NORTH CAROLINA MEDICAID

ANNUAL QUALITY REPORT 2021-2023

JUNE 2025

NC DEPARTMENT OF
HEALTH AND
HUMAN SERVICES
Division of Health Benefits

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EXECUTIVE SUMMARY

NC Medicaid is pleased to present the 2021-2023 Annual Quality Report, which assesses NC Medicaid's performance on select quality and survey measures related to the three aims and associated goals identified in the NC Medicaid Managed Care Quality Strategy from 2021 through 2023. This report also presents corresponding initiatives, led by NC Medicaid, that aim to improve quality of care and health outcomes for Medicaid beneficiaries. The Annual Quality Report is intended to inform local policymakers and relevant stakeholders of NC Medicaid's quality-related work and performance.

This report includes NC Medicaid's recent performance on select measures, both across years and compared to national averages, organized by the goals outlined in the Quality Strategy (see Figure 2). It should be noted that disruptions caused by the COVID-19 pandemic and the transition of many beneficiaries from NC Medicaid Direct to NC Medicaid Managed Care impact the 2021 results. These factors may have impacted both service delivery and data collection.

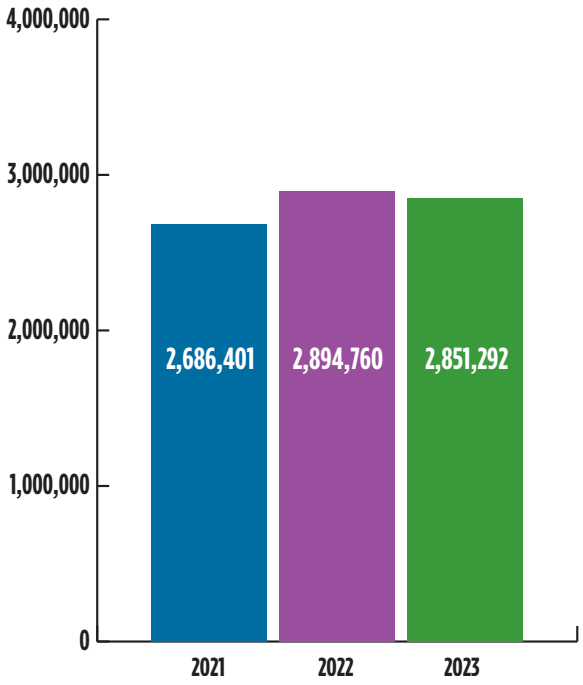
INTRODUCTION

About NC Medicaid

NC Medicaid provides critical health insurance coverage and support to over 3 million North Carolinians including low-income individuals and families, as well as pregnant women, medically fragile children,[1] people with severe mental illness, and those in adult care homes and nursing homes.[2] NC Medicaid helps pay for certain medical expenses including (but not limited to): doctor bills, hospital bills, prescriptions, nursing home care, and behavioral health care.

Medicaid is jointly financed by states and the federal government. In this partnership, the federal government sets requirements and standards, while individual state governments administer Medicaid programs and have flexibility in determining who is covered, what services are delivered, and how much providers are reimbursed.[3] As seen in Figure 1, North Carolina's Medicaid program is robust, serving a beneficiary population that grew between 2021 and 2023. Following Medicaid expansion in North Carolina in December of 2023, adults ages 19 to 64 who earn up to 138% of the Federal Poverty Level (FPL) became eligible to receive Medicaid coverage.[4] At the time of launch, over 270,000 North Carolinians automatically received full Medicaid benefits. Those automatically enrolled were only a fraction of the estimated 600,000 newly eligible individuals who became eligible to receive full benefits, highlighting the pressing need for ensuring quality health services for the populations NC Medicaid serves.[5]

Figure 1: NC Medicaid Year-End Total 2021-2023 Enrollment[6]



As seen in Figure 1, NC Medicaid's enrollment decreased from December 2022 to December 2023. During the COVID-19 pandemic, the federal government announced that Medicaid beneficiaries would have continuous (ongoing) Medicaid coverage, even if they were no longer eligible.[7] With the passage of the Omnibus Bill in December 2022, states were no longer required

[1] "Medically fragile children" refers to children with complex medical needs that require ongoing care.
[2] *About Us | NC Medicaid.* https://medicaid.ncdhhs.gov/about-us.
[3] *10 Things to Know About Medicaid | KFF.* https://www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid/.
[4] *Questions and Answers about Medicaid Expansion | NC Medicaid.* https://medicaid.ncdhhs.gov/questions-and-answers-about-medicaid-expansion.
[5] *North Carolina Celebrates More Than 500,000 Enrolled in Medicaid Expansion | NC Gov. Cooper.* https://governor.nc.gov/news/press-releases/2024/07/12/north-carolina-celebrates-more-500000-enrolled-medicaid-expansion.
[6] *Enrollment Dashboard | NC Medicaid.* https://medicaid.ncdhhs.gov/reports/dashboards/enrollment-dashboard.
[7] Baxley, Jaymie. "North Carolinians Are Losing Medicaid in Droves. Can the Purge Be Stopped?" *North Carolina Health News*, 25 Aug. 2023, http://www.northcarolinahealthnews.org/2023/08/25/medicaid-purge-continues-in-nc.

to maintain this continuous coverage which led NC Medicaid to begin the process of "Medicaid unwinding," or verifying the ongoing eligibility of more than 2.5 million enrollees in April 2023.[7]

During this time, estimates indicated that as many as 300,000 North Carolinians would no longer be enrolled in NC Medicaid. While a significant number of beneficiaries (over 270,000) were automatically enrolled to receive full benefits during the first month of Medicaid expansion (December 2023), it did not surpass the number of beneficiaries who were dis-enrolled during Medicaid unwinding, explaining the slight decrease in enrollment.[8]

A majority of NC Medicaid's beneficiaries are enrolled in NC Medicaid Managed Care (see page 80 to learn more about NC Medicaid Managed Care). In this health care delivery system, the state contracts with insurance companies, which are paid per beneficiary per month to cover their health care services.[9] This transition started in July of 2021 with the launch of Standard Plans. However, some beneficiary populations, including those eligible for Medicare and Medicaid and beneficiaries with certain behavioral health needs, remained in traditional Medicaid.[9, 10]

Table 1: NC Medicaid's Health Care Programs[6]

Type	Population Served	Description	% of Total NC Medicaid Beneficiary Population[11]
Standard Plans	Most Medicaid beneficiaries, including those with low to moderate intensity behavioral health needs.	Provides integrated physical health, pharmacy, care coordination, and basic behavioral health services. Launched on July 1, 2021.	71.25%
Behavioral Health and I/DD Services for NC Medicaid Direct	Beneficiaries with persistent and significant mental health needs, severe sub-stance use disorders (SUD)[12], intellectual and develop-mental disabilities (I/DDs) or traumatic brain injuries (TBIs).	NC Medicaid's fee-for-service program that provides care management for physical health services through Community Care of North Carolina (CCNC) and care coordination for behavioral health, I/DD, or TBI through six Local Management Entity-Managed Care Organizations (LME/MCOs). Offers Behavioral Health, I/DD, and TBI services that Standard Plans do not.	28.59%
Eastern Band of Cherokee Indians (EBCI) Tribal Option	Federally recognized tribal beneficiaries and others who qualify for services through Indian Health Service (IHS) that live in the following counties: Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Swain, Transylvania.	A primary care case management entity created by the Cherokee Indian Hospital Authority (CIHA) that provides care coordination and management of medical, behavioral health, pharmacy, and support services. Launched on July 1, 2021.	0.16%

[8] *Medicaid Expansion Launches in North Carolina, More Than 600,000 North Carolinians Newly Eligible with Nearly 300,000 Automatically Enrolled | NCDHHS.* https://www.ncdhhs.gov/news/press-releases/2023/12/01/medicaid-expansion-launches-north-carolina-more-600000-north-carolinians-newly-eligible-nearly

[9] "Medicaid Managed Care - NCHA." NCHA -, 16 July 2021, https://www.ncha.org/medicaid-managed-care/

[10] *Transformation | NC Medicaid.* https://medicaid.ncdhhs.gov/transformation

[11] Percent of NC Medicaid beneficiary population as of December 2023.

[12] SUD is a condition in which individuals have an uncontrolled use of substances (like tobacco, alcohol, or illicit drugs) that hinders their ability to engage in functions of daily living.

NC Medicaid's Quality Vision and Strategy

NC Medicaid is committed to advancing high-quality high-value care, improving population health outcomes, engaging and supporting beneficiaries and providers, reducing health disparities, and establishing a sustainable program with predictable costs. To achieve these goals, NC Medicaid implements a data-driven, outcome-focused quality improvement process using quality measures. NC Medicaid's performance on these quality measures is regularly shared through annual reports, fact sheets and publicly available dashboards to ensure transparency.

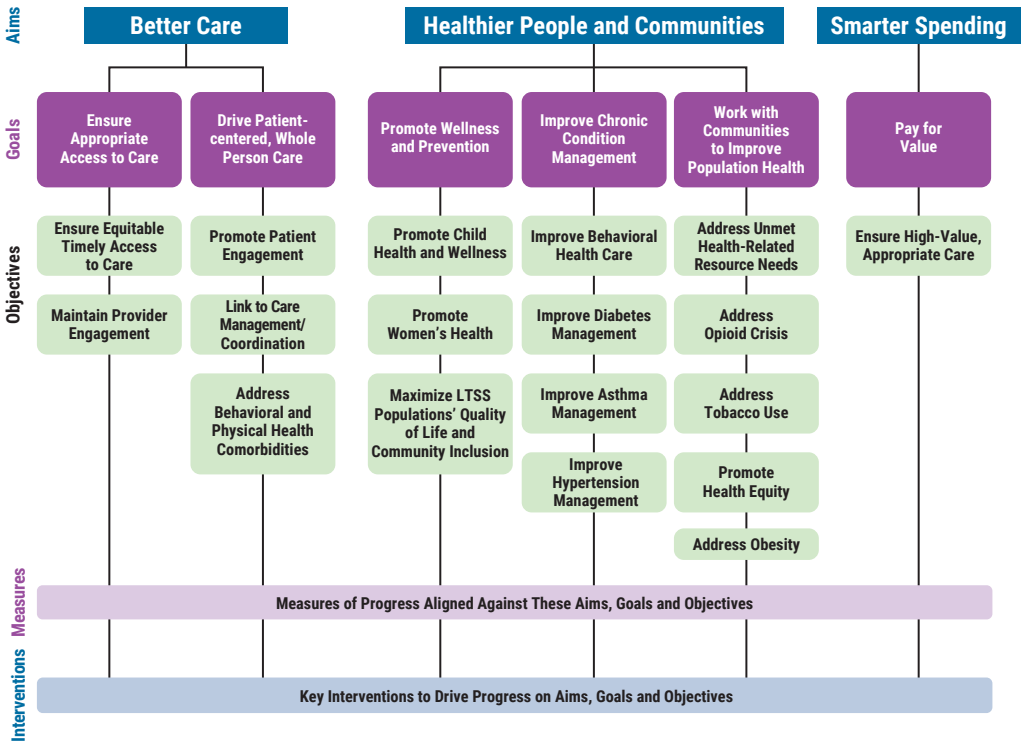
The Quality Management and Improvement webpage provides extensive information about NC Medicaid's efforts in the quality space, including NC Medicaid's Quality Strategy. The Quality Strategy, first published in 2018 and most recently updated in 2023, details NC Medicaid Managed Care's aims, goals, and objectives for quality management and improvement and details specific quality improvement initiatives that are priorities for the North Carolina Department of Health and Human Services (NCDHHS). The Quality Strategy includes a framework reflecting NCDHHS' commitment to three broad aims:[13]

1. Better Care Delivery,
2. Healthier People and Communities, and
3. Smarter Spending.

As depicted in Figure 2, each aim has corresponding goals and objectives that specify areas in which NC Medicaid targets quality improvement.

NC Medicaid's Quality Strategy goals are aligned with key NCDHHS initiatives including the Opioid Action Plan, the Early Childhood Action Plan, the Healthy Opportunities Pilots (HOP), the Perinatal Health Strategic Plan, and Healthy North Carolina 2030 to support a unified approach to improvement.

Figure 2: NC Medicaid's Quality Strategy[13]



[13] North Carolina Medicaid *Managed Care Quality Strategy* | *NCDHHS*. https://medicaid.ncdhhs.gov/nc-medicaid-2023-quality-strategy/download?attachment

METHODOLOGY

Data Sources

The quality and survey measures presented in this report are selected from national health care industry performance measures from a variety of sources. 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. The Child Core Set, a set of health care quality measures for children enrolled in Medicaid and the Children's Health Insurance Program (CHIP), and the Adult Core Set, a set of health care quality measures for adults enrolled in Medicaid, which are developed and maintained by the Center for Medicaid and Chip Services.
3. Measures of beneficiary experience with health care, collected through the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Survey established by the Agency for Healthcare Research and Quality (AHRQ). Survey respondents were selected using a stratified random sampling approach to ensure representative data across different demographic and geographic groups.
4. Measures of provider experience with delivering health care services under NC Medicaid Standard Plans, collected through NC Medicaid's Provider Experience Survey.
5. Measures of patient access to appointments with primary care physicians (PCPs), obstetrics and gynecology (OB-GYN) providers, and behavioral health providers that contract with Standard Plans, collected through NC Medicaid's Provider Access Call Study.
6. Prevention Quality Indicators (PQIs) and Pediatric Quality Indicators (PDIs) developed and maintained by AHRQ, the Centers for Disease Control and Prevention (CDC), Pharmacy Quality Alliance (PQA), and other state public health sources.
7. HEDIS-like measures, often developed by or in collaboration with NC Medicaid, use HEDIS specifications but may have a few components that were altered to better align with the specific measurement needs of NC Medicaid.

Including a combination of quality measures and measures from the CAHPS survey and the Provider Experience Survey allows for a more well-rounded and comprehensive understanding of the quality of services at NC Medicaid. Using this method of analysis, NC Medicaid hopes to better understand the quality of care provided to beneficiaries through the eyes of the beneficiary, the provider, and through administrative data.

Measures in this report are organized based on the Quality Strategy goal that best aligns with the purpose of the measure. Each measure is only presented in the report once, under the goal deemed most relevant, though justification could be made for them to fit under other goals. To view a full list of the quality measures used in this report, see Appendix B. To view a full list of the survey measures used in this report, see Appendix C.

Quality Measurement Specifications

One document that is crucial to better understand NC Medicaid's quality measures and quality measure sets is the NC Medicaid Managed Care Quality Measurement Technical Specifications Manual (the Tech Specs). The Tech Specs include information on NC Medicaid's Quality Strategy, the different required stratification elements that NC Medicaid applies to its quality measures, quality measure sets, which entities are responsible for reporting measures, and detailed descriptions of each quality measure. This document is foundational to NC Medicaid's quality measurement work and should serve as a reference for readers who want to learn more about specific measures.[14]

It is important to note that survey measures and quality measures are calculated differently. For the quality measures in this report, a majority are reported as rates calculated using the administrative method, which leverages claims and encounter data to compute outcomes consistently across the population. Some quality measures are plan-reported, meaning the Health Plans share the member-level measure results with NC Medicaid annually. The remaining quality measures are calculated by NC Medicaid or its partners, including its external quality review organization (EQRO) Health Services Advisory Group (HSAG). These measures are often referred to as "Department calculated."

NC Medicaid beneficiaries with limited benefits[15] were excluded from quality measurement data for this analysis. NC Medicaid only has access to claims and encounters data for the services that it directly covers. Beneficiaries with limited benefits often receive services covered under a different plan or payer, meaning NC Medicaid does not have access to these data. Because of this, limited benefit members cannot be compared to beneficiaries with full access to all Medicaid services. While limited benefit beneficiaries were excluded from a majority of the quality measures calculated in this report, limited benefit beneficiaries were not excluded from PDI and PQI quality measurement data.[16] Measures in which limited benefit beneficiaries were not excluded are marked with a footnote.

Where available, NCQA's national average data for all Medicaid Health Maintenance Organizations (HMOs) was compared to NC Medicaid's quality measure performance. Limited benefit members were not excluded from Medicaid HMO National Average data, so readers should use caution when comparing the NC Medicaid quality measure performance outlined in this report to national trends.

Finally, readers should be aware of two events that may have impacted 2023 data for certain quality measures. In 2023, NC Medicaid included dual eligibles[17] in its quality measurement data for non-HEDIS measures. This resulted in significant changes in numerator and denominator size for some non-HEDIS measures, but did not impact NC Medicaid results for HEDIS quality measures. Additionally, the launch of Medicaid expansion in December of 2023 resulted in certain limited benefit beneficiaries being enrolled to receive full benefits for the last month of 2023, adding them to the eligible population for quality measures. Because of these changes, readers should be cautious when reading and interpreting 2023 quality measurement data. To learn more about the impact of Medicaid expansion on the number of Medicaid beneficiaries, please refer to NC Medicaid's Enrollment Dashboard.

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[14] *North Carolina Medicaid Managed Care Quality Measurement Technical Specifications Manual | NCDHHS*. https://medicaid.ncdhhs.gov/medicaid-managed-care-quality-measurement-technical-specifications-manual/download?attachment

[15] Limited benefit members include individuals in the family planning, partial dual eligible, emergency services only, incarcerated, presumptive eligibility and COVID-19 populations. Learn more about these populations in Appendix A.

[16] An External Quality Review Organization (EQRO) provides NC Medicaid's PDI and PQI data in a specific format that cannot be manipulated.

[17] Dual eligibles are beneficiaries who receive services through Medicaid and Medicare.

Survey Measurement Specifications

Unlike quality measures, a majority of survey measures assess the percentage or number of positive responses provided by respondents. The rating scale used for each measure differs; therefore, the types of surveys and ratings scales presented in this report have been separated into three distinct sections.

Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey

The Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey is a beneficiary experience survey that serves as a national standard for measuring and reporting respondents' experiences with their health care.[18] NC Medicaid administers the CAHPS survey to adult and child Medicaid beneficiaries to understand their Medicaid experience and inform improvements in care. The CAHPS survey items included in this report were selected because they align with NC Medicaid's Quality Strategy. Navigate to Appendix F to view the full CAHPS reports.

CAHPS measures calculate and present the percentage of positive responses for each measure. Even though they are from the same survey source, there are different types of CAHPS survey measures that each use different ratings scales. This means that a "positive" score is defined differently for each measure type. Table 2 presents the different types of CAHPS measures and their corresponding scoring methodology.[18]

Table 2: CAHPS Survey Measure Scoring Calculations[18]

Measure Type	Positive Scores
Global Rating	"8", "9," or "10" on a scale of 0-10
Composite Score	"Always" or "Usually"
Individual Item	"Always" or "Usually" and "Yes"
Effectiveness of Care Measures (Adult Smoking and Tobacco Measures)	"Always", "Usually" or "Sometimes"

While global ratings, individual item, and effectiveness of care measures are a simple single rating, composite measures combine positive ratings across multiple related survey questions. For example, the "Getting Needed Care" measure is a composite of survey items, "In the last 6 months, how often was it easy to get the care, tests, or treatment you needed?" and "In the last 6 months, how often did you get an appointment with a specialist as soon as you needed it?" The responses to these questions are calculated individually and then combined to create the composite score for the Getting Needed Care measure.[18]

This report presents CAHPS data for both adult and child respondents from calendar years (CYs) 2022 and 2023, and the data included are representative of the previous six months of care from the time at which the respondent completed the survey. Data for child respondents, or beneficiaries under the age of 18, are provided by their parents/caretakers.[18]

Finally, where available, NC Medicaid's survey measure performance was compared to NCQA national average data. While numerical CAHPS national average rates cannot be disclosed, figures include a visual display of national performance.

[18] *2023 Adult and Child Medicaid CAHPS Aggregate Report | NCDHHS*. https://medicaid.ncdhhs.gov/2023-cahps-survey-full-report/download?attachment.

Network Adequacy Validation Provider Access Call Study

The Network Adequacy Validation (NAV) Provider Access Call Study evaluates the availability of appointments with primary care providers (PCPs), OB-GYN providers, and behavioral health providers that contract with Standard Plans. This study primarily sought to evaluate the adequacy of the Standard Plan network of providers by way of determining average appointment availability among contracted providers.

NC Medicaid contracted with an external vendor to conduct the study. After collecting provider information from the Standard Plans, the vendor's research team initiated secret and revealed calls to the sample of providers. Callers inquired about current and/or new patient appointment availability for routine care and accommodations that promote health equity, including interpreter access, physical disability accommodations, and mental health accommodations. Using this data, the research team calculated success measures to evaluate each Standard Plan's network adequacy, including the average wait time for routine appointments for both new and current members.

Provider Experience Survey

Administered annually, the North Carolina PCP & OB-GYN Provider Experience Survey evaluates the influence of NC Medicaid Transformation (i.e., the transition to Managed Care) on primary care and OB-GYN providers that contract with Standard Plans.[19] It is administered across all North Carolina independent primary care practices, medical groups, and health care systems that provide primary care or OB-GYN care. The survey's findings focus on providers' experience with contracting/negotiating with health plans, experience with administrative and clinical factors, and overall perceived effects of health plans on care delivery.[19]

A proprietary commercial database containing provider and health care organization characteristics was used to identify the provider sample. These data were matched to the NC Medicaid provider file and claims data to increase confidence in captured organizations serving NC Medicaid patients. All potential respondents were given the opportunity to respond to the survey online or by mail.[19] Survey results were presented on 13 separate domains of health plan experience, with seven domains representing clinical categories and six representing administrative categories. Responses were recorded using a ratings scale of 1 (poor) to 4 (excellent), and performance on each survey item was reported as an average of these scores.[19] Please refer to Appendix F to view the full NC Medicaid Provider Experience Survey.

How to Read the Performance Rates and Charts in this Report

This report contains charts depicting NC Medicaid's performance on select measures of care, quality, and utilization for CYs 2021, 2022 and 2023. For quality measures, NC Medicaid's performance is compared to Medicaid HMO National Averages. Throughout the report, quality measure figures are shown in blue and survey measure figures are shown in green. Figures 3 and 4 explain the elements of each chart and how they are used to interpret NC Medicaid's performance.

[19] *North Carolina Medicaid 2022 Provider Experience Survey| NCDHHS.* https://medicaid.ncdhhs.gov/medicaid-transformation-provider-experience-survey-2022-full-report/download?attachment

Figure 3: Example Quality Measure Figure

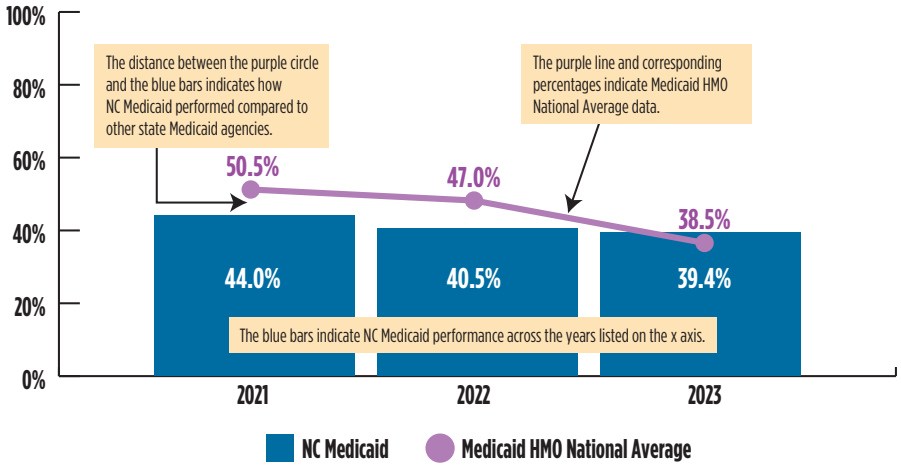
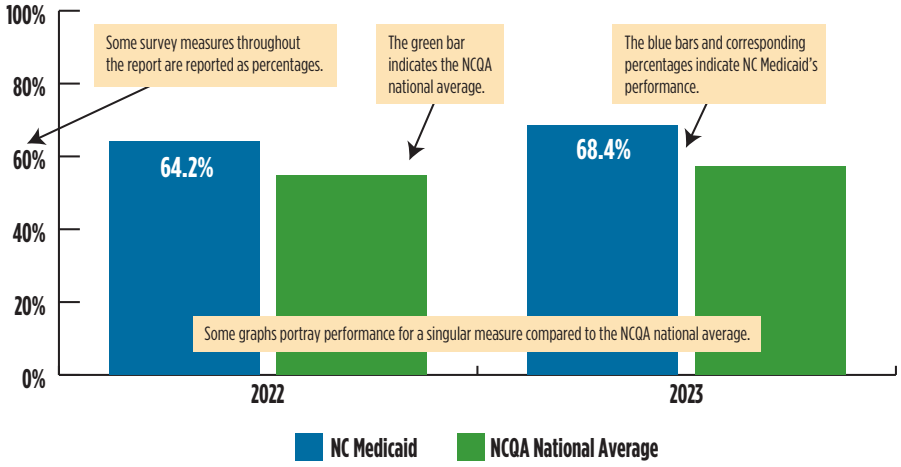
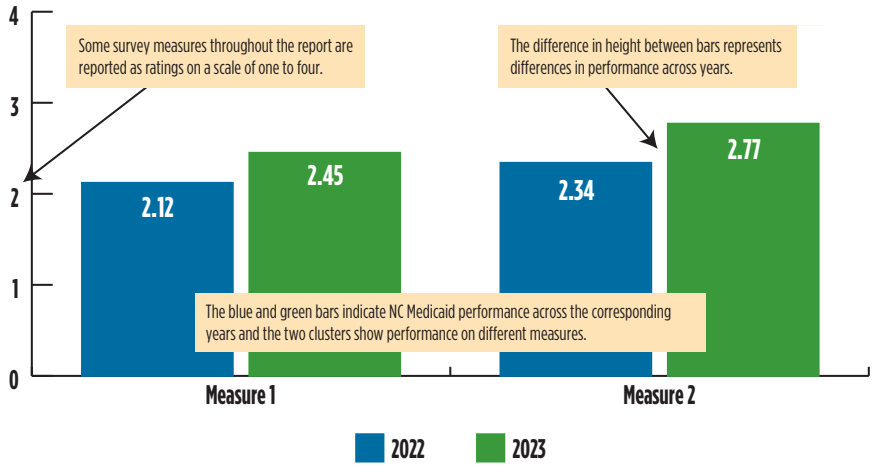


Figure 4: Example Survey Measure Figure





Caveats and Limitations

Data Sourcing

Not all quality measures included in this report have the same data sources. Historically, NC Medicaid quality measure results are derived primarily from claims data submitted by providers and health plans. However, clinical data is needed to calculate key health outcome metrics. NC Medicaid is working with the North Carolina Health Information Exchange Authority (NC HIEA) to develop the capabilities to calculate a select set of Medicaid's high-priority quality measures combining both administrative data (i.e., claims and encounters) with clinical information from providers' electronic health records (EHRs) to allow for more comprehensive results. For example, the outcome-focused measure, Controlling High Blood Pressure (CBP), requires clinical data in the form of hemoglobin A1c lab values. While substantial progress has been made in collecting more complete data, this measure may not be an accurate representation of overall performance.

Readers should be cautious when interpreting results for quality measures that rely on clinical data, such as Controlling High Blood Pressure (CBP), Screening for Depression and Follow-Up (CDF), and Hemoglobin A1c Control for Patients with Diabetes (HBD).

Performance Changes

Fluctuation in quality measurement rates is normal and expected. However, some of the quality measures included in this report experience more substantial rate changes from one calendar year to another. While some of these rate changes may be attributed to changes to a measure's specifications and/or outside factors like the COVID-19 pandemic, NC Medicaid does not always know what is driving these changes in performance. NC Medicaid will continue to monitor factors that might influence quality measure rates and performance and will provide additional context as it becomes available in future iterations of this report.

CAHPS

NCQA Quality Compass data for the Medicaid population were used for comparative purposes. The NCQA Quality Compass data used for comparison do not include managed care plan Medicaid CAHPS data from all 50 states. The states and plans that submitted data to NCQA Quality Compass may not be comparable to the plans and populations evaluated for the NC CAHPS survey. In addition, data collected for the national CAHPS benchmarks do not align with data collected from survey administration for the NC CAHPS survey: they were collected during different periods within the same year. Differences in the populations included in the Quality Compass benchmarks and the survey administration timeline may impact comparability. Caution should be exercised when interpreting the results of the comparisons analysis.

Data collectors experienced incomplete or incorrect contact information, which may have resulted in lower-than-expected response rates. The inability to contact members could also result in non-response bias. Readers should consider that potential non-response bias may exist when interpreting CAHPS results.

Finally, respondent self-reported demographics may not represent the general NC Medicaid population. The 2022 and 2023 CAHPS survey administrations saw demographic differences between the respondents and the overall NC Medicaid population. Demographic differences included differences in age, race, ethnicity, gender and geography. Caution should be exercised when considering CAHPS results with these demographic differences in mind.

Provider Access Call Study

This survey collected data specifically for providers that contracted with Standard Plans, not all of NC Medicaid.

Data from the Provider Access Call Study were collected in two ways: Secret and Revealed calls. Secret calls were conducted with PCPs, OB/GYNs, and new patients, while Revealed calls were conducted with Behavioral Health Providers, as well as for current patients. For Revealed calls, callers informed provider offices that they were calling on behalf of NC Medicaid. This methodology may allow for bias between responses for secret versus revealed calls; new patient wait times may be more accurate than current patient wait times, since provider offices were aware that callers inquiring about current patient wait times were representing NC Medicaid. Results should be interpreted with caution.

Provider Experience Survey

This survey collected data specifically for providers that contracted with Standard Plans, not all of NC Medicaid.

RESULTS

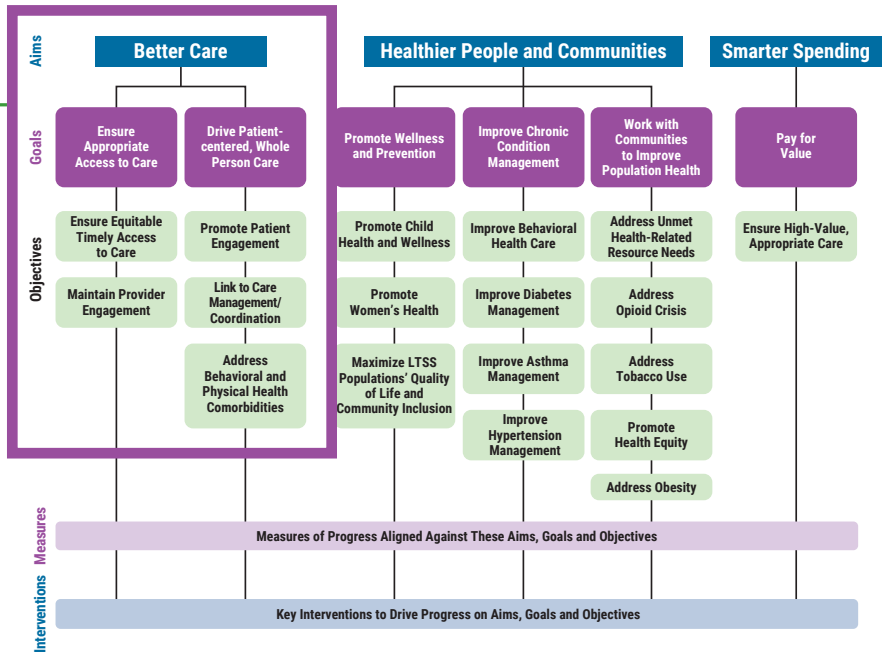
This section demonstrates North Carolina's performance on various quality and survey measures from 2021 through 2023. These measures have been aligned with the objectives associated with each of the Quality Strategy's central aims and subsequent goals. The report provides a narrative with relevant context for each measure, with an accompanying visual displaying NC Medicaid's performance. This report also highlights different NC Medicaid initiatives and programs aimed at improving beneficiary health outcomes across the different measures. These highlights are featured in light blue boxes throughout the report.

Most of the tables and figures portraying HEDIS quality measure data will also compare NC Medicaid performance to NCQA Medicaid HMO national average data. While comparisons to national averages 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 inconsistencies in billing documentation. As a result, NC Medicaid used relative improvement from the previous calendar year's performance instead of national averages when setting targets for calendar years 2021, 2022 and 2023.[13] See the NC Medicaid Quality Measurement Technical Specifications Manual for more details on NC Medicaid's benchmarking approach.

For some measures, data for certain years may not be available. This can be due to changes in the way the data were collected, the technical specifications of the measure, or if the measure was recently added to NC Medicaid's list of reported measures. Events like the COVID-19 pandemic may also impact availability of data for some of the measures in this report. A footnote has been included for measures where historic data cannot be provided, or the measure specifications have changed over time.

Aim 1: Better Care Delivery

The first aim of NC Medicaid's Quality Strategy is to provide better care delivery. While this aim is broad and encompasses a variety of factors related to how care is delivered, "better care delivery" focuses primarily on ensuring appropriate access to care and maintaining provider engagement. This aim includes two goals, both of which are outlined in the following section with their corresponding objectives.[13]



GOAL 1: ENSURE APPROPRIATE ACCESS TO CARE

Access to care is essential as it ensures that NC Medicaid beneficiaries have a clear point of entry for preventive services, screening, treatment, and follow-up care. Factors including a beneficiary's access to transportation, socioeconomic status, geographic location, and health insurance coverage can all impact a beneficiary's access to care, as well as health outcomes and disparities.[20] It is crucial that NC Medicaid utilizes metrics, like the survey measures outlined in the following sections, to assess beneficiaries' access to health care services with these factors in mind.

Ensure Timely Access

In addition to having adequate access to care, beneficiaries should have timely access to the health services they need. Timely access to care assesses a health system's capacity to provide necessary care in a timely manner after a need is identified. For many conditions, timely delivery of care can reduce one's risk of morbidity and mortality.[21a] While many of NC Medicaid's measures assess timely access to different health services, this report highlights two CAHPS survey measures that ask beneficiaries about the timeliness of their experiences trying to access necessary care.

GETTING NEEDED CARE AND GETTING CARE QUICKLY

To better understand if beneficiaries feel that they are getting the care that they need in a timely manner, NC Medicaid uses results from the *Getting Needed Care and Getting Care Quickly* CAHPS survey measures. Table 3 provides more information about these measures and the questions that beneficiaries are asked. For this measure, respondents could select "never," "sometimes," "usually," or "always" to answer. Responses of "usually" or "always" are considered positive ratings.[18]

Table 3: Getting Needed Care and Getting Care Quickly CAHPS Survey Measures[18]

Measure Name	Description
Getting Needed Care	This measure is a composite of two questions in which respondents are asked to assess how often (never, sometimes, usually or always) it was easy to get needed care: 1) In the last 6 months, how often was it easy to get the care, tests, or treatment you/your child needed? 2) In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed?
Getting Care Quickly	This measure is a composite of two questions in which respondents are asked to assess how often (never, sometimes, usually or always) it was easy to get care quickly: 1) In the last 6 months, when you/your child needed care right away, how often did you get care as soon as you needed? 2) In the last 6 months, how often did you/your child get an appointment for a check-up or routine care at a doctor's office or clinic as soon as you needed?

[20] *Social Determinants of Health - Healthy People 2030 | Health.Gov.* https://health.gov/healthypeople/priority-areas/social-determinants-health.

[21a] *Elements of Access to Health Care: Timeliness | Agency for Healthcare Research and Quality.* https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/access/elements3.html.

Figure 5: Adult CAHPS Respondents Who Usually or Always Received the Care They Needed, CY2022-2023

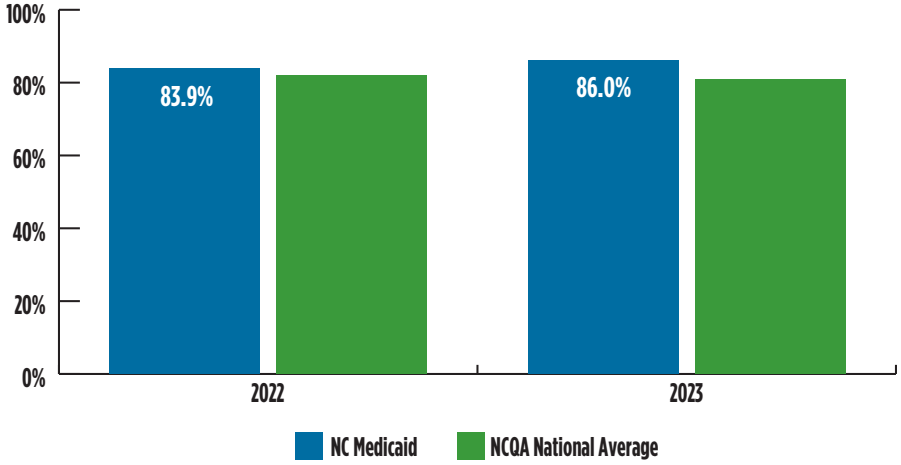
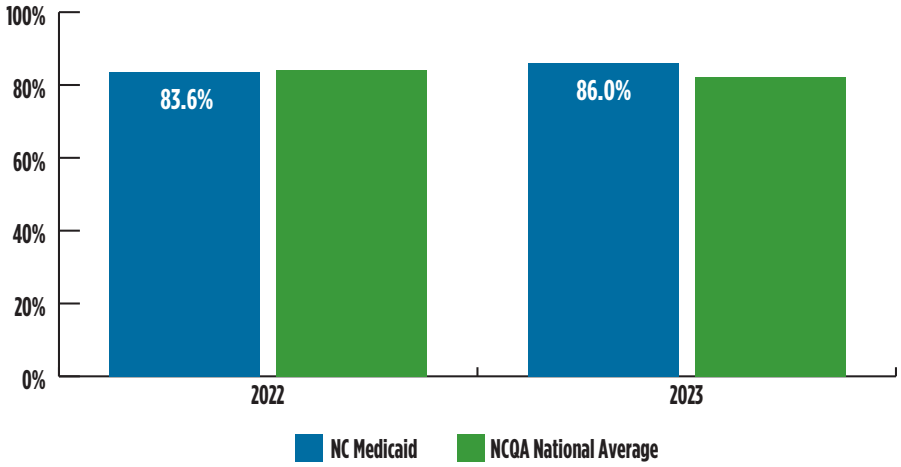


Figure 6: Child CAHPS Respondents Whose Child Usually or Always Received the Care They Needed, CY2022-2023



As seen in Figures 5 and 6, NC Medicaid's adult and child respondents reported similar rates of positive experiences with getting the care that they/their child needed. Additionally, performance was in line with or surpassed national performance for both years.

Figure 7: Adult CAHPS Respondents Who Usually or Always Got Care Quickly, CY2022-2023

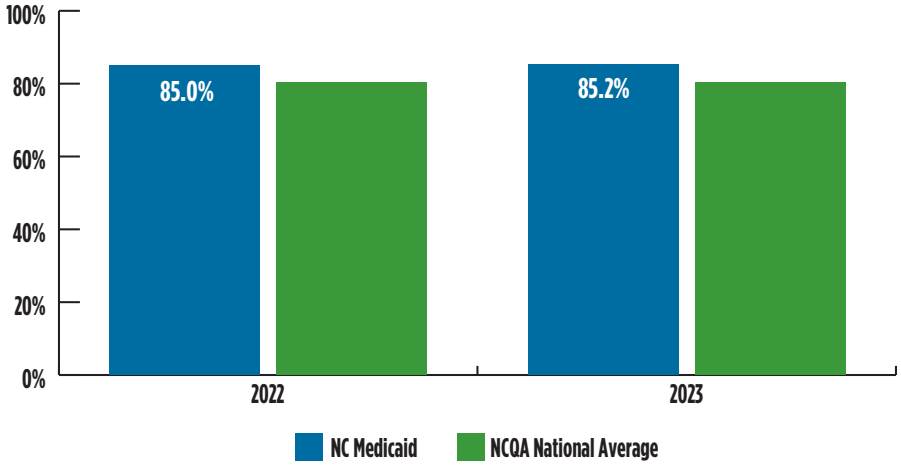
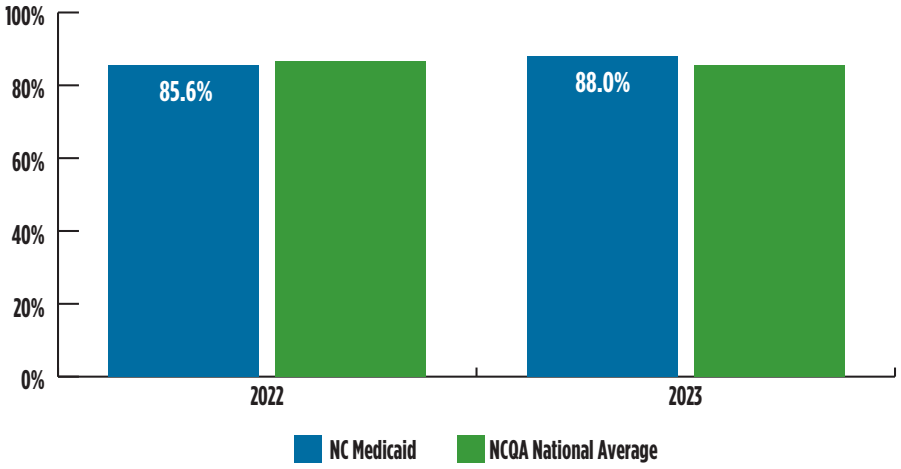


Figure 8: Child CAHPS Respondents Who Reported That Their Child Usually or Always Got Care Quickly, CY2022-2023



Similarly to the *Getting Needed Care* CAHPS measure, adult and child respondents reported positive experiences with getting the care they needed as soon as they needed it. While positive ratings trended upwards from 2022 to 2023 among both adult and child respondents, only the adult positive ratings surpassed national averages.

SURVEY INSIGHTS: PROVIDER ACCESS CALL STUDY

The Network Adequacy Validation Provider Access Call study evaluates the availability of appointments with PCPs, OB-GYN providers, and behavioral health providers that contract with Standard Plans. The first year of the study, completed in July 2022 through June 2023 (referred to hereinafter as "Year 1"), provided insights into accessibility of reaching providers that accept Medicaid, provider appointment availability, provider acceptance of new patients and accommodations provided for beneficiaries with physical or mental disabilities.

Results from the Year 1 call study showed that the new patient acceptance rate was 76% and current patients had shorter wait times than new patients for routine appointments across all provider types. When asked about accommodations, most locations surveyed spoke English as their primary language, and most (85%) reported offering interpreter services. Nearly all (98%) of respondents reported having physical disability accommodations, with the most common accommodations mentioned being equipment and infrastructure. Eighty-one percent of respondents reported that they offered mental disability accommodations, the most common accommodation cited being allowing support companions to attend appointments with patients.

Looking Ahead!

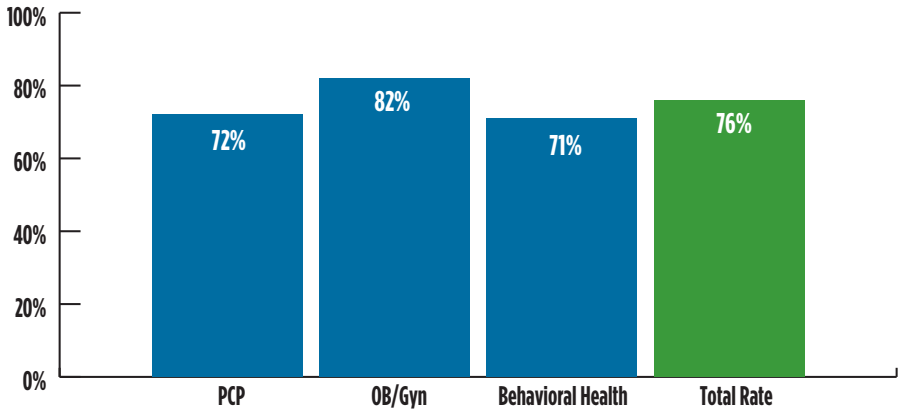
As the Standard Plans have contractual patient access and appointment wait time requirements with the State, NC Medicaid revised the Provider Access Call Study methodology to align methods of data collection and measurement exactly with established contract requirements, to be implemented starting in Year 2 of the activity. This will allow the State to more accurately monitor appointment wait times by Plan by provider type and appointment type to hold plans accountable to their contractual requirements.

This study primarily seeks to evaluate the adequacy of the Standard Plan network of providers by way of determining appointment availability among contracted providers. Understanding appointment availability will help to identify access-related issues in order to focus quality improvement efforts to ensure beneficiaries receive timely and appropriate access to care.

PATIENT ACCEPTANCE RATES AND AVERAGE APPOINTMENT WAIT TIMES

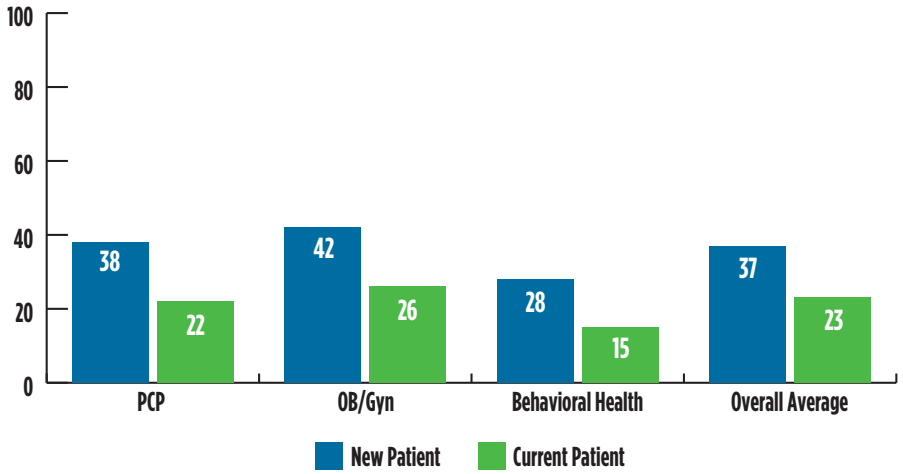
New patient acceptance rates and patient wait times are two indicators of whether patients are receiving appropriate and timely access to care. The following two measures from the Provider Access Call Study provide insights into the limitations beneficiaries may face when trying to access care.

Figure 9: Provider Access Call Study Standard Plan Average New Patient Acceptance Rates by Provider Type, July 2022-June 2023



For beneficiaries to access necessary care, providers must be accepting new patients. As seen in Figure 9, OB-GYN's had the highest new patient acceptance rate followed by primary care providers and then behavioral health providers. Overall, roughly 76% of all standard plan providers contacted during the study were accepting new patients.

Figure 10: Provider Access Call Study Standard Plan Average Patient Routine Care Appointment Wait Times (in Days) by Provider Type, July 2022-June 2023



The Provider Access Call Study used revealed calls when collecting data about wait times for current patients and secret calls when collecting data for new patients. This methodology allows for a substantial amount of bias between responses for secret versus revealed calls. Because of this, new patient wait times may be more accurate than current patient wait times and results should be interpreted with caution.

In addition to patient acceptance rates, wait times for both new and current patients can limit a beneficiary's access to timely care. As seen in Figure 10, the average Standard Plan wait time for a routine appointment was higher among new patients, which may indicate that current patients were

able to see their provider more quickly than new patients. As a reminder, the use of revealed calls may have influenced current patient wait times.

The 2022-2023 Provider Access Call Study set an ideal benchmark of 30 days for the time between scheduling and service delivery. Future iterations of this study will utilize a complex benchmarking methodology that aligns with the contractual network adequacy requirements of the Standard Plans. This new benchmarking methodology adjusts for the required appointment availability based on both the provider type (i.e., PCP, Ob-Gyn, Behavioral Health, and other Specialists) and the appointment type (e.g., routine care, urgent care, emergency care, etc.).

A 2023 study published by ECG Management Consultants, a leading healthcare consulting firm in the United States, allows for further comparison between NC Medicaid's new patient wait times and broader national findings.[21b] This independent study conducted secret calls in 23 metropolitan areas across the United States, inquiring about new patient appointment availability in 11 different medical specialties.[21b] Similar to NC Medicaid's findings from the Provider Access Call Study, the study published by ECG Management Consultants found that family medicine and OB-GYN were the two specialties with the longest new patient wait times. More specifically, the average new patient wait time for an appointment with a family medicine practitioner (PCP) was 29 days while the average new patient wait time for an OB-GYN was 37 days, both of which are lower than NC Medicaid's new patient wait times for these specialties.[21b] While this study does provide more context, it is important to note that the group of metropolitan-based practices surveyed for this study is not entirely representative of NC Medicaid's provider population.

Maintain Provider Engagement

One of the primary ways that NC Medicaid can continuously improve care delivery for its beneficiaries is by promoting successful provider engagement. Compared to the national average of 74%, North Carolina has historically had a high rate (85.7%) of providers who accept Medicaid beneficiaries as new patients.[22] While rates of Medicaid acceptance vary based on geographic location and provider type, this high rate of provider engagement helps ensure that NC Medicaid beneficiaries have access to a wide range of medical providers and services and can receive care in a timely manner. Provider engagement is complex and includes factors such as the number of providers that contract with NC Medicaid, if providers are using the billing and documenting practices outlined by NC Medicaid, how well providers are comm unicating with their patients, and provider engagement in care management.

Providers who are engaged in health care and care management services provided to their patients are more likely to provide higher quality care, identifying health challenges before they become serious and improving health outcomes.[23] While there are currently no quality measures directly related to provider engagement, NC Medicaid continues to explore ways to measure provider engagement.

While there are no quality measures, this section highlights two ways that NC Medicaid assesses provider experience and engagement with their patients; survey data from the Provider Experience Survey and Provider Access Call study and the Health information Exchange (HIE), a standardized electronic system that providers use to share patient information.[24]

[21b] ECG Management Consultants. The Waiting Game: New-Patient Appointment Access for US Physicians. ECG Management Consultants, 2024, https://www.ecgmc.com/insights/whitepaper/the-waiting-game-new-patient-appointment-access-for-us-physicians.

[22] Physician Acceptance of New Medicaid Patients: Findings from the National Electronic Health Records Survey. *MACPAC, 2021*. https://www.macpac.gov/wp-content/uploads/2021/06/Physician-Acceptance-of-New-Medicaid-Patients-Findings-from-the-National-Electronic-Health-Records-Survey.pdf

[23] "QUALITY IN HEALTHCARE." *2019 National Healthcare Quality and Disparities Report [Internet]*, Agency for Healthcare Research and Quality (US), 2020. https://www.ncbi.nlm.nih.gov/books/NBK579353/.

SURVEY INSIGHTS: PROVIDER EXPERIENCE SURVEY (PCP AND OB-GYN)

Administered annually, the North Carolina PCP & OB-GYN Provider Experience Survey evaluates the influence of NC Medicaid Transformation (i.e., the transition to Managed Care) on primary care and OB-GYN providers that contract with Standard Plans. The survey results highlight challenges and successes providers have had with Standard Plans under NC Medicaid Managed Care. Compared with the first year of managed care, Standard Plans performed worse in administrative domains. Standard Plans were rated worse on timeliness to answer questions and/or resolve problems, customer/member support services for patients, access to medical specialists for Medicaid patients, and access to needed drugs for Medicaid patients (formulary). Providers rated Standard Plans better on support for addressing social determinants of health. When asked to elaborate, the most common write-in responses were related to issues in communication, payment, and administrative burden or customer service, with a particular burden on small practices. Additionally, practices that provided OB-GYN care rated their experience with Standard Plans significantly worse than provider organizations that did not provide OB-GYN care, both on administrative and clinical domains.

Providers reported that their experience working with Standard Plans worsened from 2022 to 2023 on certain measures, as Standard Plans received lower ratings on timeliness to answer questions and/or resolve problems and member support for patients' measures. Providers' ratings of timeliness of claims processing and addressing social determinants of health measures did not change between years.

Key Takeaways from the Qualitative/Open-Ended Response Section of the Provider Experience Survey

Patient Attribution: Many provider organizations report incorrect patient attribution and the process to correct attribution lists is an administrative burden. Some organizations have expressed that they want the ability to correct attribution themselves, instead of going through Standard Plans. Ultimately, issues with attribution are impacting providers' ability to process claims and to report on required quality measures.

Claims denials and processes for resolution: Many provider organizations report overall dissatisfaction with the claims process. A commonly reported issue is resolving denied claims. Existing issues with timeliness of resolving problems with Standard Plans is making it difficult to reprocess claims.

Administrative burden of working with many Standard Plans: Provider organizations cited issues with different billing processes, incentive programs, and quality measures across Standard Plans they contract with.

These trends were not a result of specific plans performing better or worse, as Standard Plans' performance for most domains did not differ substantially across plans. This suggests that most improvement efforts can be applied broadly, without targeting individual plans.

Looking Ahead!

As such, recommendations for improvement include standardizing or streamlining procedures to reduce provider administrative burden, using contracting or payment mechanisms to encourage improvement, and using state policymaking levers to improve the context in which plans work.

[24] *About Us | North Carolina Health Information Exchange Authority (NC HIEA)*. https://hiea.nc.gov/about-us.

GOAL 2: DRIVE PATIENT-CENTERED, WHOLE-PERSON CARE[13]

The second goal of NC Medicaid's Quality Strategy is to drive patient-centered, whole person care. The objectives related to this goal are to ensure that beneficiaries are engaged in their health care, have positive experiences with their managed care plan, and have access to more tailored and holistic services.

To better understand patient engagement, NC Medicaid uses a variety of survey instruments. The following objectives feature survey measures from the CAHPS survey, outlining patient experience across the three objectives.[18]

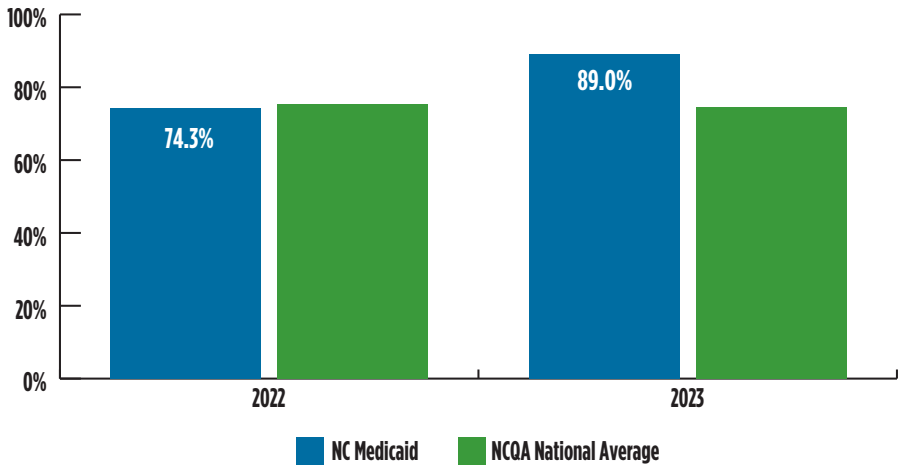
Promote Patient Engagement

Multiple studies have shown that increased patient engagement results in increased quality of care and improved health outcomes.[25] This is because patients who are engaged in their own care are more likely to adhere to clinical protocols and seek medical care when they need it.[26] Due to this, patient engagement decreases health care costs and increases positive experiences with their providers and overall healthcare.[26] In an effort to assess patient engagement among its beneficiaries, NC Medicaid uses the following survey measures:

RATING OF ALL HEALTH CARE

An important part of improving and maintaining patient engagement is ensuring that patients feel they are receiving high quality, valuable health care. To get a better understanding of beneficiaries' perception of their care, NC Medicaid uses the *Rating of All Health Care* CAHPS survey measure. This measure asks a respondent to rate all their health care on a scale of 0 to 10, with 0 being the "worst health care possible" and 10 being the "best health care possible." For this measure, ratings of 8, 9, or 10 are considered positive.[18]

Figure 11: Adult CAHPS Respondents Who Rated Their Health Care Positively, CY2022-2023

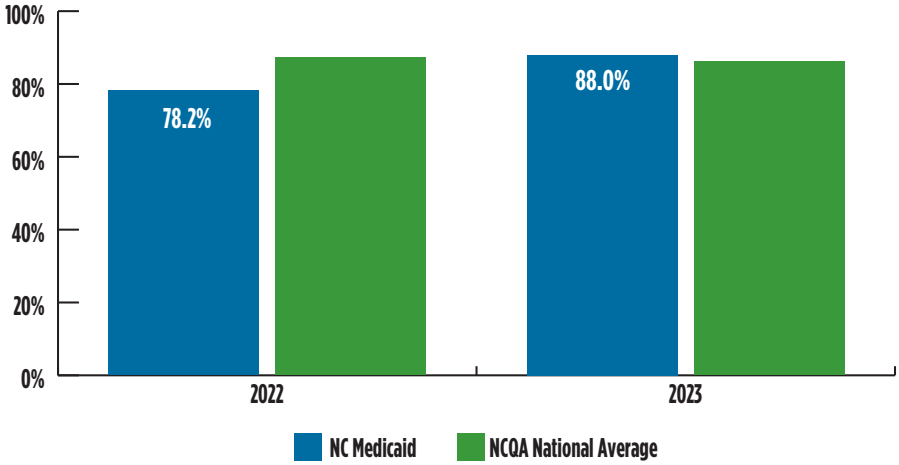


[25] Marzban, Sima, et al. "Impact of Patient Engagement on Healthcare Quality: A Scoping Review." *Journal of Patient Experience*, vol. 9, Sept. 2022, p. 23743735221125439. *PubMed Central*, https://journals.sagepub.com/doi/10.1177/23743735221125439.

[26] *Care Coordination | Centers for Medicare & Medicaid Services (CMS).* https://www.cms.gov/priorities/innovation/key-concepts/care-coordination.

As seen in Figures 11 and 12, the percentage of adult beneficiaries and parents/caretakers of child beneficiaries who rated their/their child's health care positively increased from 2022 to 2023. These increases in positive experiences resulted in NC Medicaid performing above the national average for both beneficiary populations in 2023. These findings may indicate largely positive experiences with care received through NC Medicaid.

Figure 12: Child CAHPS Respondents Who Rated Their Child's Health Care Positively, CY2022-2023



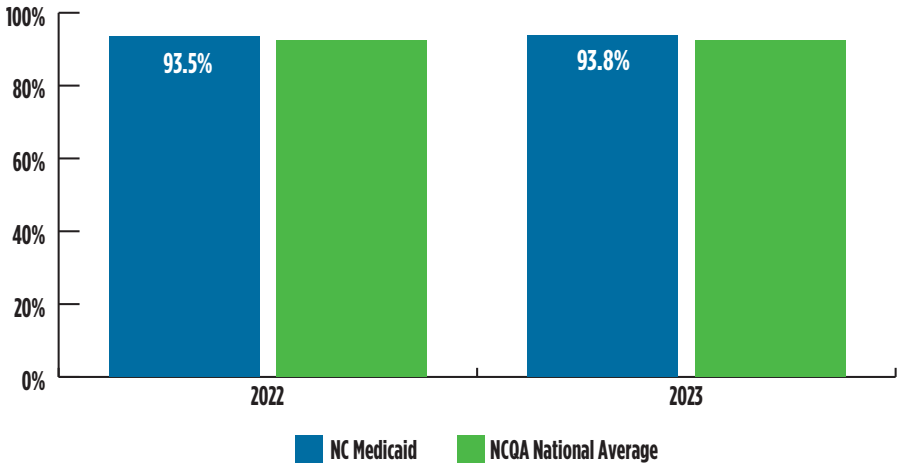
RATING OF PROVIDER COMMUNICATION

To better understand patients' perceptions of their provider's communication, NC Medicaid uses the CAHPS survey measure *How Well Doctors Communicate*. This measure is a composite of four questions that assess how often (never, sometimes, usually, or always) the respondent's personal doctor communicated well with them:[18]

1. In the last 6 months, how often did your personal doctor explain things in a way that was easy to understand?
2. In the last 6 months, how often did your personal doctor listen carefully to you?
3. In the last 6 months, how often did your personal doctor show respect for what you had to say?
4. In the last 6 months, how often did your personal doctor spend enough time with you?

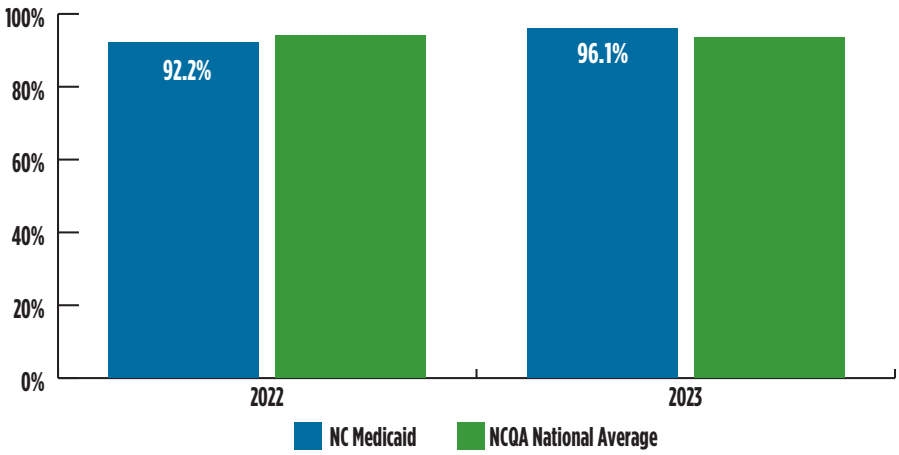
For this measure, respondents could select "never," "sometimes," "usually," or "always" to answer. Responses of "usually" or "always" are considered positive.

Figure 13: Adult CAHPS Respondents Whose Personal Doctor Usually or Always Communicated Well With Them, CY2022-2023



As seen in Figures 13 and 14, over 90% of NC Medicaid adult and child respondents have reported positive ratings of their provider's communication. All rates are above national averages except for the 2022 national average for child respondents. NC Medicaid will continue to monitor experience with provider communication with the expectation of comparable results in future years.

Figure 14: Child CAHPS Respondents Whose Child's Personal Doctor Usually or Always Communicated Well With Them, CY2022-2023



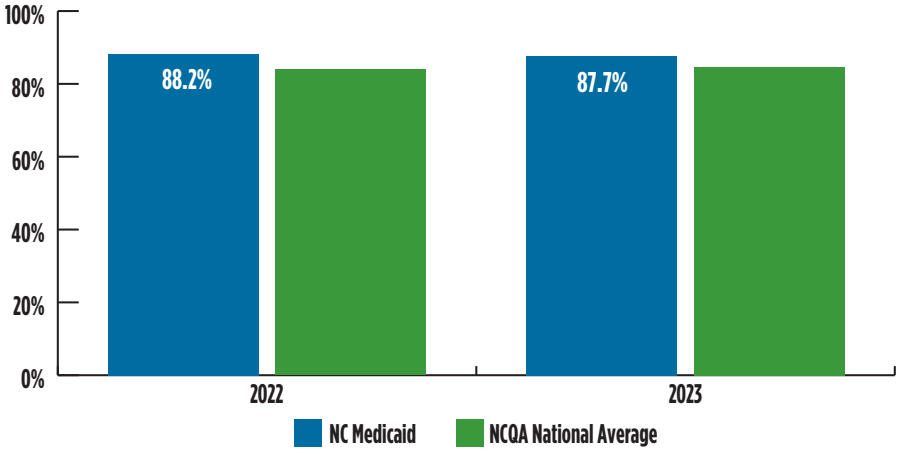
Link to Care Management/Coordination

Care management and care coordination are another way that NC Medicaid strives to provide patient-centered, holistic care. Care coordination includes organizing a patient's care across multiple providers, practices, and even health systems.[26] Care management is especially important following a visit to the emergency department (ED) and discharge from the hospital, for beneficiaries with chronic health conditions that might require multiple specialists, for those receiving in-patient care, and for beneficiaries who need additional support through social services.[26] By ensuring beneficiaries are receiving coordinated care, NC Medicaid strives to improve health outcomes and improve patient experience. To assess if it is achieving this goal, NC Medicaid uses the following survey measure:

COORDINATION OF CARE[18]

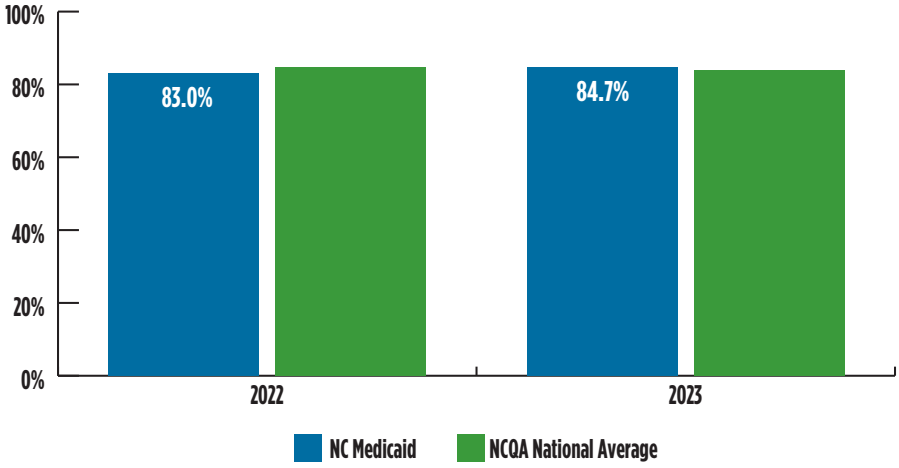
NC Medicaid assesses whether beneficiaries feel they are receiving well-coordinated care by using the *Coordination of Care* CAHPS survey measure. This is an individual item survey measure in which beneficiaries respond to the question: "In the last 6 months, how often did your personal doctor seem informed and up-to-date about the care you got from these doctors or other health providers?" For this measure, respondents could select "never," "sometimes," "usually," or "always" to answer. Responses of "usually" or "always" are considered positive.

Figure 15: Adult CAHPS Respondents Whose Personal Doctor Usually or Always Coordinated Care with Other Providers, CY2022-2023



As seen in Figures 15 and 16, well over 80% of adult and child respondents report that their/their child's personal doctor was usually or always informed and up to date on the care they/their child received from other providers. NC Medicaid's performance for both years surpassed national averages, except the 2022 Coordination of Care rate for the child population, which was below the national average.

Figure 16: Child CAHPS Respondents Who Reported that Their Child's Personal Doctor Usually or Always Coordinated Their Child's Care with Other Providers, CY2022-2023

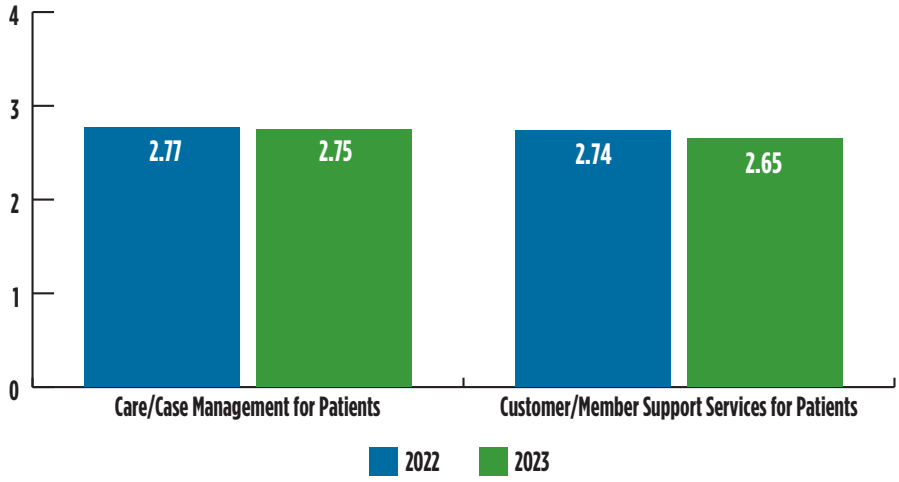


PATIENT/MEMBER SUPPORT

In addition to first-hand beneficiary experience, providers can give unique insight into the care coordination and support services NC Medicaid beneficiaries receive. Therefore, NC Medicaid includes the *Care/Case Management for Patients* and *Customer/Member Support Services for Patients* survey items from the Provider Experience Survey. These survey measures assess how providers feel their contracted Standard Plan's care/case management and customer support services are on a scale of poor to excellent.

As seen in Figure 17, providers rated Standard Plan's care/case management and customer support services slightly lower in 2023 than in 2022. Additionally, the average score indicates that the average provider response for access to case management and customer support services was either "fair" or "good." These responses identify a potential need for improved care management and support services for members.

Figure 17: NC Medicaid Provider Experience Survey Standard Plan Average of Patient/Member Support on a Scale of 1 (poor) to 4 (excellent), 2022-2023



[27] Annamalai, Aniyizhai, and Cenk Tek. "An Overview of Diabetes Management in Schizophrenia Patients: Office Based Strategies for Primary Care Practitioners and Endocrinologists." *International Journal of Endocrinology,* vol. 2015, 2015, p. 969182. *PubMed Central,* https://onlinelibrary.wiley.com/doi/10.1155/2015/969182.

Address behavioral and physical health comorbidities

Behavioral and physical health are deeply interconnected, as one can be a precursor, consequence, or result of the interactive effects with the other. For example, studies have shown that individuals diagnosed with schizophrenia have an increased risk of developing diabetes due to their use of certain psychotropic medications in combination with other lifestyle factors.[27] While severity and type of mental illness play a significant role in influencing physical health outcomes, certain mental health conditions increase one's risk for disease. Because of this intricate relationship, NC Medicaid has implemented multiple initiatives aimed at addressing behavioral and physical health comorbidities.

Collaborative Care

In 2019, NC Medicaid introduced the Collaborative Care Model (CoCM) in an effort to support the integration of mental health and SUD (behavioral health) services into primary care settings.[28] Utilizing a team-based approach, CoCM supports collaboration between a primary care clinician, a behavioral health care manager, and a consultant psychiatrist to increase access to evidence-based care for individuals with mild to moderate behavioral health needs.[29] These behavioral health services include the use of screening tools to identify unmet behavioral health needs, care assessments, measurement-based care tools to track progress, brief interventions and care coordination to support engagement with treatment, and other services. Research has shown that the CoCM can lead to significant improvement in both depression and anxiety and fewer hospitalizations for certain populations.[30, 31]

While NC Medicaid has been reimbursing providers for collaborative care services since 2019, uptake has generally remained low, and even decreased after the 2021 launch of NC Medicaid Managed Care. In 2022, NC Medicaid launched the Collaborative Care Consortium to identify and address the barriers to increasing CoCM utilization in North Carolina. The Consortium utilized leaders from NC Medicaid and the larger NCDHHS community, managed care payers, primary care and psychiatric physician representatives, and other community organizations to develop a roadmap for improving CoCM usage.[32] Using this roadmap the Consortium launched various initiatives including aligning billing and reimbursement across payers, increasing coverage by commercial payers, providing technical assistance to providers, matching providers with clinicians trained in CoCM, increasing reimbursement for CoCM, and subsidizing provider costs to implement the model. In total, over 5,000 beneficiaries received CoCM services in 2020-2023. Moving forward, NC Medicaid will continue to explore new methods to incentivize providers to utilize the CoCM to improve beneficiaries' access to behavioral health services.

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[28] *Psychiatry.Org – Learn About the Collaborative Care Model.* https://www.psychiatry.org/psychiatrists/practice/professional-interests/integrated-care/learn.

[29] *NC Medicaid Enhancements to Integrated Physical and Behavioral Health | NC Medicaid.* 15 Dec. 2022, https://medicaid.ncdhhs.gov/blog/2022/12/15/nc-medicaid-enhancements-integrated-physical-and-behavioral-health.

[30] *Positive Effect of Collaborative Chronic Care Model on VA Mental Health.* US Department of Veterans Affairs. https://www.hsrd.research.va.gov/impacts/chronic-care-model-mh.cfm.

[31] Archer, Janine, et al. "Collaborative Care for Depression and Anxiety Problems." The Cochrane Database of Systematic Reviews, vol. 10, Oct. 2012, p. CD006525. PubMed, https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006525.pub2/full?cookiesEnabled. The Collaborative Care Model in North Carolina: A Roadmap for Statewide Capacity Building to Integrate Physical and Behaviora

Tailored Care Management

Tailored Care Management (TCM), which launched in December 2022, is North Carolina's specialized care management model targeted toward individuals with a severe behavioral health condition (including both mental health and SUD), I/DD, or TBI. By December 2023, at least 231,000 beneficiaries were assigned to receive TCM. TCM enables improved health and well-being by helping these individuals navigate the health care system, engage in care consistently, and live more successfully in the community. For example, one provider shared the success story of an individual who was facing housing instability and was a frequent utilizer of the emergency room. With their care manager's support, they secured safe housing and daily meals and were connected to a PCP after years without primary care.

TCM advances the delivery of high-quality, integrated, whole-person care through better coordination and collaboration across all a beneficiary's needs. The model was built on the principle that care management would be most effective when embedded within provider organizations and as close to the site of care as possible. Beneficiaries qualifying for TCM may receive services from a primary care practice certified as an Advanced Medical Home Plus (AMH+), a behavioral health or I/DD provider certified as a Care Management Agency (CMA), or LME-MCO-based care manager. Through TCM, each individual has a single care manager who is equipped to manage a beneficiary's needs spanning physical health, behavioral health, I/DD, TBI, pharmacy, Long-Term Services and Supports (LTSS), and unmet health-related resource needs. Care managers provide the "glue" for integrated care, fostering coordination and collaboration among care team across various disciplines and settings, and helping beneficiaries and their families manage health conditions more effectively. NC Medicaid will continue to monitor quality measure performance for areas of care that are relevant to TCM, including emergency room visits and care coordination, to ensure the program meets its goal of providing well-coordinated care for beneficiaries with advanced behavioral health needs.[32]

More information on TCM is available on the Tailored Care Management webpage.

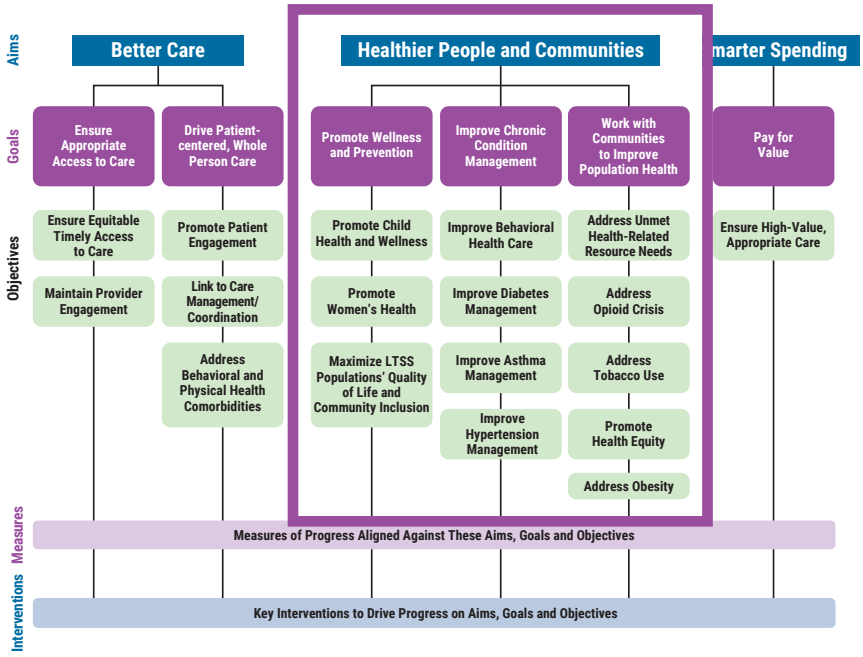
[32] The Collaborative Care Model in North Carolina: A Roadmap for Statewide Capacity Building to Integrate Physical and Behavioral Health Care. https://medicaid.ncdhhs.gov/collaborative-care-model-north-carolina-policy-paper/download?attachment

Aim 2: Healthier People and Communities

NC Medicaid's quality strategy's second aim is to improve the health of people and communities by promoting wellness and prevention, improving chronic condition management, and working with communities to improve population health. This aim includes three goals, all of which, and their corresponding objectives, are outlined in the following section.

GOAL 3: PROMOTE WELLNESS AND PREVENTION

Preventive services are a key component of NC Medicaid's work, as preventive care can safeguard beneficiaries from poor health and reduce health care spending. Preventive care includes a robust set of services meant to identify health issues before they begin to impact one's well-being.[33] For children, these services may include annual checkups, vaccinations and screenings, many of which are outlined in the child and adolescent health section of this goal. For adults, preventive care can include screenings for cancer, monitoring chronic conditions like heart disease or diabetes, and vaccines for the flu and COVID-19.[34]



This goal highlights wellness and prevention services across specific populations including children and adolescents, women, and the LTSS needs population. In addition to these populations, this section will discuss measures related to maternal health, dental health and general preventive care.

Child and Adolescent Health

As of December 2023, NC Medicaid covers roughly 1.4 million infants, children and adolescents, and strives to ensure the health of its youngest and most vulnerable beneficiaries.[6] Childhood and adolescence is a crucial point of intervention to ensure positive health outcomes later in life, and organizations like NC Medicaid have the opportunity to influence those outcomes. To better understand the health of its youngest beneficiaries, NC Medicaid uses an array of quality measures related to access to preventive care for children and adolescents. These measures are outlined in the following section.

[33] "Preventive Health: What Is It and Why Is It Important?" *Healthline*, 7 Feb. 2023, https://www.healthline.com/health/what-is-preventive-health-and-why-is-it-important.

[34] *Vaccine Basics | HHS.Gov*. https://www.hhs.gov/immunization/basics/index.html.

CHILD AND ADOLESCENT WELL-CARE VISITS (WCV) AND WELL-CHILD VISITS IN THE FIRST 30 MONTHS OF LIFE (W30)

The Child and Adolescent Well-Care Visits (WCV) and Well-Child Visits in the First 30 Months of Life (W30) HEDIS quality measures both assess whether NC Medicaid's youngest populations received primary care visits during specific times of development.[13] These measures play a crucial role in helping NC Medicaid understand if children and adolescents have access to the important preventive care services that protect their health and promote their overall wellness. See Table 4 below for a description of each measure.

Table 4: W30 and WCV[13]

Measure Name	Description
Well-Child Visits in the First 30 Months of Life (W30)	The percentage of beneficiaries who had the following number of well-child visits with a PCP during the last 15 months. The following rates are reported: 1) Well-Child Visits in the First 15 Months. Children who turned 15 months old during the calendar year and had six or more well-child visits. 2) Well-Child Visits for Age 15–30 Months. Children who turned 30 months old during the calendar year and had two or more well-child visits.
Child and Adolescent Well-Care Visits (WCV)	The percentage of beneficiaries 3 through 21 years of age who had at least one comprehensive well-care visit with a PCP or an OB-GYN practitioner during the calendar year.

Figure 18: Well-Child Visits in the First 30 Months of Life (W30), First 15 Months of Life 2021-2023 Performance

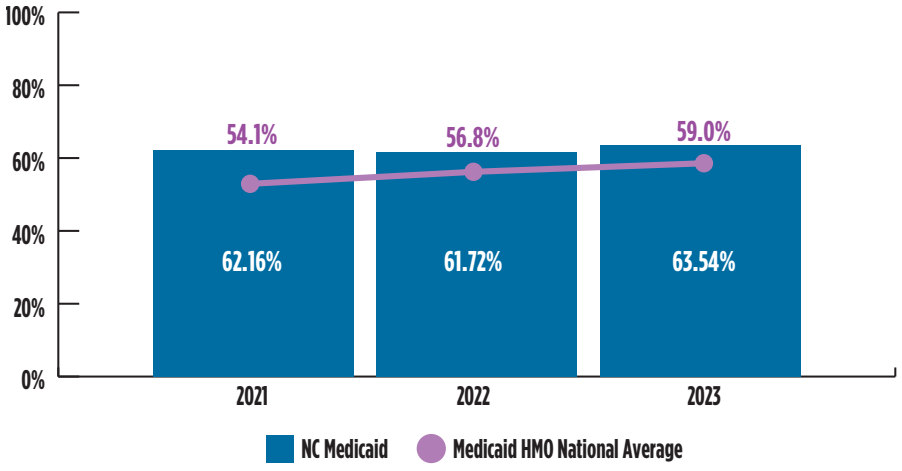
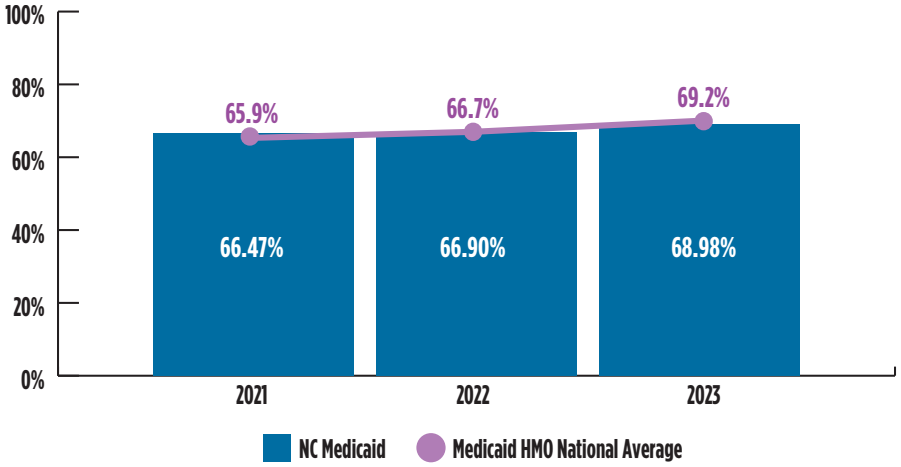


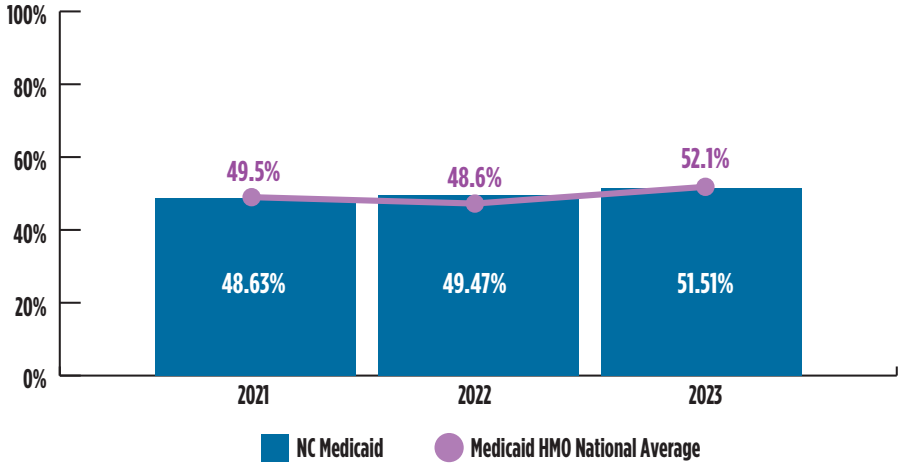
Figure 19: Well-Child Visits in the First 30 Months of Life (W30), 15-30 Months 2021-2023 Performance



As seen in Figures 18 and 19, NC Medicaid has historically performed above or in line with the national average of Medicaid HMOs for both sub-measures of the W30 measure. This is an encouraging sign and indicates that the youngest NC Medicaid beneficiaries are receiving the necessary preventive and primary care services through well-child visits.

Like W30, NC Medicaid continues to be in line the national average of Medicaid HMOs for the WCV measure (see Figure 20). This performance indicates that child beneficiaries are continuing to receive primary care services from birth through 21 years old.

Figure 20: Child and Adolescent Well-Care Visits (WCV) 2021-2023 Performance



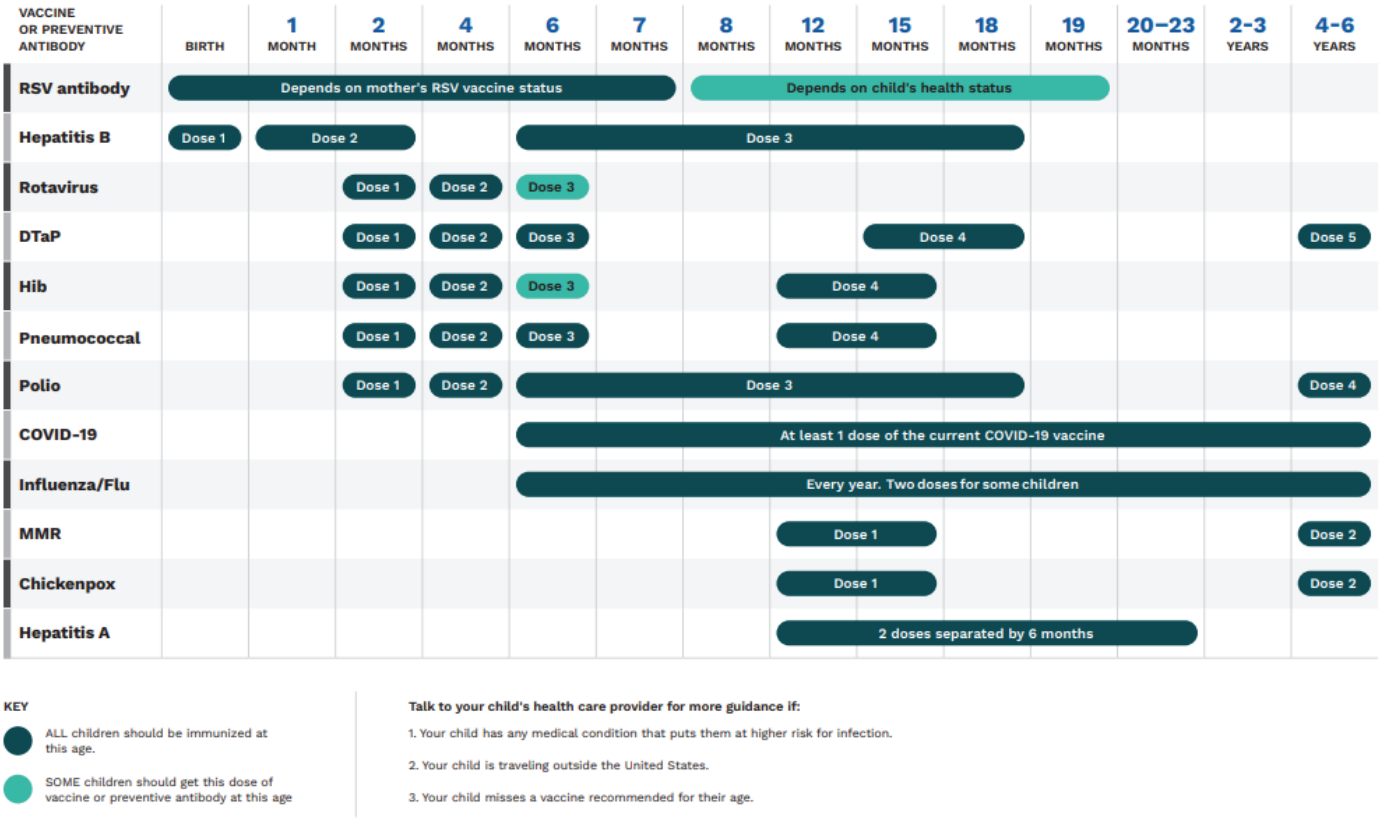
Both the WCV and W30 showed steady increases in performance between 2021 and 2023. NC Medicaid continues to prioritize primary care for children, including improving performance on the WCV and W30 measures, and has added these measures to the Advanced Medical Home (AMH) Measure Set. The measures included in the AMH Measure Set can be used by health plans for incentive arrangements, allowing health plans to incentivize improved performance. These incentive arrangements, and the fact that performance data and future targets are shared publicly, serve as a driving force behind NC Medicaid's increasing performance on the WCV and W30 measures.

CHILDHOOD IMMUNIZATION STATUS (CIS)

By teaching the immune system how to fight infections quickly and efficiently, vaccinations are one of the safest and most effective ways to prevent illness, disease, and death.[34] These crucial vaccines are given starting at birth and protect against infectious diseases like hepatitis, whooping cough, and meningitis.[35, 36] With a recent increase in the number of caregivers choosing to forego vaccination for their children, the United States is observing a reemergence of many diseases, like measles, that were previously eradicated.[37]

As seen below in Figure 21, The Centers for Disease Control (CDC) has created a vaccination schedule for children ages six and under that outlines the recommended vaccines and specifies at what age they should be given.[39] Figure 21 emphasizes how intricate the vaccination process is for young children and highlights a few areas that may present challenges when trying to ensure that all beneficiaries are properly vaccinated. These challenges include caregivers' hesitancy surrounding children receiving multiple vaccinations at one time, the fact that many of these vaccines require multiple appointments to be completed, and challenges with transportation and other logistical barriers.

Figure 21: CDC 2024 Recommended Immunizations for Birth Through 6 Years Old[38]



[35] Commissioner, Office of the. "Vaccines Protect Children From Harmful Infectious Diseases." *FDA*, Apr. 2024. www.fda.gov, https://www.fda.gov/consumers/consumer-updates/vaccines-protect-children-harmful-infectious-diseases.

[36] CDC. "Immunization Schedules for 18 & Younger." *Centers for Disease Control and Prevention*, 16 Nov. 2023, https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html.

[37] CDC. "Measles Cases and Outbreaks." *Measles (Rubeola)*, 9 Aug. 2024, https://www.cdc.gov/measles/data-research/index.html.

[38] CDC. "Your Child Needs Vaccines as They Grow!" *Vaccines & Immunizations*, 24 Sept. 2024, https://www.cdc.gov/vaccines/imz-schedules/child-easyread.html.

[39] Cameron, Melissa A., et al. "Missed Opportunity: Why Parents Refuse Influenza Vaccination for Their Hospitalized Children." *Hospital Pediatrics*, vol. 6, no. 9, Sept. 2016, pp. 507–12. Silverchair, https://publications.aap.org/hospitalpediatrics/article-abstract/6/9/507/26394/Missed-Opportunity-Why-Parents-Refuse-Influenza?redirectedFrom=fulltext.

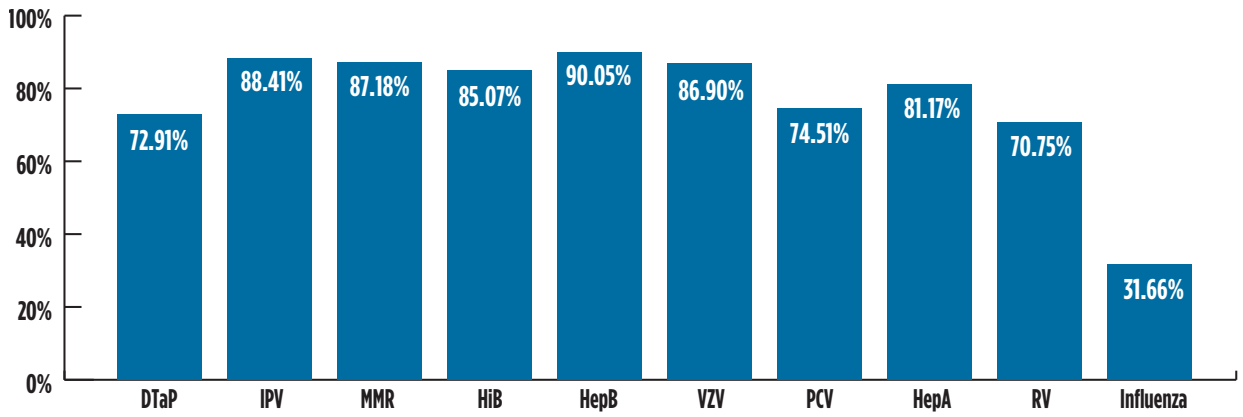
To better understand vaccine utilization among the NC Medicaid beneficiary population, NC Medicaid uses the *Childhood Immunization Status (CIS)* HEDIS quality measure. This measure assesses the percentage of children who received the following vaccines by their second birthday:[13]

Table 5: Vaccines Included in CIS HEDIS Quality Measure[13]

Vaccine Type	Number of Required Vaccines
Diphtheria, Tetanus and Acellular Pertussis (DTaP)	4
Polio (IPV)	3
Measles, Mumps and Rubella (MMR)	1
Haemophilus Influenzae Type B (HiB)	3
Hepatitis B (HepB)	3
Chicken Pox (VZV)	1
Pneumococcal Conjugate (PCV)	4
Hepatitis A (HepA)	1
Rotavirus (RV)	2 or 3
Influenza (flu)	2

Performance for each individual vaccine can be found below in Figure 22.

Figure 22: CIS, Individual Vaccine 2023 NC Medicaid Performance



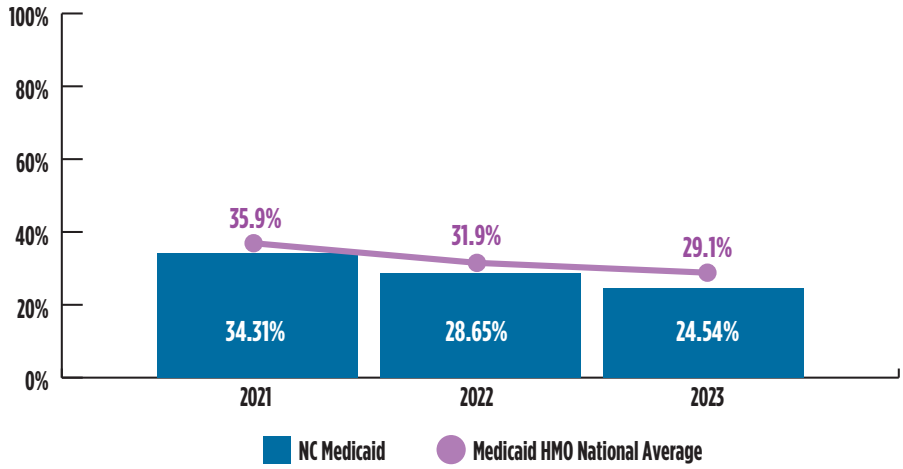
As seen in Figure 22, the rates of completion for most of the vaccinations in the CIS series are high. However, the rate of completion for the influenza vaccine has historically been low, decreasing from 2021 to 2023. There are many explanations for this low uptake of the flu vaccine, but some of the most commonly cited reasons include parents' and caregivers' concerns about the side effects of the vaccine, doubt of the vaccine's efficacy, and the fact that, unlike many of the other vaccines in the series, the flu vaccine is not required for school enrollment.[39] There is also concern among caregivers about giving the flu vaccine in combination with other vaccines, which often results in children having to make an additional trip to receive their flu vaccine, decreasing the likelihood of completion.[40] Flu vaccines are also given at specific time periods throughout the year. If these time periods do not line up with a child's well-child visit, they are much less likely to receive the vaccine. Additionally, there are disparities in flu vaccination by insurance type.

[40] CDC. "Getting a Flu Vaccine and Other Recommended Vaccines at the Same Time." *Influenza (Flu)*, 30 Sept. 2024, https://www.cdc.gov/flu/vaccines/coadministration.html.

Children enrolled in Medicaid are less likely to receive the flu vaccine compared to children enrolled in private insurance.[41] While multiple factors could be driving this difference, practices may receive private stock of the flu vaccine sooner than the state supply which may result in missed opportunities to vaccinate.

In addition to calculating rates for each individual vaccine, NC Medicaid calculates the Combination 10 sub measure. This sub measure assesses the percentage of children who receive all of the recommended doses of each vaccine outlined in Figure 22 by their second birthday.[13]

Figure 23: CIS, Combination 10 2021-2023 Performance



In part because of the low uptake of the flu vaccine (see Figure 22), NC Medicaid's overall performance for the CIS Combination 10 sub measure remains low, and much like the flu vaccine, is trending downward. While national trends for Combo 10 are also declining, NC Medicaid's performance remains well below the national average, with steep racial disparities. In an effort to drive improvement in vaccination rates and address racial disparities in the measure, NC Medicaid selected CIS Combination 10 as a 2024 withhold measure for Standard Plans.[42] In a withhold arrangement, a portion of health plans' expected capitation payment is withheld, and plans must meet targets (e.g., quality measure performance targets) to receive withheld funds from NC Medicaid, thus incentivizing improved performance. Navigate to page 78 to learn more about the withholds program.

IMMUNIZATIONS FOR ADOLESCENTS (IMA)

In addition to calculating vaccination rates for children, NC Medicaid uses the *Immunizations for Adolescents (IMA)* HEDIS quality measure to calculate the percentage of adolescents who received the recommended one dose of meningococcal vaccine, one Tdap vaccine, and the complete human papillomavirus (HPV) vaccine series by their 13th birthday.[13] This series is known as Combination 2. Just like with younger children, vaccinations play a crucial role in protecting and promoting the health of adolescents. More specifically, the vaccines in this series prevent against meningitidis, tetanus, diphtheria and pertussis, and HPV, the most common sexually transmitted infection that can increase one's likelihood of certain cancers.[13, 43]

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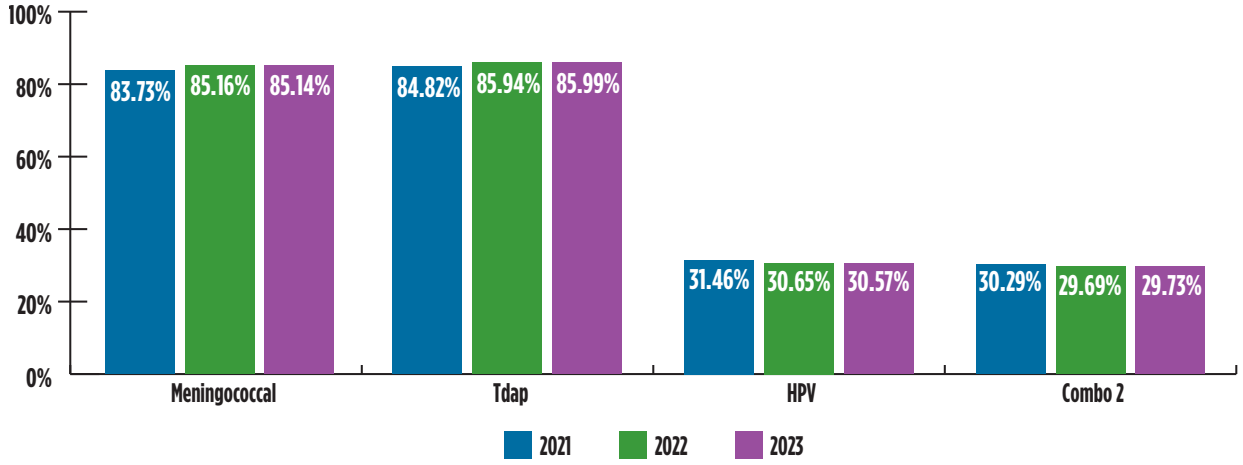
[41] Geissler, Kimberley H., et al. "Influenza Vaccinations Among Privately and Publicly Insured Children With Asthma." *Academic Pediatrics*, vol. 23, no. 7, Sept. 2023, pp. 1368–75. ScienceDirect, https://www.academicpedsjnl.net/article/S1876-2859(23)00055-4/abstract.

[42] North Carolina Medicaid Standard Plan Withhold Guidance Program. *North Carolina Department of Health and Human Services*. https://medicaid.ncdhhs.gov/nc-medicaid-standard-plan-withhold-program-guidance/download?attachment

[43] *HPV Infection - Symptoms & Causes - Mayo Clinic*. https://www.mayoclinic.org/diseases-conditions/hpv-infection/symptoms-causes/syc-20351596.

Figure 24: IMA 2021-2023 Performance



Similar to CIS Combination 10, NC Medicaid's performance on the IMA Combination 2 measure is impacted by a vaccine that is not required for school enrollment. As seen in Figure 24, uptake of the HPV vaccine is lower than the other two vaccines in the series, ultimately decreasing Combination 2 performance. While these lower rates of HPV vaccination and lower Combination 2 performance reflect national trends, it is important to note that the HPV vaccine is a series that consists of two vaccines. Because successful completion of this vaccine requires two separate trips to a provider's office, the likelihood that a beneficiary would complete the series is lower. Additionally, many parents and caregivers are hesitant to vaccinate their child against HPV due to concerns surrounding side effects, vaccine safety and necessity, and stigma surrounding sexually transmitted infections.[44] These concerns, and subsequent lower rates of HPV vaccination, may explain the drastic decrease in performance for the HPV vaccine and overall poorer performance for the IMA Combination 2 sub measure.

Care Management for At-Risk Children

Care Management for At-Risk Children (CMARC) is a state-funded program designed to provide comprehensive care management services to children, from the time they are born until they turn five years old, who are identified as at-risk for poor health outcomes. The program's primary goal is to improve child health and development through enhanced access to medical and community resources, family support and education in managing children's health needs effectively.

North Carolina has a long history of offering care management services for at-risk children enrolled in the Medicaid program through locally administered care management programs. While Standard Plans are responsible for administering these care management programs, local health departments (LHDs) directly provide these services to beneficiaries. To ensure all eligible children receive care, EBCI Tribal Option has similar support programs for at-risk children who are federally recognized tribal beneficiaries and other individuals eligible to receive care under the IHS.

CMARC services are provided by 75 out of the 86 local health departments across the state and include education, support, linkages to other resources, comprehensive health assessments, screenings, management of high-risk behavior, and response to health-related resource needs that may impact health outcomes. The program plays a critical role in improving the quality of care provided by NC Medicaid by

[44] Beavis, Anna L., et al. "Exploring HPV Vaccine Hesitant Parents' Perspectives on Decision-Making and Motivators for Vaccination." *Vaccine: X*, vol. 12, Oct. 2022, p. 100231. *PubMed Central*, https://www.sciencedirect.com/science/article/pii/S2590136222000912?via%3Dihub.

promoting preventive health measures, addressing health concerns early in a child's development, and providing continuous support to caregivers and families. These services are provided by a dedicated care manager who manages and coordinates their care until identified needs are met. Additionally, multiple quality measures related to child health, wellness, and prevention are used to assess health plan performance and to hold health plans accountable for successfully delivering CMARC services.

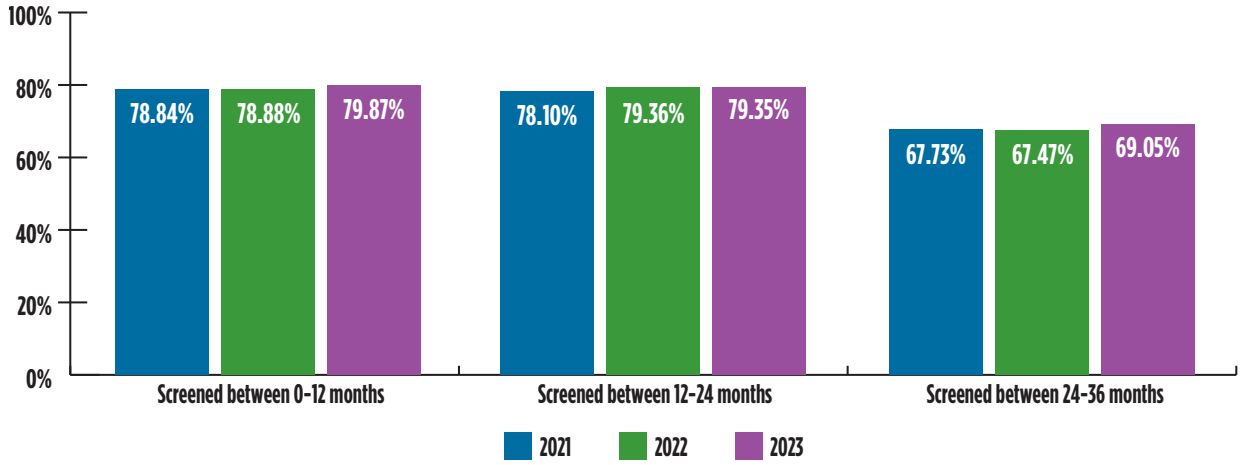
For more information about the CMARC program and how it contributes to quality care in North Carolina, please see the CMARC Program Guide or visit the CMARC webpage.

DEVELOPMENTAL SCREENING IN THE FIRST THREE YEARS OF LIFE (DEV)

Another key component of child and adolescent preventive care is screening. Developmental screenings are a way for providers to determine if a child is appropriately reaching developmental milestones, including development of language, movement, thinking, behavioral, and emotional skills. Monitoring development during early childhood can ensure that potential developmental delays are identified and addressed before they become significant health challenges.[46]

The Developmental Screening in the First Three Years of Life (DEV) quality measure assesses the percentage of children who were screened for being at risk of developmental, behavioral, and social delays using a standardized screening tool.[13] The American Academy of Pediatrics recommends that children receive three developmental screenings in the first three years of life.[45] Because of this, DEV is calculated across three age-specific indicators including if children were screened in the 12 months preceding, or on their first, second, and third birthdays.[13]

Figure 25: DEV 2021-2023 NC Medicaid Performance



As seen in Figure 25, rates of developmental screening are highest during the first two years of life and drop the third year. NC Medicaid's performance on the DEV measure has been steadily improving since 2021. While there are many factors influencing this improvement, NC Medicaid has seen steady increases in the rates of well-care visits (WCV) and well-child visits (W30). By placing an emphasis on the importance of these primary care appointments, NC Medicaid also steadily improved its performance on the DEV measure, as developmental screenings are often administered at well-care and well-child visits.

[45] CDC. "Child Development." *Child Development*, 15 May 2024, https://www.cdc.gov/child-development/index.html.
[46] "EPSDT in Medicaid." *MACPAC,* 12 Jan. 2021, https://www.macpac.gov/subtopic/epsdt-in-medicaid.

EARLY AND PERIODIC SCREENING, DIAGNOSTIC AND TREATMENT (EPSDT) SCREENING RATIO

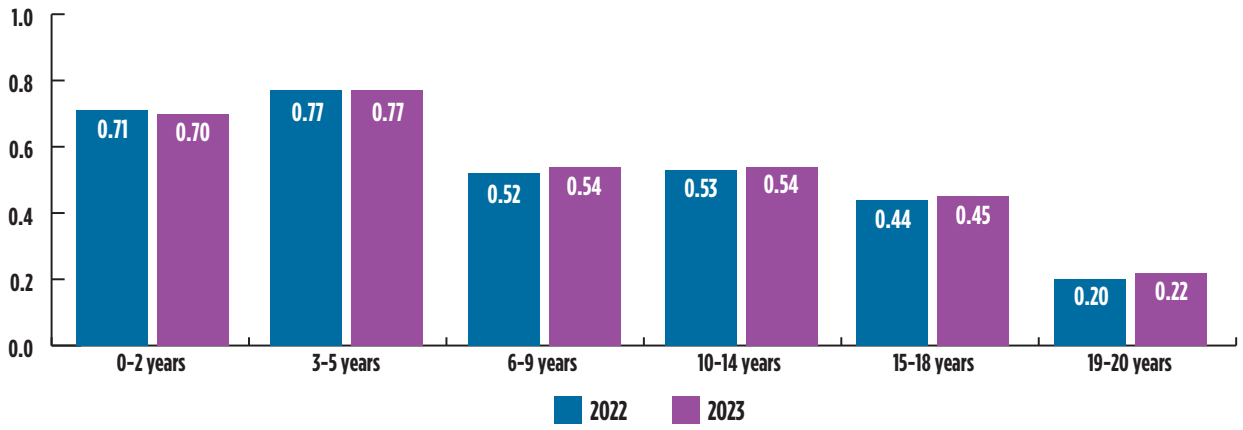
NC Medicaid strives to identify and address health challenges at an early age. In fact, all children under the age of 21 who are enrolled in Medicaid are entitled to the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit.[46] This benefit requires state Medicaid agencies to ensure beneficiaries have access to Medicaid-coverable services that are medically necessary, regardless of whether the service is covered in the state plan.[47] These services include hearing and vision screenings, dental services, diagnostic lab tests including lead screening, age-appropriate vaccinations, periodic health assessments, and tailored diagnostic and treatment, all with the goal of identifying and treating potentially debilitating health conditions early on in childhood.[47]

DID YOU KNOW?

In 1990, CMS set a goal of a 0.80 beneficiary participant ratio in EPSDT per state, per year. The initial goal was for states to reach this benchmark by 1995, but in 2014, the national average participant ratio was 0.59. Between 2006 and 2013, only eight states had achieved the 0.80 participation ratio at least once.

To assess whether child and adolescent beneficiaries are receiving the appropriate EPSDT benefits, NC Medicaid uses the *EPSDT Screening Ratio*.[13] This measure indicates the extent to which EPSDT eligible beneficiaries received the appropriate number of initial and periodic screening services.[13] This measure is slightly different because it is calculated by federal fiscal year instead of calendar year and is reported a ratio instead of a rate. More specifically, this measure divides the actual number of initial and periodic screening services received by beneficiaries by the expected number of initial and periodic screening services.[13]

Figure 26: EPSDT Screening Ratio 2022-2023 NC Medicaid Performance



In recent years, NC Medicaid's performance has been on track with the national average participant ratio. In 2022, NC Medicaid had an overall screening ratio of 0.59 which increased slightly to 0.60 in 2023. Stratifying EPSDT screening data by age reveals significant patterns in screening. As seen in Figure 26, younger beneficiaries, specifically those ages 0 to 5, have a much higher screening ratio. Ratios decrease as beneficiaries get older, dropping to only 0.22 by twenty years of age. These findings are not surprising given that older adolescents are less likely to pursue preventive care services, ultimately missing EPSDT benefits and screenings.[48] This pattern emphasizes the need for targeted intervention to sustain EPSDT screening throughout a beneficiary's entire childhood and adolescence.

[47] *Early and Periodic Screening, Diagnostic, and Treatment | Medicaid.* https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html.

[48] Rand, Cynthia M., and Nicolas P. N. Goldstein. "Patterns of Primary Care Physician Visits for US Adolescents in 2014: Implications for Vaccination." *Academic Pediatrics*, vol. 18, no. 2, Mar. 2018, pp. S72–78. *DOI.org (Crossref)*, https://www.academicpedsjnl.net/article/S1876-2859(18)30007-X/fulltext.

NC Integrated Care for Kids Model

The NC Integrated Care for Kids Model (NC InCK) is a health equity-driven, child-centered local service delivery and State payment model aimed at improving the quality of care and reducing expenditures for children insured by NC Medicaid in five North Carolina counties: Alamance, Orange, Durham, Granville and Vance. NC InCK aims to integrate services for children, including physical and behavioral health, food, housing, early care and education, Title V (maternal and child health needs assessment), child welfare, mobile crisis response services, juvenile justice and legal aid. Three clinically integrated networks across the participating counties, Duke Connected Care, UNC Health Alliance, and Community Care Physician Network, coordinate care for pilot-eligible children across the continuum of child core services, including healthcare, schools, foster care and juvenile justice systems and social services. NC InCK is funded through a grant from CMS and is operating over a seven-year model period that began in January 2020 with a two-year planning period (2020 and 2021) and a five-year implementation period (2022 through 2026). Since the launch of InCK in April 2022, 6,115 children received outreach for program enrollment and 2,552 children (38% of those outreached) engaged in InCK. As of Sept. 6, 2024, 1,444 children (54% of those who ever engaged) were still engaged or had successfully graduated (1,215 still engaged, 229 graduated) from the InCK program.

InCK strives to provide all children and families with opportunities to thrive regardless of their race, color, national origin, disability, age, sex and religion. NC InCK aims to achieve its goal through three sets of activities, all of which are informed by the InCK Family Council and Youth Council, made up of NC InCK beneficiaries and their caregivers, to ensure that program activities are family-centered and promote equity:

1. NC InCK more holistically assesses the needs of children using a novel stratification approach that integrates data from NC Medicaid, the Department of Public Instruction, and the Department of Public Safety to assign children to one of three service integration levels (SILs).
2. NC InCK employs integration consultants and family navigators to integrate services across sectors for children who could benefit from additional support.
3. NC InCK has implemented a novel alternative payment model (APM) to incentivize provider actions that improve the holistic well-being of children and close crucial disparities. In this APM, quality of care is measured and improved using standard health care measures (e.g., proportion of children receiving well-child checks) and novel cross-sector, well-being measures (e.g., kindergarten readiness, food insecurity and housing stability).

NC InCK's stratification process evaluates factors outside the traditional health care system. For example, factors that determine a child's SIL include positive screens for housing or transportation needs, Temporary Assistance for Needy Families (TANF) eligibility, a high Social Deprivation Index, risk of out-of-home placement, juvenile justice residential placement, foster care involvement, chronic school absenteeism, frequent short-term suspensions, expulsion from school, and parental/guardian challenges like substance use during pregnancy or a recent psychiatric admission.

Children with these risk factors receive increasingly intensive care management services. This process facilitates the provision of more intensive services to children and families whom the health care system has systemically discriminated against, and those whose needs have historically gone unmet by the health care system. NC InCK will continuously evaluate the SIL algorithm to ensure that all children in need of services are being elevated for care management.

In designing its care management services, the NC InCK team strived to design a family-led, strengths-based model that provides necessary, convenient care to children and families. NC InCK's integration consultants and family navigators are trained explicitly in how to ensure equitable implementation of the service model including in how to support family navigators in effectively communicating with families and creating family-centered goals. Children, youth, and families have the opportunity to co-create Shared Action Plans with their Family Navigator that outline goals and strengths of the child in the family's own words. In encouraging the family to drive its own care goals, this process helps promote more equitable health outcomes by ensuring families are given the opportunities and resources that are most useful to them.

More details on the NC InCK model including links to provider trainings, data companion guides for APM measures, and community resources can be found on the NC InCK website.

An InCK Success Story

An adolescent boy living with adoptive parents and adult siblings was enrolled in the program due to poor school performance, suspected attention deficit hyperactivity disorder (ADHD), and weight management challenges offers an illustration of InCK's potential for positive impact.

He was prediabetic and at risk for failing his current grade. The InCK Family Navigator helped the family identify goals (improve physical health and remain on-track for on-time graduation), secured an expedited ADHD evaluation, and helped the boy successfully complete summer school. They also enrolled the family in a free produce program via his Medicaid plan and connected the family to a nutritionist.

After four months, the boy had lost 30 pounds and he and his adult siblings were no longer prediabetic. Finally, the Family Navigator also connected the family to a utilities voucher program, which allowed them to redirect household funds towards outstanding legal costs from obtaining custody.

The caregivers report that the boy is happier, more social, and making academic progress and that the support of the Family Navigator has benefitted the entire family.

Looking Ahead: Child and Family Specialty Plan

As part of NC Medicaid's transformation to Medicaid Managed Care, NCDHHS intends to launch the Children and Families Specialty Plan (CFSP) - a single, statewide NC Medicaid Managed Care plan.[39] This Plan, to be operated by Blue Cross and Blue Shield of North Carolina's Healthy Blue Care Together, was created to better support Medicaid-enrolled children, youth and families who are currently and formerly served by the child welfare system in receiving seamless, integrated and coordinated health care.

The Plan has been specially tailored to leverage NC Medicaid's existing care systems to address and mitigate the challenges faced by children in the foster care system, emphasizing that these children should have robust and multidisciplinary care management. To learn more about the CFSP and NC Medicaid's work in providing care to beneficiaries served by the child welfare system, visit the Children and Families Specialty Plan webpage.

Women's Health

The female beneficiary population requires unique preventive care to ensure positive health outcomes.[49] More specifically, many women experience life events like pregnancy, childbirth, and menopause that can impact their long-term health, in addition to more chronic illnesses like breast and cervical cancers.[50] Therefore, it is crucial that women receive proper preventive care and screenings. While NC Medicaid is able to stratify by sex across almost all quality measures, there are a few measures that focus on women as the population of interest.

CERVICAL CANCER SCREENING (CCS)

Cervical cancer occurs when there is excessive cell growth in the cervix. Located at the lower end of the uterus, the cervix is a component of the female reproductive system.[50] While rates of cervical cancer have steadily decreased over the last two decades, it is still one of the most common causes of cancer-related death among American women, predominantly affecting women above the age of 30.[51, 52] Although family history of cervical cancer does increase risk, long-term infection with HPV, a common sexually-transmitted

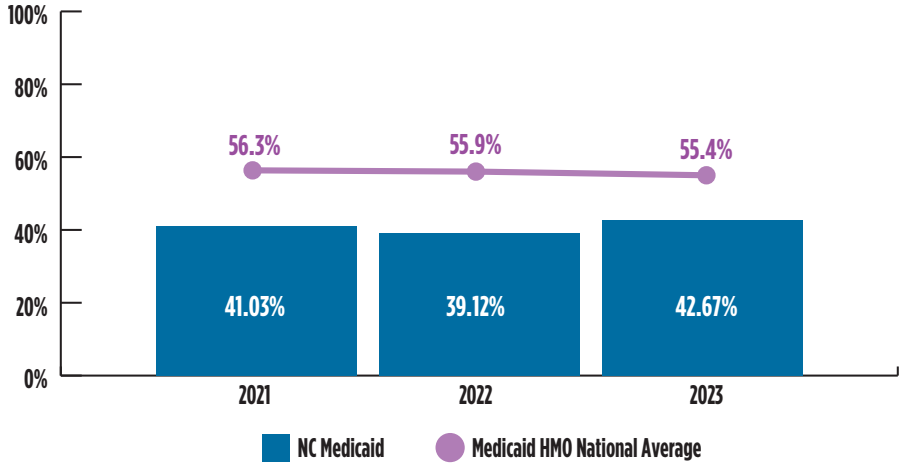
[49] *Women - Healthy People 2030 | Health.Gov*. https://health.gov/healthypeople/objectives-and-data/browse-objectives/women.
[50] CDC. "Cervical Cancer Basics." *Cervical Cancer*, 22 Feb. 2024, https://www.cdc.gov/cervical-cancer/about/index.html.
[51] CDC. "United States Cancer Statistics (USCS)." *United States Cancer Statistics*, 26 June 2024, https://www.cdc.gov/united-states-cancer-statistics/index.html.
[52] "Cervical Cancer Screening." *NCQA*, https://www.ncqa.org/hedis/measures/cervical-cancer-screening.

virus, is the most common cause of cervical cancer. While the HPV vaccine is an effective way to prevent cervical cancer, screening tests for cervical cancer are essential for early identification and treatment.[51] There are two types of screening tests for cervical cancer that can be easily completed in a doctor's office or clinic: cervical high-risk human papillomavirus (hrHPV) testing and cervical cytology, also known as a Pap test or Pap smear.[53] These tests look for cell changes on the cervix and precancers.

While women generally should start receiving these tests at age 21, patients may receive Pap tests and hrHPV testing at differing frequencies depending on age and other risk factors.[54] As effective screening and early detection are important to reduce rates of cervical cancer-related death, NC Medicaid uses the *Cervical Cancer Screening (CCS)* quality measure to assess the percentage of women who were appropriately screened for cervical cancer.[13] These criteria align with screening recommendations set by the American Cancer Society. Any beneficiary who receives one of the following tests will meet the criteria for screening and is included in the CCS numerator.[13]

1. Beneficiaries 21-64 years of age who had cervical cytology performed within the last three years.
2. Beneficiaries 30-64 years of age who had cervical high-risk human papillomavirus (hrHPV) testing performed within the last five years.
3. Beneficiaries 30-64 years of age who had cervical cytology/high-risk human papillomavirus (hrHPV) co-testing within the last five years.

Figure 27: CCS* 2021-2023 Performance



**Starting in 2023, NC Medicaid changed the CCS measure to Electronic Clinical Data Systems (ECDS) reporting. ECDS reporting gives health plans a method for collecting and reporting standard electronic clinical data for HEDIS quality measurement and improvement, ultimately increasing the efficiency of quality reporting. Learn more about ECDS reporting here.*

As seen in Figure 27, NC Medicaid has historically underperformed compared to the national average of Medicaid HMOs. This performance indicates cervical cancer screening is an area of critical intervention. Identifying cervical cancer in its earlier stages can increase chances of survival. For example, cervical cancer diagnosed at an early stage has a five-year relative survival rate of 91%, meaning that 91% of those diagnosed with early-stage cervical cancer will be alive for at least five years after diagnosis. This five-year relative survival rate drastically decreases to 60% when cervical cancer is diagnosed after it has already spread to nearby tissues, emphasizing the importance of early detection through screening.[55]

[53] *Screening for Cervical Cancer | Cervical Cancer | CDC*. https://www.cdc.gov/cervical-cancer/screening/index.html.
[54] *The American Cancer Society Guidelines for the Prevention and Early Detection of Cervical Cancer | American Cancer Society*. https://www.cancer.org/cancer/types/cervical-cancer/detection-diagnosis-staging/cervical-cancer-screening-guidelines.html.
[55] *Cervical Cancer Prognosis and Survival Rates - NCI.* 13 Oct. 2022, https://www.cancer.gov/types/cervical/survival.

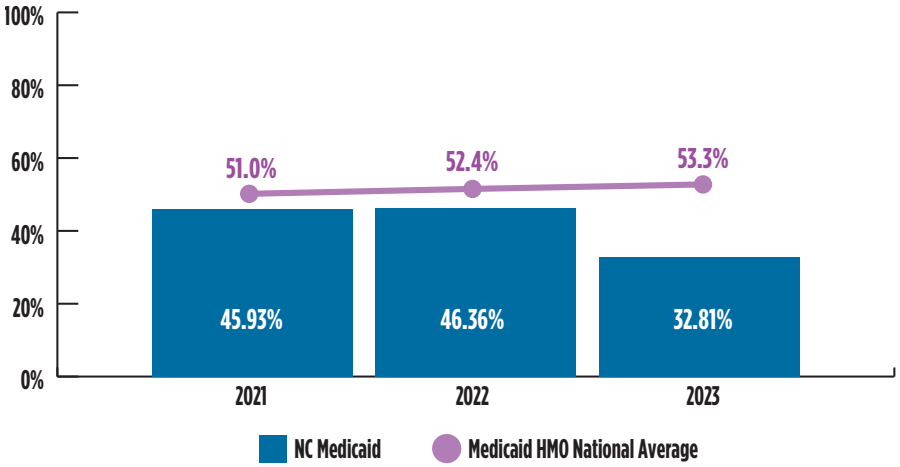
BREAST CANCER SCREENING (BCS)

Another type of cancer that is increasingly common among women is breast cancer. While this cancer can occur in both men and women, it is much more common in women and is the second most diagnosed cancer in U.S. women behind skin cancer.[56]

While there are multiple types of breast cancer, breast cancer occurs when breast cells begin to develop abnormally. These abnormal cells divide more rapidly than normal cells, eventually leading to the formation of a cancerous lump or mass.[57] While those with no risk factors can still develop breast cancer, there are certain risk factors that increase one's risk for developing the disease including being biologically female, increasing age, beginning menstruation at an early age, history of pregnancy, a personal or family history of breast cancer and other conditions, and obesity, among others.[57] Routine screenings are a primary mechanism for early diagnosis of breast cancer and reduced breast cancer related deaths. These screenings include clinical breast exams and mammograms, an x-ray image of the breast tissue.[57]

To assess whether beneficiaries receive proper breast cancer screening, NC Medicaid uses the *Breast Cancer Screening (BCS)* quality measure. This measure assesses the percentage of female NC Medicaid beneficiaries between the ages of 50 and 74, who have had a least one mammogram to screen for breast cancer in the past two years.[13]

Figure 28: BCS* 2021-2023 Performance



**Starting in 2023, NC Medicaid changed the BCS measure to ECDS reporting. ECDS reporting gives health plans a method for collecting and reporting standard electronic clinical data for HEDIS quality measurement and improvement, ultimately increasing the efficiency of quality reporting. Learn more about ECDS reporting at the NCQA HEDIS ECDS webpage.*

As seen in Figure 28, NC Medicaid has historically performed below the Medicaid HMO national average. One possible explanation for the substantial decrease in performance from 2022 to 2023 is the launch of Medicaid expansion in December 2023. During this time, the number of beneficiaries in the numerator stayed the same but the number of qualifying individuals in the denominator increased in the last month of 2023, distorting the data.

Like with cervical cancer, this performance indicates an area of critical intervention as breast cancer screenings. Identifying the disease in its earlier stages can increase chances of survival. For example, the five-year relative survival rate of localized, early-stage breast cancer is 99%.[57] This rate drops to 86% for cancer that has spread outside of the breast to nearby tissues or lymph nodes, and plummets

[56] "Breast Cancer - Symptoms and Causes." *Mayo Clinic*, https://www.mayoclinic.org/diseases-conditions/breast-cancer/symptoms-causes/syc-20352470.

[57] "Breast Cancer Facts & Stats 2024 - Incidence, Age, Survival, & More." *National Breast Cancer Foundation*, https://www.nationalbreastcancer.org/breast-cancer-facts.

to 31% for cancer that has spread to other parts of the body, emphasizing the need for early detection of breast cancer through regular screenings.[58] NC Medicaid will continue to monitor its performance on the BCS measure to identify potential explanations for the sudden decline in performance.

Maternal Health

Pregnant and postpartum beneficiaries are two populations for which preventive care is particularly important. Over 80% of maternal deaths in the United States have been identified as preventable, emphasizing the urgency behind ensuring that pregnant people receive timely and adequate care.[58] For example, prenatal appointments often include blood work, blood pressure and urine tests to detect conditions like anemia and preeclampsia, both of which can cause serious health problems for the pregnant beneficiary and the fetus.[59] If these conditions are detected early, providers can take the necessary steps to avoid complications.

In 2022, NC Medicaid covered roughly half of all births that took place in North Carolina. Because of this, NC Medicaid uses multiple quality measures to ensure that women throughout the state are receiving proper prenatal and postpartum care services.

PRENATAL AND POSTPARTUM CARE (PPC)

Two of the most important forms of preventive care to promote healthy pregnancy are prenatal and postpartum check-ups. Prenatal care takes place throughout the course of a pregnancy, and can include physical exams, measuring vital signs of both the mother and fetus, genetic testing and healthy lifestyle education.[60] It is recommended that women schedule their first prenatal appointment as soon as they discover they are pregnant because prenatal care is most effective when it is started early.[61]

Following delivery, during the postpartum period, new mothers can remain at risk of life-threatening complications from birth. These may include postpartum hemorrhage, infection, and postpartum preeclampsia.[61] Additionally, women are at risk of developing postpartum depression, which can impact a woman's ability to care for herself and her baby. All of these are issues that can be identified and treated at postpartum check-ups.[62]

To better understand if NC Medicaid beneficiaries are accessing timely prenatal and postpartum care, NC Medicaid uses the *Prenatal and Postpartum Care (PPC)* quality measure. This measure consists of two sub-measures:[13]

1. *Timeliness of Prenatal Care*: The percentage of deliveries for which women had a prenatal care visit in the first trimester on or before the enrollment start date or within 42 days of enrollment in the organization.
2. *Postpartum Care:* The percentage of deliveries for which women had a postpartum visit between seven and 84 days after delivery.

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[58] "CDC Newsroom." *CDC,* 1 Jan. 2016, https://www.cdc.gov/media/releases/2022/p0919-pregnancy-related-deaths.html.
[59] *Prenatal Care Checkups.* https://www.marchofdimes.org/find-support/topics/planning-baby/prenatal-care-checkups.
[60] *What Happens during Prenatal Visits? | NICHD - Eunice Kennedy Shriver National Institute of Child Health and Human Development.* 31 Jan. 2017, https://www.nichd.nih.gov/health/topics/preconceptioncare/conditioninfo/prenatal-visits.
[61] *Warning Signs of Postpartum Health Problems | March of Dimes.* https://www.marchofdimes.org/find-support/topics/postpartum/warning-signs-postpartum-health-problems.

As seen in Figures 29 and 30, NC Medicaid has historically performed far below the national average for both the Timeliness of Prenatal Care and Postpartum Care sub measures. While there are many factors contributing to NC Medicaid's performance, the use of global billing codes has impacted these rates. Global billing codes for perinatal services are not billed for up to 84 days after the end of pregnancy. This means the first instance of prenatal care and subsequent postpartum care are often not adequately captured in claims and encounters data. As a result, NC Medicaid has implemented two new billing codes and an array of other policy updates. Read the following section to learn more about these policy changes.

Figure 29: PPC, Timeliness of Prenatal Care 2021-2023 Performance

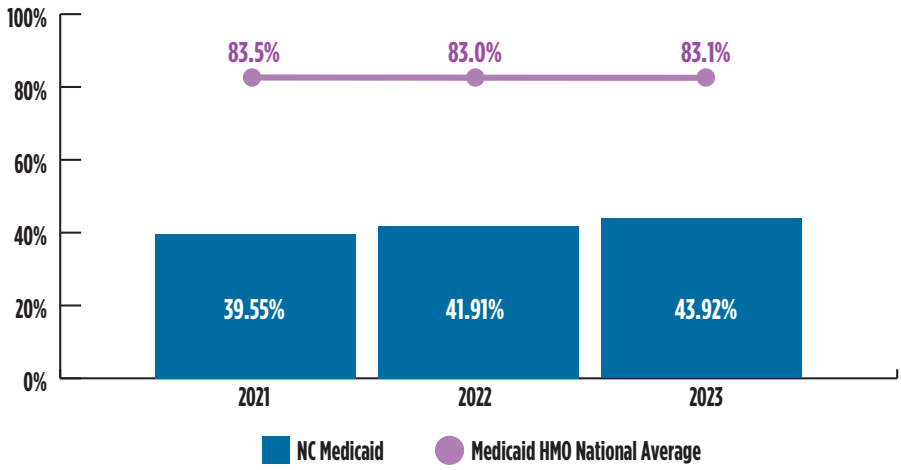
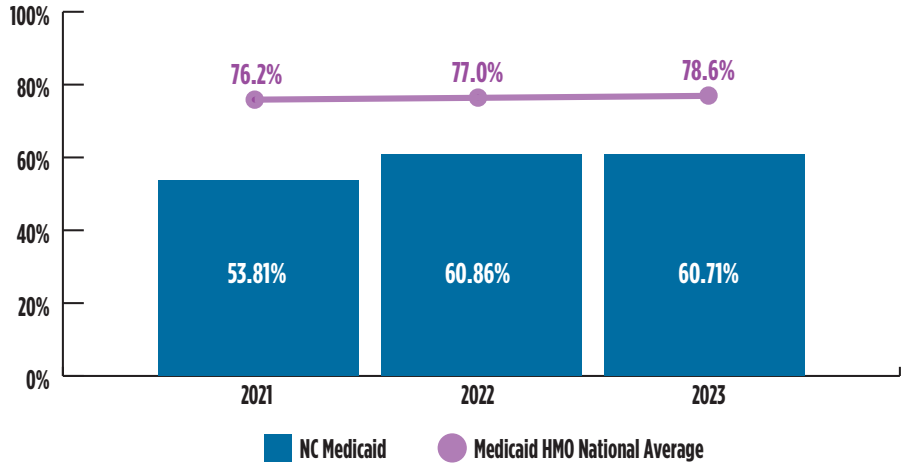


Figure 30: PPC, Postpartum Care 2021-2023 Performance



Obstetrical Services Policy Updates

Effective April 1, 2024, NC Medicaid made multiple changes to its obstetrical services clinical policy. These changes are designed to improve the quality of care provided to beneficiaries, resolve administrative challenges for providers, and capture more accurate data about prenatal and postpartum care delivery.[62] See Table 6 to learn more about these updates.

[62] *Changes to the 1E-5 Obstetrical Services Policy Effective* April 1, 2024 | NC Medicaid. 16 April 2024, https://medicaid.ncdhhs.gov/blog/2024/04/16/changes-1e-5-obstetrical-services-policy-effective-april-1-2024.

Table 6: Changes to NC Medicaid's 1E-5 Obstetrical Services Policy[62]

Policy Change	Description	Learn More
Group Prenatal Incentive Payments	In addition to covering individual prenatal services, NC Medicaid will now cover group prenatal care services as well. Group prenatal care models are specifically designed to improve a beneficiary's social support and education by providing certain prenatal services in a group setting. In fact, evidence suggests that patients who receive care under this model report better prenatal knowledge, are more likely to breastfeed their infant, and feel more ready for labor and delivery.[63] While incorporating this group model is optional for health care practices, NC Medicaid now offers an incentive payment to practices for each pregnant beneficiary who attends at least five group prenatal visits in hopes of increasing adoption of this model.	Changes to the 1E-5 Obstetrical Services Policy Effective April 1, 2024
Vaginal Birth After Cesarean (VBAC) Codes	After a thorough review, it was discovered that NC Medicaid was not reimbursing for certain vaginal birth after cesarean (VBAC) billing codes. To resolve this issue, NC Medicaid added six VBAC codes to their fee schedule for providers to file for reimbursement. Adding these codes will ensure that providers are appropriately incentivized for VBAC deliveries, which are associated with lower rates of complications as compared to cesarean births.	
Postpartum Depression Screening	Screening for postpartum depression is a crucial component care provided during the postpartum period. Oftentimes, beneficiaries need to be screened multiple times throughout the postpartum period to ensure they are not experiencing postpartum depression.[64] Per the updated policy, NC Medicaid will now reimburse providers for up to four postpartum depression screenings per patient in order to align with Health Check Guidelines. NC Medicaid hopes this increase in the number of screenings covered will ensure that providers can screen and make referrals as needed following delivery.	
Prenatal and Postpartum Care F Codes	In an effort to better capture whether NC Medicaid beneficiaries are receiving timely and adequate prenatal and postpartum care, NC Medicaid has added two, non-paid F codes to its clinical policy. These codes, 0500F for prenatal care and 0503F for postpartum care, are meant to improve data collection to ensure a more accurate picture of prenatal and postpartum care delivery. Historically, prenatal and postpartum services have been documented using global billing codes, which may not be billed for up to 84 days after the end of pregnancy. This means the first instance of prenatal care and subsequent postpartum care are often not adequately captured in claims and encounters data. The goal is that by implementing these new F codes, and more accurately capturing care delivery for pregnant beneficiaries, NC Medicaid can have a better understanding of the care being delivered to this population and improve performance on the *PPC* quality measure.	If you are interested in learning more about these F codes, why they are important, and how they should be used, please check refer to the PPC F Codes Fact Sheet and FAQ Document.

RATE OF SCREENING FOR PREGNANCY RISK

One way NC Medicaid identifies beneficiaries who are at a higher risk for adverse birth outcomes is through a standardized Pregnancy Risk Screening tool. This tool is administered to all pregnant beneficiaries by their obstetric provider, and asks questions about a beneficiary's current pregnancy, obstetric history, perceptions of their pregnancy, factors like whether they have experienced

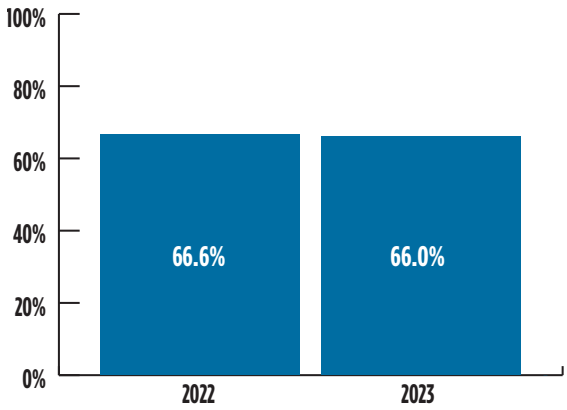
[63] *Group Prenatal Care*. https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/03/group-prenatal-care.
[64] Patient Screening. Accessed September 24, 2024. https://www.acog.org/programs/perinatal-mental-health/patient-screening

interpersonal violence, have been unable to afford food or have felt unsafe due to their living situation, as well as health behaviors including drinking and smoking.[65] Those who are identified as high-risk are enrolled in the Care Management for High-Risk Pregnancies (CMHRP) program.

To assess if providers are properly administering the screening tool, NC Medicaid uses the R*ate of Screening for Pregnancy Risk* quality measure which calculates the proportion of pregnant beneficiaries who received a pregnancy risk screening. This quality measure is Department calculated.[13]

In 2022 and 2023, roughly 66% of eligible NC Medicaid beneficiaries were screened using the pregnancy risk screening tool. NC Medicaid has made significant efforts to improve this rate, including additional reimbursements for providers who have their patients complete the pregnancy risk screening form.[66] To ensure beneficiaries are being sufficiently screened, providers can be reimbursed for completion of the form up to three times during a single pregnancy.[65] With North Carolina having preterm birth, maternal mortality rates, and infant mortality rates above the national average, it is critical to detect potential complications early through screening.[67]

Figure 31: NC Medicaid Pregnancy Risk Screening 2022-2023 Performance



Care Management for High-Risk Pregnancies

NC Medicaid's Care Management for High-Risk Pregnancies (CMHRP) program provides intensive care management services to women with high-risk pregnancies to reduce preterm and low birthweight births and improve prenatal service delivery.[68] The introduction of CMHRP marked a switch to more intensive and multidisciplinary care management for women with high-risk pregnancies. Today, CMHRP services are provided by 75 of the 86 local health departments across North Carolina.

During the transition to Managed Care, NC Medicaid's main perinatal management entity, previously known as the Pregnancy Medical Home, became the Pregnancy Management Program (PMP).[69] The PMP provides comprehensive and high-quality maternity care services to pregnant beneficiaries through a variety of guidelines and initiatives, with one of the largest initiatives being CMHRP. While technically part of the PMP, CMHRP is jointly administered through a partnership between NC Medicaid's Prepaid Health Plans and LHDs.[67]

To identify NC Medicaid beneficiaries who are high-risk and qualify for CMHRP services, all pregnant NC Medicaid beneficiaries are expected to be screened at least once using a standardized Pregnancy Risk Screening Tool. If a beneficiary completes the screening tool and is found to be high-risk, they are referred to NC Medicaid's CMHRP program and are connected to a CMHRP care manager through their local health department or PHP.[67] Care managers work with the beneficiary and the beneficiary's prenatal care provider to review the clinical plan,

[65] Care Management for High-Risk Pregnancies (CMHRP) Pregnancy Risk Screening Form. *NCDHHS*. https://medicaid.ncdhhs.gov/documents/reports/transformation/caremanagement/cmhrp-pregnancy-risk-screening-form-english/open

[66] *Maternity Coverage and Service Reimbursement Updates | NC Medicaid.* 27 Oct. 2023, https://medicaid.ncdhhs.gov/blog/2023/10/27/maternity-coverage-and-service-reimbursement-updates.

[67] "2023 March Of Dimes Report Card For North Carolina." *March of Dimes | PeriStats*, https://www.marchofdimes.org/peristats/reports/north-carolina/report-card.

[68] Program Guide: Management of High-Risk Pregnancies and At-Risk Children in Managed Care. *NCDHHS*. https://medicaid.ncdhhs.gov/program-guide-management-high-risk-pregnancies-and-risk-children-managed-care/download?attachment

provide information and educational materials, and connect families with resources that could be helpful during and after pregnancy.[70] By using a unique approach that prioritizes addressing medical, social, and behavioral needs, CMHRP aims to improve the quality of care provided to high-risk pregnant beneficiaries.[69]

Check out the Department's CMHRP webpage to learn more about this program.

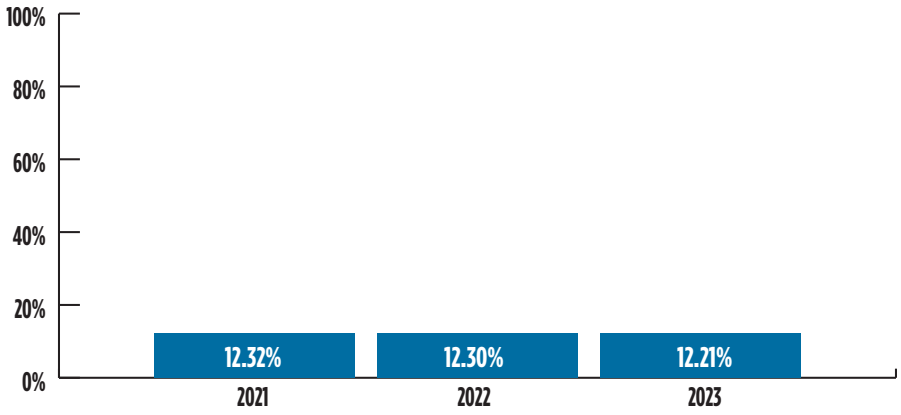
LOW BIRTH WEIGHT

An infant is identified as low birth weight (LBW) if it is born weighing less than 2,500 grams or 5 pounds, 8 ounces. Low birthweight is highly correlated with pre-term birth. While some infants who are born with LBW have positive health outcomes, others can have significant health challenges including breathing complications, brain bleeds, and infections. Babies who were born LBW are also more likely to face chronic health challenges later in life like diabetes, heart disease, high blood pressure, and intellectual and developmental disabilities.[70]

Low birthweight rates are an important indicator of access to, and utilization of, prenatal care services. In fact, infants born to mothers who do not receive prenatal care are three times more likely to be born low birthweight.[72] Similar increase in risk for LBW is observed for mothers who did not receive timely prenatal care or who received fewer prenatal visits than what is recommended.[71]

To better understand rates of LBW among beneficiaries, NC Medicaid uses the Low Birth Weight quality measure. This measure is Department calculated and is a modified version of the CMS LBW measure, reporting the rate of low birth weight (<2,500 grams) births, in addition to a sub-rate of very low birth weight (<1,500 grams) births.[13] Instead of assessing low birth weight at the state-level, NC Medicaid's modified LBW measure assesses low birth weight at the plan- and member-level to better monitor and support health plan efforts to decrease rates of LBW. It should be noted that NC Medicaid only receives LBW data for members enrolled in Standard Plans and NC Medicaid Direct. Therefore, Figure 32 only reflects performance for those member populations.

Figure 32: Low Birth Weight, Low Birth Weight Births (<2,500 grams) 2021-2023 Performance



[69] *Pregnancy Medical Home Transitioned to Pregnancy Management Program | NC Medicaid*. 19 Oct. 2021, https://medicaid.ncdhhs.gov/blog/2021/10/19/pregnancy-medical-home-transitioned-pregnancy-management-program.

[70] *DHHS: DPH: WICWS: Services*. https://wicws.dph.ncdhhs.gov/services.htm.

[71] *Low Birthweight | March of Dimes*. https://www.marchofdimes.org/find-support/topics/birth/low-birthweight. Accessed 13 Aug. 2024.

[72] *Ensuring Healthy Births Through Prenatal Support - Center for American Progress*. https://www.americanprogress.org/article/ensuring-healthy-births-prenatal-support

The percentage of LBW births (births in which the infant weighed less than 2,500 grams) among NC Medicaid beneficiaries was roughly the same from 2021 to 2022. NC Medicaid's rates are high compared to state and national performance. In 2022, 9.43% of births in North Carolina were low birth weight, a rate lower than the NC Medicaid population.[73] Additionally, in 2022, 8.60% of births in the United States were low birth weight, meaning both NC Medicaid and the state of North Carolina are performing worse than national rates.[74]

Dental Care

Oral health is a crucial component of overall health and well-being. The average adult in the United States has anywhere between 10 and 17 decayed, missing, or filled permanent teeth, and about half of all adults have gingivitis (gum inflammation).[75] Certain dental issues, like dental caries (cavities) and periodontitis (gum disease) can increase risk for malnutrition and life-threatening diseases including endocarditis (an infection of the inner lining of the heart), cardiovascular disease, complications with pregnancy and birth, and pneumonia.[76] Because of this, NC Medicaid is dedicated to providing comprehensive dental care to its beneficiaries to improve dental and overall health outcomes. North Carolina is one of only 25 state Medicaid agencies that provides "extensive" dental benefits, meaning NC Medicaid covers preventative, restorative, and periodontal services as well as dentures and oral surgery services with no annual spending limit.[77] This comprehensive coverage of services has resulted in higher utilization rates among NC Medicaid beneficiaries. As of 2022, NC Medicaid is tied fourth in the nation for overall utilization of dental services for enrolled children and sixth for adult dental utilization, an encouraging finding for NC Medicaid and efforts to engage beneficiaries in dental care.[78]

It should be noted that NC Medicaid delivers dental care as a carve out service, meaning that all dental care provided to beneficiaries is delivered through NC Medicaid Direct instead of a beneficiary's health plan.

ORAL EVALUATION, DENTAL SERVICES (OEV)

While rates of cavities in school-age children has been steadily declining, the average child still has one cavity in their permanent teeth by the time they are nine years of age, 2.6 cavities by the age of 12 years, and eight cavities by the time they reach 17 years old.[74] For prevention, the American Dental Association (ADA) recommends people of all ages receive regular dental cleanings and check-ups twice a year. For most people, these appointments take place every six months, but this can vary depending on dental health needs and should be risk-based, resulting in those who are at higher risk of disease receiving more diagnostic and preventive services.[79] Pediatric, adolescent and adult dental check-ups are very similar, consisting of a thorough cleaning from a dental hygienist followed by a check-up from a dentist, with periodic additional diagnostic and preventive services and treatments, like x-rays and topical fluoride treatments.[78]

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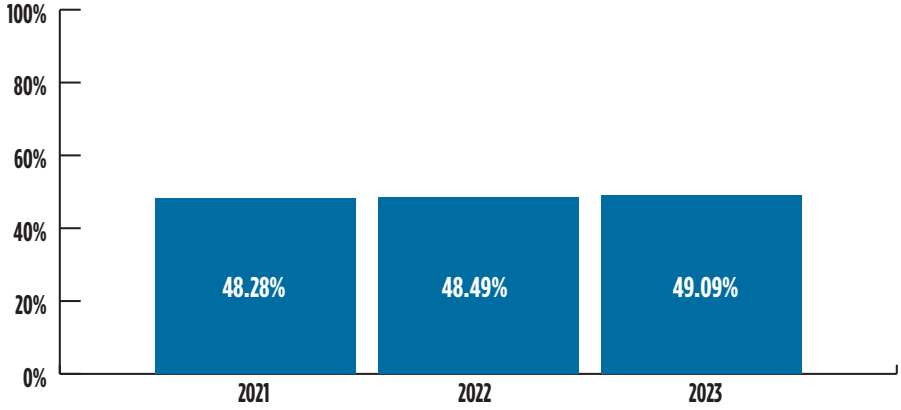
[73] *Stats of the States - Low Birthweight Births*. 25 Feb. 2022, https://www.cdc.gov/nchs/pressroom/sosmap/lbw_births/lbw.htm.
[74] *FastStats*. 15 Apr. 2024, https://www.cdc.gov/nchs/fastats/birthweight.htm.
[75] National Committee for Quality Assurance (NCQA). (2022). HEDIS Measurement Year 2022 (Volume 1)
[76] *Oral Health: A Window to Your Overall Health - Mayo Clinic*. https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475. Accessed 13 Aug. 2024.
[77] *Medicaid Coverage of Dental Benefits for Adults. MACPAC*, 2015. https://www.macpac.gov/wp-content/uploads/2015/06/Medicaid-Coverage-of-Dental-Benefits-for-Adults.pdf
[78] Williams, Elizabeth, and Robin Rudowitz Published. "Variation in Use of Dental Services by Children and Adults Enrolled in Medicaid or CHIP." *KFF*, 29 May 2024, https://www.kff.org/medicaid/issue-brief/variation-in-use-of-dental-services-by-children-and-adults-enrolled-in-medicaid-or-chip.
[79] How Dental Cleanings Work. *Cleveland Clinic*, 2023. https://my.clevelandclinic.org/health/treatments/11187-dental-check-up.

To better understand whether beneficiaries are receiving these crucial annual dental visits, NC Medicaid uses the Oral Evaluation, Dental Services (OEV) quality measure, which assesses the number of beneficiaries under the age of 21 who have received a comprehensive or periodic oral evaluation with a dental provider during the calendar year.[13]

Figure 33: OEV 2021-2023 NC Medicaid Performance

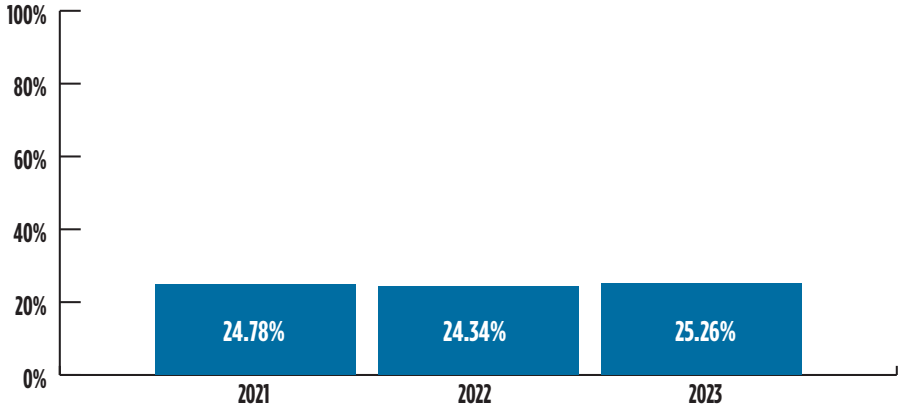


While NC Medicaid's performance on the OEV measure may seem low, NC Medicaid has historically outperformed the national median of reporting Medicaid agencies. In 2022, the national median for the OEV measure was 43.2%, over five percentage points lower than NC Medicaid's performance that year. While this performance indicates that NC Medicaid's dental program is strong relative to national performance, it does highlight a more widespread need for education and outreach surrounding the importance of dental care and dental checkups. Again, when interpreting these results, it is important to keep in mind that routine dental care is not "one size fits all" and taking a risk-based approach is important when deciding how often a beneficiary needs to complete a preventive oral evaluation.

TOPICAL FLUORIDE FOR CHILDREN (TFL)

Applying topical fluoride or fluoride varnish, a viscous, sticky substance that a dental provider applies on the teeth, is another way that dental providers prevent cavities in children. While cavities can be prevented at home by using toothpaste or mouthwash that contains fluoride, fluoride varnish is often applied two times a year by a dental professional starting as soon as the eruption of a child's first tooth.[81, 82] Topical fluoride has been found to prevent roughly one-third of cavities in baby teeth.[80] To better understand if beneficiaries are receiving regular topical fluoride treatments from their dental care providers, NC Medicaid uses the Topical Fluoride for Children (TFL) quality measure. This measure assesses the percentage of beneficiaries, ages 1 through 20 years, who have received at least two topical fluoride applications during the calendar year at dental or oral health services, dental services, or oral health services.[13]

Figure 34: TFL 2021-2023 NC Medicaid Performance



[80] Medicaid and CHIP Scorecard - Oral Evaluation, Dental Services. https://www.medicaid.gov/state-overviews/scorecard/measure/Oral-Evaluation-Dental-Services?measure=HC.17&measureView=state&population=999&methodology=320&dataView=pointInTime&chart=map

[81] *Fluoride: Topical and Systemic Supplements | American Dental Association*. https://www.ada.org/resources/ada-library/oral-health-topics/fluoride-topical-and-systemic-supplements.

[82] CDC. "Oral Health Tips for Children." *Oral Health*, 23 May 2024, https://www.cdc.gov/oral-health/prevention/oral-health-tips-for-children.html.

While national data for TFL does not exist, making it difficult to provide comparisons for this measure, roughly a quarter of NC Medicaid's eligible child population receives the recommended topical fluoride application each year. In an effort to address this low uptake and increase the number of children receiving fluoride treatment, NC Medicaid implemented the Into the Mouths of Babes (IMB) program.

Into the Mouths of Babes

One of the most significant barriers to young children accessing dental services is the difficulty in having to seek additional care from a dentist for these services. To make these services less burdensome and more accessible for beneficiaries, NC Medicaid and partnering organizations created Into the Mouths of Babes (IMB) to reimburse trained primary care physicians offering preventive oral health services as part of standard well-child visits.[83] Services are provided from the time of a child's first tooth eruption until the age of three and a half, and include oral evaluation and risk assessment, parent/caregiver counseling, fluoride varnish application, and referral to a dental provider from their medical home. IMB's overall goal is to prevent and reduce childhood tooth decay and increase the referrals of high-risk children to Medicaid enrolled dentists.[81]

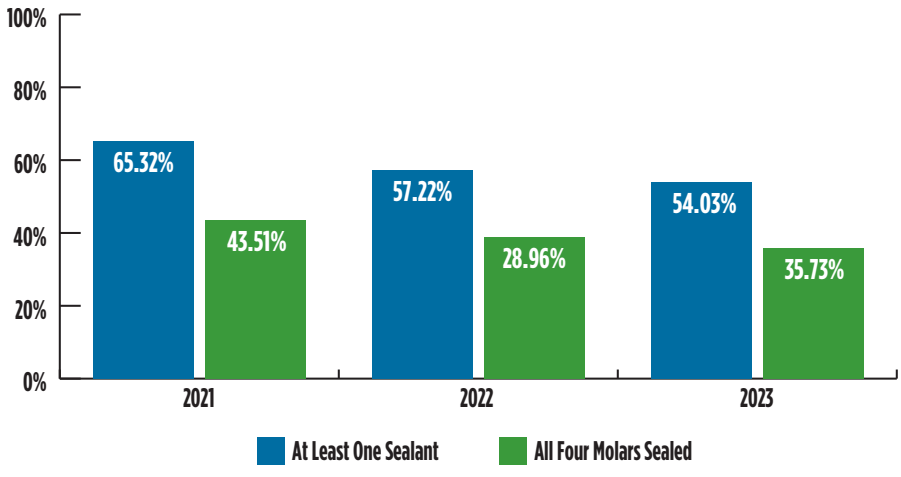
After over two decades, the IMB program has demonstrated promising results. Children who received four or more IMB visits before three years of age had a 21% reduction in hospitalizations for dental treatment and a 17.7% reduction in cavities.[81] Additionally, IMB contributed to a statewide decline in cavity rates and helped decrease the gap in rates of tooth decay between children from low- and other-income families at the community level.[81]

SEALANT RECEIPT ON PERMANENT FIRST MOLARS (SFM)

In addition to topical fluoride treatments, one of the most effective ways of preventing cavities among children and adolescents is by applying a dental sealant.[80] Dental sealants are hard, acrylic coverings that dental professionals apply to the chewing surfaces of the back molars to protect them from cavity-causing bacteria.[84] Sealants are most commonly used in children and adolescents, with over 40% of children ages 6 through 11 and 48% of adolescents ages 12 through 19 in the United States having sealants on their permanent teeth.[82] Because sealants can prevent up to 80% of cavities, NC Medicaid uses the Sealant Receipt on Permanent First Molars (SFM) quality measure to assess the percentage of beneficiaries who turn 10 during the calendar year and received sealants on permanent first molar teeth. This measure has two submeasures:[13]

1. At least one sealant on a permanent first molar by the 10th birthdate; or
2. All four permanent first molars sealed by the 10th birthdate

Figure 35: SFM 2021-2023 NC Medicaid Performance



As seen in Figure 35, it is much more common for NC Medicaid child beneficiaries to have one permanent first molar sealed by their 10th birthday than it is to have all four sealed. While there are many factors that might

[83] *Partners & Providers | Division of Public Health*. https://www.dph.ncdhhs.gov/programs/oral-health/partners-providers.
[84] *Dental Sealants: How They Work*. https://my.clevelandclinic.org/health/treatments/10912-sealants.

influence these trends, it is important to note that these sealants are typically applied during basic dental check-ups. As noted in NC Medicaid's performance on the OEV measure, many children do not receive the recommended dental check-ups each year, resulting in a smaller percentage of eligible beneficiaries receiving all four sealants.

The SFM measure has additional limitations related to administrative data that might be impacting data collection and subsequent performance. While this measure uses claims and encounters data to calculate performance, this data cannot identify factors that would make it impossible for an individual to be numerator compliant for the measure. These factors include children who have teeth that are already in active decay and cannot be sealed, and children who have received sealants or other treatments (restorations, extractions, etc.) that were not billed to NC Medicaid and are therefore not in the beneficiary's history.

Early Childhood Oral Health Collaborative (ECOHC)

The North Carolina Early Childhood Oral Health Collaborative (ECOHC) is a diverse group of partners from over twenty state agencies and organizations. Its mission is to improve quality of life for young children (ages birth through five years) and their families by promoting good oral health. ECOHC partners work together to support and advise two early childhood oral health programs. The first program, IMB, is co-managed by the NCDHHS Oral Health Section (OHS) and the NC Medicaid. The second, titled Brushing is Fun, Start by Age 1, is managed solely by OHS. While ECOHC officially adopted its goals to promote oral health for North Carolina's infants and toddlers in 2016, the group's work had been ongoing for several years prior as the IMB Operations Committee.

The IMB Operations Committee's sole focus was promoting, supporting, and managing North Carolina's physician fluoride varnish services program. The shift to ECOHC in 2016 arose from recognizing the need to provide oral health education for our partners outside of the medical and dental home. As a result, ECOHC now encompasses agencies to support early childcare education settings and other community partners like the Supplemental Nutrition Program for Women, Infants, and Children (WIC) and family support specialists. The foundation for ECOHC has paved the way to implement innovative programs like IMB, a national model for other statewide medical-dental integration initiatives. Other achievements include the publication of close to 50 evaluation outcomes studies and major policy change to support implementation and growth for infant and toddler in-classroom toothbrushing programs.

Looking Ahead: Oral Evaluation During Pregnancy (OEV-P)

Like childhood and adolescence, there are multiple time periods throughout the lifespan in which receiving proper dental care is especially important. One of these critical periods is during pregnancy. To ensure that pregnant members are receiving oral health evaluations and other preventive oral healthcare, NC Medicaid added the *Oral Evaluation During Pregnancy (OEV-P)* quality measure to its NC Medicaid Direct Measure Set for Calendar year 2025. This measure calculates the percentage of members aged 15 to 44 years with live-birth deliveries during the calendar year who received a comprehensive or periodic oral evaluation during their pregnancy. These appointments are crucial for the health of both the mother and the infant, as dental disease can be transmitted during pregnancy. While historical performance data was not available for this iteration of the Annual Quality Report, OEV-P performance will be included in future iterations.

Preventive Care

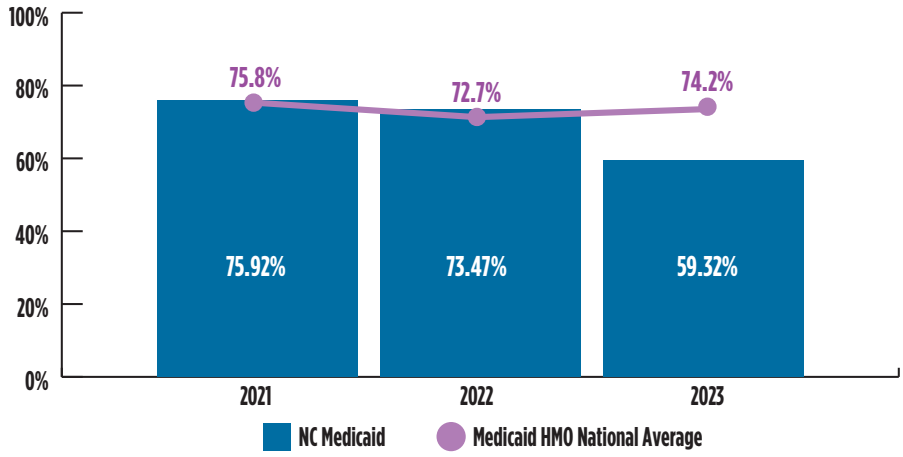
In addition to assessing preventive care among specific beneficiary populations, NC Medicaid has a few measures that assess preventive services more generally. Measures related to preventive care assess a diverse array of illnesses, health conditions, and care needs but are generally focused on early detection of health problems to prevent complications and improve outcomes. The following section outlines four more general primary care measures.

ADULTS' ACCESS TO PREVENTIVE/AMBULATORY HEALTH SERVICES (AAP)

The *Adults' Access to Preventive/Ambulatory Health Services (AAP)* quality measure calculates the percentage of beneficiaries 20 years of age and older who had an ambulatory or preventive care visit during the calendar year.[13] Similar to the WCV and W30 measures for children, AAP assesses if adult beneficiaries are receiving crucial primary care appointments each year. These appointments serve as an opportunity for providers to discuss health behaviors like diet and exercise with their patients, in addition to addressing acute issues or managing chronic conditions.[85]

As seen in Figure 36, NC Medicaid has historically performed slightly above the national average for the AAP measure but dropped below the national average in 2023. One probable explanation for the decrease in performance from 2022 to 2023 is a substantial change to the measure's eligible population. In 2023, the denominator for AAP increased by roughly 300,000 beneficiaries, mostly due to Medicaid Expansion at the end of the year. With many of these new members becoming eligible for services, such as ambulatory and preventive health services, in December of 2023, beneficiaries had very little time to receive services before the end of the measurement year. The Department will continue to track AAP to see if this lower performance persists into MY2024.

Figure 36: AAP 2021-2023 Performance



RATING OF PERSONAL DOCTOR

Beneficiaries' experiences with their provider are a crucial factor impacting whether they seek primary care services. For many patients, a primary care provider is their most frequent and consistent access to medical care. Because of this, it is crucial that beneficiaries have a positive perception of their personal doctor[86] and are inclined to visit them regularly. To better understand the care that beneficiaries receive from their personal doctor, NC Medicaid uses the *Rating of Personal Doctor* CAHPS survey measure. For this measure, respondents could rate their response from a range of 0-10, with 0 being "worst personal doctor possible" and 10 being the "best personal doctor possible." Ratings scoring an 8, 9 and 10 are considered positive.[18]

[85] "Adults' Access to Preventive/Ambulatory Health Services." *NCQA*, https://www.ncqa.org/hedis/measures/adults-access-to-preventive-ambulatory-health-services.

[86] For the purposes of the CAHPS survey, a beneficiary's "personal doctor" is whoever the patient identifies, meaning their "personal doctor" may not necessarily be a primary care physician. However, there are other questions in the CAHPS survey that specifically assess specialist care, so it is likely that this question reflects a beneficiary's experiences with a primary care physician or a physician they see for regular care.

As seen in Figures 37 and 38, the vast majority of both adult and child beneficiary respondents reported a positive rating of their/their child's personal doctor. Both child and adult respondents reported higher positive ratings than the national average in 2022 and 2023, indicating that NC Medicaid beneficiaries are generally pleased with their personal doctor.

Figure 37: Adult CAHPS Respondents Who Rated Their Personal Doctor Positively, CY2022-2023

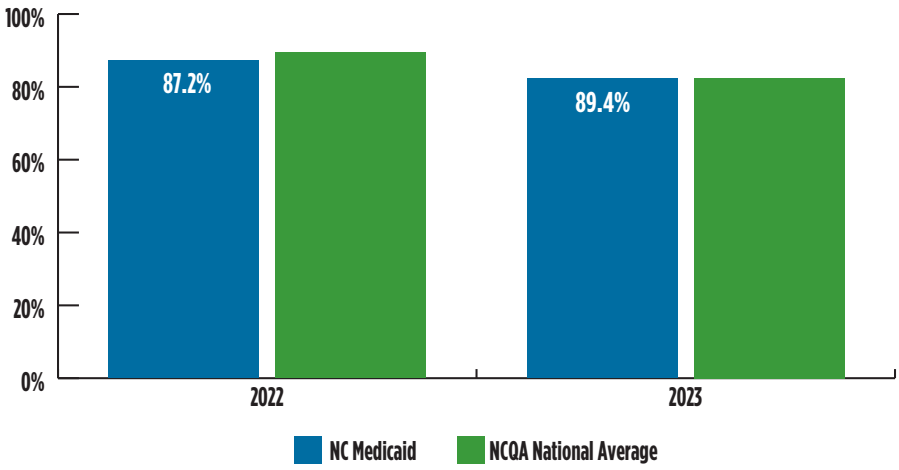
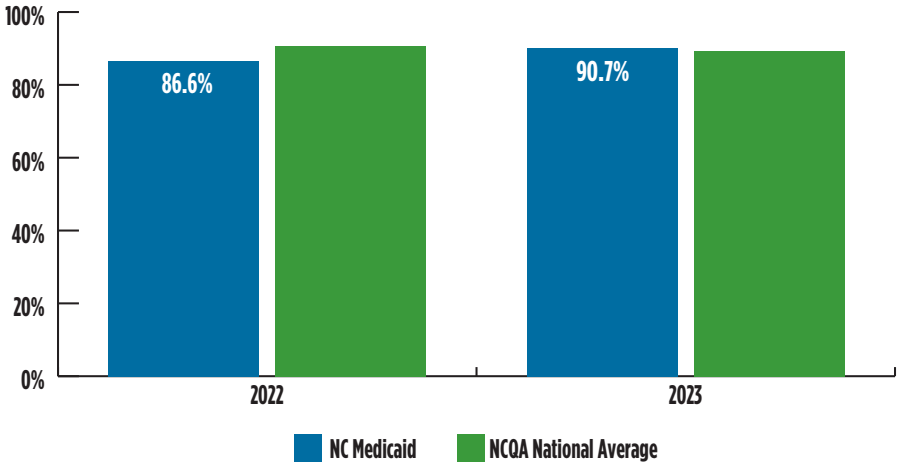


Figure 38: Child CAHPS Respondents Who Rated Their Child's Personal Doctor Positively, CY2022-2023



COLORECTAL CANCER SCREENING (COL)

While colon and rectal cancer are different, they are commonly referred to together as colorectal cancer. Colon cancer is an excess growth of cells, also known as a polyp, in the first and longest section of the large intestine known as the colon.[87] Rectal cancer, which develops when healthy cells develop DNA mutations, occurs in the final few inches of the large intestine known as the rectum. For most types of rectal cancers, it is unclear what causes the initial cell mutations.[88]

Treating colorectal cancer in its earliest stage can lead to a 5-year 90% survival rate. With more advanced stages of colorectal cancer, chances of survival decrease, emphasizing the importance of early detection and screening. Still, one-third of eligible adults in the United States have never received a screening.[86] Because early detection and treatment drastically improve health outcomes for someone with colorectal cancer, NC Medicaid uses the Colorectal Cancer Screening (COL) quality measure to assess the percentage of beneficiaries ages 50 through 75 that have received appropriate screening for colorectal cancer.[85, 89]

[87] *Colon Cancer - Symptoms and Causes - Mayo Clinic*. https://www.mayoclinic.org/diseases-conditions/colon-cancer/symptoms-causes/syc-20353669.

[88] Colorectal Cancer Facts & Figures. *American Cancer Society, 2023*. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2023.pdf

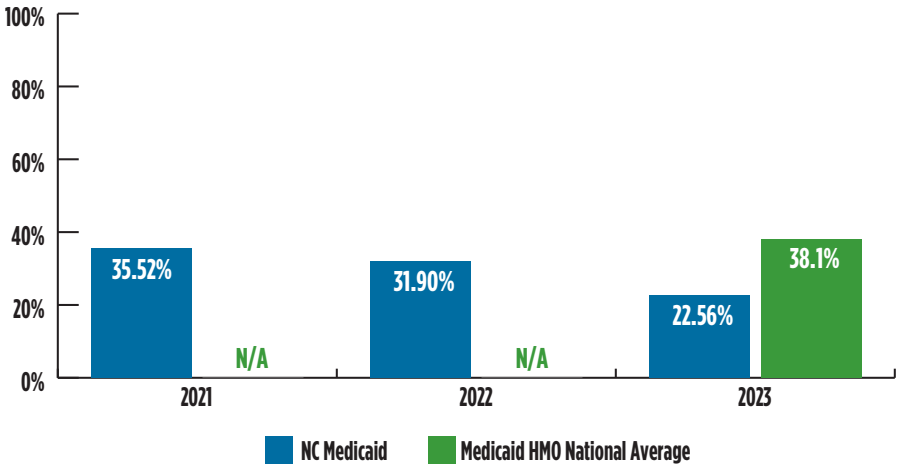
[89] *Colorectal Cancer Screening - NCQA*. https://www.ncqa.org/hedis/measures/colorectal-cancer-screening

Note that the age range for this measure was expanded to include individuals ages 45 through 75 to better align with updated guidance from the US Preventive Services Task Force (USPSTF) in calendar year 2022. The appropriate methods of screening are listed below.[87]

1. Annual fecal occult blood test;
2. Flexible sigmoidoscopy every five years;
3. Colonoscopy every 10 years;
4. Computed tomography colonography every five years; or,
5. Stool DNA test every three years.

If a beneficiary has completed any one of the five screenings listed above, they are identified as compliant for this measure.[87]

Figure 39: COL* 2021-2023 Performance



Because COL was recently added as a measure to assess the Medicaid population, Medicaid HMO National Average data are only available for calendar year 2023.

As seen in Figure 39, NC Medicaid's performance on the COL quality measure decreased from 2021 to 2023. These declining rates mimic NC Medicaid's performance on the AAP quality measure, which is not surprising given that many preventive screenings are either prescribed or conducted during primary care appointments. Today, colorectal cancer is the second leading cause of cancer-related death in the United States, and those who are diagnosed with the disease are younger than ever before.[90] Because of this, it is crucial that NC Medicaid works with its provider partners and stakeholder groups to increase awareness about the importance of colorectal cancer screening.

CHLAMYDIA SCREENING (CHL)

Chlamydia is a common sexually transmitted infection among males and females, but it can have much more serious consequences for people who are biologically female if left untreated.[91] Untreated chlamydia can permanently damage the female reproductive system by causing pelvic inflammatory disease, infertility, and an increased risk of being infected with HIV.[92] To better understand beneficiaries'

[90] Siegel, Rebecca L., et al. "Colorectal Cancer Statistics, 2023." CA: A Cancer Journal for Clinicians, vol. 73, no. 3, 2023, pp. 233–54. Wiley Online Library, https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21772.
[91] CDC. "About Chlamydia." Chlamydia, 12 Aug. 2024, https://www.cdc.gov/chlamydia/about/index.html.
[92] "Chlamydia Screening in Women." NCQA, https://www.ncqa.org/hedis/measures/chlamydia-screening-in-women

access to chlamydia screening services, NC Medicaid uses the *Chlamydia Screening (CHL)* quality measure. This measure evaluates the percentage of beneficiaries ages 16 through 24 who were identified as sexually active and who had at least one test for chlamydia during the calendar year.[90] The CHL measure assess rates among this age group because over half of the cases of chlamydia in the United States in 2023 were among individuals ages 15-24, indicating that this age group is of higher risk.[93]

As seen in Figure 40, rates of chlamydia screening are higher among beneficiaries ages 21 to 24. Beneficiaries do not typically start Pap smears until they are 21 and these appointments are often the same appointments in which beneficiaries are screened for chlamydia. Therefore, beneficiaries under the age of 21 would not typically receive chlamydia screenings unless they are given one by their primary care provider or are already visiting a specialist regularly, which may explain the increase in performance for the 21 to 24 age group.

NC Medicaid has historically performed above the Medicaid HMO national average for the CHL measure (see Figure 41). Though relatively steady, the number of eligible beneficiaries who received recommended chlamydia screenings increased from 2022 to 2023.

Figure 40: NC Medicaid CHL 2021-2023 Performance by Age Group

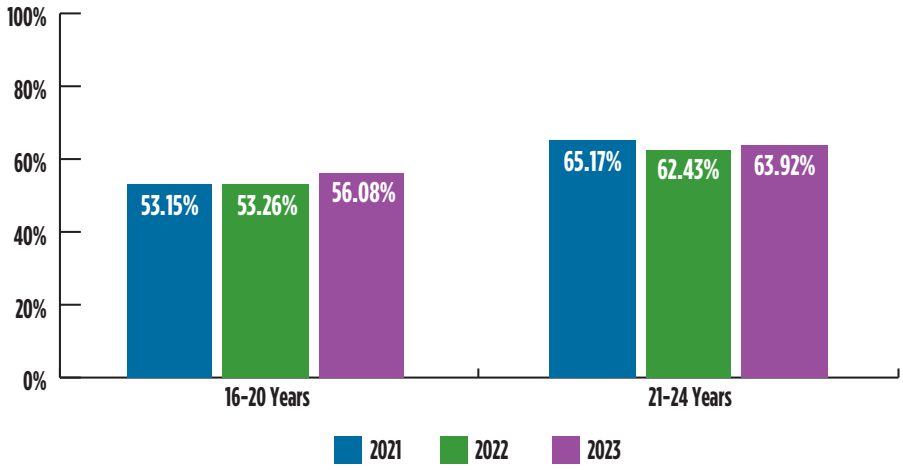
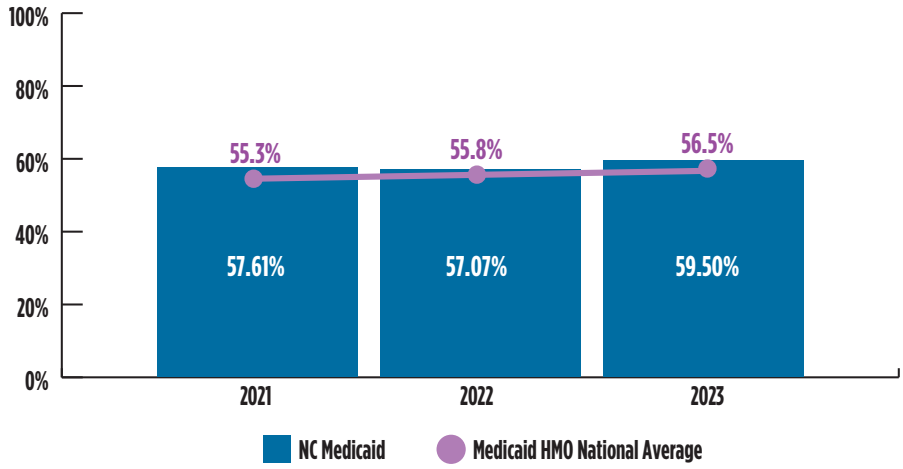


Figure 41: CHL 2021-2023 Performance



Care for the Long-Term Services and Supports Population

Long-Term Services and Supports (LTSS), as defined by CMS, include: care provided in the home, in community-based settings, or in facilities, such as nursing homes; care for people of all ages with disabilities who need support because of age, physical, cognitive, developmental or chronic health conditions, or other functional limitations that restrict their abilities to care for themselves.[94]

[93] Chlamydia: Causes, Symptoms, Treatment & Prevention. https://my.clevelandclinic.org/health/diseases/4023-chlamydia.

[94] *Long-Term Services and Supports Care Management | NC Medicaid*. https://medicaid.ncdhhs.gov/care-management/long-term-services-and-supports-care-management.

Low-income adults who require LTSS are among the most complex, expensive, and fast-growing populations covered by NC Medicaid. With a diverse range of care needs, service utilization, and spending, this population includes individuals from birth until death.

NC Medicaid continues to innovate care delivery and services for these populations. The NC Medicaid LTSS Care Management Program is intended to guide PHP development of care management practices for beneficiaries with LTSS needs to foster high-quality, accessible services that enhance well-being and facilitate engagement in community life.

NC Medicaid is currently working with the State Data Resource Center (SDRC) towards having more complete claims and encounters data for dual eligible individuals (individuals who receive services through Medicare and Medicaid). The dual eligible population represents a large proportion of the LTSS population, so these efforts will contribute to more comprehensive quality measurement in this space. Additionally, CMS has created a Health Home Measure Set to be used by states when reporting quality measurement data for the LTSS population.

GOAL 4: IMPROVE CHRONIC CONDITION MANAGEMENT

Providing adequate management for beneficiaries with chronic conditions is of particular interest to NC Medicaid because this population often requires targeted and ongoing services over extended periods of time. Chronic conditions are broadly defined as conditions that last 12 months or more, require ongoing medical attention, and may impact one's ability to take part in activities and/or daily living. Chronic conditions can be caused by a multitude of factors including genetic predisposition, certain behavioral health risk factors like smoking or poor nutrition, and external factors like living and working conditions.[95] Chronic conditions include illnesses such as diabetes, high blood pressure, cancer and behavioral health challenges. In alignment with NC Medicaid's quality strategy and the goal of improving care for those with chronic conditions, NC Medicaid uses an array of quality measures to assess management of chronic conditions among beneficiaries.

Improve Behavioral Health Care

Behavioral health, which includes emotional, psychological and social well-being, is a key component of overall health. Behavioral health is linked to physical health, with evidence showing that some mental health conditions, like depression, can increase the risk of developing chronic conditions like heart disease. Similarly, having a chronic condition may increase one's risk of experiencing behavioral health challenges.[96] Due to this direct relationship between behavioral health and physical health outcomes, NC Medicaid assigns multiple quality measures related to behavioral health care. Two of these measures are listed below and Goal #5 presents more behavioral health-related measures.

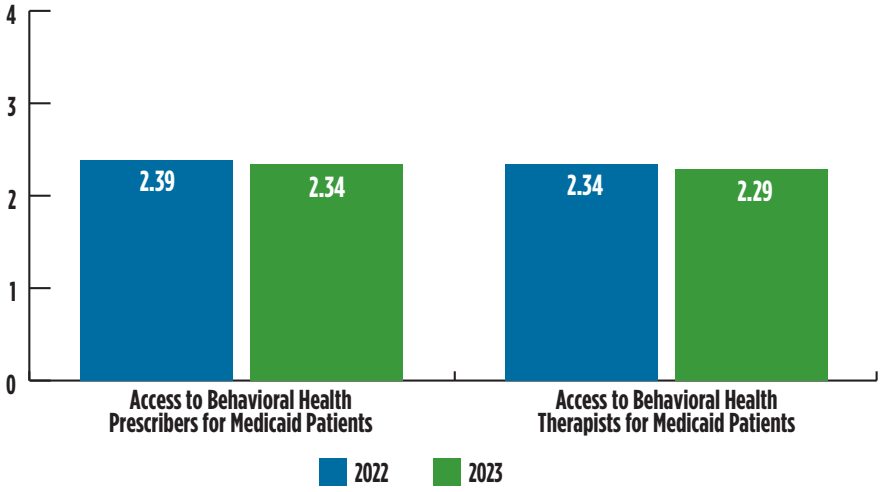
ACCESS TO BEHAVIORAL HEALTH SERVICES

To better understand members' access to these crucial behavioral health services, NC Medicaid uses providers as a vantage point in the *Access to Behavioral Health Prescribers for Medicaid Patients* and *Access to Behavioral Health Therapists for Medicaid Patients* survey measures.[97] Taken from the

[95] CDC. "About Chronic Diseases." Chronic Disease, 24 May 2024, https://www.cdc.gov/chronic-disease/about/index.html.
[96] About Mental Health. 20 May 2024, https://www.cdc.gov/mentalhealth/learn/index.htm.
[97] Limited benefit members were not excluded from the Access to Behavioral Health Prescribers for Medicaid Patients and Access to Behavioral Health Therapists for Medicaid Patients survey measure results.

Provider Experience Survey, these survey questions solicit data on how PCPs and OB-GYNs characterize NC Medicaid beneficiaries' access to behavioral health prescribers and therapists. Providers answered using a scale of 1 (poor) to 4 (excellent).

Figure 42: NC Medicaid Provider Experience Survey Standard Plan Average of Access to Behavioral Health Prescribers and Therapists on a Scale of 1 (poor) to 4 (excellent), 2022-2023



As seen in Figure 42, providers rated patients' access to behavioral health prescribers and behavioral health therapists similarly across both measures and years. The average response for both measures was a rating between "fair" and "good." These findings may indicate that there is room for improvement to ensure Standard Plan members have adequate access to behavioral health services.

USE OF FIRST-LINE PSYCHOSOCIAL CARE FOR CHILDREN AND ADOLESCENTS ON ANTIPSYCHOTICS (APP)

Antipsychotic medications can be a crucial component of treatment for many individuals facing behavioral health challenges but have significant side effects and should only be prescribed when necessary.[98] However, antipsychotic medications at times are prescribed outside of evidence-based standards to treat conditions like attention-deficit hyperactivity disorder (ADHD) and disruptive behaviors for children, where psychosocial interventions are part of first-line treatment and antipsychotic medications are not.[99, 100, 101, 102]

To assess whether providers are using psychosocial care prior to prescribing antipsychotic medication, NC Medicaid uses the *Use of First Line Psychosocial Care for Children and Adolescents on Anti-Psychotics (APP)* quality measure. The APP measure assesses the percentage of children and adolescents 1–17 years of age who had a new prescription for an antipsychotic medication and had documentation of psychosocial care as first-line treatment.[13]

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[98] Correll, Christoph U. "Antipsychotic Use in Children and Adolescents: Minimizing Adverse Effects to Maximize Outcomes." Focus, vol. 6, no. 3, July 2008, pp. 368–78. *psychiatryonline.org (Atypon)*, https://psychiatryonline.org/doi/10.1176/foc.6.3.foc368.

[99] McKinney, Cliff, and Kimberly Renk. "Atypical Antipsychotic Medications in the Management of Disruptive Behaviors in Children: Safety Guidelines and Recommendations." *Clinical Psychology Review*, vol. 31, no. 3, Apr. 2011, pp. 465–71. PubMed, https://www.sciencedirect.com/science/article/abs/pii/S0272735810001753?via%3Dihub.

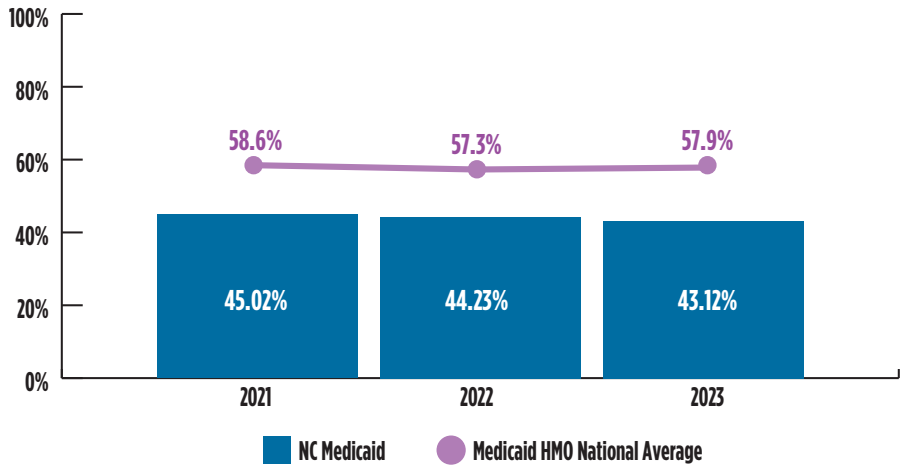
[100] *Experts' Recommendations for Treating Maladaptive Aggression in Youth - PMC*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3279716.

[101] Olfson, Mark, et al. "National Trends in the Outpatient Treatment of Children and Adolescents With Antipsychotic Drugs." *Archives of General Psychiatry*, vol. 63, no. 6, June 2006, pp. 679–85. *Silverchair*, https://jamanetwork.com/journals/jamapsychiatry/fullarticle/209678.

[102] Kutcher, Stan, et al. "International Consensus Statement on Attention-Deficit/Hyperactivity Disorder (ADHD) and Disruptive Behaviour Disorders (DBDs): Clinical Implications and Treatment Practice Suggestions." *European Neuropsychopharmacology: The Journal of the European College of Neuropsychopharmacology*, vol. 14, no. 1, Jan. 2004, pp. 11–28. *PubMed*, https://www.sciencedirect.com/science/article/abs/pii/S0924977X03000452?via%3Dihub.

As seen in Figure 43, NC Medicaid has historically underperformed compared to the national average of Medicaid HMOs. Additionally, NC Medicaid's performance followed national trends and decreased between 2021 and 2023. This declining performance indicates a need for increased utilization of psychosocial care for children being prescribed antipsychotics.

Figure 43: APP 2021-2023 Performance

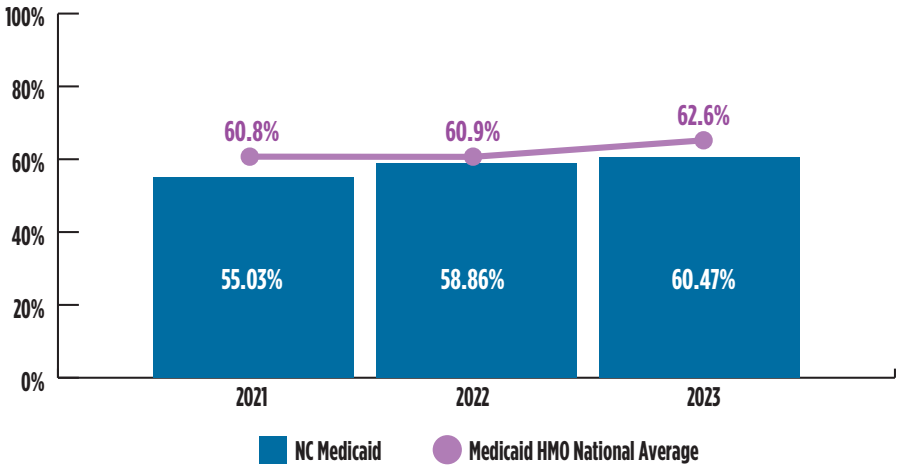


ANTIDEPRESSANT MEDICATION MANAGEMENT (AMM)

Depression is another behavioral health condition that can be chronic. Medication is a common treatment for depression, but proper response to medication requires the provider to determine which medication is the best fit for an individual beneficiary and the beneficiary to adhere to a treatment plan across the acute (short term) and continuation (long term) phases, respectively.[101] It is crucial that beneficiaries receive medication management services and continue taking antidepressant medications following initial prescription. To monitor ongoing management and assess medication adherence, NC Medicaid uses the *Antidepressant Medication Management (AMM)* quality measure. This measure calculates two rates:[103]

1. Effective Acute Phase Treatment: Adults who remained on an antidepressant medication for at least 84 days (12 weeks); and
2. Effective Continuation Phase Treatment: Adults who remained on an antidepressant medication for at least 180 days (six months).

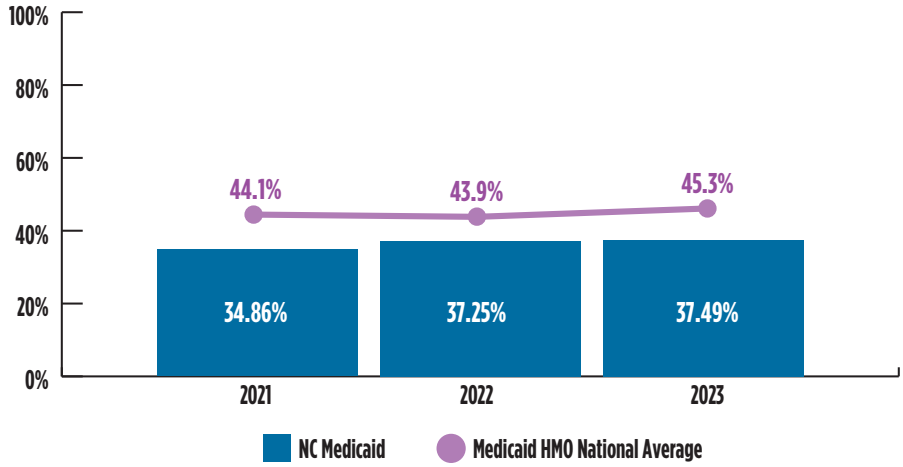
Figure 44: AMM, Effective Acute Phase Treatment 2021-2023 Performance



[103] "Antidepressant Medication Management." *NCQA*, https://www.ncqa.org/hedis/measures/antidepressant-medication-management.

As seen in Figures 44 and 45, NC Medicaid has historically underperformed compared to the Medicaid HMO national average for both sub-measures, but underperformance is more noticeable for the *Effective Continuation Phase* sub-measure. Additionally, rates of continuation of antidepressant medication are much lower than rates of initiation, indicating a need for ongoing medication management and long-term support following prescription and initial use.

Figure 45: AMM, Effective Continuation Phase Treatment 2021-2023 Performance



It should be noted that NCQA retired the HEDIS AMM measure for Calendar year 2025, acknowledging that the measure fails to address other non-pharmacological methods of care and does not capture clinical judgments to avoid pharmacological treatments for certain beneficiaries. Instead of using the AMM measure, NCQA advises that state Medicaid agencies rely on more comprehensive measures that assess depression screening, follow-up and monitoring, and improvement in outcomes.[104]

FOLLOW-UP AFTER EMERGENCY DEPARTMENT VISIT FOR MENTAL ILLNESS (FUM) AND FOLLOW-UP AFTER HOSPITALIZATION FOR MENTAL ILLNESS (FUH)

Ensuring beneficiaries receive timely follow-up care following ED visits or hospitalizations for mental illness allows providers to reassess treatment plans and medications and connect beneficiaries with additional services, which may help prevent subsequent ED visits or hospitalizations.[105] It is recommended that patients who had an ED visit or were hospitalized for mental illness receive follow-up care with a mental health provider within 30 days of their discharge. Ideally, patients would receive follow-up care with a provider in the seven days following their visit, but obtaining immediate follow-up care can be challenging, particularly for patients who had low engagement with outpatient care prior to their hospital visit.[106]

Two HEDIS measures are used to assess follow-up care for those who visited the hospital due to mental illness: the *Follow-Up After Emergency Department Visit for Mental Illness (FUM)* and the *Follow-Up After Hospitalization for Mental Illness (FUH)* quality measures, described in Table 7.[13]

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[104] Communications, NCQA. "HEDIS MY 2025: What's New, What's Changed, What's Retired." *NCQA*, 1 Aug. 2024, https://www.ncqa.org/blog/hedis-my-2025-whats-new-whats-changed-whats-retired.

[105] Beadles, Christopher A., et al. "First Outpatient Follow-up after Psychiatric Hospitalization: Does One Size Fit All?" *Psychiatric Services (Washington, D.C.)*, vol. 66, no. 4, Apr. 2015, pp. 364–72. *PubMed*, https://psychiatryonline.org/doi/10.1176/appi.ps.201400081.

[106] Smith, Thomas E., et al. "The Effectiveness of Discharge Planning for Psychiatric Inpatients With Varying Levels of Preadmission Engagement in Care." *Psychiatric Services (Washington, D.C.)*, vol. 73, no. 2, Feb. 2022, pp. 149–57. *PubMed*, https://psychiatryonline.org/doi/10.1176/appi.ps.202000863.

Table 7: FUM and FUH

Measure Name	Description
Follow-Up After Emergency Department Visit for Mental Illness (FUM)	The percentage of discharges for beneficiaries six years of age and older who visited the ED for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health practitioner. Two rates are submitted: 1. The percentage of discharges for which the beneficiary received follow-up within 30 days after discharge. 2. The percentage of discharges for which the beneficiary received follow-up within seven days after discharge.
Follow-Up After Hospitalization for Mental Illness (FUH)	The percentage of discharges for beneficiaries six years of age and older who were hospitalized for treatment of selected mental illness diagnoses and who had a follow-up visit with a mental health practitioner. Two rates are reported: 1. The percentage of discharges for which the beneficiary received follow-up within 30 days of discharge. 2. The percentage of discharges for which the beneficiary received follow-up within seven days of discharge.

NC Medicaid has historically performed below the Medicaid HMO national average for both the 7-day and 30-day follow-up FUH indicators. Moreover, NC Medicaid's rates have been trending downward since 2021. As seen in Figure 46, rates of follow-up in the seven days following a beneficiary's hospitalization for mental illness are much lower than rates of follow-up during the 30-day period. These findings likely represent access to care and beneficiary engagement barriers, areas that NC Medicaid is currently targeting for performance improvement efforts.

Figure 46: FUH, 7-Day Follow-Up 2021-2023 Performance

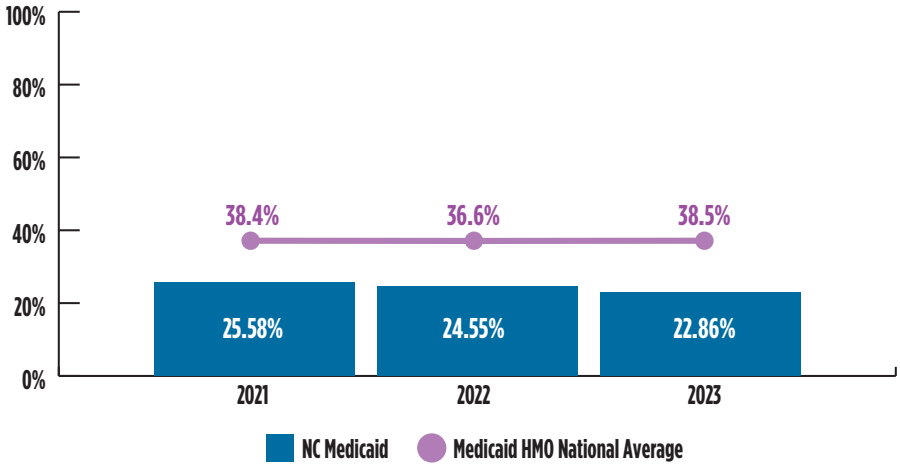
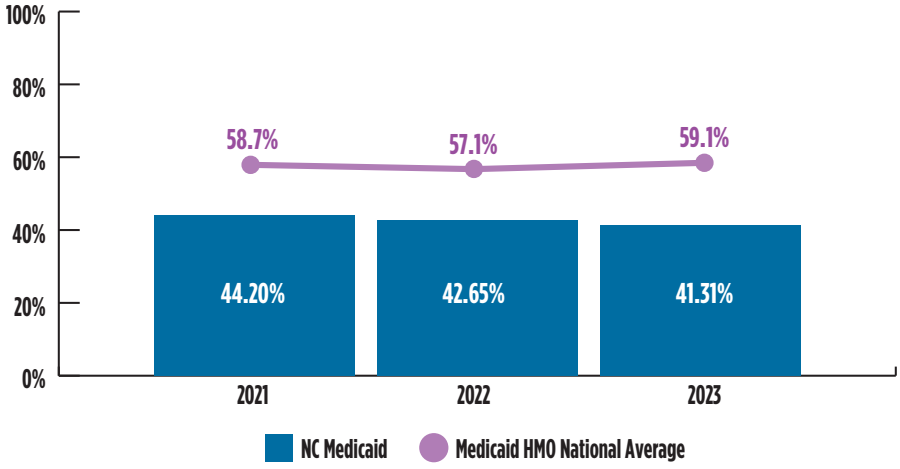


Figure 47: FUH, 30-Day Follow-Up 2021-2023 Performance



Like the FUH measure, rates of follow up in the seven days following an ED visit for mental illness are much lower than rates of follow-up in the 30 days following the visit. Historically, NC Medicaid has performed as well as or above the national average. However, much like national performance, NC Medicaid's performance has been trending downward since 2021.

Figure 48: FUM, 7-Day Follow-Up 2021-2023 Performance

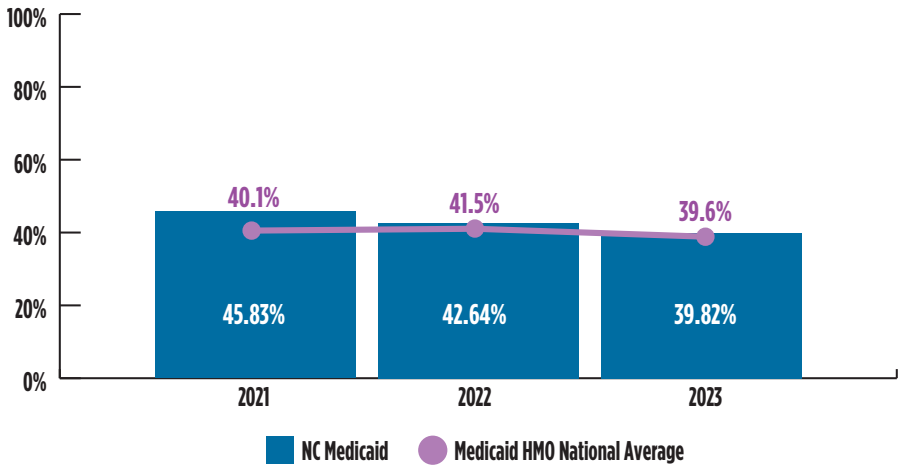
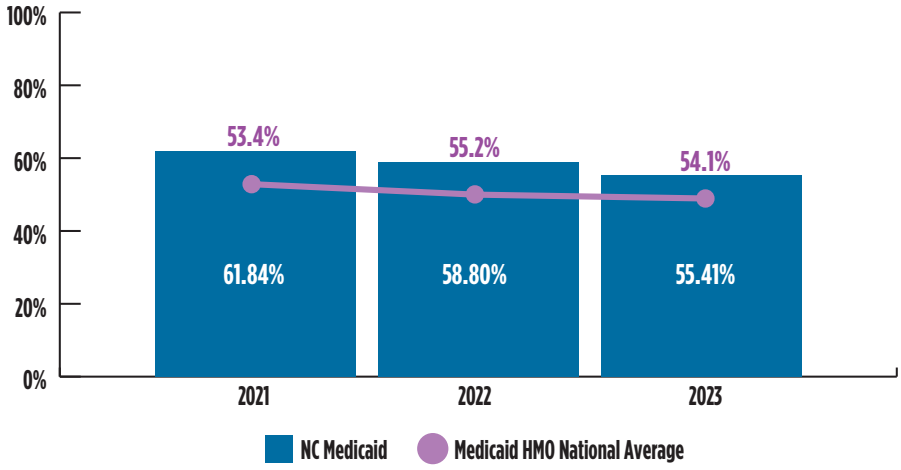


Figure 49: FUM, 30-Day Follow-Up 2021-2023 Performance

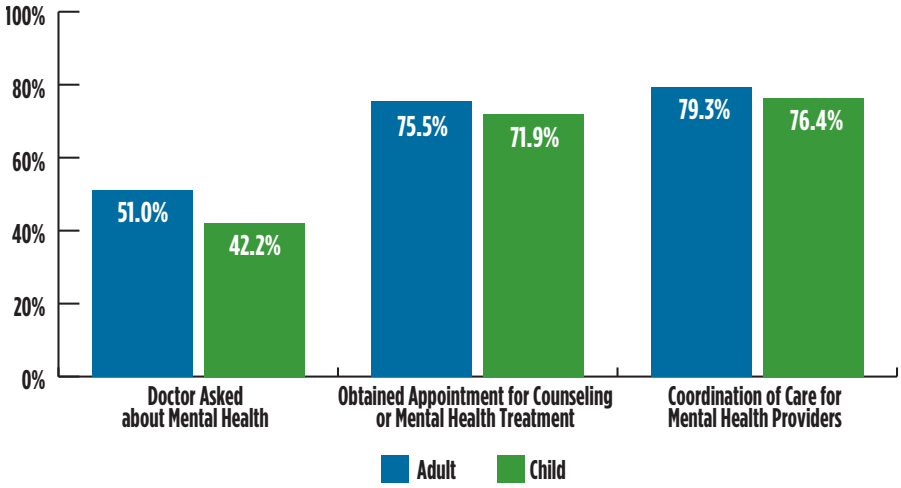


It should be noted that both the FUM and FUH measures require beneficiaries to meet with a designated subset of mental health providers to satisfy measure requirements and be counted in the numerator of the measure. This presents a significant challenge as 93 out of 100 counties throughout North Carolina have at least one geographic or population health professional shortage area (HPSA) for mental health services. As a result of the high number of HPSAs, many beneficiaries must seek mental health follow-up services with a non-qualifying provider like their primary care provider, which does not satisfy measure requirements and may impact NC Medicaid's performance. Learn more about HPSAs by visiting the NCDHHS Office of Rural Health North Carolina Health Professional Shortage Area fact sheet. Starting in MY2025, NCQA is making updates to FUH and FUM, aimed at improving follow-up care and data capture by expanding the types of providers and services that can fulfill the follow-up requirements.

BENEFICIARY EXPERIENCE WITH MENTAL HEALTH TREATMENT

In addition to using claims and encounters data to understand the behavioral health care provided to beneficiaries, NC Medicaid strives to understand the quality of these services through the perspective of the beneficiary. To achieve this, NC Medicaid uses multiple mental health CAHPS supplemental survey items including *Doctor Asked about Mental Health*, *Sought Counseling or Treatment for Mental Health*, *Obtained Appointment for Counseling or Mental Health Treatment*, and *Coordination of Care for Mental Health Providers*. For this measure, respondents could select "never," "sometimes," "usually," or "always" to answer. Responses of "usually" or "always" are considered positive ratings.[18]

Figure 50: NC Medicaid Program Adult and Child CAHPS Respondents who Rated Their/Their Child's, Mental Health Care Positively Among Those Who Sought Counseling or Mental Health Treatment, 2023



As seen in Figure 50, of those who sought treatment, 75.5% of adults and 71.9% of children obtained an appointment for counseling or mental health treatment. Furthermore, 79.3% of adults and 76.4% of children reported positive ratings for the coordination of care among their mental health providers. With these thoughts in mind, roughly half of adult beneficiaries and roughly 40% of child beneficiaries reported that their provider "usually" or "always" asked about their mental health.

While not included in Figure 50, it is important to note that only 17.9% of adult and child CAHPS survey respondents reported that they sought counseling or mental health treatment.

Improve Diabetes Management

Care management is crucial for diabetes, which can result in blindness, nerve damage, kidney disease, and frequent infections, among other poor health outcomes if under- or untreated.[107, 108] To better monitor health outcomes among beneficiaries with diabetes, NC Medicaid uses multiple PQIs and PDIs. PQIs aim to identify issues of access to quality outpatient care, while PDIs assess potential quality and safety issues specific to the pediatric inpatient population.[109, 110] These measures and NC Medicaid's performance are described below.

Looking Ahead: Behavioral Health and Intellectual/ Developmental Disabilities Tailored Plans

Tailored Plans are an option within NC Medicaid Managed Care that offer the same physical health coverage as Standard Plans, but with additional coverage for behavioral health services. Tailored Plans offer integrated physical health, pharmacy, care coordination, and behavioral health services for beneficiaries who have significant behavioral health and substance use disorders, I/DDs and TBIs.[98]

Tailored Plans provide a vulnerable subsection of NC Medicaid's beneficiaries with essential behavioral health services. Tailored Plans help improve the quality of care received by eligible beneficiaries through a couple of different means, namely through waiver services and through Performance Improvement Projects (PIPs). While they did not exist during the timeframe featured in this report, Tailored Plans launched in North Carolina on July 1, 2024.

[107] Votel, Kaitlyn. "The Complications of Diabetes – and How to Avoid Them." *HealthPartners Blog*, 5 Jan. 2024, https://www.healthpartners.com/blog/untreated-diabetes-complications.

[108] CDC. "Vision Loss and Diabetes." *Diabetes*, 10 June 2024, https://www.cdc.gov/diabetes/diabetes-complications/diabetes-and-vision-loss.html.

[109] *AHRQ QI: Pediatric Quality Indicators Overview*. https://qualityindicators.ahrq.gov/measures/pdi_resources.

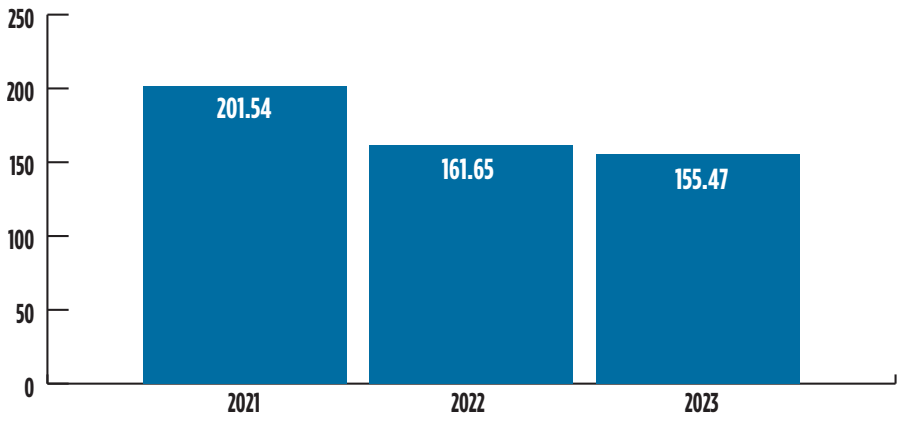
[110] *AHRQ QI: Prevention Quality Indicators in Inpatient Settings Overview*. https://qualityindicators.ahrq.gov/measures/pqi_resources.

PQI-01: DIABETES SHORT-TERM COMPLICATIONS ADMISSION RATE

To assess whether care management is effective for preventing diabetes-related hospitalizations, NC Medicaid uses the *Diabetes Short-Term Complications Admission Rate*[111] prevention quality indicator. This measure assesses the number of hospitalizations among beneficiaries ages 18 years and older for which diabetes with short-term complications was the principal diagnosis.[112] For this measure, a lower number indicates better performance.

As seen in Figure 51, NC Medicaid's PQI-01 performance improved from 2021 to 2023. This indicates fewer beneficiaries were admitted to the hospital due to diabetes-related short-term complications, suggesting that beneficiaries are receiving better diabetes care management. While 2022 and 2023 national data are not available for comparison, NC Medicaid's 2021 PQI-01 rate was very high compared to the national benchmark of 82 admissions per 100,000 population.[113]

Figure 51: PQI-01: Diabetes Short-Term Complications Admission Rate 2021-2023



Diabetes Management Learning Collaborative

The Diabetes Management Learning Collaborative brings together the Standard Plans, the Division of Public Health (DPH), the American Diabetes Association (ADA), and NC Medicaid. This collective effort focuses on identifying barriers in diabetes care and developing targeted interventions to enhance the quality of care provided to Medicaid beneficiaries across North Carolina.

The Collaborative's mission is to transform diabetes care in North Carolina through strategic partnerships, data-driven decision making and improvements, and a commitment to sustainable health outcomes. By uniting the Standard Plans with key stakeholders like DPH, ADA, and NC Medicaid, the initiative addresses critical challenges in diabetes management, such as data quality, provider engagement, and beneficiary education. The Collaborative works to improve key indicators, including the Glycemic Status Assessment for Patients with Diabetes (GSD) quality measure, with a goal of enhancing NC Medicaid's performance by 1.67% annually over three years. By expanding its focus to include both sub-measures, Glycemic Status below 8.0% and Glycemic Status above 9.0%, the Collaborative aims to support continuous quality improvement, reduce diabetes-related complications, and achieve better health outcomes for NC Medicaid beneficiaries with diabetes.

[111] Limited benefit members were not excluded from the PQI-01 results.

[112] Prevention Quality Indicator 01 (PQI 01) Diabetes Short-Term Complications Admission Rate. *AHRQ*, 2024. https://qualityindicators.ahrq.gov/Downloads/Modules/PQI/V2024/TechSpecs/PQI_01_Diabetes_Short-term_Complications_Admission_Rate.pdf

[113] Prevention Quality Indicators (PQI) Benchmark Data Tables, v2024. *AHRQ*, 2024. https://qualityindicators.ahrq.gov/Downloads/Modules/PQI/V2024/Version_2024_Benchmark_Tables_PQI.pdf

Improve Asthma Management

Asthma is another chronic condition that, if left unmanaged or uncontrolled, can lead to poor health outcomes. Symptoms like wheezing, tightness of the chest, shortness of breath that are associated with asthma may lead to lung infections, delayed growth and development, and life-threatening asthma attacks if not addressed in a timely manner.[114] NC Medicaid prioritizes monitoring asthma medications and hospital admissions among beneficiaries with asthma to better understand how beneficiaries' asthma is being managed.

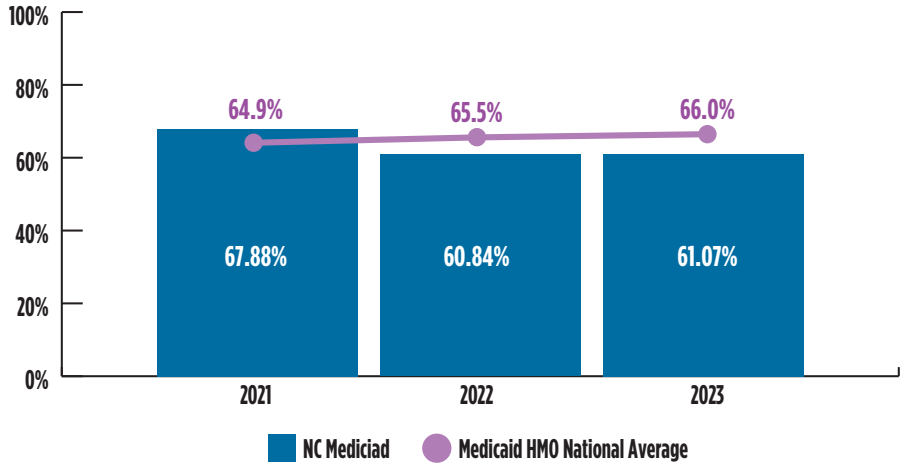
ASTHMA MEDICATION RATIO (AMR)

Medications are one of the most widely used and effective methods to address and control asthma symptoms. An individual's need for medication can vary based on age and severity of symptoms but individuals with asthma commonly use a combination of quick-relief and long-term controller medications.[115] Quick-relief medicines work to quickly relax the airways to make breathing easier, while long-term control medicines reduce swelling and inflammation in the airways to prevent symptoms from developing.[113] Prescription of these long-term "controller" medications can serve as an indicator that beneficiaries' asthma is being well managed.

To assess the appropriate use of controller medications among its beneficiary population, NC Medicaid uses the *Asthma Medication Ratio (AMR)* quality measure. This measure calculates the percentage of beneficiaries 5 through 64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater.[13]

As seen in Figure 52, NC Medicaid's performance on the AMR measure decreased from 2021 to 2022 indicating that fewer beneficiaries had a ratio greater than 0.50 of controller medications to total asthma medications. NC Medicaid's performance is comparable to national trends and improved from 2022 to 2023.

Figure 52: AMR 2021-2023 Performance



PDI-14: ASTHMA ADMISSION RATE

Children with asthma face unique challenges in managing their symptoms. While the causes of asthma are not fully understood, children may be at a higher risk of developing asthma if they have a family history of asthma or allergies, are overweight, or if they are exposed to certain environmental factors.[116] Since children are anatomically smaller, any swelling or difficulty breathing resulting from asthma attacks, may be more

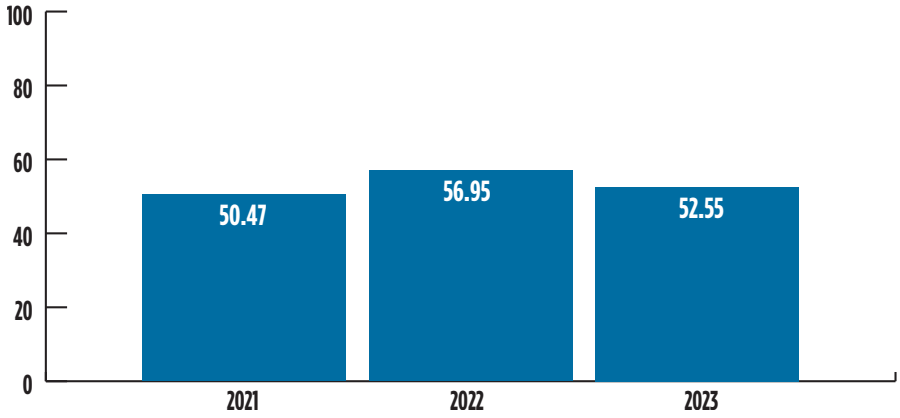
[114] "What Is Uncontrolled Asthma?" *Healthline*, 6 June 2023, https://www.healthline.com/health/asthma/uncontrolled-asthma.
[115] Association, American Lung. *Understand Your Asthma Medication*. https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/treatment/medication.
[116] "Childhood Asthma: Make a Plan to Control Attacks-Childhood Asthma - Symptoms & Causes." *Mayo Clinic*, https://www.mayoclinic.org/diseases-conditions/childhood-asthma/symptoms-causes/syc-20351507.

life threatening than it would be in a larger, more developed adult. In fact, asthma is the leading cause of hospitalizations, ED visits, and missed school days among children. While childhood asthma cannot be cured, with the proper medications it can be successfully managed.[114]

To better understand if asthma is being successfully managed among child beneficiaries, NC Medicaid calculates the *Asthma Admission Rate*[117] pediatric quality indicator. This indicator assesses the number of hospitalizations among beneficiaries ages 2 to 17 years of age who had a principal diagnosis of asthma.[118] For this measure, a lower number indicates better performance.

As seen in Figure 53, NC Medicaid's PDI-14 performance varied annually from 2021 to 2023. The number of children being admitted to the hospital for asthma-related complications increased in calendar year 2022, before decreasing again in 2023. While national benchmark data is not available for 2022 and 2023 yet, the 2021 national rate for PDI-14 was 48.53 admissions per 100,000 population, indicating that NC Medicaid performed slightly below the 2021 national benchmark.[119]

Figure 53: PDI-14: Asthma Admission Rate 2021-2023



PQI-05: CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) OR ASTHMA IN OLDER ADULTS ADMISSION RATE

While asthma is more common among children in North Carolina, 9.2% of adult North Carolinians are impacted by asthma.[120] The causes, triggers, and symptoms of adult asthma are similar to those of children and should be monitored just as closely to ensure positive health outcomes.

To better understand if asthma is being managed among the adult beneficiary population, NC Medicaid uses the *Chronic Obstructive Pulmonary Disease (COPD)* or *Asthma in Older Adults Admission Rate*[121] prevention quality indicator.[122] This indicator assesses the number of hospitalizations among beneficiaries ages 40 years and older who had a principal diagnosis of either COPD or asthma. For this measure, a lower number indicates better performance.[120]

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[117] Limited benefit members were not excluded from the PDI-14 results.

[118] Prevention Quality Indicator 01 (PQI 01) Asthma Admission Rate. *AHRQ*, 2024. https://qualityindicators.ahrq.gov/Downloads/Modules/PDI/V2024/TechSpecs/PDI_14_Asthma_Admission_Rate.pdf

[119] Pediatric Quality Indicators (PDI) Benchmark Data Tables, v2024. *AHRQ*, 2024. https://qualityindicators.ahrq.gov/Downloads/Modules/PDI/V2024/Version_2024_Benchmark_Tables_PDI.pdf

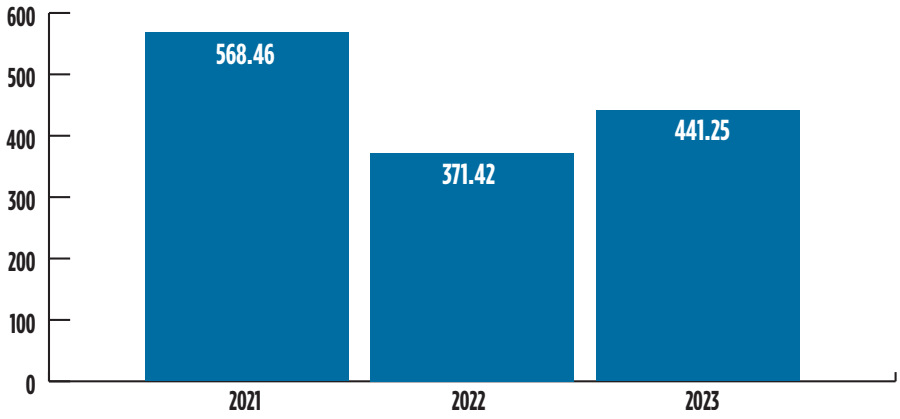
[120] *Asthma Trends Brief: Current Asthma Demographics | American Lung Association*. https://www.lung.org/research/trends-in-lung-disease/asthma-trends-brief/current-demographics.

[121] Limited benefit members were not excluded from the PQI-05 results.

[122] Prevention Quality Indicator 05 (PQI 05) Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate. *AHRQ*, 2024. https://qualityindicators.ahrq.gov/Downloads/Modules/PQI/V2024/TechSpecs/PQI_05_Chronic_Obstructive_Pulmonary_Disease_(COPD)_or_Asthma_in_Older_Adults_Admission_Rate.pdf

Like NC Medicaid's performance on PDI-14, NC Medicaid's performance on PQI-05 has fluctuated from 2021 to 2023. The rate of beneficiaries being hospitalized due to COPD or asthma decreased from 2021 to 2022, before increasing again in 2023. While data are not available for 2022 and 2023, NC Medicaid's 2021 rate was higher than the national PQI-05 benchmark of 195.8 admissions per 100,000 population.[111]

Figure 54: PQI-05: COPD or Asthma in Older Adults Admission Rate 2021-2023



Improve Hypertension Management

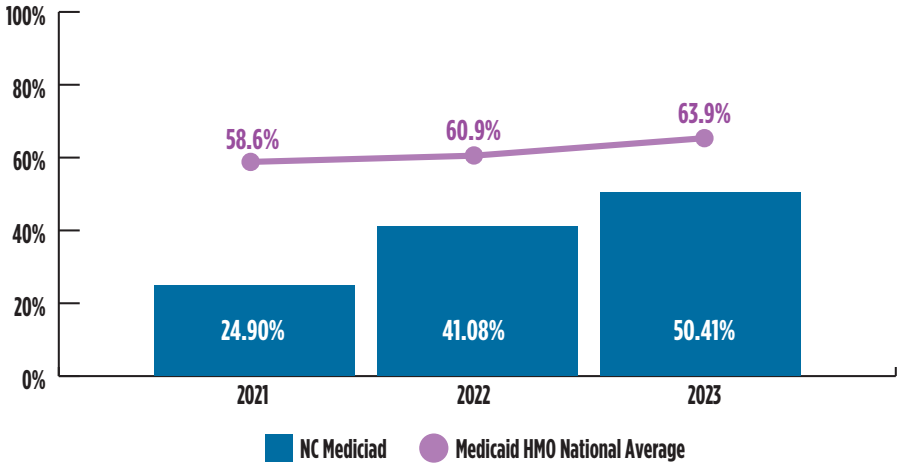
Like diabetes and asthma, hypertension, more commonly known as high blood pressure, can result in heart attack, stroke, and increase risk for dementia if left untreated.[123] While the causes of high blood pressure vary, risk factors include age, race, family history, obesity, lack of exercise, tobacco use and diet. Additionally, certain chronic conditions like kidney disease and diabetes can increase risk of high blood pressure.[121]

CONTROLLING HIGH BLOOD PRESSURE (CBP)

In addition to lifestyle changes, management of high blood pressure includes working with a health care team to create a care plan and taking medication if necessary.[124] To better understand if NC Medicaid beneficiaries are receiving the health care needed to control their blood pressure and subsequently keeping their blood pressure within an acceptable range, NC Medicaid uses the *Controlling High Blood Pressure (CBP)* quality measure. The CBP measure assesses the percentage of adults, ages 18 through 85 years, who had a diagnosis of hypertension and whose blood pressure was adequately controlled. For this measure, an appropriate blood pressure reading would be less than 140/90mm Hg but target blood pressures may vary clinically based on other medical issues that may be impacting an individual's health.[13]

As seen in Figure 55, NC Medicaid has seen significant improvements in CBP performance. To capture more accurate CBP data, NC Medicaid has led efforts to improve how clinical data is recorded and collected. These improvements include increasing the number of providers who are recording patient clinical data

Figure 55: CBP 2021-2023 Performance



[123] "High Blood Pressure (Hypertension): Controlling This Common Health Problem-High Blood Pressure (Hypertension) - Symptoms & Causes." *Mayo Clinic*, https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/symptoms-causes/syc-20373410.

[124] CDC. "Managing High Blood Pressure." *High Blood Pressure*, 20 May 2024, https://www.cdc.gov/high-blood-pressure/living-with/index.html.

in a standardized and complete format, so it is compatible with NC HealthConnex, North Carolina's state-designated HIE that enables the exchange of patient demographic and clinical data among authorized entities. These improvements in data collection ultimately increase interoperability between providers and help explain these higher CBP rates in MY2023.

GOAL 5: WORK WITH COMMUNITIES TO IMPROVE POPULATION HEALTH

This goal, outlined in NC Medicaid's Quality Strategy, highlights areas where community engagement is crucial to improve health outcomes. While this engagement can look different depending on the issue being addressed, many communities face unique challenges when trying to improve population health. Challenges like health disparities,[125] are difficult to address solely from a medical perspective due to their systematically rooted and complex nature, while others, like opioid and tobacco use, and obesity, are understood health behaviors that can be modified through community intervention and collaboration. NC Medicaid strives to better understand if its efforts to improve population health are effective through an array of quality measures.

Address Unmet Health-Related Resource Needs

The first objective outlined in Goal 5 focuses on the importance of addressing social determinants of health (SDOH), a population-level view of the social and economic environments in which people live, play, work, and live, and the resulting health-related social/resource needs (HRSN or HRRN) experienced by individuals.[124] These include factors like housing instability, food insecurity, lack of transportation, and safety concerns that impact health behaviors, health outcomes and/or the ability to access health services.[126] Research has found that SDOH are responsible for roughly half of the differences in health outcomes across the United States.[124] NC Medicaid has implemented innovative strategies to address SDOH, and is continuing to develop corresponding quality measures to assess whether and how beneficiaries' access to needed social resources is improving and the resulting impact to health outcomes for populations whose needs are addressed.

Rate of Screening for Health-Related Resource Needs (HRRN) Quality Measure

The Rate of Screening for Health-Related Resource Needs (HRRN) quality measure was created by NC Medicaid to assess if members are being properly screened for health-related resource needs. These needs may include access to healthy food, safe housing and transportation, among others. HRRN specifically calculates "the percentage of beneficiaries who completed a screening within the calendar year." While data is not yet publicly available, HRRN is a priority measure for the Department and performance is being tracked internally using plan-reported data. NC Medicaid hopes that measure data will be available for public use in the near future.

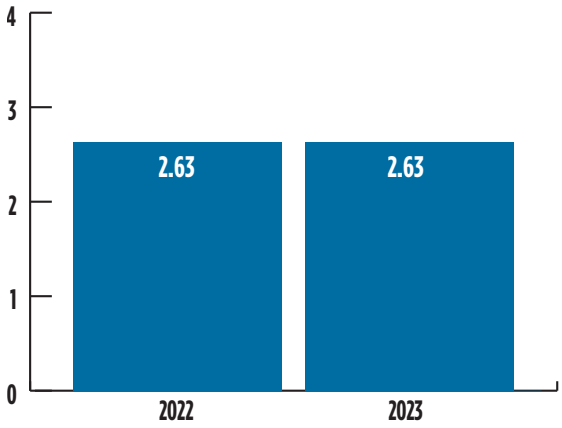
[125] Disparities in health that stem from unjust, systemic policies and practices which limit opportunities for good health.

[126] Addressing Health Related Social Needs in Communities Across the Nation. *U.S. Department of Health and Human Services (HHS)*, 2023. https://aspe.hhs.gov/sites/default/files/documents/3e2f6140d0087435cc6832bf8cf32618/hhs-call-to-action-health-related-social-needs.pdf

SUPPORT FOR ADDRESSING SOCIAL DETERMINANTS OF HEALTH

Health care providers are in a unique position to address SDOH. SDOH directly underpin health and patient discussions of their health challenges with a provider. Indeed, in these spaces, different SDOH challenges are often revealed. As such, it is crucial that providers feel they have the support, training and tools to address their patients' SDOH needs. To better understand providers' perception of the support they have in addressing SDOH, NC Medicaid includes the *Support for Addressing Social Determinants of Health*[127] survey question in the Provider Experience Survey.

Figure 56: NC Medicaid Provider Experience Survey Standard Plan Average of Support for Addressing SDOH on a Scale of 1 (poor) to 4 (excellent), 2022-2023



As seen in Figure 56, providers' experiences with the support they receive from Standard Plans they contract with in addressing SDOH remained the same from 2022 through 2023. NC Medicaid's average response was between "fair" and "great"; this may indicate a need for updated resources and increased support to providers in addressing SDOH challenges among their Medicaid patients.

Healthy Opportunities Pilots

The Healthy Opportunities Pilots (HOP) is the nation's first comprehensive program to test and evaluate the impact of providing select evidence-based, non-medical interventions related to housing, food, transportation, and interpersonal safety/toxic stress to high-needs Medicaid beneficiaries' health outcomes and health care costs. In recognition that research shows up to 80% of health is determined by social and environmental factors and the behaviors that emerge as a result, the federal government authorized the implementation of the Healthy Opportunities Pilots. Part of the state's 1115 demonstration waiver, the state successfully launched HOP services in March 2022. The state has since received the opportunity to continue HOP for an additional five years, through December 9, 2029.[128]

HOP services launched March 15, 2022, in three predominantly rural regions of North Carolina with the following goals:

- Integrate evidence-based, non-medical services into Medicaid to improve health outcomes for Medicaid beneficiaries, promote health equity, and reduce costs to NC Medicaid.
- Leverage independent evaluation results to determine which services are of highest value and impact.
- Create an accountable infrastructure, sustainable partnerships, and payment vehicles that support integrating the highest value non-medical services into the Medicaid program sustainably at scale.

North Carolina worked with a wide range of stakeholders to achieve these goals. Pilot stakeholders— including health plans, Care Management Entities, Human Service Organizations (HSOs) (i.e., community-based organizations and social service agencies), and Network Leads (i.e., organizations that build, manage, and support a network of HSOs) — all play coordinated but distinct roles to provide whole-person care to HOP enrollees. The collaboration among stakeholders allowed the Department to begin to address health disparities by ensuring that a whole-person approach was maintained when addressing the needs of Medicaid members.

[127] Limited benefit members were not excluded from the Support for Addressing Social Determinants of Health survey measure results.

[128] Hood, Carlyn M., et al. "County Health Rankings: Relationships Between Determinant Factors and Health Outcomes." *American Journal of Preventive Medicine*, vol. 50, no. 2, Feb. 2016, pp. 129–35. *PubMed*, https://www.ajpmonline.org/article/S0749-3797(15)00514-0/abstract.

From program launch through November 30, 2023, over 13,000 unique individuals were enrolled in HOP, and nearly 200,000 services were delivered across HOP domains of service. An interim evaluation report from that time demonstrated the program's promising results:[129]

- Effective Service Delivery: North Carolina's goal of establishing effective multi-sector collaboration between the state, PHPs, healthcare systems, Network Leads and HSOs has been achieved in the three HOP regions. HOP infrastructure has successfully enabled delivery of HOP services. Food services are the most common service type, representing more than 85% of all services delivered.
- HOP Services Are Associated with Improvements in Social Needs: The independent evaluators found strong evidence that HOP services reduced the total number of social needs for individuals. Findings suggest that longer participation in HOP may be associated with greater reduction in needs.
- Participation in HOP Impacted Health Care Utilization: Participants were likely to enroll in HOP during a period of rising risk for adverse health care utilization and spending. HOP participation was associated with decreased ED utilization (an estimated reduction of 6 ED visits per 1000 member-months. HOP participation was also associated with reduced inpatient hospitalizations for non-pregnant adults by 2 admissions per month per 1000 beneficiaries.
- Receipt of HOP Services Lowered Total Cost of Care: Researchers found lower health care expenditures attributable to HOP participation across several analyses, relative to what would have occurred without HOP participation. Evaluators estimated that service spending (which includes spending for medical care and HOP services), was, on average, $85 dollars less per HOP participant per month than it would have been in the absence of the HOP program. Longer participation in HOP (e.g., 12 months rather than 6 months) was associated with greater reductions in direct service spending.

As the number of Medicaid members aided by the Healthy Opportunities Pilots continues to scale up, NC Medicaid will continue to evaluate the program to understand: a) the health outcomes for those supported by services; b) the effectiveness of the HOP model; and, c) impact of HOP services provision on health-care costs.

Address the Opioid Crisis

Addressing the opioid crisis is another objective for which working alongside communities is crucial. In North Carolina, five people die from opioid overdose every day, emphasizing how devastating the opioid epidemic has been to families, communities, and care providers.[130, 131] Because opioid overdose is associated with SUD, NCDHHS is working to connect people with preventive care, treatment for SUD, and necessary community supports.[129] These efforts include increasing access to services like the overdose reversal drug known as naloxone and syringe exchange programs, and as well as expanding access to SUD treatment services.[129] NC Medicaid uses an array of quality measures to evaluate opioid use and SUD treatment, which generally fall into two categories: monitoring opioid use among beneficiaries and assessing the SUD treatment beneficiaries are receiving.

[129] NC Medicaid Healthy Opportunities Pilots Interim Evaluation Report. *Department of Health and Human Services*, 2024. https://www.ncdhhs.gov/healthy-opportunities-pilots-interim-evaluation-report/download?attachment.

[130] "The Impact of Opioids." *More Powerful NC*, https://www.morepowerfulnc.org/get-the-facts/the-impact.

[131] *Overdose Epidemic | NCDHHS*. https://www.ncdhhs.gov/about/department-initiatives/overdose-epidemic.

QUALITY MEASURES MONITORING OPIOID USE

Use of Opioids from Multiple Providers in Persons Without Cancer (OMP) and Use of Opioids at High Dose in Persons Without Cancer (OHD)

While opioid use of any kind is dangerous and increases one's likelihood of overdose, the use of opioids from multiple providers and pharmacies, and the use of opioids at high doses, drastically increases associated risks.[132] Studies have found that individuals who source opioids from four or more providers or pharmacies have a higher risk of overdose related death compared to those who receive opioids from a singular provider or pharmacy.[130] Additionally, the CDC recommends that providers implement additional precautions when prescribing higher doses of opioids and recommends that providers avoid these higher doses altogether.[133] Because of these increased risks, it is crucial that NC Medicaid monitor beneficiaries who receive opioid prescriptions from multiple sources and those who are taking opioids at high doses using the *Use of Opioids from Multiple Providers in Persons Without Cancer (OMP)* and *Use of Opioids at High Dose in Persons Without Cancer (OHD)* quality measures.[13] See Table 8 for a description of each measure.

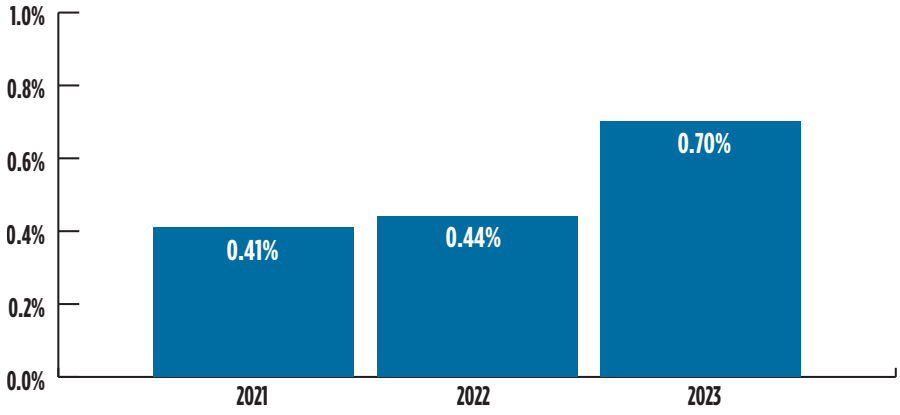
Table 8: OMP and OHD

Measure Name	Description
Use of Opioids from Multiple Providers in Persons Without Cancer (OMP)	Calculates the percentage of individuals, 18 years of age and older, who received prescriptions for opioids from four or more prescribers and four or more pharmacies within a 180-day period.
Use of Opioids at High Dose in Persons Without Cancer (OHD)	Calculates the percentage of individuals, 18 years of age and older, who received prescriptions for opioids with an average daily dosage of 90 or more morphine milligram equivalents (MME) over a period of 90 days or more.

It is important to note that beneficiaries with cancer were intentionally excluded from these measures as those beneficiaries often need extensive pain management services and opioids at higher doses. For both measures, lower rates indicate better performance.

As seen in Figure 57, NC Medicaid's OMP rate remained relatively stable from 2021 through 2022 before suddenly increasing in 2023. While it could be influenced by a multitude of factors, this poorer performance may be attributed to the inclusion of dual eligibles in 2023 OMP data.

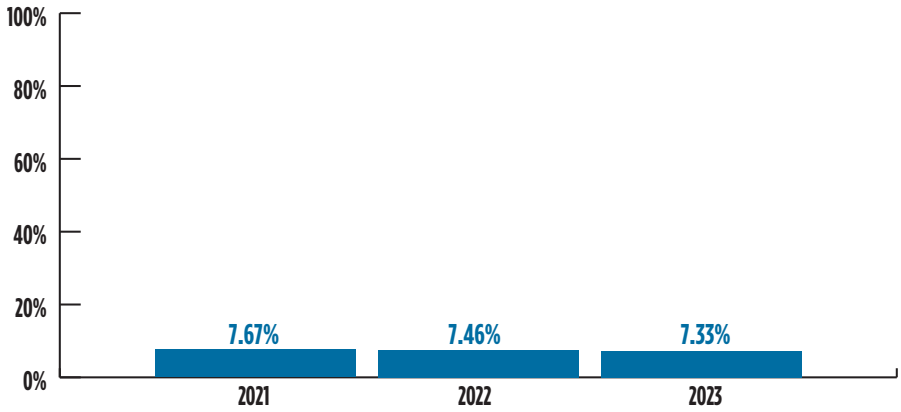
Figure 57: OMP[134] 2021-2023 NC Medicaid Performance



[132] "Use of Opioids from Multiple Providers." *NCQA*, https://www.ncqa.org/hedis/measures/use-of-opioids-from-multiple-providers.
[133] "Use of Opioids at High Dosage." *NCQA*, https://www.ncqa.org/hedis/measures/use-of-opioids-at-high-dosage.
[134] Some members may have had multiple managed care status codes. Members who had a limited benefit managed care status code in their patient history at any point during the calendar year were excluded from this analysis.

As seen in Figure 58, NC Medicaid's performance on the OHD measure has steadily improved since 2021.

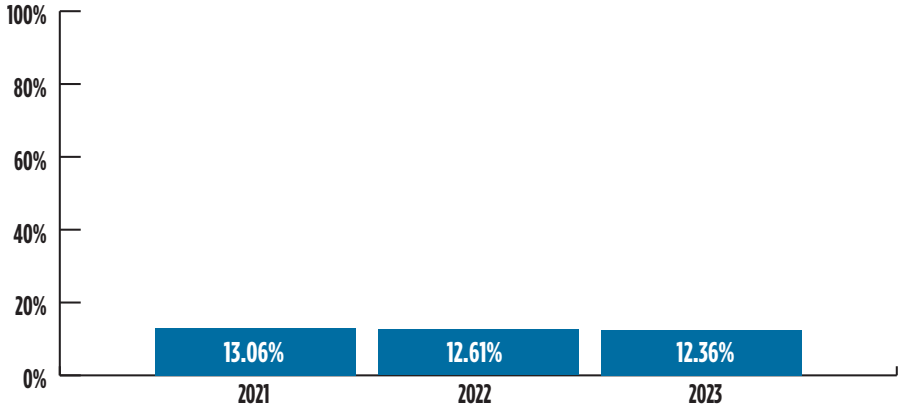
Figure 58: OHD 2021-2023 NC Medicaid Performance



CONCURRENT USE OF PRESCRIPTION OPIOIDS AND BENZODIAZEPINES (COB)

Like opioids, benzodiazepines are a group of sedative drugs that are highly addictive.[135] Almost 30% of overdoses resulting in death involve benzodiazepines, which are often used in concurrence with opioids.[136] Concurrent use of these drugs is dangerous and drastically increases the likelihood of overdose. Therefore, providers should take extreme caution when prescribing opioids and benzodiazepines at the same time.[130] To monitor the percentage of beneficiaries 18 years and older who currently use prescription opioids and benzodiazepines, NC Medicaid uses the *Concurrent Use of Prescription Opioids and Benzodiazepines (COB)* quality measure. Lower rates for the COB measure indicate better performance.[13]

Figure 59: COB 2021-2023 NC Medicaid Performance



Like the OMP and OHD measures, NC Medicaid's performance on the COB measure steadily improved between 2021 and 2023, indicating a decrease in the percentage of NC Medicaid beneficiaries being prescribed opioids and benzodiazepines concurrently.

QUALITY MEASURES EVALUATING BENEFICIARIES' ACCESS TO TREATMENT

Use of Pharmacotherapy for Opioid Use Disorder (OUD)

Studies have found that the most effective treatment for opioid use disorder is a combination of pharmacotherapy (medication) and behavioral therapies.[137] The Federal Drug Administration (FDA) has approved three medications for the treatment of opioid use disorder. It is safe for these medications to

[135] Benzodiazepine Addiction: Symptoms & Signs of Dependence. American Addiction Centers. Accessed August 20, 2024. https://americanaddictioncenters.org/benzodiazepine/symptoms-and-signs

[136] Sun, Eric C., et al. "Association between Concurrent Use of Prescription Opioids and Benzodiazepines and Overdose: Retrospective Analysis." *BMJ*, vol. 356, Mar. 2017, p. j760. www.bmj.com, https://www.bmj.com/content/356/bmj.j760.

[137] "Opioid Use Disorder." *Yale Medicine*, https://www.yalemedicine.org/conditions/opioid-use-disorder.

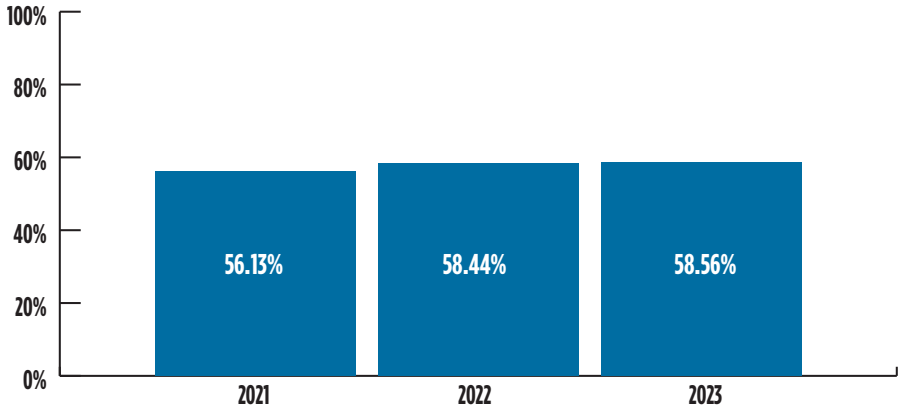
be taken continuously over long periods of time and evidence shows that these drugs reduce opioid misuse, increase the likelihood that someone will remain in treatment for opioid use disorder, and lower the risk of overdose mortality.[134, 138] Because pharmacotherapy is so effective for helping those with opioid use disorder, NC Medicaid uses the *Use of Pharmacotherapy for Opioid Use Disorder (OUD)* quality measure to calculate the percentage of beneficiaries ages 18 to 64 with an opioid use disorder who filled a prescription for, or were administered or dispensed, an FDA-approved medication for opioid use disorder. Five rates are reported for the OUD measure:[13]

- A total (overall) rate capturing any medications used for medication assisted treatment of opioid dependence and addiction (Rate 1)
- Four separate rates representing the following types of FDA-approved drug products:
    a. Buprenorphine (Rate 2)
    b. Oral naltrexone (Rate 3)
    c. Long-acting, injectable naltrexone (Rate 4)
    d. Methadone (Rate 5)

For the purposes of this report, only the total rate has been reported in Figure 60.

As seen in Figure 60, NC Medicaid's performance on the OUD measure improved between 2021 and 2023. This improved performance indicates an increased awareness and acceptance of these medications as an effective way to treat opioid use disorder, and reflects the federal government's efforts to make these drugs more accessible during the COVID-19 pandemic.[139] NC Medicaid is hopeful that performance will continue to improve as these drugs become a more common way to support beneficiaries living with opioid use disorder.

Figure 60: OUD, Total Rate 2021-2023 NC Medicaid Performance



FOLLOW-UP AFTER EMERGENCY DEPARTMENT VISIT FOR SUBSTANCE USE (FUA)

Timely follow-up care for those with SUD is a key component of effective treatment.[140] The ED is in a unique position to impact health outcomes for those with SUD, as it serves as a provider of acute illness stabilization while also being the sole point of connection to additional health services (i.e. SUD treatment) for many patients.[141]

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[138] Abuse, National Institute on Drug. *How Effective Are Medications to Treat Opioid Use Disorder? | National Institute on Drug Abuse (NIDA).* https://nida.nih.gov/publications/research-reports/medications-to-treat-opioid-addiction/efficacy-medications-opioid-use-disorder.

[139] Abuse, National Institute on Drug. *COVID-19 and Substance Use | National Institute on Drug Abuse (NIDA).* 20 Nov. 2023, https://nida.nih.gov/research-topics/covid-19-substance-use.

[140] *Impact of Continuing Care on Recovery From Substance Use Disorder - PMC*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7813220.

[141] Samuels, Elizabeth A., et al. "Emergency Department-Based Opioid Harm Reduction: Moving Physicians From Willing to Doing." *Academic Emergency Medicine: Official Journal of the Society for Academic Emergency Medicine*, vol. 23, no. 4, Apr. 2016, pp. 455–65. *PubMed*, https://doi.org/10.1111/acem.12910.

The *Follow-Up After Emergency Department Visit for Substance Use (FUA)* HEDIS measure assesses the care that beneficiaries receive following a visit to the ED for substance use.[13] The measure calculates the percentage of ED visits for beneficiaries ages 13 and up with a principle diagnosis of SUD, who received a follow-up visit for SUD. Two rates are calculated: 1) Those who received care within seven days of their ED visit; and 2) those who received care within 30 days of their ED visit.[13]

As seen in Figures 61 and 62, NC Medicaid's performance on the FUA 7-day and 30-day sub measures mirrors national trends. Both NC Medicaid performance and national averages saw a significant spike in performance from 2021-2022. These increases may be due to a change in the FUA measure technical specifications for calendar year 2022. In addition to changing the measure name, the denominator expanded to include ED visits for unintentional or undetermined overdose for commonly used drugs with addiction potential. The numerator also expanded, marking additional visit, treatment, and provider types as satisfactory to meet the measure requirements. While there is no definitive explanation for the decrease between calendar years 2022 and 2023, NC Medicaid's decreased performance mirrored national trends.

Figure 61: FUA, 7-Day Follow-Up 2021-2023 Performance

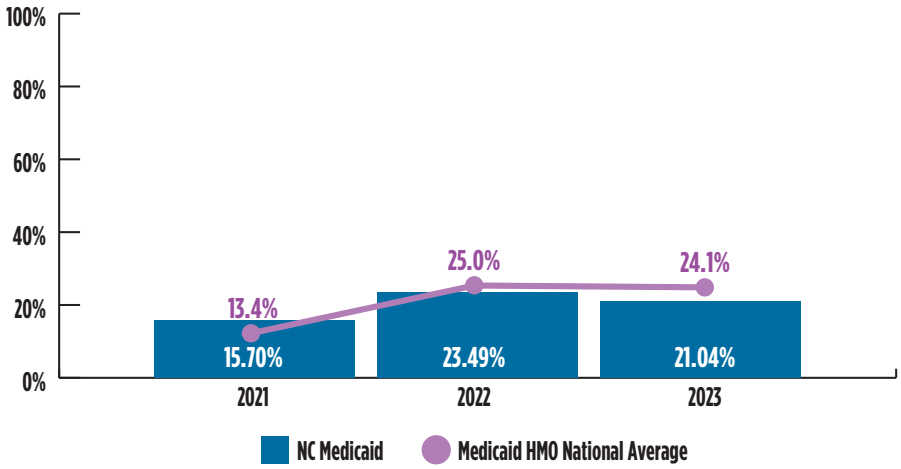
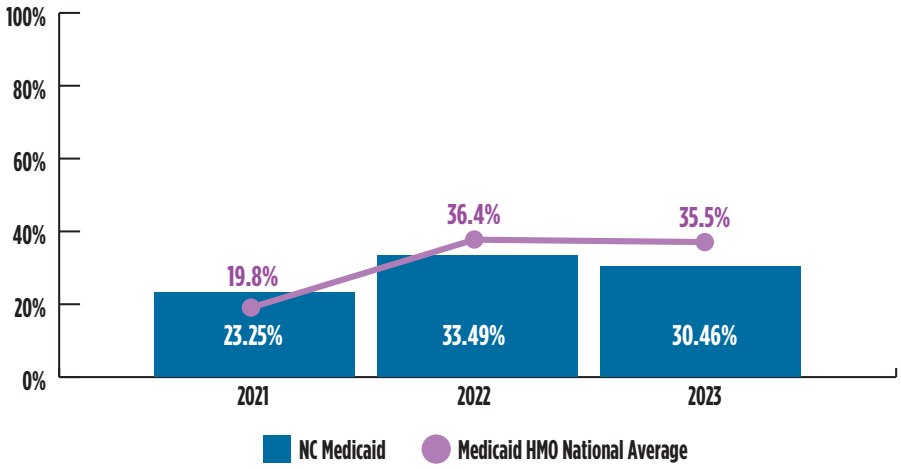


Figure 62: FUA, 30-Day Follow-Up 2021-2023 Performance



Like many other measures that include 7-day and 30-day follow-up, rates of follow-up in the 30 days following the appointment are higher than the 7-day sub measure.

INITIATION AND ENGAGEMENT OF SUBSTANCE USE DISORDER TREATMENT (IET)

Because SUD includes many substances other than opioids, NC Medicaid assesses different types of treatment for beneficiaries with other types of SUDs using the *Initiation and Engagement of Substance Use Disorder Treatment (IET)* quality measure.[13] This measure is more extensive, as it not only assesses initiation of treatment, but also continued engagement. This information is calculated in two rates:[13]

1. Initiation of SUD Treatment: The percentage of new SUD episodes that result in treatment initiation through an inpatient SUD admission, outpatient visit, intensive outpatient encounter, partial hospitalization, telehealth visit, or medication treatment within 14 days.
2. Engagement with SUD Treatment: The percentage of new SUD episodes that have evidence of treatment engagement within 34 days of initiation.

For this measure, engagement with SUD treatment is defined as the initiation of SUD treatment and two or more additional SUD services or medication treatment within 34 days of the SUD treatment initiation.[13]

As seen in Figures 63 and 64, rates of SUD treatment initiation are much higher than rates of engagement, revealing that a significant number of beneficiaries who initiate treatment do not continue the treatment long-term. While a beneficiary's engagement with treatment is impacted by a variety of factors, it is possible that better care coordination, resources to address barriers to care, and more extensive engagement and follow-up services might improve the rate of beneficiaries who continue SUD treatment.

Figure 63: IET, Initiation of SUD Treatment 2021-2023 Performance

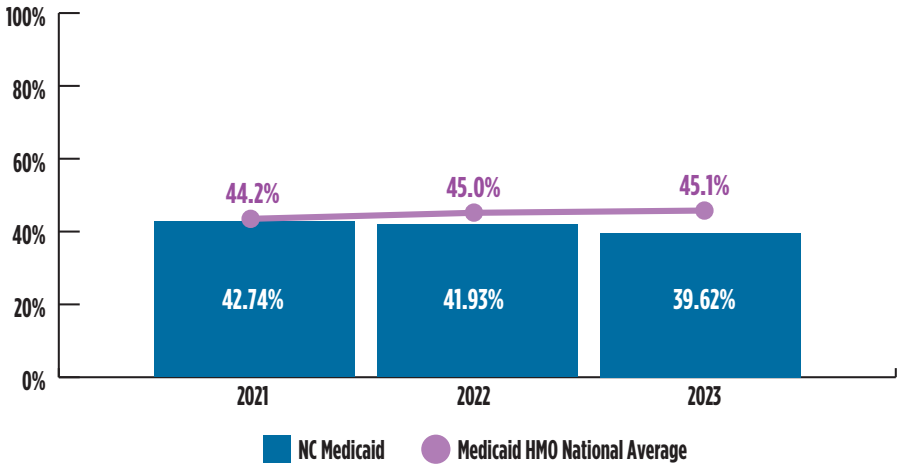
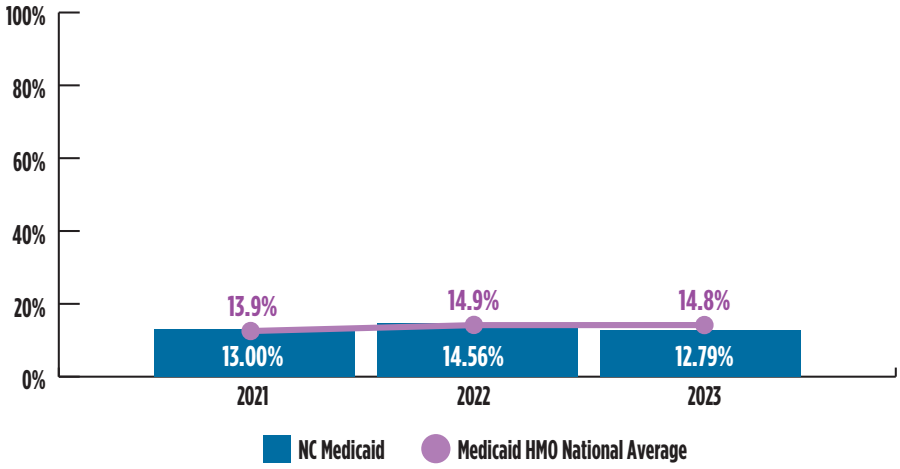


Figure 64: IET, Engagement with SUD Treatment 2021-2023 Performance



Expansion of Substance Use Disorder Services

Approved by CMS in 2018, the SUD Section 1115 demonstration aims to strengthen the NC Medicaid SUD delivery system. NC Medicaid plays a key role in addressing rising overdoses and the opioid epidemic by providing access to SUD treatment and withdrawal services. The demonstration has the following objectives:

- Expanding SUD benefits to offer the complete American Society of Addiction Medicine (ASAM) continuum of SUD services
- Obtaining a waiver of the Medicaid institution for mental diseases (IMD) exclusion for SUD services
- Ensuring that providers and services meet evidence-based program and licensure standards
- Building SUD provider capacity
- Strengthening care coordination and care management for individuals with SUDs
- Improving North Carolina's prescription drug monitoring program (PDMP)

Covering the full ASAM continuum of SUD services improves quality of care by ensuring beneficiaries with SUD can access the services that best meet their specific needs and allowing beneficiaries to transition to other services as their needs change. NC Medicaid updated clinical policies to require a determination of the appropriate level of care is included in the assessment information of beneficiaries diagnosed with SUDs.

Services being added to the State Plan include:

- ASAM 3.1: Clinically managed low-intensity residential treatment services
- ASAM 3.3: Clinically managed population-specific high-intensity residential programs),
- ASAM 2-WM: Ambulatory withdrawal management with extended on-site monitoring
- ASAM 3.2-WM: Clinically managed residential withdrawal management

Coverage of existing services such as ASAM levels 3.5 (clinically managed high-intensity residential services) and 3.7 (medically monitored intensive inpatient services) is being expanded to include additional populations, such as adolescents.

As part of the demonstration, North Carolina has obtained a waiver that allows Medicaid coverage for SUD services provided in IMDs, such as psychiatric hospitals. This has expanded access to inpatient SUD treatment for Medicaid beneficiaries that was previously limited by the IMD exclusion.

The changes being made under the SUD demonstration compliment broader Medicaid reforms, to integrate beneficiaries' physical and behavioral health coverage, improving quality of care and access for beneficiaries with SUD. NC Medicaid is currently in negotiations with CMS to renew the SUD waiver for an additional five years.

Address Tobacco Use

Tobacco use is a risky health behavior that NC Medicaid aims to monitor among beneficiaries. In 2022, 14.5% of adults in North Carolina smoked cigarettes. This rate was higher than the national average of 14.0% and highlights the importance of addressing tobacco use among North Carolinians.[142] Treatment for tobacco use is most effective when it includes behavioral counseling and medication, and treatment is often initiated by a conversation with a health care provider.[143] NC Medicaid uses three survey measures to assess whether providers are discussing smoking cessation and smoking cessation strategies with beneficiaries. These measures include *Advising Smokers and Tobacco Users to Quit, Discussing Cessation Medications and Discussing Cessation Strategies*.[17]

SMOKING & TOBACCO CESSATION MEASURES

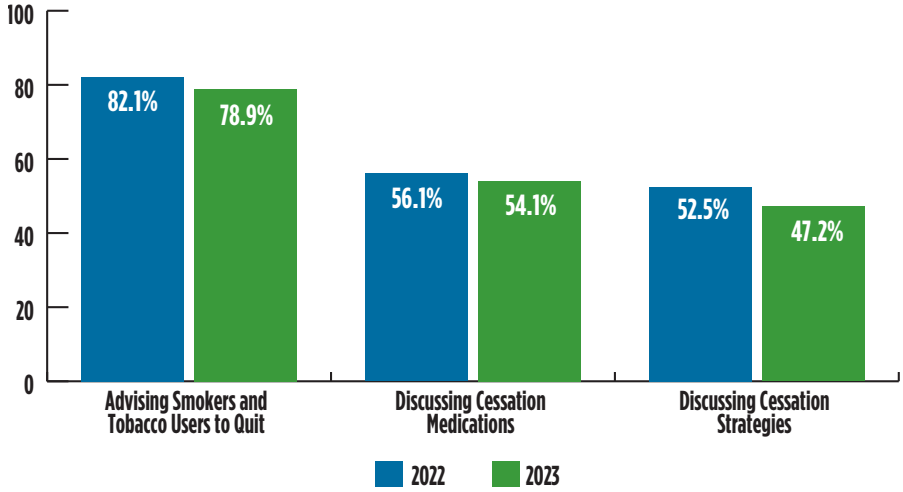
To better understand how providers are discussing smoking habits and cessation with their patients, NC Medicaid uses multiple tobacco-related survey measures. These measures include Advising Smokers and Tobacco Users to Quit, Discussing Cessation Medications, and Discussing Cessation Strategies. These survey questions were only asked to respondents who self-identified as smokers or tobacco users. For this measure, respondents could select "never," "sometimes," "usually," or "always" to answer. Responses of "usually" or "always" are considered positive ratings.[17]

[142] Tobacco Use in North Carolina. *Truth Initiative, 2023*. https://truthinitiative.org/research-resources/smoking-region/tobacco-use-north-carolina-2023.

[143] A Practical Guide to Help Your Patients Quit Using Tobacco. *CDC*. https://www.cdc.gov/tobacco/patient-care/pdfs/hcp-conversation-guide.pdf

As seen in Figure 65, a vast majority of respondents who were smokers and tobacco users reported that their provider "sometimes", "usually" or "always" advised them to quit smoking and using tobacco in both 2022 and 2023. However, respondents indicated their providers discussed cessation medications and cessation strategies less frequently across both years. While it is encouraging that providers are advising their patients to stop smoking and using tobacco, these findings present opportunities to extend and improve health education and overall communication about smoking cessation medications and strategies.

Figure 65: NC Medicaid Program Adult CAHPS Respondent Smokers and Tobacco Users Who Rated Their Smoking & Tobacco Cessation Care Positively, CY2022-2023



Promote Health Equity

Reducing health disparities is one of NC Medicaid's central priorities. Studies have found that Medicaid beneficiaries experience increased barriers to care compared to the general population due in part to higher rates of poverty, chronic illness and disability.[144, 145] These disparities exist between the Medicaid population and the general population in addition to significant disparities within the NC Medicaid population. NC Medicaid prioritizes quality measures to continuously monitor both types of disparities. Addressing these disparities will take a collaborative approach between NC Medicaid and the communities it serves. While there are no specific quality measures assessing health equity, the following section highlights some of the many initiatives NC Medicaid is currently leading to increase health equity within its beneficiary population and across the state.

[144] What Difference Does Medicaid Make?. *Kaiser Family Foundation*, 2013. https://www.kff.org/wp-content/uploads/2013/05/8440-what-difference-does-medicaid-make2.pdf

[145] Hsiang, Walter R., et al. "Medicaid Patients Have Greater Difficulty Scheduling Health Care Appointments Compared With Private Insurance Patients: A Meta-Analysis." *Inquiry: A Journal of Medical Care Organization, Provision and Financing*, vol. 56, 2019, p. 46958019838118. PubMed, https://journals.sagepub.com/doi/10.1177/0046958019838118.

NC Medicaid Annual Health Disparities Report

NC Medicaid serves roughly 3 million low-income individuals and families, placing it in a unique position to track health disparities and improve the health of populations that have been systemically discriminated against by lack of access to health care. The NC Medicaid Annual Health Disparities Report was developed to help identify and describe health disparities across the entire NC Medicaid beneficiary population.

The report includes 50 quality measures and identifies health disparities across eight demographic stratifications. The results are organized into six domains: beneficiary experience, child and adolescent health, women's health, mental health, substance use, and health care utilization. For 2022, the domain with the most identified disparities was the substance use domain, and the demographic stratifications with the most identified disparities were beneficiaries who identify as having a disability and those with long-term services and support needs.

In addition to identifying health disparities, the NC Medicaid Annual Health Disparities Report highlights programs across NC Medicaid that are working to eliminate disparities. This report serves as a tool to identify areas of need and track health disparities over time alongside other Department and Division wide efforts.

The full report and a six-page brief are available here.

Health Equity Payments

From April through June 2021, NC Medicaid introduced a limited health equity payment to specific primary care practices serving beneficiaries from areas with high poverty rates to improve access to primary care and preventive services during the COVID-19 public health emergency.

Practices were directed to use funds to enhance primary care medical home services through initiatives such as:

- Training staff on implicit bias, trauma-informed care, and health equity
- Recruiting clinical pharmacists, dieticians, community health workers (CHWs), health coaches and doulas
- Improving practice infrastructure to address non-medical drivers of health
- Investing in behavioral health supports and enhancing integration of behavioral and physical health

Many of the practices spent the payments on prevention measures to close care gaps, improve quality and clinical data analysis, and implement efforts related to addressing the COVID-19 pandemic. Some examples of common successful investment included expanding team-based models of care by hiring a variety of health care professionals (e.g., therapists, pharmacists, dieticians, nurses, and social workers) and integrating behavioral health care into primary care.

Prepaid Health Plan x Division of Health Benefits Health Equity Collaborative Conversation

The Prepaid Health Plan (PHP) x Division of Health Benefits (DHB) Health Equity Collaborative Conversation is a quarterly meeting between the health plans. The focus of the meeting is to help achieve the goals of NC Medicaid to further health equity across the state for beneficiaries. Previous discussions have covered topics such as NC Medicaid and NCDHHS health equity priorities as well as the goals and strategies for the plans, tools for measuring health equity, engagement with tribal populations and programs for individuals involved with the justice system.

Division of Health Benefits Health Equity Steering Committee

The Health Equity Steering Committee was formed in August 2021 as a response to a growing need in NC Medicaid to have a place to discuss and develop solutions for issues related to health equity goals for Medicaid beneficiaries. The purpose is to work together to reduce health disparities among Medicaid beneficiaries through Medicaid policies and programs. The Committee is a central hub for NC Medicaid staff to bring equity concerns, ideas, programs, and more related to Division Goals, for thought partnership and action.

Address Obesity

Over the past two decades, rates of obesity in the United States have increased dramatically.[146] Today, more than 2 in 5 adults are obese, as well as roughly 1 in 5 children and adolescents.[147] These rates are alarming as obese individuals are at an increased risk of developing type 2 diabetes, high blood pressure, liver disease and even certain cancers, making it increasingly clear that obesity can have a significant impact on overall population-level health.[148] While addressing obesity at any age is important, addressing obesity during childhood and adolescence can prevent an array of serious health concerns later in life.

WEIGHT ASSESSMENT AND COUNSELING FOR NUTRITION AND PHYSICAL ACTIVITY FOR CHILDREN/ADOLESCENTS (WCC)

Primary care providers can teach children and their parents how to make healthier life choices by discussing weight management, proper nutrition and the importance of physical activity. To assess whether providers are having these discussions with their patients, NC Medicaid uses the *Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)* quality measure. This measure calculates the percentage of children ages 3 through 17 years who had an outpatient visit with a PCP or OB-GYN and had record of body mass index (BMI) percentile documentation, counseling for nutrition, and counseling for physical activity.[13] The rates for these three indicators are calculated separately.

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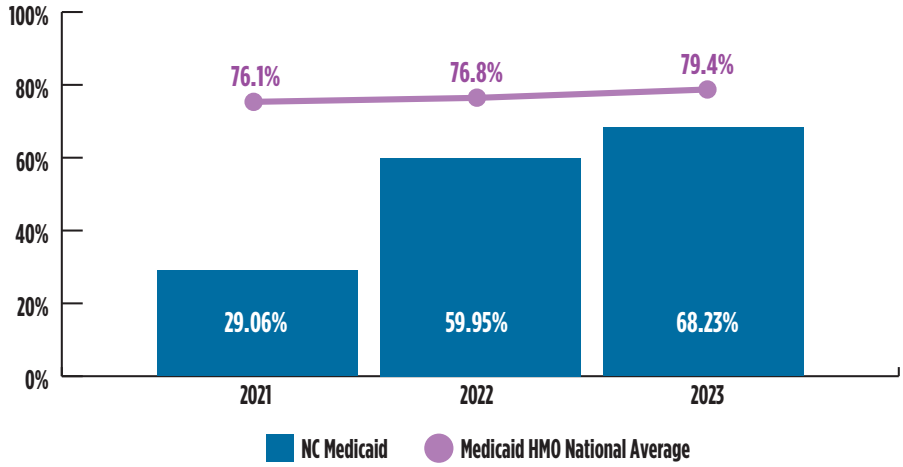
[146] "The State of Obesity 2020: Better Policies for a Healthier America." *TFAH*, https://www.tfah.org/report-details/state-of-obesity-2020.

[147] "Overweight & Obesity Statistics - NIDDK." *National Institute of Diabetes and Digestive and Kidney Diseases*, https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity.

[148] "Obesity - Symptoms and Causes." *Mayo Clinic*, https://www.mayoclinic.org/diseases-conditions/obesity/symptoms-causes/syc-20375742.

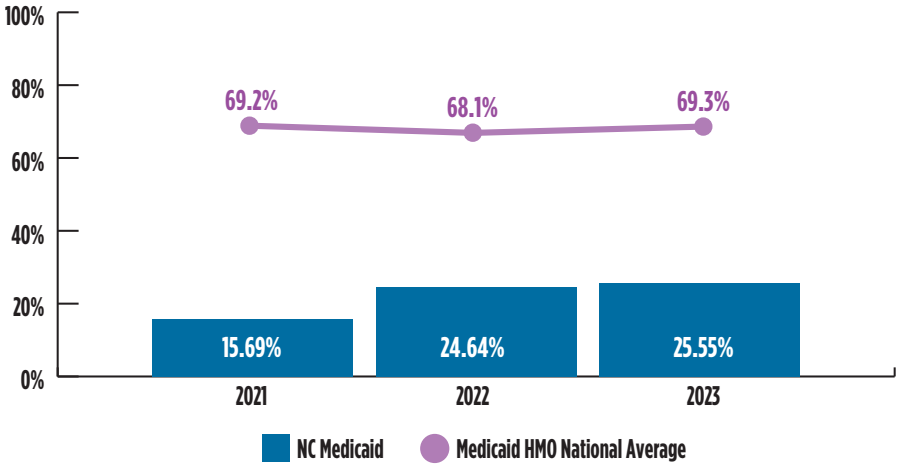
NC Medicaid made significant strides in collecting and documenting BMI data between 2021 and 2023, resulting in improved performance on the BMI Percentile Documentation submeasure. These improvements in data quality are primarily due to improvements in access to clinical data through the HIE, North Carolina's standardized electronic data system that allows for the exchange of patient data between providers.[149] While NC Medicaid's use of clinical data is ever evolving, it was incredibly challenging to assess true performance on the WCC measure prior to the use of clinical data.

Figure 66: WCC, BMI Percentile Documentation 2021-2023 Performance



It is important to note that BMI has come under scrutiny in recent years for being a flawed proxy for overall health, as it focuses predominantly on weight and does not account for other key components of health.[150]

Figure 67: WCC, Counseling for Nutrition 2021-2023 Performance



Unlike the BMI Percentile Documentation submeasure, both the Counseling for Nutrition and Counseling for Physical Activity submeasures remain incredibly relevant and important in encouraging healthy eating and exercise habits among young beneficiaries. Teaching children, adolescents and their families about the benefits of eating healthy foods and getting plenty of physical activity can promote healthier life habits over the life course and prevent illnesses associated with being overweight or obese.[151]

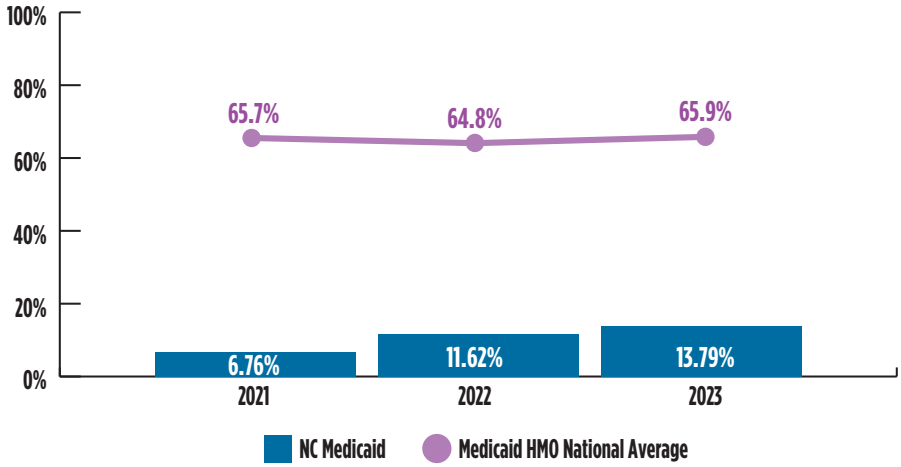
[149] Navigate to page 79 to learn more about the HIE.

[150] "BMI a Poor Metric for Measuring People's Health, Say Experts." *Harvard T.H. Chan School of Public Health*, 2022. https://www.hsph.harvard.edu/news/hsph-in-the-news/bmi-a-poor-metric-for-measuring-peoples-health-say-experts.

[151] "Helping Young Children Thrive." *Centers for Disease Control and Prevention*, 13 May 2022, https://www.cdc.gov/obesity/strategies/early-care-education/helping-young-children-thrive/index.html.

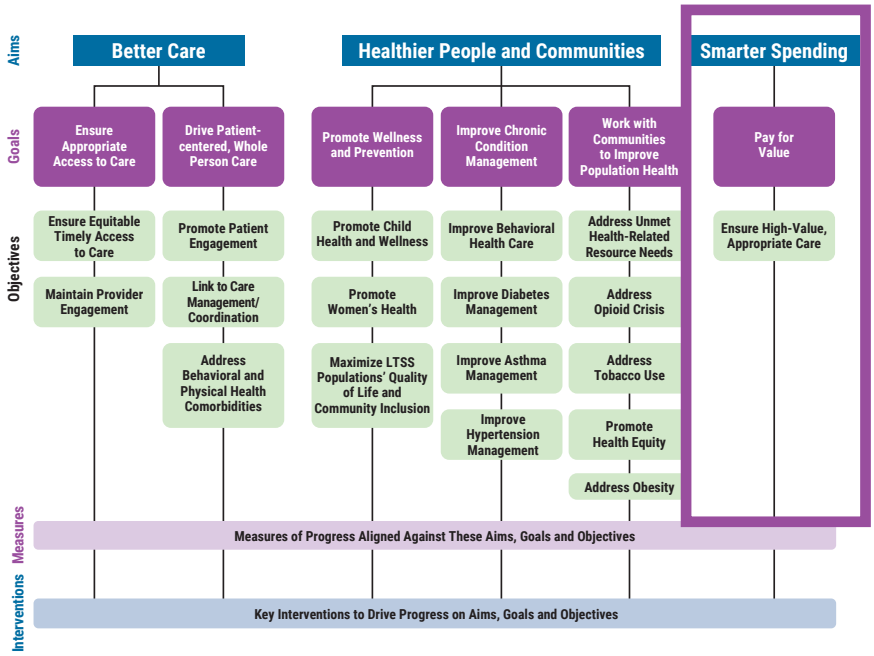
As seen in Figures 67 and 68, NC Medicaid has underperformed for both nutrition and physical activity counseling. NC Medicaid's low performance on the Counseling for Nutrition and Counseling for Physical Activity submeasures may be explained in part by the lack of consistent documentation for the related services. NC Medicaid recently added coverage for diagnosis codes associated with the WCC measure in an effort to address these gaps.

Figure 68: WCC, Counseling for Physical Activity 2021-2023 Performance



Aim 3: Smarter Spending

The third and final aim highlights NC Medicaid's efforts to reduce the total cost of care, and direct Health Plan's toward smarter spending, and ultimately, better care delivery. Reducing the total cost of care not only positively impacts NC Medicaid's spending, but it also reduces health care costs for beneficiaries by limiting the amount they are paying out of pocket for services. Additionally, NC Medicaid uses an array of programs and initiatives, many of which are outlined below, to incentivize Health Plans to reduce costs while also prioritizing quality improvement. The following section outlines Goal #6 of the Quality Strategy and many of the initiatives NC Medicaid has implemented to incentivize smarter spending.



GOAL 6: PAY FOR VALUE

This final aim focuses on one goal: to ensure that NC Medicaid, Health Plans, and beneficiaries are paying for care that is valuable. "Pay for Value" emphasizes that all care paid for on behalf of beneficiaries should represent effective care that improves outcomes and efficient use of financial resources.[12]

Ensure High-Value, Appropriate Care

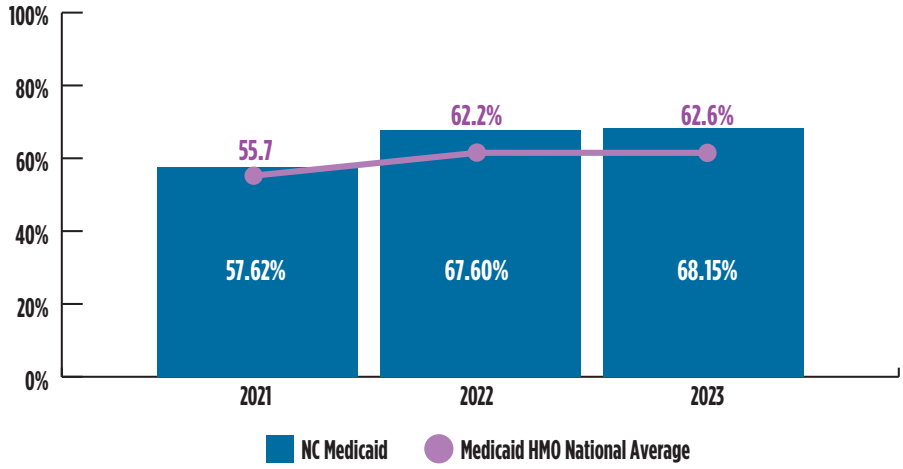
"Ensure High-Value, Appropriate Care" is the only objective listed under Goal #6. This objective reiterates that the care provided to beneficiaries should be of high value, while reducing costs and still ensuring that beneficiaries receive the appropriate and necessary medical services. The following four measures are used to assess the value of care being provided to beneficiaries.[12]

AVOIDANCE OF ANTIBIOTIC TREATMENT FOR ACUTE BRONCHITIS/BRONCHIOLITIS (AAB)

Antibiotics are intended to treat bacterial infections and should only be used when medically necessary. Overprescription of antibiotics results in decreased value of care for the patient, increased costs for NC Medicaid, and increased risk for poor health outcomes. People who take antibiotics often and when they are not necessary are more likely to develop a resistance to antibiotic treatment which can make it harder to treat future infections.[152] Acute bronchitis is one example of an illness that does not require the use of antibiotics because it is typically caused by a virus or bacteria that would not respond to antibiotic treatment. Acute bronchitis will typically resolve on its own after a few days.[149] Therefore, providers are advised to educate patients on symptom management rather than prescribe antibiotics. To assess whether providers are not prescribing antibiotics to beneficiaries who present with acute bronchitis, NC Medicaid uses the *Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)* quality measure. This measure assesses the percentage of episodes for beneficiaries ages 3 months and older with a diagnosis of acute bronchitis/bronchiolitis that did not result in an antibiotic dispensing event.[13]

NC Medicaid saw improved performance on the AAB measure from 2021 to 2023, indicating a decrease in the percentage of beneficiaries with bronchitis/bronchiolitis who were treated using antibiotics. Furthermore, in 2022 and 2023, NC Medicaid performed above the Medicaid HMO national average, an encouraging finding given NC Medicaid's push to reduce the prescription of potentially unnecessary antibiotics.

Figure 69: AAB 2021-2023 Performance



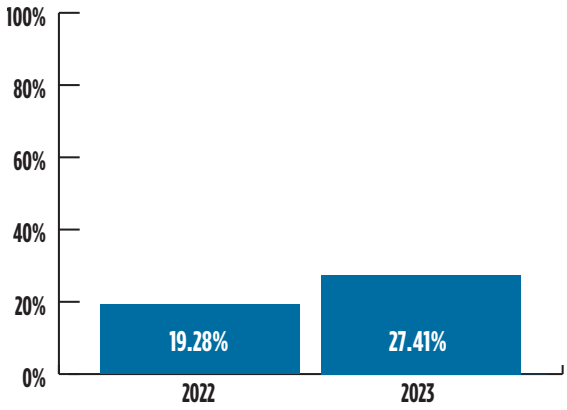
[152] *Preventing and Treating Bronchitis*. CDC, 2024. https://www.cdc.gov/acute-bronchitis/media/pdfs/Bronchitis-508.pdf

ANTIBIOTIC UTILIZATION FOR RESPIRATORY CONDITIONS (AXR)

Antibiotics are also frequently overprescribed for other respiratory conditions that cannot be treated using an antibiotic and for which antibiotics may be more harmful than beneficial. To better understand how providers are using antibiotics to treat respiratory conditions among beneficiaries, NC Medicaid uses the *Antibiotic Utilization for Respiratory Conditions (AXR)* quality measure, which measures the percentage of episodes for beneficiaries 3 months of age and older with a diagnosis of a respiratory condition that resulted in an antibiotic dispensing event.[13]

As seen in Figure 70, NC Medicaid's rate of antibiotic utilization for respiratory conditions increased from 2022 to 2023. While there are multiple factors that may have influenced this increased prescription of antibiotics among providers, this sudden increase might indicate a need for enhanced surveillance of how and when providers are prescribing antibiotics for respiratory ailments. As there is very little historical data on this measure, making it hard to analyze trends overtime, it will be important to monitor NC Medicaid's performance in the coming years.

Figure 70: AXR* 2022-2023 NC Medicaid Performance



**Because this measure is relatively new, Medicaid HMO National Average data is not available for 2022 and 2023.*

USE OF IMAGING STUDIES FOR LOW BACK PAIN (LBP)

Low back pain is a common health complaint for many Americans. It is estimated that roughly 75-85% of Americans experience varying degrees of back pain throughout their life. Low back pain is temporary in roughly 90% of cases and can improve without surgery.[153] Experts advise imaging should only be used during the first six weeks of lower back pain if the patient presents with other risk factors or concerns like progressive neurological deficits. Otherwise, imaging studies should not be used up until six weeks after the onset of pain to prevent unnecessary radiation exposure and spending.[154] To ensure providers are only using imaging studies when they are appropriate and necessary, NC Medicaid uses the *Use of Imaging Studies for Low Back Pain (LBP)* quality measure. This measure calculates the percentage of adults, 18 through 75 years of age, with a principal diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, CT scan) within 28 days of diagnosis (a higher score indicates better performance).[13] To account for scenarios where an imaging study is required, this measure excludes members who had conditions or complicating factors that may indicate a need for imaging.[155] For the LBP measure, a higher score indicates better performance.[13]

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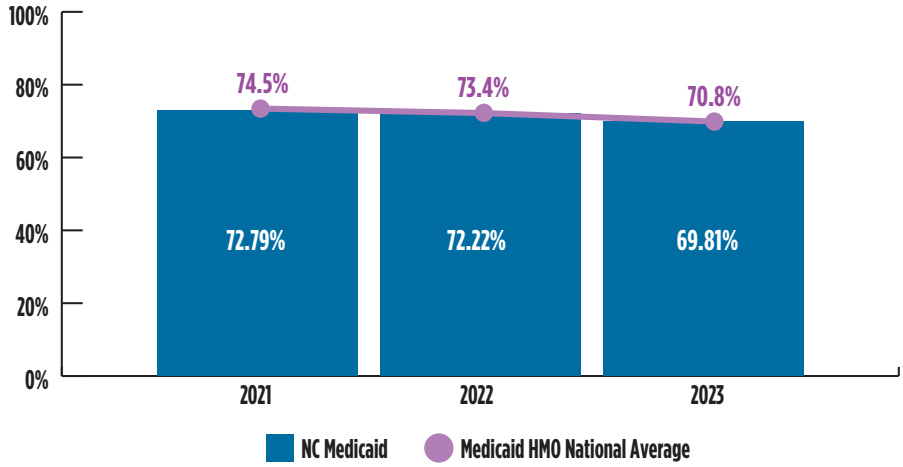
[153] *"Low Back Pain."* AANS. https://www.aans.org/patients/conditions-treatments/low-back-pain.

[154] *Imaging for Low Back Pain.* AAFP. https://www.aafp.org/family-physician/patient-care/clinical-recommendations/all-clinical-recommendations/cw-back-pain.html.

[155] Conditions or complicating factors include beneficiaries who have a history of cancer, osteoporosis, lumbar surgery, spondylopathy, HIV and/or major organ transplant at any time in their medical history, intravenous drug use, neurologic impairment, spinal infection, and/or prolonged use of corticosteroids within the last year, and trauma and/or fragility fracture within the last 90 days.

As seen in Figure 71, NC Medicaid performed in line the national averages from 2021 through 2023. While performance declined, these changes mirrored national trends, potentially indicating the need for a widespread call to limit the use of imaging technology for beneficiaries who present with low back pain and no other risk factors.

Figure 71: LBP 2021-2023 Performance



Standard Plan Quality Withhold Program

A key component of North Carolina's Quality Strategy includes measuring and incentivizing performance improvement as part of Medicaid transformation. Withhold programs are one mechanism to encourage performance improvement in a variety of domains and have been implemented in other state Medicaid managed care programs. In a withhold arrangement, a portion of health plans' expected capitation payment is withheld, and plans must meet targets (e.g., quality measure performance targets) to receive withheld funds from NC Medicaid at the conclusion of a defined performance period, typically the annual quality measurement cycle.

The withhold program is designed to align with NC Medicaid's Quality Aims, Goals and Objectives, focusing on:

1. Promoting child health, development, and wellness,
2. Promoting women's health,
3. Addressing unmet health-related resource needs, and
4. Promoting health equity.

In alignment with these objectives, the Standard Plan Quality Withhold Program focuses on areas where quality measure performance is declining, or disparities have been identified among priority populations who are medically underserved. It aims to raise awareness and provide incentives for continuous improvement in these vital areas. While NC Medicaid has only implemented withholds for the Standard Plans, NC Medicaid intends to implement withholds for other programs (Tailored Plans, Child and Family Specialty Plan, etc.) in the future.

NC Medicaid's Standard Plan Withhold Program is based on three measures in 2024 and 2025:

1. *Childhood Immunization Status — Combination 10*,
2. *Prenatal and Postpartum Care (PCC) — Timeliness of Prenatal Care and Postpartum Care*, and
3. *Rate of Screening for HRRN*

Children in NC Medicaid continue to perform below NCQA's Quality Compass national Medicaid HMO average (henceforth referred to as "national average") for the *Childhood Immunization Status — Combination 10* measure.[156] This measure assesses the percentage of children two years of age that received a combination of 10 recommended vaccines by their second birthday.[153] In addition to overall low performance, NC Medicaid identified a significant disparity for this measure when comparing performance of the Black or African American population to the Non-Black or African American population. Therefore, the Childhood Immunization Status — Combination 10 measure will be used for two withhold components: an overall performance improvement measure and a priority population improvement measure (focused on performance improvement for the Black or African American population).

NC Medicaid has also performed below the national average in measures of infant and maternal health, specifically for prenatal and postpartum care (see page 41 to learn more about NC Medicaid's PPC performance). The Prenatal and Postpartum Care measure has two indicators: (1) *Timeliness of Prenatal Care*, which assesses the percentage of deliveries in which women had a prenatal care visit in the first trimester, on or before the enrollment start date, or within 42 days of enrollment in the organization; and (2) *Postpartum Care*, which assesses the percentage of deliveries in which women had a postpartum visit on or between seven and 84 days after delivery. In 2023, NC Medicaid rates were roughly 39 percentage points lower than national averages for *Timeliness of Prenatal Care* (43.93% for NC Medicaid compared to 83.1% nationally) and roughly 18 percentage points lower for Postpartum Care (60.53% for NC Medicaid compared to 78.6% nationally).[153] Timely access to prenatal and postpartum care is important, as studies have shown that as many as 80% of all pregnancy-related deaths could be prevented if women had better access to or received better quality of care.[158] The withhold program includes overall performance improvement for timeliness of prenatal care, as well as overall performance improvement for postpartum care.

The Rate of Screening for HRRN is a unique measure developed by NC Medicaid to assess the percentage of beneficiaries who received a successful screening by their managed care plan for health-related resource needs within the calendar year. Unfortunately, screening data is currently being recorded and reported inconsistently. To encourage improvement in screening, in the first two years of the Withhold Program, this measure will be used as a pay-for-reporting[159] measure. In future years, NC Medicaid aims to transition this to a pay-for-performance[160] measure.

Using the *Childhood Immunization Status — Combination 10 and Prenatal and Postpartum Care* measures as a part of the Withhold Program is a tool to advance the quality objectives of promoting child health, development, and wellness; promoting women's health; and promoting health equity. Using the Rate of Screening for Health-Related Resource Needs measure aligns with the quality objective of addressing unmet health-related resource needs. In future years, NC Medicaid may consider other withhold measures that encourage performance improvement in multiple health-related domains. Each year, NC Medicaid assesses performance across withhold areas to modify the program to continually advance its goals, focus on new targets that foster continuous quality improvement, and assess opportunities to tie the Withhold Program to evolving priorities. More information about this annual process and the rubric that is used for assessment can be found in the Standard Plan Withhold Program Measure Set Decision-Making Rubric.

[156] Childhood Immunization Status - NCQA. https://www.ncqa.org/hedis/measures/childhood-immunization-status
[157] Prenatal and Postpartum Care (PPC) - NCQA. https://www.ncqa.org/hedis/measures/prenatal-and-postpartum-care-ppc
[158] CDC Newsroom. CDC. January 1, 2016. https://www.cdc.gov/media/releases/2022/p0919-pregnancy-related-deaths.html
[159] If there are challenges in consistency and completeness of the data, a measure can be piloted as pay-for-reporting in the Withhold Program where payout is determined based on the result of data validation.
[160] For pay-for-performance measures, a portion of a Plan's capitation is withheld based on performance instead of data validation.

Health Information Exchange

The NC HIEA operates North Carolina's state-designated HIE, NC HealthConnex. This secure, standardized electronic system allows providers to share essential patient health information. Under the 2015 Statewide Health Information Exchange Act (See N.C.G.S. § 90-414.1 et seq.), providers and entities receiving state funds for care, such as Medicaid and the State Health Plan, were required to connect to NC HealthConnex by Jan. 1, 2023. Connection and use of NC HealthConnex services is also available at no cost to any North Carolina provider on a voluntary basis.

NC HealthConnex aims to enhance health care quality in the state and reduce administrative burden by enabling the exchange of patient demographic and clinical data among authorized entities, in compliance with the Health Insurance Portability and Accountability Act's (HIPAA's) Privacy and Security Rules (45 C.F.R. §§ 160, 164). Research indicates that timely access to this information can reduce clinician workload, prevent testing duplication, lower health care costs and improve patient safety.[161, 162]

NC Medicaid is actively partnering with the NC HIEA to improve interoperability and clinical data availability for quality measurement, care management, and health-related resource needs. Regarding quality measurement, initial phases of this work are focused on the collection of key data elements for monitoring hypertension and diabetes, as well as ensuring child and adult beneficiaries are being appropriately screened and treated for depression. This initiative aligns with the industry's shift toward digital quality measurement (dQM), as outlined in the CMS Digital Quality Measurement Strategic Roadmap. By integrating administrative (e.g., claims, encounters, enrollment) data with clinical information from electronic health records (EHRs), dQMs will provide more timely and comprehensive quality measure results. This will reduce providers' manual data reporting, provide a cross-health plan view of their performance, and offer near real-time insights into care gaps and health outcomes. This enhanced information will ultimately support quality improvement efforts and help providers improve performance in value-based payment arrangements.

NC Medicaid is also working with the NC HIEA to streamline the exchange of care documents essential for the provision of appropriate care management, while reducing the number of interfaces providers and health plans are required to maintain. In addition to reducing provider burden, this process will enhance the near real-time exchange of care management interaction data to ensure that Medicaid beneficiaries receive clinically appropriate and non-duplicative services. Finally, NC Medicaid is leveraging NC HealthConnex to develop a standardized, digital process to track beneficiaries' health-related resource needs, such as food insecurity and housing instability and make the data available to treating providers, health plans, and the state. The aim of this initiative is to reduce duplicative sensitive screenings and better connect individuals with necessary resources and services.

The goal of each of these use cases is to reduce administrative burden and spending while increasing access to the data needed for the delivery of effective, whole-person care for Medicaid beneficiaries.

To learn more about NC HealthConnex, including how to connect, please visit the NC HealthConnex webpage.

[161] Kaelber DC, Bates DW. Health information exchange and patient safety. J Biomed Inform. 2007;40(6 Suppl):S40-45. https://pubmed.ncbi.nlm.nih.gov/17950041/.

[162] Li E, Clarke J, Neves AL, Ashrafian H, Darzi A. Electronic Health Records, Interoperability and Patient Safety in Health Systems of High-income Countries: A Systematic Review Protocol. BMJ Open. 2021;11(7):e044941. https://pubmed.ncbi.nlm.nih.gov/34261679/

Managed Care

In an effort to reduce costs and waste while maintaining or improving member health outcomes, NC Medicaid transitioned from a fee-for-service to a value-based care model called NC Medicaid Managed Care in July of 2021. Under fee-for-service, Medicaid pays health care providers directly for each service they provide. This structure can lead to overutilization of services that may not be truly beneficial to patient outcomes, and subsequently, to increased costs and healthcare waste. The fee-for-service structure fails to incentivize care coordination and can contribute to fragmented care delivery.[163] In the new managed care model, members' services are coordinated through a health plan consisting of a coordinated network of providers.[164] The health plan reimburses providers directly and continuously monitors quality measures to incentivize improved performance and member health outcomes. This transition is one of the most significant changes NC Medicaid has made to prioritize smarter spending. Learn more about NC Medicaid Managed Care and its health plans on the NC Medicaid Managed Care webpage.

Healthy Opportunities/Health Equity PHP Reinvestment Initiative

In alignment with the Smarter Spending's vision of incentivizing innovation, NC Medicaid launched the Healthy Opportunities/Health Equity PHP Reinvestment Initiative in 2023. Through this initiative, Standard Plans can invest in projects from community-based organizations that address unmet health-related resource needs and/or reduce disparities in access to care. Investments can be counted in lieu of remittance for risk corridors or serve as voluntary contributions toward the numerator of a Standard Plan's medical loss ratio (MLR). Additionally, approved MLR proposals from Standard Plans that account for at least 0.1% of their annual capitation revenue in a Standard Plan region may be eligible for an auto-enrollment preference award.[165]

Standard Plans must submit reinvestment proposals for NC Medicaid approval to receive the financial credits. NC Medicaid reviews proposals for their adherence to a criteria checklist. Amongst other requirements, reinvestment proposals must include data used to guide the investment; an alignment statement with the NC Medicaid's Quality Strategy; a clear narrative description of how the investment will be operationalized; and evaluation metrics. Furthermore, proposals must delineate how the investments advance HOP, the social drivers of health, and/or Health Equity through impacts on health outcomes among populations that have been historically marginalized by exclusion from quality health care. Examples of qualifying HOP and Health Equity community investments include, but are not limited to:

I. HOP investments encompass housing, food, transportation, interpersonal safety, and employment/economic development.
    a. Housing can pertain to medical respite, permanent supportive housing projects, rental assistance, and housing subsidies.
    b. Food investments revolve around food pantries, nutrition programs, farmers' markets, delivered meals, and food boxes.

[163] Fee-for-Service vs Value-Based Care: The Differences You Should Know (2024) - Streamline Health. Accessed November 4, 2024. https://streamlinehealth.net/fee-for-service-vs-value-based-care

[164] *NC Medicaid Managed Care to Launch Statewide on July 1 | NCDHHS*. https://www.ncdhhs.gov/news/press-releases/2021/06/30/nc-medicaid-managed-care-launch-statewide-july-1.

[165] The auto-enrollment bump will be applied to Calendar Year 2026 and based on approved MLR investments from State Fiscal Year 2025. Standard Plans submitted the investment proposals that would be assessed for auto-enrollment eligibility in June and July of 2024. The Department will review the proposals and issue approval notifications by the end of Calendar Year 2024. Following this, Standard Plans have the remainder of State Fiscal Year 2025 to expend the approved investments.

c. Transportation could involve public or private transportation to assist community beneficiaries in accessing medical services, grocery stores, local events, or activities of daily living.

d. Interpersonal safety investments relate to early childhood initiatives, parenting programs, activities that address adverse childhood experiences, and programs for survivors of interpersonal violence, elder abuse, or child abuse.

e. Employment/economic development investments support local hiring, workforce development, re-entry programs, etc.

II. Health Equity investments encourage improvements in language accessibility, cultural humility training, outreach, and a focus on the health needs of populations that have been systemically discriminated against.

As of September 2024, NC Medicaid has approved 32 proposals for SFY2022 and SFY2023. These approved investments account for over $12 million. Approved investments include:

- A workforce development program to train medical students and medical assistance apprentices at federally qualified health centers
- Foster care programs to promote successful parenting skills, housing transitions for former foster youth, and therapeutic services
- Mobile food trucks to serve individuals experiencing housing insecurity
- Mobile health clinics to address the physical and behavioral health needs of community beneficiaries in rural areas
- Housing initiatives for youth who have been in out-of-home care systems, families, and individuals with low incomes
- A doula program to support the perinatal needs of pregnant people from the Lumbee Tribe
- A diaper bank program to support families with diapers, period products, and other hygiene products

Total Cost of Care Dashboard

In 2024, NC Medicaid launched a Total Cost of Care (TCOC) Dashboard for AMHs and Standard Plans. AMHs gained access to their complementary version of the TCOC Dashboard in April 2024.

This tool allows entities to access and analyze data related to the total cost of health care received by NC Medicaid beneficiaries assigned to their practice. The TCOC Dashboard aims to help entities identify potential drivers of overuse and inefficiency and assist AMHs in making informed decisions when engaging in value-based arrangements with NC Medicaid health plans.

Each AMH can view data for the NC Medicaid Standard Plan beneficiaries and NC Medicaid Direct beneficiaries that are assigned to their panel. The dashboard provides a comprehensive view of total cost and health care resource utilization for this population compared to relevant benchmarks. This includes care that is provided to the AMH's assigned panel by other health care entities, such as hospitals.

RATIONALE FOR THE TOTAL COST OF CARE DASHBOARD

As NC Medicaid moves toward paying for value, it wants to ensure that providers are prepared to successfully participate in value-based payment (VBP) arrangements. NC Medicaid's TCOC Dashboard aligns with the aim of smarter spending by giving AMHs more insight into the total health care costs of their NC Medicaid Standard Plan beneficiaries, using a standard methodology for practices across all Standard Plans. AMHs can use the dashboard to identify potential drivers of costs and assess how costs change over time, including response to certain interventions.

The dashboard allows users to explore how costs for their assigned population vary across characteristics such as gender, race, ethnicity, age, and health condition. These stratifications allow the user to determine whether particular conditions, categories of service, or demographics are driving cost or resource use and to subsequently identify opportunities for quality improvement initiatives that reduce patterns of inefficiency or unnecessary health care utilization within or across certain groups. In future versions of the TCOC Dashboard, NC Medicaid hopes to link data on cost or resource use with data on quality of care.

TCOC is included in NC Medicaid's AMH measure set, meaning that a Standard Plan may incorporate the measure into its AMH contracts and use it to calculate AMH performance incentive payments. Although the calculation of total cost of care for the purposes of VBP arrangements may vary by plan, this standardized TCOC Dashboard is designed to help practices to make informed decisions as they consider entering into VBP arrangements with Standard Plans. At this time, Standard Plans may choose to use TCOC as a performance incentive measure for AMHs using NC Medicaid's chosen TCOC algorithm (described further below) or their own methodology.

Please note that NC Medicaid is not setting any targets related to cost or resource use. Rather, the dashboard is intended to be an informational tool for providers.

Figure 72: Uses of the NC Medicaid TCOC Dashboard

What can the TCOC dashboard tell us?	What is the TCOC dashboard NOT designed to tell us?
• Allow PHPs and AMHs to see how their resource use and costs compare to their peers • Allows PHPs and AMHs to see whether particular conditions, categories of services, or demographics are driving cost or resource use • Can help entities identify opportunities for quality improvement initiatives to reduce patterns of inefficiency or unnecessary health care utilization • Can help providers determine whether a VBP arrangement offered by a PHP is a good fit for them.	• Does not show member-level data • Not intended to inform care management, care delivery, or outreach to individual members • Not intended to indicate anything about quality of care • Not intended to imply that lower costs are always better, but rather to encourage providers to understand their own resource use and how it impacts their costs.

APPROACH TO CALCULATING TOTAL COST OF CARE

NC Medicaid's TCOC Dashboard is built upon an open-source framework from HealthPartners that has been adapted for the Medicaid population. Information is pulled from billing data that is submitted to NC Medicaid. The dashboard presents risk-adjusted total cost and resource utilization for an AMH's assigned population in the form of indices measured against the selected benchmark of the statewide Medicaid population, panel size, or tier. Risk adjustments for total cost and resource utilization account for age, gender, diagnoses, etc. In addition to a total cost index, the dashboard features a total resource use index that measures the volume of services used. These two indices combined offer comprehensive insights that go beyond cost measures alone. Since the total cost index does not account for differential payments to support critical access hospitals, providers are encouraged to rely more heavily on the resource use index to inform decisions related to cost efficiency.

For more information about the HealthPartners framework, please visit the HealthPartners Total Cost of Care webpage.

The TCOC dashboard supports stratification based on various beneficiary characteristics including eligibility, prepaid health plan, gender, race, ethnicity, age, health condition, and eligibility for the NC InCK program.

Please note that stratifications with less than 150 attributed beneficiaries will have some data suppressed. The number of beneficiaries and risk-adjusted cost will be available but, in accordance with HealthPartners' recommendation, the cost and resource use indices will be suppressed.

Making Care Primary Model

In 2023, North Carolina was selected as one of eight states to participate in a new CMS primary care payment model known as Making Care Primary (MCP). This model aims to strengthen the primary care services provided to beneficiaries in partnership with other payers in North Carolina, including Medicaid. CMS' selection of North Carolina as a site for this model was in part due to existing alignment of NC Medicaid programs with elements of MCP, including the AMH model, which emphasizes care management, patient-centered care, and addressing health-related social needs through local care managers. The goals of MCP align closely with NC Medicaid's existing population health priorities and efforts to use value-based arrangements to improve quality of care.

The Medicare MCP model provides a pathway for participating primary care practices with varying levels of experience in value-based care to gradually shift away from fee-for-service payment in primary care in favor of population-based and quality-based payments informed by a focused set of measures. Practices will also build infrastructure to improve behavioral health, specialty integration and drive equitable access to care.

As a first step toward bringing its primary care models into further alignment with MCP and encouraging more effective provider participation in value-based care, NC Medicaid is developing a standardized primary care performance incentive arrangement. PHPs are currently required to offer most primary care providers bonus payments based on their performance on a defined set of quality measures, but these arrangements vary in practice, introducing significant provider burden and diluting impact. Under NC Medicaid's approach, all NC Medicaid health plans would be required to offer a standard, MCP-aligned model to their contracted AMH primary care practices, including a focused group of quality measures with consistent measurement.

NC Medicaid's implementation of value-based payment models, such as MCP-aligned incentive model, aims to further evolve its vision of improved health through an equitable, innovative, whole-person centered and well-coordinated system of care. NC Medicaid plans to consider future primary care payment and care delivery reforms in alignment with the Medicare MCP model, including prospective payment, based on learnings from CMS, market readiness, and sufficient state capacity to implement more advanced VBP models.

Conclusion

The NC Medicaid Annual Quality Report highlights the many ways in which NC Medicaid works to achieve its goal of improving the health of North Carolinians through an innovative, whole-person centered, and well-coordinated system of care and measurement of quality, which addresses both medical and non-medical drivers of health. This report plays a key role in tracking quality over time and monitoring performance across aims and goals of NC Medicaid's Quality Strategy. Moving forward, the NC Medicaid Annual Quality Report will serve as an opportunity to share quality performance and any relevant steps taken to improve beneficiaries' quality of care.

Continuous assessment of progress against this Quality Strategy is not without challenges. NC Medicaid's transition into managed care and its efforts to align with an ever-shifting quality landscape, mean new programs are added almost every year. Only one year into Medicaid expansion, NC Medicaid is in a unique position to serve North Carolinians who were previously unable to receive these life-changing health benefits. NC Medicaid is hopeful that future iterations of the NC Medicaid Annual Quality Report will showcase continuous improvement in quality performance, better health outcomes for beneficiaries, and more dynamic and targeted interventions.

APPENDIX

Appendix A: Limited Benefit Group Exclusions

Partial benefit groups receive only select coverage for services due to different eligibility status. This section describes six different partial benefit groups, their covered services, and whether they were excluded from quality measurement calculations in this Plan.

Family Planning: Family planning, reproductive health and contraceptive services are provided to eligible men and women, whose income is at or below 195% of the federal poverty level, with no age restrictions. (Link to More Information)

Partial Dual Eligible: Partial dual eligibles receive Medicare financial support from Medicaid but no Medicaid services such as long-term services and supports (LTSS). These partial dual aid categories include comprehensive Medicare Aid (MQB-Q), limited Medicare aid (MQB-B), Medicaid working disabled (MWB), and limited Medicare-Aid capped enrollment (MQB-E). (Link to More Information)

Emergency Services Only: Emergency services include labor and delivery, including caesarean section. It can also include any treatment after the sudden onset of a medical condition manifesting itself by acute symptoms of sufficient severity, such that the absence of immediate medical attention could reasonably be expected to result in placing the patient's life at jeopardy.

Incarcerated: The only services that are covered while a beneficiary's Medicaid is in suspension for incarceration are medical services received during an inpatient stay. Inpatient stay services include the care of patients whose condition requires admission to a hospital.

Presumptive Eligibility: Presumptive eligibility for pregnant women covers only ambulatory prenatal care, defined as outpatient services related to pregnancy, including prenatal care services and services related to other conditions that may complicate the pregnancy. To receive this eligibility the patient must attest to pregnancy, income level, and NC residency. The patient does not have to attest to U.S. citizenship.

COVID-19: NC Medicaid reimbursed COVID-19 testing, treatment, and vaccination costs for individuals without insurance who enroll in the NC Medicaid Optional COVID-19 Testing, Treatment and Vaccination (MCV) program.

Appendix B: Quality Measures Included in the Annual Quality Report

Measure Acronym	Measure Name	Measure Steward	HEDIS/ Non-HEDIS
AAP	Adults' Access to Preventive/Ambulatory Health Services	NCQA	HEDIS
AXR	Antibiotic Utilization for Respiratory Conditions	NCQA	HEDIS
AMM	Antidepressant Medication Management	NCQA	HEDIS
PDI-14	Asthma Admission Rate	Agency for Healthcare Research and Quality (AHRQ)	Non-HEDIS
AMR	Asthma Medication Ratio	NCQA	HEDIS
AAB	Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis	NCQA	HEDIS
BCS	Breast Cancer Screening	NCQA	HEDIS
CCS	Cervical Cancer Screening	NCQA	HEDIS
WCV	Child and Adolescent Well-Care Visits	NCQA	HEDIS
CIS	Childhood Immunization Status	NCQA	HEDIS
CHL	Chlamydia Screening	NCQA	HEDIS
PQI-05	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate	Agency for Healthcare Research and Quality (AHRQ)	Non-HEDIS
COL	Colorectal Cancer Screening	NCQA	HEDIS
COB	Concurrent Use of Prescription Opioids and Benzodiazepines	PQA	Non-HEDIS
CBP	Controlling High Blood Pressure	NCQA	HEDIS
DEV	Developmental Screening in the First Three Years of Life	Oregon Health and Sciences University (OHSU)	Non-HEDIS
PQI-01	Diabetes Short-Term Complications Admission Rate	Agency for Healthcare Research and Quality (AHRQ)	Non-HEDIS
	Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Screening Ratio	CMS	Non-HEDIS
FUM	Follow-Up After Emergency Department Visit for Mental Illness	NCQA	HEDIS
FUA	Follow-Up After Emergency Department Visit for Substance Use	NCQA	HEDIS
FUH	Follow-Up After Hospitalization for Mental Illness	NCQA	HEDIS
IMA	Immunizations for Adolescents	NCQA	HEDIS
IET	Initiation and Engagement of Substance Use Disorder Treatment	NCQA	HEDIS
	Low Birth Weight	DHHS	HEDIS-Like
OEV	Oral Evaluation, Dental Services	American Dental Association (ADA)	Non-HEDIS
PPC	Prenatal and Postpartum Care	NCQA	HEDIS
	Rate of Screening for Pregnancy Risk	DHHS	Non-HEDIS
SFM	Sealant Receipt on Permanent First Molars	ADA	Non-HEDIS
TFL	Topical Fluoride for Children	ADA	Non-HEDIS

APP	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	NCQA	HEDIS
LBP	Use of Imaging Studies for Low Back Pain	NCQA	HEDIS
OHD	Use of Opioids at High Dose in Persons Without Cancer	PQA	Non-HEDIS
OMP	Use of Opioids from Multiple Providers in Persons Without Cancer	Pharmacy Quality Alliance (PQA)	Non-HEDIS
OUD	Use of Pharmacotherapy for Opioid Use Disorder	CMS	Non-HEDIS
WCC	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents	NCQA	HEDIS
W30	Well-Child Visits in the First 30 Months of Life	NCQA	HEDIS

Appendix C: Survey Measures Included in the Annual Quality Report

Measure Name	Survey Source	Survey Focus	Measure Type
Access to Behavioral Health Services	Provider Experience Survey	Providers	
Advising Smokers and Tobacco Users to Quit	CAHPS	Beneficiaries	Individual
Coordination of Care	CAHPS	Beneficiaries	Individual
Coordination of Care from Mental Health Providers	CAHPS	Beneficiaries	Individual
Discussing Cessation Medications	CAHPS	Beneficiaries	Individual
Discussing Cessation Strategies	CAHPS	Beneficiaries	Individual
Doctor Asked about Mental Health	CAHPS	Beneficiaries	Individual
Getting Care Quickly	CAHPS	Beneficiaries	Composite
Getting Needed Care	CAHPS	Beneficiaries	Composite
How Well Doctors Communicate	CAHPS	Beneficiaries	Composite
Obtained Appointment for Counseling or Mental Health Treatment	CAHPS	Beneficiaries	Individual
Patient/Member Supports	Provider Experience Survey	Providers	
Rating of All Health Care	CAHPS	Beneficiaries	Global Rating
Rating of Personal Doctor	CAHPS	Beneficiaries	Global Rating
Sought Counseling or Mental Health Treatment	CAHPS	Beneficiaries	Individual
Standard Plan New Patient Acceptance Rate	Provider Access Call Study	Providers	
Standard Plan Patient Routine Appointment Wait Time	Provider Access Call Study	Providers	
Support for Addressing Social Determinants of Health (SDOH)	Provider Experience Survey	Providers	

Appendix D: Summary of Quality Measure Performance[166]

Measure Name	Submeasure	2021 Performance	2022 Performance	2023 Performance
GOAL 3: PROMOTE WELLNESS AND PREVENTION				
Child and Adolescent Well-Care Visits (WCV)		48.63%	49.47%	51.51%
Well-Child Visits in the First 30 Months of Life (W30)	First 15 Months	62.16%	61.72%	63.54%
	15-30 Months	66.47%	66.90%	68.98%
Childhood Immunization Status (CIS)	DTaP	72.73%	72.93%	72.91%
	IPV	89.18%	89.05%	88.41%
	MMR	87.13%	87.54%	87.17%
	HiB	85.12%	85.23%	85.07%
	Hepatitis B	91.10%	90.67%	90.05%
	VZV	86.74%	87.27%	86.90%
	Pneu conj	76.60%	77.71%	74.51%
	Hepatitis A	80.58%	81.14%	81.17%
	Rotavirus	72.68%	72.62%	70.76%
	Influenza	44.24%	36.30%	31.66%
	Combo 10	34.31%	28.65%	24.54%
Immunizations for Adolescents (IMA)	Meningococcal	83.73%	85.16%	85.14%
	Tdap	84.82%	85.94%	85.99%
	HPV	31.46%	30.65%	30.57%
	Combo 2	30.29%	29.69%	29.73%
Developmental Screening in the First Three Years of Life (DEV)	Screened by 12 Months	78.84%	78.88%	79.87%
	Screened by 24 Months	78.10%	79.36%	79.35%
	Screened by 38 Months	67.73%	67.47%	69.05%
	Combined Screening Rate	74.97%	75.10%	76.00%
Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Screening Ratio				
Cervical Cancer Screening (CCS)		41.03%	39.12%	42.67%
Breast Cancer Screening (BCS)		45.93%	46.36%	32.81%
Prenatal and Postpartum Care (PPC)	Timeliness of Prenatal Care	39.55%	41.91%	43.92%
	Postpartum Care	53.81%	60.86%	60.71%
Rate of Screening for Pregnancy Risk			66.6%	66.0%
Low Birth Weight†		12.32%	12.30%	

[166] Limited benefit members (managed care status codes MCS018, 020, 021, 023, 024, 043) were excluded from these calculations.

Oral Evaluation, Dental Services (OEV)		48.28%	48.49%	49.09%
Topical Fluoride for Children (TFL)	Dental or Oral Health Service	24.78%	24.34%	25.26%
Sealant Receipt on Permanent First Molars (SFM)	At least one sealant	65.32%	57.22%	54.03%
	All four molars sealed	43.51%	38.96%	35.73%
Adults' Access to Preventive/Ambulatory Health Services (AAP)		75.92%	73.47%	59.32%
Colorectal Cancer Screening (COL)		35.52%	31.90%	22.56%
Chlamydia Screening (CHL)	16-20 Years	53.15%	53.26%	56.08%
	21-24 Years	65.17%	62.43%	63.92%
	Total	57.61%	57.07%	59.50%
GOAL 4: IMPROVE CHRONIC CONDITION MANAGEMENT				
Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics (APP)		45.02%	44.23%	43.12%
Antidepressant Medication Management (AMM)	Acute Phase	55.03%	58.86%	60.47%
	Continuation Phase	34.86%	37.25%	37.49%
Follow-Up After Emergency Department Visit for Mental Illness (FUM)	7-Day Follow-Up	45.83%	42.64%	39.82%
	30-Day Follow-Up	61.84%	58.80%	55.41%
Follow-Up After Hospitalization for Mental Illness (FUH)	7-Day Follow-Up	25.58%	24.55%	22.86%
	30-Day Follow-Up	44.20%	42.65%	41.31%
Diabetes Short-Term Complications Admission Rate (PQI-01)†		201.54 per 100,000 beneficiaries	161.65 per 100,000 beneficiaries	155.47 per 100,000 beneficiaries
Asthma Medication Ratio (AMR)		67.88%	60.84%	61.07%
Asthma Admission Rate (PDI-14)†		50.47 per 100,000 beneficiaries	56.95 per 100,000 beneficiaries	52.55 per 100,000 beneficiaries
Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI-05)†		568.46 per 100,000 beneficiaries	371.42 per 100,000 beneficiaries	441.25 per 100,000 beneficiaries
Controlling High Blood Pressure (CBP)		24.90%	41.08%	50.41%
GOAL 5: WORK WITH COMMUNITIES TO IMPROVE POPULATION HEALTH				
Use of Opioids from Multiple Providers in Persons Without Cancer (OMP)†		0.41%	0.44%	
Use of Opioids at High Dose in Persons Without Cancer (OHD)†		7.67%	7.46%	7.33%
Concurrent Use of Prescription Opioids and Benzodiazepines (COB)†		13.06%	12.61%	12.36%

Use of Pharmacotherapy for Opioid Use Disorder (OUD)	Total	56.13%	58.44%	58.56%
Follow-Up After Emergency Department Visit for Substance Use (FUA)	7-Day Follow-Up	15.70%	23.49%	21.04%
	30-Day Follow-Up	23.25%	33.49%	30.46%
Initiation and Engagement of Substance Use Disorder Treatment (IET)	Initiation	42.74%	41.93%	39.62%
	Engagement	13.00%	14.56%	12.79%
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/ Adolescents (WCC)	BMI Percentile Documentation	29.06%	59.95%	68.23%
	Counseling for Nutrition	15.69%	24.64%	25.55%
	Counseling for Physical Activity	6.76%	11.62%	13.79%
GOAL 6: PAY FOR VALUE				
Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB)		57.62%	67.60%	68.15%
Antibiotic Utilization for Respiratory Conditions (AXR)			19.28%	27.41%
Use of Imaging Studies for Low Back Pain (LBP)		72.79%	72.22%	69.81%

† Lower rates indicate better performance.

Appendix E: Summary of CAHPS Survey Measure Performance

Measure Name	Population	2022 Performance	2023 Performance
GOAL 1: ENSURE APPROPRIATE ACCESS TO CARE			
Getting Needed Care	Child Beneficiaries	83.60%	86.00%
	Adult Beneficiaries	83.90%	86.00%
Getting Care Quickly	Child Beneficiaries	85.60%	88.00%
	Adult Beneficiaries	85.00%	85.20%
How Well Doctors Communicate	Child Beneficiaries	92.20%	96.10%
	Adult Beneficiaries	93.50%	93.80%
GOAL 2: DRIVE PATIENT-CENTERED, WHOLE-PERSON CARE			
Rating of All Health Care	Child Beneficiaries	78.20%	88.00%
	Adult Beneficiaries	74.30%	89.00%
Coordination of Care	Child Beneficiaries	83.00%	84.70%
	Adult Beneficiaries	88.20%	87.70%
GOAL 3: PROMOTE WELLNESS AND PREVENTION			
Rating of Personal Doctor	Child Beneficiaries	86.60%	90.70%
	Adult Beneficiaries	87.20%	89.40%

GOAL 4: IMPROVE CHRONIC CONDITION MANAGEMENT			
Doctor Asked about Mental Health	Child Beneficiaries		42.20%
	Adult Beneficiaries		51.00%
Obtained Appointment for Counseling or Mental Health Treatment	Child Beneficiaries		71.90%
	Adult Beneficiaries		75.50%
Coordination of Care from Mental Health Providers	Child Beneficiaries		76.40%
	Adult Beneficiaries		79.30%
GOAL 5: WORK WITH COMMUNITIES TO IMPROVE POPULATION HEALTH			
Advising Smokers and Tobacco Users to Quit	Adult Beneficiaries	82.10%	78.90%
Discussing Cessation Medications	Adult Beneficiaries	56.10%	54.10%
Discussing Cessation Strategies	Adult Beneficiaries	52.50%	47.20%

Appendix F: Relevant Survey Reports

Report Name	Link	Description
2022 CAHPS Report	Link	The Consumer Assessment of Healthcare Providers and Systems (CAHPS) is a beneficiary experience survey that serves as a national standard for measuring and reporting respondents' experiences with their health care.
2023 CAHPS Report	Link	
2022 Provider Experience Survey	Link	The Medicaid Provider Experience Survey evaluates the impact of the North Carolina Medicaid Transformation on primary care and obstetrics/gynecology (OB-GYN) practices that contract with NC Medicaid.
2023 Provider Experience Survey	Link	

Appendix G: Relevant Quality Measurement Resources

Report Name	Link	Description
NC Medicaid Quality Management and Improvement Webpage	Link	NC Medicaid's Quality Management and Improvement webpage is the home to a majority of NC Medicaid's quality-related deliverables and reports.
NC Medicaid Managed Care Quality Strategy	Link	NC Medicaid's Quality Strategy details NC Medicaid Managed Care aims, goals and objectives for quality management and improvement and details specific quality improvement (QI) initiatives that are priorities for NCDHHS.
NC Medicaid Technical Specifications Manual	Link	This document provides an overview of NCDHHS' plans for promoting high-quality care through NC Medicaid Managed Care based on the aims, goals and objectives outlined in the Department's Quality Strategy. It includes a list of the quality measures intended for monitoring beneficiary access to care, utilization of services, and health outcomes, and health plan performance and improvement processes. This manual also contains all of NC Medicaid's measure sets (Tailored Plan Measure Set, Standard Plan Measure Set, etc.). NC Medicaid updates this document as needed and on an annual basis.
NC Medicaid Quality Measure Performance and Targets for the AMH Measure Set	Link	To ensure delivery of high-quality care under the managed care delivery system, NC DHHS developed the NC Medicaid Managed Care Quality Strategy and identified a set of quality metrics that it uses to assess health plans' performance across their populations. The Department identified a subset of these measures for health plans to use to monitor Advanced Medical Home (AMH) performance and calculate AMH performance incentive payments. The first quality performance period for AMHs began in January 2022.

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