NC Medicaid, in partnership with a third party, will field a survey to providers assessing their satisfaction with the health plan(s) with which they have contracted. NC Medicaid will publish overall satisfaction rates and other findings from this survey.
- CAHPS Survey Results. NC Medicaid, in partnership with a third party, will field the CAHPS Survey to assess patient experience in receiving care. NC Medicaid will publish overall ratings of plans and all care received and other findings from this survey.
- Quality Rating System (QRS). NC Medicaid will develop a QRS specifically aimed at beneficiaries that provides an easily understandable format for beneficiaries to gauge health plan performance in order to make decisions about plan selection.
- Access Report. NC Medicaid, in partnership with a third party, will issue a report summarizing available, perceived and realized access for each health plan's members.

[74] *Medical Care Advisory Committee, https://medicaid.ncdhhs.gov/notices/committees-and-work-groups/medical-care-advisory-committee/mcac-subcommittee-meetings#quality*

NC Medicaid recognizes the importance of continuous quality improvement as indicators of population health improvement and outcomes. Moving forward, NC Medicaid will continue to assess progress towards its Medicaid quality goals and will hold health plans accountable for meeting these goals. It will continue to refine its quality goals, objectives and measures to meet identified population health needs and evidenced- based care to achieve NC Medicaid's central aims (better care delivery, healthier people and communities and smarter spending).

NC Medicaid will refine the objectives outlined in the Quality Strategy based on program-wide performance results in Year 1 and thereafter. NC Medicaid anticipates updates its quality goals in order to drive continued improvement against the greatest areas of opportunity and need. Over time, NC Medicaid expects to decrease the size of the overall measure set by retiring measures no longer necessary to capture optimal care. NC Medicaid will also regularly evaluate its measures to drive progress in line with the Quality Strategy.

STATEMENT ON THE COVID-19 PUBLIC HEALTH EMERGENCY

North Carolina reported its first case of coronavirus on March 3, 2020. To mitigate transmission, North Carolina's governor instituted a stay at home order from March 27, 2020 to May 8, 2020, with significant social distancing measures continuing through the time of this writing.

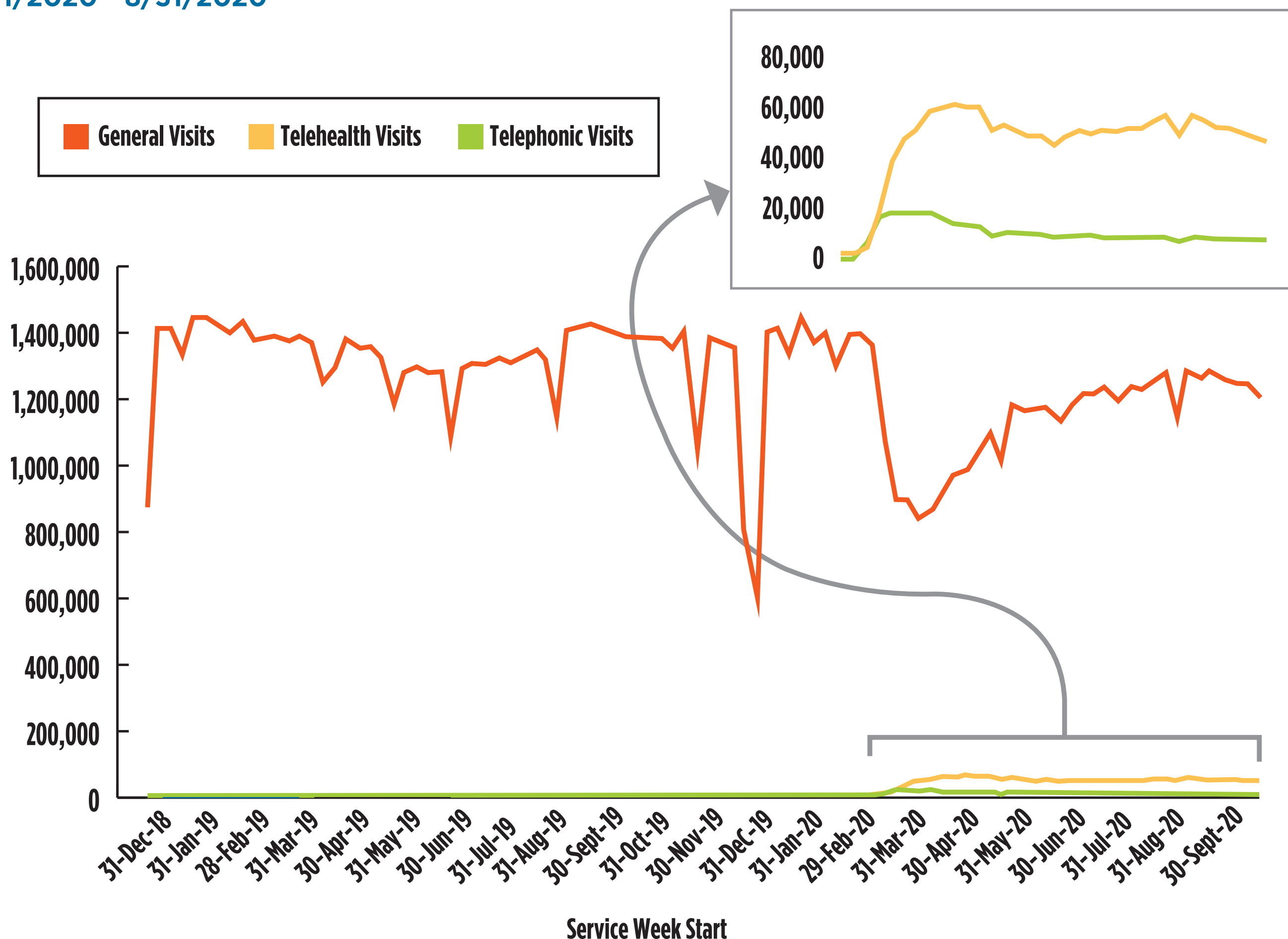
Starting March 3, 2020 through Oct. 15, 2020, 393,379 of NC Medicaid's 2,450,000 beneficiaries have been tested for the virus, with 42,060 testing positive. Throughout the COVID-19 public health emergency the Department has worked tirelessly to ensure that beneficiaries are receiving high-quality care. NC Medicaid has adapted longstanding approaches to increase safety. Systems to monitor the care environment and understand how the virus is affecting beneficiaries were stood up seemingly overnight.

The public health emergency precipitated a dramatic decrease in the volume of in-person care delivered to NC Medicaid beneficiaries. On March 8, 2020, NC Medicaid instituted a broad array of telemedicine (telephonic and computer-based telehealth) policies to support social distancing and maintain continuity of care and enhance access for both acute and chronic care. By the week of April 19, 2020, the midpoint of the stay at home order, in-person primary care claims were down 56.28% from the beginning of March. Prior to this, the state supported a limited consultative-only form of telemedicine mostly focused on psychiatry.

By the week of April 19, telehealth professional claims were up 2,961% from the beginning of March (increase from 1,890 to 57,857 claims) and from the same week the previous year (1,776 claims). Professional claims for telephonic care increased by 17,613%; from zero at the beginning of March to 17,613 the week of April 19. Behavioral health and primary care saw the largest proportions of telemedicine with behavioral health climbing to 18.88% of claims and primary care climbing to 18.92% for the week of April 19. Almost 16% of beneficiaries served during the week of April 19 received their care via telemedicine.

In an effort to encourage beneficiaries to engage in telehealth during the pandemic, NC Medicaid produced an educational, public facing infomercial to encourage adoption. Additionally, the department partnered with all payors in the state to align and consistently share telehealth coverage to encourage providers to engage in this new form of care. Nationally, NC Medicaid is recognized as a leader in the rapid adoption of telehealth services with an exceptional evaluation approach for these newly adopted services.

Chart 25. North Carolina Medicaid Telehealth, Telephonic and In-person Claims Volume 1/1/2020 - 8/31/2020



Analyses to-date of telehealth claims and clinical data have found that:

- Practices that adopted telemedicine at higher rates saw a larger proportion of their enrolled Medicaid patients during the first five months of the public health emergency.
- Counties' rates of primary care services delivered via telehealth decreased as the percent of counties' populations living in rural areas increases and increase as the percent of counties' populations with broadband access (Federal Communications Commission, 2016) increases.
- Fewer beneficiaries had a second primary care claim within 14 days after a primary care claim when the initial modality was telemedicine. Moreover, there tended to be more time between the initial visit and the second claim when the initial modality was telemedicine.

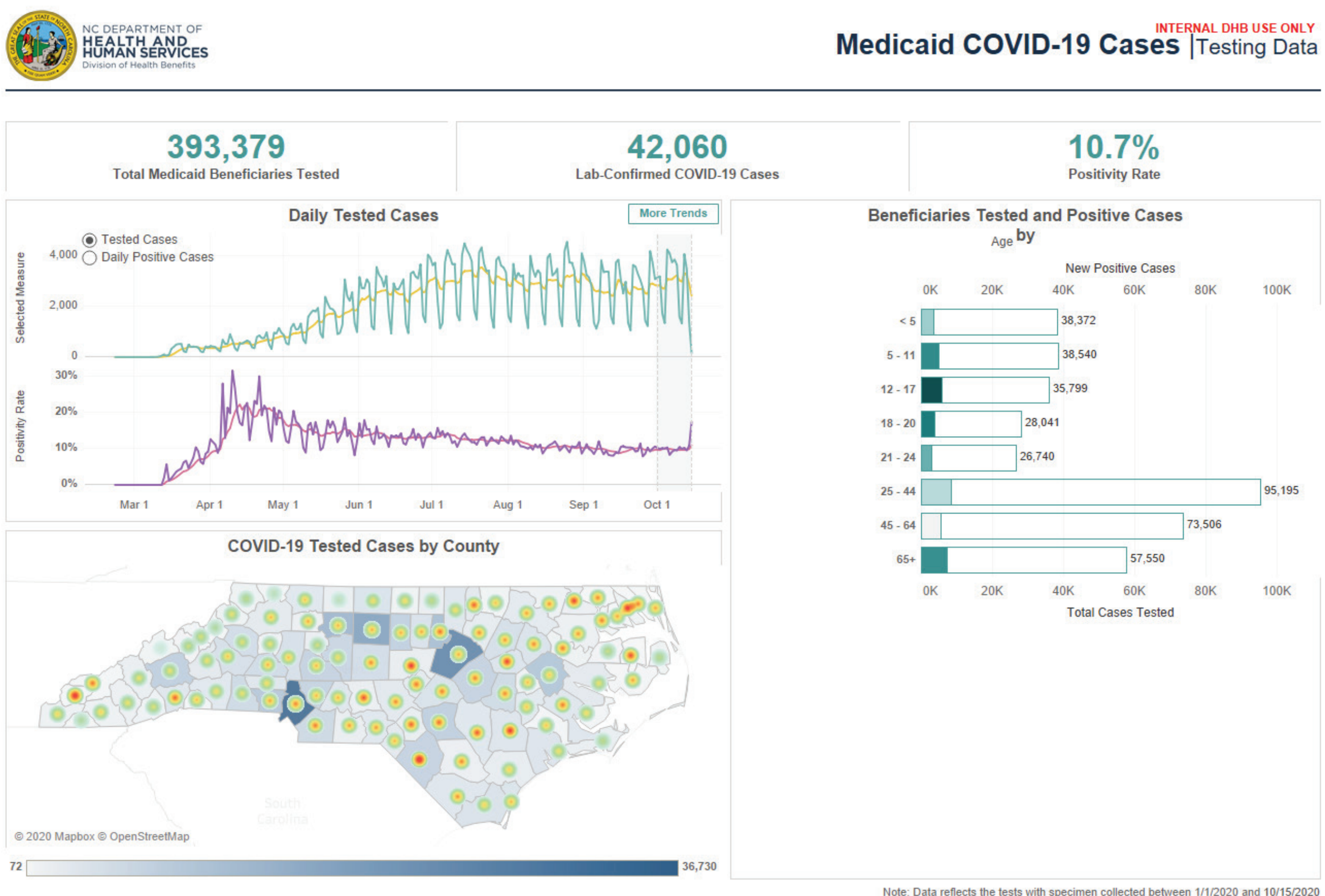
These points provide a utilization-based view of NC Medicaid's COVID-19-driven implementation of telemedicine policies. To achieve more depth, the state is taking the following approaches to obtain findings on the outcomes of telemedicine:

1. Using lab data from DPH to understand whether there were fewer laboratory-confirmed COVID-19 cases among patients that saw providers that delivered more care via telemedicine.
2. Fielding a Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey with a sampling approach that will allow responses to be stratified by telemedicine utilization and then by the following demographic categories:
    a. Child | Adult
    b. Race (Black | White | General)
    c. Ethnicity (Hispanic/Latinx | Not Hispanic/Latinx | General)

3. Working with behavioral health providers to survey patients on their experience of telemedicine
4. Partnering with the Sheps Center for Health Services Research at UNC-Chapel Hill to understand whether telepsychiatry visits during the public health emergency:
   a. reduced use of crisis-related behavioral health services among beneficiaries with behavioral health conditions.
   b. affected adherence to antipsychotic medications compared to beneficiaries who did not use telepsychiatry.

NC Medicaid also worked with DPH to establish a regular feed of COVID-19 data from North Carolina's State Lab. These data are linked to claims and enrollment data to get a more complete picture of how the virus is impacting beneficiaries.

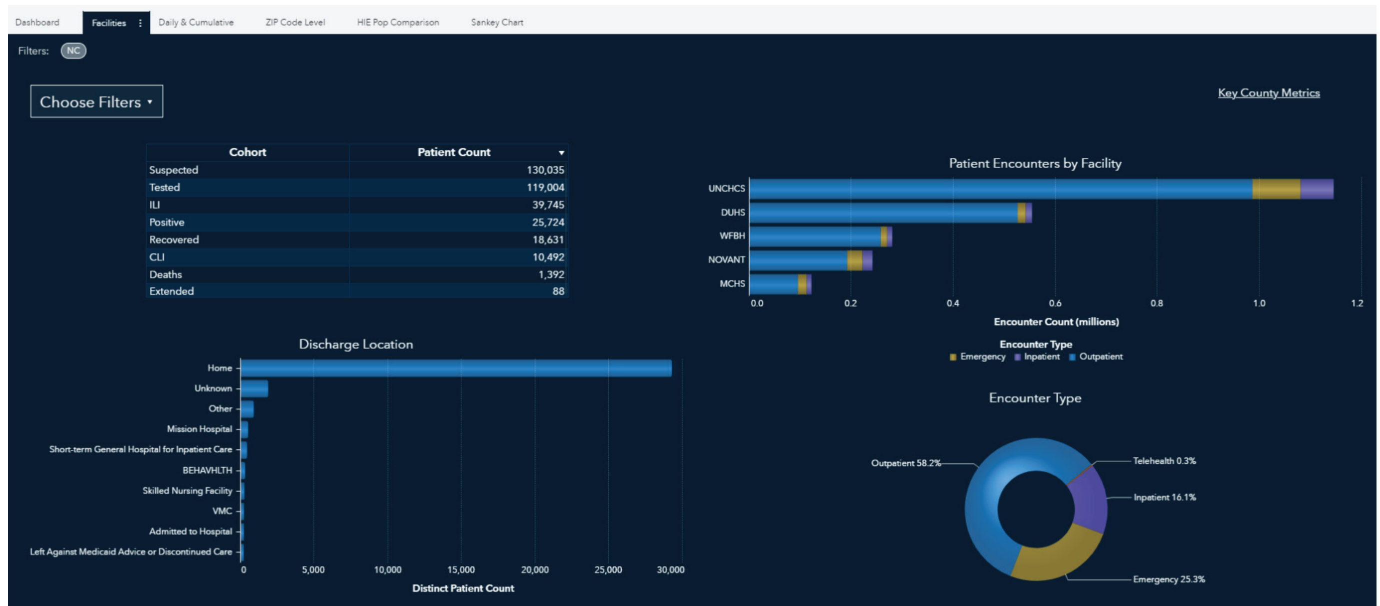
Figure 3. North Carolina Medicaid COVID-19 Active Cases Dashboard, summary tab reflecting specimens collected between 1/1/2020 and 10/15/2020



The state has been tracking whether beneficiaries are receiving indicated preventive care since the outset of the public health emergency. Data to-date indicate that fewer beneficiaries are receiving indicated well-care visits, immunizations and chronic condition tests in comparison to prior to the public health emergency. Rates of overdue preventive care rose steadily from the beginning of the public health emergency, plateauing at higher levels in July, and remaining there through the time of this writing (November 2020).

NC Medicaid's partnership with NC HealthConnex, North Carolina's health information exchange, has accelerated during the public health emergency. NC HealthConnex is using NC Medicaid eligibility data to subset the clinical data in the health information exchange and create a Medicaid COVID-19 clinical dashboard. The dashboard provides insights on how demographic and geographic subgroups are experiencing the virus and the trajectory of the disease within the Medicaid population. Moreover, what NC HealthConnex has been able to accomplish with the Medicaid COVID-19 dashboard will serve as a template for future quality and population health analytics that use the clinical data in the health information exchange.

Figure 4. NC Health Connex Medicaid COVID-19 Dashboard, facilities tab reflecting data through 10/15/2020



While the public health emergency has been tragic, North Carolina Medicaid has, along with other agencies in the Department, acted boldly to preserve the health of North Carolinians. The Department focused on supporting the health of vulnerable and historically marginalized populations, many of whom are represented in NC Medicaid. It will take a long time to understand the full impact of the public health emergency on the quality of care delivered to beneficiaries. However, in the face of adversity, analytic partnerships have been strengthened. These partnerships will help NC Medicaid better understand and improve the quality of care being provided to beneficiaries long after the public health emergency has ended.

APPENDIX A. HEALTH PLAN QUALITY MEASURE SETS

1. Standard Plan Measure Set

NQF #	Measure	Steward	Frequency
PEDIATRIC MEASURES			
NA	Child and Adolescent Well-Care Visit (WCV)	NCQA	Annually
NA	Percentage of Eligibles Who Received Preventive Dental Services (PDENT)	CMS	Annually
0038	Childhood Immunization Status (Combination 10) (CIS)	NCQA	Annually
1407	Immunization for Adolescents (Combination 2) (IMA)	NCQA	Annually
NA	Total Eligibles Receiving at Least One Initial or Periodic Screen (Federal Fiscal Year)	DHHS	Annually
2801	Use of First Line Psychosocial Care for Children and Adolescents on Antipsychotics (APP)	NCQA	Annually
NA	Well-Child Visits in the First 30 Months of Life (W30)	NCQA	Annually
ADULT MEASURES			
0032	Cervical Cancer Screening (CCS)	NCQA	Annually
0033	Chlamydia Screening in Women (Total Rate) (CHL)	NCQA	Annually
0059	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (HPC)	NCQA	Annually
0018	Controlling High Blood Pressure (CBP)	NCQA	Annually
0039	Flu Vaccinations for Adults (FVA, FVO)		
0027	Medical Assistance with Smoking and Tobacco Use Cessation (MSC)	NCQA	Annually
0576	Follow-Up After Hospitalization for Mental Illness (FUH)	NCQA	Annually
0418/0418E	Screening for Depression and Follow-Up Plan (DSF)	CMS	Annually
2940	Use of Opioids at High Dosage in Persons Without Cancer (OHD)	PQA	Annually
2950	Use of Opioids from Multiple Providers in Persons Without Cancer (OMP)	PQA	Annually
3389	Concurrent Use of Prescription Opioids and Benzodiazepines (COB)	PQA	Annually
1768	Plan All-Cause Readmissions (PCR)	NCQA	Annually
NA	Total Cost of Care	IBM Watson Health Cost of Care Model	Annually
NA	Rate of Screening for Unmet Resource Needs	DHHS	Annually
MATERNAL HEALTH MEASURES			
NA	Low Birth Weight	DHHS	Annually
NA	Prenatal and Postpartum Care (PPC)	NCQA	Annually
NA	Rate of Screening for Pregnancy Risk	DHHS	Annually

2. Behavioral Health I/DD Tailored Plan Measure Set

NQF #	Measure	Steward	Frequency
PEDIATRIC MEASURES			
NA	Child and Adolescent Well-Care Visit (WCV)	NCQA	Annually
NA	Percentage of Eligibles Who Received Preventive Dental Services (PDENT)	CMS	Annually
0038	Childhood Immunization Status (Combination 10) (CIS)	NCQA	Annually
0108	Follow-Up for Children Prescribed ADHD Medication (ADD)	NCQA	Annually
1407	Immunization for Adolescents (Combination 2) (IMA)	NCQA	Annually
2800	Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM)	NCQA	Annually
NA	Total Eligibles Receiving at Least One Initial or Periodic Screen (Federal Fiscal Year)	NCDHHS	Annually
2801	Use of First Line Psychosocial Care for Children and Adolescents on Antipsychotics (APP)	NCQA	Annually
NA	Well-Child Visits in the First 30 Months of Life (W30)	NCQA	Annually
ADULT MEASURES			
0105	Antidepressant Medication Management (AMM)	NCQA	Annually
0032	Cervical Cancer Screening (CCS)	NCQA	Annually
0033	Chlamydia Screening in Women (CHL)	NCQA	Annually
0059	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (HPC)[75]	NCQA	Annually
0018	Controlling High Blood Pressure (CBP)	NCQA	Annually
0039	Flu Vaccinations for Adults (FVA, FVO)	NCQA	Annually
0027	Medical Assistance with Smoking and Tobacco Use Cessation (MSC)	NCQA	Annually
0576	Follow-Up After Hospitalization for Mental Illness (FUH)	NCQA	Annually
0418/0418E	Screening for Depression and Follow-Up Plan (DSF)[76]	CMS	Annually
1932	Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD, SMD, SMC)	NCQA	Annually
2940	Use of Opioids at High Dosage in Persons Without Cancer (OHD)	PQA	Annually
2950	Use of Opioids from Multiple Providers in Persons Without Cancer (OMP)	PQA	Annually
3389	Concurrent Use of Prescription Opioids and Benzodiazepines (COB)	PQA	Annually
3175	Continuation of Pharmacotherapy for Opioid Use Disorder	USC	Annually
1768	Plan All-Cause Readmissions (PCR)	NCQA	Annually
NA	Total Cost of Care	IBM Watson Health Cost of Care Model	
NA	Rate of Screening for Unmet Resource Needs	DHHS	Annually
MATERNAL MEASURES			
NA	Low Birth Weight	DHHS	Annually
NA	Prenatal and Postpartum Care (PPC)	NCQA	Annually
NA	Rate of Screening for Pregnancy Risk	DHHS	Annually

[75] *Pending additional information regarding the collection of clinical data.*
[76] *Pending additional feedback regarding the collection of clinical data. This measure will be accompanied by future guidance to limit screening in patients where it's not appropriate.*

EBCI Tribal Option Measure Set

Measure	Steward	Frequency
Poor Glycemic Control		Annually
Controlling High Blood Pres-sure – Million Hearts		Annually
Childhood Immunizations		Annually

CCNC Measure Set

NQF #	Measure	Steward
PEDIATRIC MEASURES		
NA	Child and Adolescent Well-Care Visits (WCV)	NCQA
0038	Childhood Immunization Status (Combination 10) (CIS)	NCQA
1407	Immunization for Adolescents (Combination 2) (IMA)	NCQA
N/A	Well-Child Visits in the First 30 Months of Life (W30)	NCQA
ADULT MEASURES		
0032	Cervical Cancer Screening (CCS)	NCQA
0033	Chlamydia Screening in Women (Total Rate) (CHL)	NCQA
0059	Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) (HPC)	NCQA
0018	Controlling High Blood Pressure (CBP)	NCQA
1768	Plan All-Cause Readmissions (PCR) [Observed versus expected ratio]	NCQA
0418/0418E	Screening for Depression and Follow-Up Plan (DSF)	CMS
TBD	Total Cost of Care	IBM Watson Health Cost of Care Model

APPENDIX B: NC MEDICAID MEASURE SOURCES

The quality measures are selected from a variety of national sources of health care industry performance measures. These sources include:

1. The Healthcare Effectiveness Data and Information Set (HEDIS), a widely used set of performance measures developed and maintained by the National Committee for Quality Assurance (NCQA);
2. Core sets of health care quality measures for Children's Health Insurance Program (CHIP) and for adults enrolled in Medicaid, which are developed and maintained by the Centers for Medicaid and CHIP Services (CMCS);
3. Measures of patient experience with health care, collected through the HEDIS® Consumer Assessment of Healthcare Providers and Systems (CAHPS) program established by the Agency for Healthcare Research and Quality (AHRQ);
4. AHRQ's Pediatric Quality Indicators (PDIs) and Preventions Quality Indicators (PQIs) used to measure avoidable and preventable inpatient hospitalizations for adults and children; and
5. Public health measures developed and maintained by the Centers for Disease Control (CDC), Pharmacy Quality Alliance and other federal, state and public health sources.

The following tables indicate the sources of measures included in this report.

Measure Sources 1

The following include measures from the Healthcare Effectiveness Data and Information Set (HEDIS), which is developed and maintained by the National Committee for Quality Assurance (NCQA) and CMS child and adult core sets.

Measure	NCQA HEDIS	CMS Child Core	CMS Adult Core	HEDIS-CAHPS Survey	PDI/ PQI	Public Health
Adherence to Antipsychotic Medications for Individuals with Schizophrenia	X		X			
Adolescent Well-Care Visit	X	X				
Adult Body Mass Index (BMI) Assessment	X		X			
Annual Dental Visits (Total Rate)	X					
Annual Monitoring for Patients on Persistent Medications	X					
ACE/ARB	X					
Diuretics	X					
Total Combined Rate	X					

Antidepressant Medication Management (Both Rates)	X		X			
Acute Phase Treatment	X		X			
Continuation Phase Treatment	X		X			
Appropriate Testing for Children with Pharyngitis	X					
Appropriate Testing for Children with Upper Respiratory Infection	X					
Asthma Medication Ratio	X	X				
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	X					
Breast Cancer Screening	X					
Cervical Cancer Screening	X					
Childhood Immunization Status (Combination 10)	X	X				
Children and Adolescents' Access to Primary Care Practitioners	X	X				
12-24 months of age	x	x				
25 months - 6 years old	X	X				
7-11 years old	X	X				
12-19 years old	X	X				
Chlamydia Screening in Women	X	X				
Comprehensive Diabetes Care (CDC)	X					
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)	X					
Comprehensive Diabetes Care (BP Control [<140/90]	X					
Comprehensive Diabetes Care HbA1c Control [<8.0%]	X					
Hemoglobin A1c (HbA1c) Testing (HA1C)	X					
Hemoglobin A1c (HbA1c) Poor Control (>9.0%)	X					
Eye (Retinal) Exam	X					
Medical Attention for Nephropathy	X					
Continuity of Pharmacotherapy for Opioid Use Disorder						X
Controlling High Blood Pressure	X					
Dental Sealants for 6-9-Year-Old Children at Elevated Carries Risk		X				
Combined Rate		X				
Medicaid		X				
Health Choice		X				
Diabetes Care for People with Serious Mental Illness: HbA1c Poor Control (>9.0%)	X		X			
Diabetes Screening for People with Schizophrenia or Bi-polar Disorder Who are Using Antipsychotic Medications (SSD)	X		X			
Follow-Up After Hospitalization for Mental Illness	X		X			
7-Day Follow-up	X		X			
30-Day Follow-up	X		X			

Follow-up After ED Visit for Mental Illness or Alcohol or Other Drug Abuse	X		X			
7-Day Follow-up	X		X			
30-Day Follow-up	X		X			
Follow-Up for Children Prescribed ADHD Medication (Both Rates)	X		X			
Initiation Phase	X		X			
Continuation and Maintenance (C&M) Phase	X		X			
Immunization for Adolescents (Combination 2)	X	X				
Meningococcal	X	X				
Tdap (Tetanus, Diphtheria, Pertussis)	X	X				
HPV	X	X				
Combination 1 Rate	X	X				
Combination 2 Rate	X	X				
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (Both Rates)	X		X			
Age 13-17 years: Initiation of AOD Treatment	X		X			
Age 18+ years: Initiation of AOD Treatment	X		X			
Total Rate: Initiation of AOD Treatment	X		X			
Age 13-17 years: Engagement of AOD Treatment	X		X			
Age 18+ years: Engagement of AOD Treatment	X		X			
Total Rate: Engagement of AOD Treatment	X		X			
Inpatient Utilization – General Hospital/Acute Care – Total (Average Length of Stay)	X		X			
Medication Management for People with Asthma (Medication Compliance 75% Rate only)	X		X			
Age 5-11: 75% of treatment period	X		X			
Age 12-18: 75% of treatment period	X		X			
Age 19-50: 75% of treatment period	X		X			
Age 51-64: 75% of treatment period	X		X			
Total Rate: 75% of treatment period	X		X			
Pharmacotherapy Management of COPD Exacerbation (Both Rates)	X		X			
Systemic Corticosteroid	X		X			
Bronchodilator	X		X			
Plan All-Cause Readmissions	X					
Prenatal and Postpartum Care (Both Rates)	X	X				
Timeliness of Prenatal Care	X	X				
Postpartum Care	X	X				
Statin Therapy for Patients with Diabetes (Both Rates)	X					
Received Statin Therapy	X					
Statin Adherence 80%	X					

Statin Therapy for Patients with Cardiovascular Disease (Both Rates)	X					
Received Statin Therapy Total	X					
Statin Adherence 80% Total	X					
Use of Imaging Studies for Low Back Pain	X					
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (the total of all ages for each of the 3 rates)	X	X				
Total BMI Percentile Documentation	X	X				
Total ages 3-17	X	X				
Total Counseling for Nutrition	X	X				
Total Counseling for Physical Activity	X	X				
Well-Child Visits in the First 15 Months of Life	X	X				
6 + Visits	X	X				
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	X	X				

Measure Sources 2

The following are measures of patient experience with health care collected through the HEDIS® Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey.

Measure	HEDIS CAHPS Survey
Coordination of Care (Overall beneficiary satisfaction with the helpfulness of their health plan)	X
Customer Service (health plan gave necessary information/help)	X
Getting Care Quickly (Illness/Injury, Non-Urgent)	X
Getting Needed Care (Access to Care, Tests, Treatment & Specialists)	X
Flu Vaccinations for Adults Ages 18 and Older	X
Medical Assistance with Smoking and Tobacco Use Cessation	X
Advising Smokers and Tobacco Users to Quit	X
Discussing Cessation Medications	X
Discussing Cessation Strategies	X
Rating of All Health Care (Experience getting appointments and needed information)	X
Rating of Personal Doctor (Clearly explained things, was attentive and respectful, and informed about care received from other providers)	X
Rating of Health Plan (Experience getting appointments and needed information)	X
Rating of Specialist Seen Most Often (Appointments as soon as needed)	X

Measure Sources 3

The following are measures AHRQ's Pediatric Quality Indicators (PDIs) and Preventions Quality Indicators (PQIs) used to measure avoidable and preventable inpatient hospitalizations for adults and children.

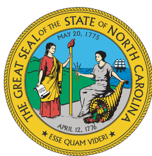
Measure	PQI	PDI
PDI-14: Asthma Admission Rate		X
PDI-15: Diabetes Short-Term Complications Admission Rate		X
PDI-16: Gastroenteritis Admission Rate		X
PDI-18: Urinary Tract Infection Admission Rate		X
PQI-01: Diabetes Short-Term Complication Admission Rate	X	
PQI-05: COPD or Asthma in Older Adults Admission Rate	X	
PQI-08: Heart Failure Admission Rate	X	
PQI-15: Asthma in Younger Adults Admission Rate	X	

Measure Sources 4

The following are non-HEDIS Measures developed and maintained by the Centers for Disease Control (CDC), U.S. Office of Population Affairs (OPA), Pharmacy Quality Alliance (PQA) and other state and public health sources.

Measure	CDC	OPA	PQA	NCDHHS	The Joint Commission	Health Partners
Concurrent use of Prescription Opioids and Benzodiazepines			X			
Continuity of Pharmacotherapy for Opioid Use Disorder						
Use of Opioids in High Doses in Persons Without Cancer			X			
Use of Opioids from Multiple Providers in Persons Without Cancer			X			
Contraceptive Care: Most & Moderately Effective Methods (Ages 15-20) CCP		X				
3 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)		X				
60 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)		X				
3 Days Postpartum Rate 2 (LARC)		X				
60 Days Postpartum Rate 2 (LARC)		X				
Contraceptive Care: Most & Moderately Effective Methods (Ages 21-44) CCP		X				
3 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)		X				
60 Days Postpartum Rate 1 (Most or moderately effective FDA-approved)		X				
3 Days Postpartum Rate 2 (LARC)		X				
60 Days Postpartum Rate 2 (LARC)		X				
Total Cost of Care						X

Percentage of Low Birthweight Births	X					
Percentage of Pregnant Smokers Receiving Appropriate Screening/ Treatment for Smoking				X		
Screening for Pregnancy Risk				X		
Screening for Social Determinants of Health				X		
SUB-3 Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol and Other Drug Use Disorder Treatment at Discharge					X	
Decrease the percentage of adult Medicaid beneficiaries who are current smokers				X		
Decrease the percentage of high school students using tobacco				X		
Decrease the percentage of women who smoke during pregnancy				X		
Decrease exposure to secondhand smoke in the workplace				X		
Nutrition/Physical Activity				X		
Increase fruit and vegetable consumption among adults				X		
Increase percentage of adults who get recommended amount of physical activity				X		
Reduce the unintentional poisoning mortality rate				X		



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